

OWNING THE SHARING ECONOMY

Comparing the business models of platform cooperatives and investor owned sharing economy platforms

Master's Thesis
Ronja Puranen
Aalto University School of Business
Information and Service Management
Spring 2019



Author Ronja Puranen

Title of thesis Owning the sharing economy- Comparing the business models of platform cooperatives and investor owned sharing economy platforms

Degree Master of Science in Economics and Business Administration

Degree programme Information and Service Management

Thesis advisor(s) Virpi Tuunainen

Year of approval 2019

Number of pages 87

Language English

Abstract

In the past decade, the collaborative economy has received a lot of attention in media and research. Originally the collaborative economy was expected to change the ways we consume and bring significant social and environmental benefits. In recent years the collaborative economy has, however, also received a lot of criticism especially in terms of worker rights and the ways in which value is distributed within the sector. One possible solution to this could be platform cooperatives, that is, sharing economy platforms that are owned by its customers, workers or other stakeholders. The premise of platform cooperatives is that if workers or customers are the owners of the platform, their rights are better protected and that the profits would be distributed straight to those that are in a key role in creating value.

There is very little research done on platform cooperatives, and this thesis aims to contribute to that research gap. The main focus of this thesis is to look at the differences and similarities in business models between platform cooperatives and investor owned sharing economy platforms. Another objective of this thesis is also to look at how the business model canvas as a tool should take into account the alternative starting point and way of organizing economic activity of platform cooperatives.

The framework of this research is the business model canvas by Osterwalder and Pigneur (2010). The business model canvas is a widely used tool in mapping out what value the company is generating and for who as well as what kind of resources, activities and partners it is using to deliver that value.

The method used for this study is multiple case study. Four platform cooperatives were selected from the most common types of platform cooperatives along with four investor owned counterparts that had a similar offering. The main differences emerged in the value proposition, customer relationships and key partners while the companies resembled each other in terms of channels, key activities and key resources. In addition, an adapted business model canvas is derived that takes better into account the different starting point of doing business of platform cooperatives.

Keywords sharing economy, platform cooperatives, cooperatives, business models, business model canvas

Tekijä Ronja Puranen

Työn nimi Jakamistalouden omistaminen – vertaileva monitapaustutkimus alustaosuuskuntien ja osakeyhtiöpohjaisten jakamistalouden alustojen liiketoimintamalleista

Tutkinto Kauppatieteiden maisteri

Koulutusohjelma Tieto- ja palvelujohtaminen

Työn ohjaaja(t) Virpi Tuunainen

Hyväksymisvuosi 2019**Sivumäärä** 87**Kieli** Englanti

Tiivistelmä

Viimeisen vuosikymmenen aikana jakamistalous on saanut paljon mediahuomiota ja sitä on tutkittu paljon. Jakamistalouden ensimmäisten vuosien aikana odotettiin, että jakamistalouden rakenteet muuttaisivat taloutta merkittävästi ja toisivat mukanaan huomattavia sosiaalisia ja ympäristöhyötyjä. Viime vuosien aikana jakamistalous on kuitenkin saanut paljon kritiikkiä osakseen, erityisesti liittyen työntekijöiden oikeuksiin ja siihen, kuinka voitot jakautuvat sektorin osallistujien kesken. Yksi ehdotetuista ratkaisuksista jakamistalouden haasteisiin ovat alustaosuuskunnat, jotka ovat jakamistalouden alla toimivia alustoja, joiden omistajia ovat työntekijät, asiakkaat tai muut sidosryhmät. Alustaosuuskuntien toimivuuden idea perustuu oletukseen, että jos työntekijät tai asiakkaat omistavat alustan, heidän oikeutensa ovat paremmin suojeltuja ja voitot jakaantuisivat suoraan heille, jotka ovat keskeisessä roolissa arvonluonnissa.

Alustaosuuskuntia on tutkittu todella vähän, ja tämän pro gradu tutkielman tarkoitus on kuroa tätä kuilua umpeen. Tämän tutkielman päätarkoitus on selvittää, mitkä ovat keskeiset erot ja samankaltaisuudet liiketoimintamalleissa alustaosuuskuntien ja osakeyhtiöpohjaisten jakamistalouden alustojen välillä. Toinen tavoite on tutkia, kuinka liiketoimintallien konseptualisointityökalun kannattaisi ottaa osuuskuntien lähtökohdat ja tavoitteet paremmin huomioon.

Tässä tutkimuksessa käytetty viitekehys on Osterwalderin ja Pigneur'in (2010) liiketoimintamallikangas. Tämä työkalu on laajasti käytetty tunnistamaan minkälaista arvoa yritys luo, kenelle sekä mitä resursseja, aktiviteetteja ja partnereita on käytetty arvontuottamisessa.

Pro gradu-tutkielman metodi on monitapaustutkimus. Neljä alustaosuuskuntaa valittiin niiltä sektoreilta, joilla alustaosuuskuntia on eniten. Näitä vertaillaan neljään osakeyhtiöpohjaiseen jakamistalouden alustoihin, joilla on samankaltainen tarjoama valittuihin alustaosuuskuntiin verrattuna. Suurimmat erot ilmenivät arvopropositiossa, asiakassuhteissa ja partnereissa, kun taas samankaltaisuuksia löytyi käytettyjen kanavien, aktiviteettien ja resurssien osalta. Lisäksi tuloksissa määritellään sovellettu liiketoimintamallikangas, joka ottaa paremmin huomioon alustaosuuskuntien eri lähtökohdat liiketoiminnalle.

Avainsanat jakamistalous, alustaosuuskunnat, osuuskunta, liiketoimintamalli

Table of Contents

1	Introduction	1
1.1	Research questions.....	2
1.2	Structure of the thesis.....	3
2	Literature Review	4
2.1	Collaborative economy	4
2.1.1	Definitions and classifications.....	5
2.1.2	Criticism towards the collaborative economy	7
2.1.3	The rise of platform cooperativism	14
2.2	Cooperatives	15
2.2.1	History of cooperatives.....	16
2.2.2	Key features of cooperatives	18
2.3	Business models.....	20
2.3.1	Business models and strategy	21
2.3.2	Building blocks of business models	21
2.3.3	Adapted business model canvas for multi-sided markets.....	25
3	Methodology.....	28
3.1	Multiple case study	28
3.2	Selection of case companies.....	30
3.2.1	Case company descriptions	31
3.3	Data collection and analysis.....	36
4	Findings and analysis	41
4.1	Loconomics and Thumbtack.....	41
4.2	Fairmondo and Ebay	48
4.3	Moeda and Wefunder	54
4.4	Turo and Tapazz.....	60
4.5	Observations from the analysis	65
5	Conclusions	71
5.1	Theoretical implications	72
5.1.1	Synergies between the sharing economy and cooperatives	73
5.1.2	Implications for the business model canvas	76
5.2	Managerial implications.....	79
5.3	Limitations.....	80

5.4	Suggestions for further research	81
	References.....	82

List of Tables

Table 1: Concepts describing the collaborative economy 6

Table 2: Cooperative Principles (ICA)..... 16

Table 3: Data source types observed per each case company 37

Table 4: Data sources used for platform cooperatives 38

Table 5: Data sources used for investor owned platforms..... 39

Table 6: Summary of key similarities and differences between Loconomics and Thumbtack
..... 47

Table 7: Summary of key similarities and differences between Fairmondo and Ebay 53

Table 8: Summary of key similarities and differences between Moeda and Wefunder..... 59

Table 9: Summary of key similarities and differences between Tapazz and Turo..... 65

List of Figures

Figure 1. Business Model Canvas (Osterwalder and Pigneur, 2010)..... 26

Figure 2. Adapted business model canvas for two sided markets (from Osterwalder and Pigneur, 2010). 27

Figure 3. Case study designs (Yin, 2003)..... 29

Figure 4. Adapted business model canvas for platform cooperatives 78

1 Introduction

Collaborative economy and its platforms are best known for their most prominent examples Uber and Airbnb (Sutherland and Jarrahi, 2018). In its early days, the collaborative economy was hailed to change culturally rooted, capitalistic values of ‘more is more’ and reduce excessive consumption lacking environmental responsibility (Botsman and Rogers, 2010). Botsman and Rogers (2010) talked about ‘mass reevaluation of what and how we consume’ that was based on the ideas of simplicity, transparency and participation. Several companies, like Uber, Etsy and local food movements, were seen as revolutionary and disrupting their way through multiple industries (Botsman and Rogers, 2010).

Recently, collaborative economy and its companies have also started to raise concerns (Martin, 2016; Murillo, Buckland and Val, 2017). Ideas of simplicity, transparency and open participation have come under reevaluation as incumbent companies have matured. For example, the biggest collaborative economy platforms are complex organizations that do not yet have a taxonomy or a common definition. Second, these platforms lack transparency as their business is based on sophisticated algorithms the operating logic of which is not known outside the company. Third, even though threshold for participation is often low, participants lack several rights they had with traditional companies. Moreover, controversies over consumer rights, sustainability and value distribution are also often under debate. (Murillo et al., 2017)

Passionate critics point out that the winners of the platform economy have nothing revolutionary in them but have succumbed to the capitalistic forces of fast growth and shareholder profits. Since their incumbency, sharing economy companies have become dominant players in their respective markets, accumulating all surplus to their owners. (Scholz and Schneider, 2017)

Researchers and activists have called for a more democratic collaborative economy (Scholz, 2014; Martin, Upham and Klapper, 2017). One solution is based on the work of Nathan Schneider and Trebor Scholz, who, in 2015, introduced the concept of platform cooperativism. The premise of platform cooperatives states that if participants of the platform also own the platform, then the value is distributed to the ones who actually create it and, as decision making is democratic, not a single stakeholder and turn the company in their favor. (Scholz and Schneider, 2017)

In previous research platform cooperatives are briefly mentioned as an example solution to re-organizing economic activity (Frenken and Schor, 2017; Mair and Reischauer, 2017; Martin, Upham and Klapper, 2017). However, there is little actual research on platform cooperatives themselves apart from the work of Como et al. (2016) who look at the interaction between the collaborative and cooperative economy in EU countries.

Platform cooperativism entails the idea that the cooperative movement would offer a viable alternative to current sharing economy platforms that take advantage of their workers, bypass regulation and generate large profits for their owners (Scholz and Schneider, 2017). It is known that cooperatives, due to the profit distributing logic and social causes, often have a hard time attracting business professionals as managers that share the same motives and, more importantly, have the right kind of expertise to manage the cooperative's business operations (Storey, Basterretxea and Salaman, 2014). However, in order to provide a viable alternative to investor owned platforms, platform cooperatives need to be able to build a viable business model around them.

A business model is the company's blueprint on the key value it is providing to its customer and how it has organized its operations around it (Zott, Amit and Massa, 2011). One key reason why current sharing economy platforms have been able to disrupt their respective markets is business model innovation (Sundararajan, 2016). The purpose of this thesis is to compare existing investor owned sharing economy platforms' business models to that of platform cooperatives. It is important for platform cooperatives to have a viable business model as well as to see if the business models are significantly different and what similarities there are. On a theoretical level it is easy to see the motivational differences between platform cooperatives and investor owned platform, however, it is interesting to see how this translates to everyday operations in their business models.

1.1 Research questions

This thesis will focus on the business model of platform cooperatives that will be compared against existing investor owned platforms. As will be explained in the literature review, cooperatives reason for existing is to bring value to its members, whereas the operating logic for investor owned companies is to maximize monetary shareholder value.

Since the starting point for doing business is so different between cooperatives and investor owned companies, it is expected that there will be significant differences in their business models as well. On the other hand, platform cooperatives in the sharing economy do not operate in a vacuum but also compete with each other and investor owned companies to some extent, it will also be interesting to see what kind of similarities there are among the two different models. The main research question of this thesis is then as follows:

What are the differences and similarities in business models between platform cooperatives and investor owned platforms?

As mentioned, the business model is the company's blueprint for organizing its activities and delivering its value to its customers. The most widely used tool for researching business models is that of Osterwalder and Pigneur (2010) which will also be used as the theoretical framework for this thesis. The business model canvas is a very general tool for conceptualizing the company's operations and is not restricted to any specific company structure. However, as the reason for existing for cooperatives is so different and as the motivations for doing business are often related to social and communal aspects, this thesis will also look at how the business model canvas should adopt to alternative ways of organizing economic activity. The second research question is then defined as follows:

How should the business model canvas take into account the alternative ways of organizing economic activity of platform cooperatives?

1.2 Structure of the thesis

This thesis is structured as follows. First, I will look at relevant literature in terms of the collaborative economy, platform cooperatives and business models to gain a holistic understanding of recent research, provide background information to the phenomena as well as create basis for the methodology. Second, the methodology part, I will explain the logic for the chosen method, multiple case study, as well as clarify how the research and

analysis was done. In the third section I will explain in detail the main findings and observations from the analysis. Finally, I will conclude with managerial implications, limitations of the study as well as suggestions for further research.

2 Literature Review

The purpose of this literature review is to look at prior research related to collaborative economy, cooperatives and business models. First, I will look at the collaborative economy and how it has evolved since it first emerged in the early 2010s. This is important as platform cooperatives are a very recent phenomena and they have first emerged as a critique to how the current collaborative economy has diverged from its initial promise. I will focus on three aspects: definitional challenges and classifications, criticism towards the collaborative economy as well as the rise of platform cooperativism.

Second, I will focus on the cooperative movement in general. This will cover mainly why cooperatives initially emerged and what differentiates them from other company entities. As will become evident, the reason for existing for cooperatives differs significantly from that of investor owned companies. In addition, since the limited liability company is the most widespread legal entity for companies, the key features of cooperatives and their implications on business are often not well known.

Lastly, I will look at business models and how they research has evolved in recent years. This is done to lay ground to the methodology and to derive the final research framework used in this thesis.

2.1 Collaborative economy

Collaborative economy is an emerging research area that has gained momentum relatively recently (Muñoz and Cohen, 2017; Sutherland and Jarrahi, 2018). First mentions are from around 2010 with the theme gaining traction in increasing amounts from 2013 onwards (Martin, 2016). In 2015, The European Union estimated revenues from collaborative economy within the region to be 28 billion euros, doubling from previous year. Moreover, 17% of EU citizens were found to be using collaborative platforms with 5% of citizens also providing services on them (European Commission, 2016). Globally the collaborative

economy is expected have potential to reach revenues of 335bn dollars by 2025 (PwC, 2015).

Even though the phenomenon of collaborative economy and consumption are very recent, the activities underlying it, sharing and collaborating, are not at all new (Belk, 2007; Sundararajan, 2016). The current rise of the collaborative economy owes much to the invention of digital tools (Sundararajan, 2016). Companies under the collaborative consumption umbrella are often highly depended on the technology they use (Frenken and Schor, 2017). Digital tools and platforms make it possible for companies to connect users to exchange goods and services on a global level as well as scale their business at an unprecedented rate (Botsman and Rogers, 2010). It is particularly the scalability that is seen as the main key driver behind the rapid uprise of collaborative consumption and its platforms (Hamari, Sjöklint and Ukkonen, 2014; Sutherland and Jarrahi, 2018).

Second, collaborative economy and its companies have been heralded over their ability to facilitate trust building between strangers (Sundararajan, 2016; Botsman and Rogers, 2010). Previously, people would trust only people in their immediate networks (Frenken and Schor, 2017) whereas collaborative economy companies work as new kinds of intermediaries, using a range of methods to reduce the barrier for strangers to trust one another (Botsman and Rogers, 2010).

2.1.1 Definitions and classifications

Regardless of several attempts (Botsman and Rogers, 2010; Botsman, 2013; Gawer, 2014) there is no collectively accepted term or definition for the collaborative economy or consumption. Sutherland and Jarrahi (2018) see this as a result of the research spanning across several fields. As there are several theoretical lenses looking at the phenomena, the perspectives taken on it are also largely varied (Sutherland and Jarrahi, 2018).

The key aspects where researchers' viewpoints differ are the definition of sharing as well as the role of ownership. Belk (2007) argues that 'sharing' that includes monetary compensation cannot be included in the sharing economy at all which would exclude several of the most classical examples of sharing economy companies. Another common term used to describe the sharing economy is access based consumption (Bardhi and Eckhardt, 2012), which only includes exchanges where there is no change of ownership. Botsman and Rogers (2010) have by far the broadest definition where collaborative

consumption describes digital market exchange including bartering, lending, sharing, swapping and gift giving. Other commonly used terms are found in Table 1.

Table 1: Concepts describing the collaborative economy

Sharing economy	eg. Botsman and Rogers, 2010; Sundararajan, 2016
Collaborative consumption	eg. Hamari et al., 2016
Collaborative economy	eg. Botman and Rogers, 2010; Sundararajan, 2016; Martin, 2016
Access based consumption	eg. Eckhardt and Bardhi, 2015; Dredge and Gyimothy, 2015
Platform economy	Sundararajan, 2016
On demand economy	Sundararajan, 2016

The lack of a general term and definition has led to confusion around the phenomena (Frenken and Schor, 2017). Narratives around the sharing economy vary significantly from revolutionary movement giving power back to individuals and communities to “another nightmarish form of neoliberal capitalism” (Martin, 2016). Murillo et al. (2017) also notes that several of the present manifestations of the sharing economy in fact bare little resemblance to what its original manifesto stated. Similar concerns have been raised by others as well (Botsman, 2013; Martin, 2016).

For the purposes of this thesis, I will not restrict the scope of the research on any specific mode of exchange but use the more broad term of Botsman and Rogers (2010) who define collaborative consumption as “traditional sharing, bartering, lending, trading, renting, gifting and swapping, redefined through technology and peer communities”. Sharing economy is also often used interchangeably with collaborative consumption as an overall umbrella term that including similar types of systems and exchanges (Sundararajan, 2016), which is also the starting point of this thesis.

There have been several attempts to devise a comprehensive framework describing the characteristics of collaborative consumption (Botsman and Rogers, 2010; Gawer, 2014; Munoz and Cohen, 2017; Sutherland and Jarrahi, 2018). The most extensive list of key characteristics is the one by Munoz and Cohen (2017) that who conducted a literature review on previous classifications, finding seven dimensions that manifest themselves in research: platforms for collaboration, under-utilised resources, peer to peer transactions, collaborative governance, being mission driven, having alternative funding and technology reliance. Platforms are often seen a key differentiating feature of sharing economy initiatives and work as both the infrastructure as the provider for exchange (Mair and

Reischauer, 2017). The concept of under-utilised resources, also known as idling capacity (Botsman and Rogers, 2010), refers to redistribution of products, commodities or intangible assets to people who have a higher need for them. Peer to peer transactions refer to the shift from people transacting with companies or other institutions to transacting among themselves (Mair and Reischauer, 2017). As transactions are more and more peer to peer facilitated, sharing economy initiatives should be collectively and collaboratively governed as well (Munoz and Cohen, 2017). Being mission driven refers to the fact that several companies have other distinct, often social or environmental, motives in addition to turning a profit. In connection to collaborative governance, a lot of the early stage platforms have also adopted other methods of financing their business, such as crowdfunding (Munoz and Cohen, 2017). Lastly, sharing economy platforms are highly reliant on the technology as digital tools are often the key enablers in creating a differentiated offering (Munoz and Cohen, 2017).

Research has also focused on changes in market dynamics that has resulted from the rise of the collaborative economy. Scaraboto (2015) talks about collaborative consumption networks as hybrid economies that combine features from purely market based exchange and non-market exchange (for example gift giving). Networks come up with their own transaction combination that blur the lines between the producer and the consumer. Moreover, the motivations of participants are complex and in constant change (Scaraboto, 2015). The development of collaborative consumption platform can also lead to shift in the underlying market logic (such as in the case of Uber, Lyft) or market emergence, where platforms operate without establishing stable patterns of interaction (good example being Airbnb) (Mair and Reischauer, 2017). However, collaborative consumption can have negative consequences as well (Scaraboto, 2015). This can be well seen in the case of Airbnb the emergence of which has allegedly led to a significant decrease in affordable housing in several large cities (Guttentag, 2018).

2.1.2 Criticism towards the collaborative economy

When the concept of collaborative economy first emerged, it was greeted with a lot of enthusiasm (Botsman and Rogers, 2010; Walsh, 2011). Collaborative economy took advantage of new technologies, was said to change consumer behavior and most importantly, lead to significant environmental benefits (Botsman and Rogers, 2010;

Kathan et al., 2016). An early and central book written on the topic was written by Botsman and Rogers in 2010, in which they talked about a 're-evaluation of what and how we consume' and counted on large scale economic as well as social change driven by the principles of simplicity, transparency and participation. A need for less resources, longer product life cycles and maximized use capacity were seen as the key ways for reducing environmental impact of consuming (Kathan, Matzler and Veider, 2016). It was also argued that people would become less reliant in having ownership over their goods as sharing and gaining access to them became equally acceptable ways of consuming (Stein 2015, Kathan et al., 2016).

Despite these ideals, the collaborative economy has also received a lot of criticism in recent years. Uber has faced a lot of regulatory pushback in several countries (Henley, 2017), and Airbnb was first under scrutiny when it refused to pay insurance over damaged goods to one of the home owners (Swaine, 2011). Murillo et al. (2017) raise concern over the fact that due to the confusion around the term surrounding the sharing economy, several companies are able to adopt very traditional and capitalist market behaviors far from the original promise of collaborative economy, and still operate under the term.

These two narratives, the promise of decentralized, equal and sustainable society enabled by collaborative economy and collaborative economy falling subject to traditional, capitalistic market practices, are very prominent surrounding the discussion of the sharing economy and their collision is an underlying theme in many issues currently facing the sharing economy (Martin, 2016; Murillo et al., 2017).

The challenges, controversies and issues facing the sharing economy have been mapped out on several occasions (Kathan et al., 2016; Murillo et al., 2017; Sundararajan, 2016; Martin, 2016; Frenken and Schor, 2017). What follows in this thesis is the adapted classification of Murillo et al. (2017) who divide the controversies into market, government, worker, consumer and environment controversies. It should be noted that several controversies include traits from more than one class and that they also overlap one another. In addition, I have added a separate section for technological controversies. Murillo et al. (2017) have described several of these controversies under the aforementioned theme, however, aspects related to the power of algorithms, data ownership and privacy are so tied to the technologies of these platforms that I discuss them in their own section.

Market Controversies

The collaborative economy came with a promise of facilitating a multitude of new innovations and business models (Botsman and Rogers, 2010). This was expected to apply not only to the sharing economy sector but the whole surrounding economy. Moreover, the sharing economy was expected to facilitate more sustainable, fair and participatory market behavior than any other sector. However, researchers and activists have started to arise over the validity of these statements, with critics raising concerns over profit distribution within both markets and companies as well as the role of traditional market players (Scholz and Schneider, 2017; Martin, 2016).

Several of the sharing economy platforms have become to dominate their respective markets (Murillo et al., 2017). Even though they have lowered transaction costs, critics argue venture capital has fueled extremely high valuations leading to disproportionate market power (Murillo et al., 2017). Studies also show that profits are not concentrated only in certain companies but also geographically with densely populated and popular areas gaining most value (Dredge and Gyimóthy, 2015). Sharing economy companies take advantage of network effects and lowering marginal costs, which in turn lead to natural monopolies and growing concentration of wealth (Brynjolfsson and McAfee, 2014).

As sharing economy platforms are backed with venture capital investments, most of the value they create reverts back to the investors. Critics call out for a more even distribution of wealth, mainly arguing that most of the value is based on peer to peer interaction that is only aggregated by the company through recommendation and other rating systems (Scholz and Schneider, 2017). As value concentrates to only a handful of companies and marginal cost of digital products is very low, companies are able to hire fewer and fewer people, again leading to growing inequality (Brynjolfsson and McAfee, 2014).

However, it should be noted that the dynamics of network effects and resulting inequality are more inherent to digital economy and platforms rather than sharing economy itself (Brynjolfsson and McAfee, 2014). It is within the interest of a platform business to create a natural monopoly for itself because it needs network effects in order to grow and it is these network effects and lowering marginal cost of digital products in general, that have

been studied to lead to wealth concentration and inequality (Brynjolfsson and McAfee, 2014). There are also studies showing that it is a natural progression for grassroots movements to become more commercially oriented as they grow (Martin, Upham and Budd, 2015)

Government Controversies

Since their inception, sharing economy companies have faced strong resistance from traditional players as well as government legislators and regulators (Murillo et al., 2017). On one hand, sharing economy is built on the ideas of individual empowerment and self-regulation (Murillo et al., 2017). Founders advocating for the sharing economy claim to be able to substitute for government roles with sophisticated recommendation and rating algorithms that replace the need for licenses and government led background checks (Stein, 2015). From their point of view, governments are hindering their growth and not being able to keep up with technological change. As a result, extensive resources are used to lobby for even looser regulation. (Murillo et al., 2017)

Critics, on the other hand, argue that companies are again given too much power. Sharing economy companies undermine the role of the government by taking roles held by them. Moreover, they as legislation cannot keep up with market disruption, sharing economy seems to shift risk to customers by causing market failures related to safety, security or public service provisioning. Additionally, platforms are also accused of avoiding taxes and working outside markets and putting traditional players at a significant disadvantage. (Murillo et al., 2017)

Brynjolfsson and McAfee (2014) refer to the sharing economy as a completely new playing field that calls for redefinition of both regulator and regulated. Several questions still remain unanswered such as which players should be regulated and which not, or whether all participants within a platform should face the same regulation (Sundararajan, 2016). In addition, wide disparity also remains over according to which law (for example innovation or some other) should these companies be regulated (Sundararajan, 2016). Adding to the confusion is the burden facing companies working internationally but facing different, local regulation at each operating area (Sundararajan, 2016).

Worker Controversies

The manifesto of the sharing economy is eager to promote self-reliance in terms of employment (Botsman and Rogers, 2010). Renting, sharing and swapping would provide people with more flexible employment opportunities, new ways of earning as well as completely new ways of working (Martin, 2016; Murillo, 2017). This is based on the idea that any person could start earning from their idle assets and as there is no need for intermediaries, they would have full control of all their resources (Dredge and Gyimothy, 2015). The sharing economy and its narrative is built on giving people more choice, autonomy and flexibility over their income were closely intertwined with the idea of a complete reorganization of work (Scholz, 2014).

In reality, however, what has followed is a huge expansion of the freelancer market (Martin, 2016; Murillo et al., 2017). One of the most pronounced criticisms towards the sharing economy is platforms neglecting worker rights (Murillo et al., 2017). People working for the sharing economy are not employed directly by the platforms but labeled as independent contractors or similar. In this way benefits and liabilities are reshuffled, as companies are able to reduce employment costs but these microentrepreneurs bare most of the risk. People working in the sharing economy lack almost all basic worker rights, such as proper insurance or a pension scheme. High internal competition among workers leads to trampling of salaries under minimum wage, often referred to by critics as “a race to the bottom” (Murillo et al., 2017).

The feeling of control seems to also be very nominal in the sharing economy. People are given the choice to work whenever and wherever they want, but companies also exert high power through the use of algorithms. Workers might be forced to take on unprofitable tasks or their wages can be cut involuntarily by the companies (Huet, 2015). The use of rating and recommendation systems also puts workers in a vulnerable position as one bad rating can cause significant damage. Many workers have noted that working in the sharing economy is not a viable option for long term employment as all the risks have shifted back to the employee. This can also be seen in the high switching rate of employees (Murillo et al., 2017).

Consumer Controversies

For customers, the sharing economy provides more flexible and transient ways of consuming (Kathan et al., 2016). Sharing economy platforms have reduced transaction

costs with sophisticated algorithms that facilitate trust between strangers (Frenken and Schor, 2017). This has made it possible to earn on assets, like your car or spare room, that used to stand idle for most of their time. Recommendation and rating systems were seen to reduce the need for regulation and give consumers the power to manage these systems themselves (Kathan et al., 2016; Murillo et al., 2017).

Critics have pointed out that cost and liability are again distributed unevenly between the company, customer and micro-entrepreneur (Murillo et al., 2017). First, they argue out that trust created on the platforms remains only an illusion and that platforms business model is to provide information and add normality and familiarity to the process which only creates a pretence of trust (Murillo et al., 2017). Recommendation and rating systems create new kinds of biases and social hierarchies (Labrecque et al., 2013), and participants use elaborate methods of exclusion even though on surface the service is promoted as open and inclusive (Schor et al., 2016). There has been discussion on, for example, whether race and gender have an effect on Airbnb listing prices and rental rates as well as ratings consumers give are not genuine (Edelmann, 2014; Cheng and Foley, 2018)

In addition, questions have been raised over equality of participation and whether users' motivations for participation are indeed based on social or environmental motivations as had been expected. For example, in order to list your house on Airbnb, you need to own a house or have a spare room. Similarly, in order to earn money with Uber, you need a car to drive. This places restrictions on who can participate in the sharing economy. Stokes et al. (2014) found that people in full or part time employment in managerial or administrative position were more likely to participate in the collaborative economy than the unemployed, ethnic minorities or people in unskilled or semi-skilled work. Moreover, people are very likely to trade with people with similar mindsets and lifestyles, creating highly homogeneous subgroups within the collaborative economy initiatives (Schor et al., 2016)

Researchers have also studied users' motivations for participating in the sharing economy. A study by Hamari et al. (2016) showed that price and convenience are often cited as the most important factors in choosing a platform and cost reductions and that utility and service quality correlated most with user satisfaction. People who would cite sustainability as a factor affecting their decision were already highly engaged in sustainable consumption (Hamari et al., 2016). These findings are contradicting the idea

that social and environmental motives would be driving participation in the sharing economy.

Sustainability Controversies

The promise of a more sustainable economy is inherent to the advocates of collaborative economy (Botsman and Rogers, 2010). Environmental benefits are based on three key ideas. First, people would increase the utilization rate of their products, improving the efficient use of their assets. Second, people would need to buy commodities less as they could share and rent them, leading to a decrease in use of resources. These ideas are closely linked to the concept of circular economy where the lifetime of a product is seen as a circle and no resources are wasted. Sharing economy is often seen as one of the key pathways to a circular economy. (Botsman and Rogers, 2010)

There is little proof of collaborative economy leading to sustainable consumption. Currently, environmental impacts are only accounted for the first round, that is, the eminent effects resulting from producing and using a product or a service (Frenken and Schor, 2016). However, there are indicators that point towards people only shifting their consumption or even increasing their consumption (Kathan et al., 2016).

Technological Controversies

Collaborative economy relies heavily on technological innovation as platforms provide the means for scaling and reaching critical mass (Botsman and Rogers, 2010). On one hand, technology enables the use of sophisticated recommendation systems that improve user experience. Digital tracking can also provide safety from various range of frauds (Dredge and Gyimothy, 2015).

However, the mediating power of technology and algorithms is also a concern for many, which is also seen in the conversation around sharing economy. For example, in the ride hailing business, establishing connection between a user and a driver is done by the algorithm which also collects data on user and driver behavior, determines the prices for transactions and influences your reputation within the platform (Calo and Rosenblat, 2017). Similar dynamic is also at play in microtask platforms where competition over work is very intense (Murillo et al, 2017). Micro entrepreneurs therefore have little control over

which tasks they can accept as the algorithm can also penalize them for unwanted behavior (Calo and Rosenblat, 2017).

Algorithms can also induce discrimination on sharing economy platforms. Design choices of platforms are associated to lead to discrimination and enforcing existing biases. As most platforms are regulated by users through recommendation and or rating systems, they exert high power on the providers for instance by driving provider's rating down impulsively (Dredge and Gyimothy, 2015). Research does, however, remain mixed over the overall generalizability of these aspects.

2.1.3 The rise of platform cooperativism

The previous sections discussed the collaborative economy and the challenges it is currently facing. Several countermovements trying to address these issues have emerged, of which most often cited are blockchain based decentralised autonomous organisations (DAOs) and platform cooperatives (Frenken and Schor, 2016; Martin, 2016; Fehrer *et al.*, 2018). Blockchain, a distributed peer network that records all transactions in a permanent, secure and searchable way, is seen to provide infrastructure for truly decentralised platforms and through decentralisation democratising the economy (Fehrer *et al.*, 2018). DAOs are an interesting solution that would also deserve further research, however, due to their newness and technological nature, they are outside the scope of this thesis.

Introduced first in 2014 by professor Trebor Scholz in his article "Platform Cooperativism vs the Sharing Economy" Scholz argued that several of the sharing economy platforms aggregate market value to only a handful of companies and exploit their workers, which has lead to growing inequality in the digital sphere. According to platform cooperativism, sharing economy is more accurately described as the "on demand" economy, where human effort is capitalised (Scholz, 2014).

Scholz (2014) then calls for a more democratic model where the platforms were owned by their workers and customers, reducing the need for middlemen like Uber or Airbnb. This would in turn result in a sharing economy truer to its original promise. Shortly after Scholz, together with Nathan Schneider, held an event "Platform Cooperativism. The Internet. Ownership. Democracy", at The New School and edited a collection of essays on the topic in a book called *Ours to Hack and to Own: The Rise of Platform Cooperativism, a New Vision for the Future of Work and a Fairer Internet*.

Platform cooperativism, drawing from the underlying logic of the cooperative movement, is about shared ownership and democratic governance. If a platform is collectively owned by those who create value on it, profits are distributed more evenly throughout the economy. Moreover, if a platform operates on a local basis, like Uber and several labor marketplaces usually do, the profits are more likely to remain on a local level, supporting the local community, instead of being channeled to venture capitalists. Democratic governance, in turn, is about handing control over to the members, abiding by a democratic decision-making process as well as equal participation and autonomy. (Scholz in Scholz and Schneider, 2017, p. 20-26).

The movement aims to combine the best parts of worker self-management, the cooperative movement and commons-based peer production of the digital economy (Scholz, 2016 in Scholz and Schneider, 2017, p.23). The main argument is that the cooperative model would help people working for digital platforms reach decent pay and higher income security. Cooperatives claim to provide a better safety net for its members in the digital era, where work remains increasingly dispersed and people are more responsible for their social security (Hill, 2015 in Scholz and Schneider, 2017, p. 48-53). In alignment with commons-based approach, software that is used should be open source and all participants should have full control over their data and be included in the design process of the service (Bollier, 2016, in Scholz and Schneider, 2017, p. 69-74).

However, Scholz and Schneider (2017) also note that platform cooperativism is not about a single solution but a fundamental shift in the current economic ecosystem that requires support systems from all sectors of the economy. Several promoters advocate for, for example, basic income and redefining the role of regulator in the economy and stating these changes are crucial for the success of a truly decentralized sharing economy (Scholz and Schneider, 2016). Several supporting organisations have sprung up, such as OuiShare in France and Shareable in the United States (Sundararajan, 2016).

2.2 Cooperatives

Cooperatives are jointly-owned and democratically governed enterprises (ICA, 2018) and form a significant portion of several economies. Most prominent in the agricultural sector, they work towards meeting the needs of their members, not value maximization (Skurnik, 1999; ICA, 2018; ILO, 2002). There are 2.6 million cooperatives that have in total over 1 billion memberships (UN DESA). Together they generate 20 trillion USD in revenue (UN

DESA). However, they are usually small and local enterprises with their contribution to GDP being over 10% in only New Zealand, the Netherlands, France and Finland. (UN DESA, 2014).

For the purposes of this thesis, it is important to distinguish their key features, differentiating factors from other types of companies as well as why they are relevant in today's discussion of a more equal economy. I will also discuss briefly the benefits and hindrances of the cooperative model.

2.2.1 History of cooperatives

The history of cooperatives dates back to the 19th century. The first industrial revolution liberated markets and changed market dynamics but also resulted in growing inequality. These shifts in the 1800s were seen as the driving forces behind the first cooperatives (Seppelin, 2000). The modern cooperative movement is seen to start from 1844 when the Equitable Pioneers of Rochdale Society was established in Manchester (ILO, 2016). They were the first to lay down the rules for the cooperative movement, rules that were based on the ideas of fairness and transparency (Rochdale pioneers museum, n.d). The purpose was not only to gain more equal access to resources but also have a positive effect on the surrounding community (ILO, 2016). International Co-operative Alliance (ICA) was founded 1895 (ILO, 2016) the goal of which was to “define and defend the Co-operative Principles and develop international trade” (ICA, n.d). The principles have evolved three times to adapt to changes in the market environment (ICA, n.d)

Table 2: Cooperative Principles (ICA)

1) Voluntary and Open membership

“Cooperatives are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination”

2) Democratic Member Control

“Cooperatives are democratic organizations controlled by their members, who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership. In primary cooperatives members have equal voting rights (one member, one vote) and cooperatives at other levels are also organized in a democratic manner.”

3) Member Economic Participation

“Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: developing their cooperative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the cooperative; and supporting other activities approved by the membership.”

4) Autonomy and Independence

“Cooperatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their cooperative autonomy”

5) Education, Training and Information

“Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the development of their co-operatives. They inform the general public - particularly young people and opinion leaders - about the nature and benefits of co-operation.”

6) Cooperation among Cooperatives

“Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional and international structures.”

7) Concern for Community

“Cooperatives work for the sustainable development of their communities through policies approved by their members.”

One of the most common examples of a successful cooperative is the Mondragon Corporation. Founded in 1956, the Mondragon Corporation is an ecosystem of 266 companies and cooperatives, employing over 80 000 people (Mondragon, n.d). Mondragon has been able to combine both business goals of efficiency with solidarity and democratic governance as well as expand internationally (Mondragon, n.d). Their business spans across industrial, financial, distribution, technology as well as education sectors (Mondragon, n.d). They employ methods of democratic governance rigorously and are committed to the wellbeing of the community as a whole (Mondragon, n.d). Nearly all resources are re-invested, employees take wage cuts in times of crisis and no manager earns more than 9 times the lowest paying employee (Mondragon, n.d). However, the Mondragon Corporation has received critique in terms of its internationalization strategy, the goal of which is to acquire foreign companies but not make the members, leading to

friction between the cooperative values of Mondragon and the values of the acquired companies (Flecha and Ngai, 2014).

Recent interest in cooperatives arose as a result of the 2008 financial crisis and the following recession (Cheney et al., 2014). The crisis brought to light inherent flaws in the economy including lack of incentives for appropriate risk management and growing inequality (Cheney et al., 2014). Several cases of information misuse, fraud and corruption were also released (Cheney et al., 2014). It was argued that capitalist economy has distanced itself from the concern for the community, employee welfare and environmental matters (Cheney et al., 2014; Storey et al., 2014).

Cooperative movement, on the other hand, was originally during the first industrial revolution when similar dynamics were at play (Seppelin, 2000). Cooperatives, along with other models that combine social targets with financial viability, offer an alternative to profit maximizing investor owned firms (Storey et al., 2014). Cooperative model holds promise due to its ability to increase employment, reduce poverty and contribute to social integration (Cheney et al., 2014). The International Labor Organization (ILO) has also recently advocated for the cooperative model in reaching the sustainable development goals of 2030 (ILO, n.d).

2.2.2 Key features of cooperatives

Cooperatives can take various forms and they can be classified in several ways (Cheney et al., 2014). Most often they are classified based on ownership, in which case they are divided into consumer, producer, worker or housing cooperatives (Cheney et al., 2014; Hansmann, 1999). Moreover, there are cooperatives that are owned by various stakeholders, often referred to as multi-stakeholder cooperatives (Cheney et al., 2014)

The most important differentiating factor between a cooperative and an investor owned company is their reason for existence: investor owned companies exist first and foremost in order to turn a profit and maximize investor value (Hansmann, 1999) whereas the primary goal of cooperatives is, on the other hand, to create value to its members (ICA, 2018). A cooperative is owned by its members whereas an investor owned company is owned by its shareholders (Hansmann, 1999). Moreover, in a cooperative most of the profit in most cases remains within the company and is not redistributed to shareholders, emphasizing the importance of delivering value to its members (Hansmann, 1999).

Cooperatives and investor owned companies also differ in decision making rights. In cooperatives, voting rights follow the logic “one member, one vote” (ICA, 2018) whereas in a limited liability company, voting rights go in proportion to the amount of money invested. The differentiation of votes and shares in cooperatives is not a coercive regulation but in practice nearly all cooperatives follow it (Novkovic, 2008).

Especially in the case of worker cooperatives, several benefits stem from increased worker participation. For example, in times of recession companies that are employee owned, prove to be more resilient (Kurtulus and Kruse, 2018). Burdin and Dean (2009) found that, in times of crisis, both investor owned and cooperative companies experience wage cuts and loss of employment, however, job loss is higher in investor owned firms. This is seen as a result of collective decision making: in cooperatives employees participate in management process and are also likely to take wage cuts in order to keep their jobs (Cheney et al., 2014).

Second, being able to take part in management processes also increases employee accountability and feelings of belonging (Cheney et al., 2014; Thompson, 2015). As a result, traditional leadership roles are challenged, employee motivation and performance is increased and employee retention rates have lowered (Cheney et al., 2014; Thompson 2015; Hansmann, 1999). On a related note, if employees are also owners of the company, they tend to also have more information about the state of the company, which in turn reduces agency costs (Hansmann, 1999).

Cooperatives are often criticized for inefficiency or compromising on their social goals, a process often referred to as degeneration (Storey et al., 2014; Hansmann, 1999). Arguments regarding inefficiency stem from the idea that as decision making is democratic, it is also slow and disorganized (Hansmann, 1999; Thompson, 2015). Moreover, collective decision making has been studied to lead to the so-called free riding and horizon problems. The former refers to members taking advantage of the collective benefits and the latter referring to the lack of incentive for older members to invest in the cooperative as they are not able to receive the full value when leaving the cooperative (Novkovic, 2008).

As for degeneration, it can happen through a multitude of ways: concentrating power to managers, selling shares to outside owners or increasing the amount of hired labour

(Storey et al., 2014; Hansmann, 1999). This is a risk especially when a cooperative expands to international markets, when control remains with the cooperative and the subsidiary does not convert to a cooperative (Cheney et al., 2014). Indeed, there is a constant and ongoing discussion within many cooperatives regarding the purpose of the company. This again tends to be solved with open discussion and constantly striving for the better (Storey et al., 2014).

2.3 Business models

The concept of a business model has been discussed in research for decades, however, since the 1990s information technology wave it has gained increased interest in both researchers as well as managers (Zott et al., 2011). Business models are studied as their own entity, as a complement to company strategy and as a tool for innovation (Zott et al., 2011).

Regardless of its mounting popularity, research lacks a unified definition, language or typology of business models. Zott et al. (2011) argue that practitioners use definitions that suit their studies but lack overall generalizability and that there is little effort to integrate studies that are done from different focal points. What researchers can agree on, is that business model is a separate entity from any other unit of analysis, such as offering or market, business models model systems surrounding on how value is created and captured and that is holds emphasis on the relationships and activities between the focal company and its partners. (Zott et al., 2011).

Among the most cited definitions of business models are Amit and Zott's (2001) definition "the business model depicts the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities" and Magretta's (2002) definition that conceptualizes a business model as a collection of stories that focus on the fundamental questions of business regarding the customer, value, revenue and efficiency (Zott et al., 2011). According to Casadesus-Masanell and Ricart (2010) a business model is a tool for realizing the business strategy and Teece (2010) talks about a business model articulating "the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value". Summing up, it can be said that a business model is derived from company strategy, at its heart is the customer and value captured by the customer and that a business model tries to embody the process

needed to deliver that value while making sure the business remains financially viable. Osterwalder, Pigneur and Tucci (2005) refer to this as the “business logic” of a firm.

2.3.1 Business models and strategy

From a strategic point of view, studies focus on the ability of a business model to depict the process of value creation and the links between business models and firm performance. The starting point of business models is very much focused on customer value, also emphasizing the fact that value is not created from only the firm’s capabilities but in networks of partners across the competitive landscape (Zott et al., 2011). Moreover, business models can work as a complementary tool to company strategy, linking company objectives and value creation.

There are also links between business models and firm performance. The studies done on business models suggest that business models can work as a source of competitive advantage. In entrepreneurial companies, those with innovative business models also had higher financial performance. In a later study Zott and Amit (2007) also find that combined with a suitable product strategy, a company is likely to experience higher positive firm performance (Zott and Amit, 2007).

Effective business model design can even replace traditional business models, changing the way the immediate competitive landscape or even industry creates value. One example of this is the media industry the business models of which have had to change drastically since the invention of digital tools. Business models and new technologies go hand in hand, as research agrees on how technology lacks inherent value, but it is the business model built around it that enables unlocking of value from technology. (Zott et al., 2011)

2.3.2 Building blocks of business models

In addition to defining business models, research has focused on the ontology of a business model. The most popular one is by far the business model canvas (Osterwalder, 2004), that is explained in detail further on.

Teece (2010) argues effective business models consist of determining the customer benefit, identifying market segments, selecting technologies to be used in the offering, deciding on revenue and cost structure and the design of value capturing mechanisms.

Casadeus-Masanella and Ricart (2010) take a broader view and compose business modes based on choices made and the consequences of those choices. Choices are further divided into policy choices, that account for which path of action does a company take in its operations, asset choices, that are about decisions regarding physical resources, and governance choices that work are agreements concerning decision rights over policy and asset choices. Consequences are classified into rigid and flexible, which refers to how sensitive the consequence is to changes in choice. Rigid consequences are those that take time to alter, such as the effects on brand reputation and flexible choice are highly susceptible to change, as revenue is to for example choices that change production capacity. What results is a diagram of causal loops that offer insight to how companies are “built up” and help frame choices and their consequences. Casadeus-Masanella and Ricart (2010).

On a more recent note, Boons et al. (2013) identified value proposition, supply chain, customer interface and financial model as key elements of business models and integrated sustainability perspective in each. In this regard, value proposition should take into account a society wide impact that balances cost and benefit for each stakeholder, from end user to the environment. In a sustainable business model, each node of the supply chain is both responsible and liable of its own actions, not shifting responsibility to other nodes. Similar idea holds in terms of customer interface too, which should promote customers taking own responsibility over their consumption. Lastly, costs and benefits should be divided equally among all participants in the participating network. (Boons et al., 2013)

Review of the business model canvas by Osterwalder and Pigneur (2010)

Most reviewed business model ontology is the one by Osterwalder and Pigneur (2010). Their definition of a business model is as follows: “A business model is a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams. “

The model is divided in four pillars, consisting of product, customer interface, infrastructure management and financial pillars. The product pillar focuses on which

products or services make up the company's offering and what their value proposition is. Customer interface aims to address who the company's customers are, how the offering is delivered to them and what kinds of customer relationships are needed to retain them. Infrastructure management pillar's purpose is to answer questions regarding how it will deliver the value proposition, that is, what kinds of resources, activities and partners are needed. Financial pillar is then about both revenue and cost structure of the company. (Osterwalder and Pigneur, 2010)

These pillars are then divided into one, two or three building blocks. Each building block is discussed in detail in the following, as are also the implications for each building block to look at it from the perspective of multi sided platforms. (Osterwalder and Pigneur, 2010)

Product Interface Pillar

Value proposition - Value proposition consists of those products and services that create value for the customer. It aims to address a specific customer problem and answer to specific customer needs. The value proposition distills the reasons for why a customer should choose that company over another into a few sentences. Value propositions can be innovative or similar to existing offers with additional features. Several aspects can contribute to value proposition, such as performance, design, price, accessibility or risk reduction. (Osterwalder and Pigneur, 2010)

Customer Interface

These building blocks are customer facing, describing the value proposition as well as how the company aims to reach the customer as well as what kind of relationships it is going to establish with its customers. (Osterwalder and Pigneur, 2010)

Customer segments - This building block defines the attributes of those groups of people the company wishes to serve. Only when the customer segment is clearly defined, can the company start to clarify its final value proposition based on the needs and problems of these customer segments. A company can, for example, target the mass market that does not differentiate between customer segments, or niche market, where the characteristics of customer segments are very clearly defined. (Osterwalder and Pigneur, 2010)

Customer relationships - Customer relationships building block addresses what kind of relationships the company must establish with each customer segment. The nature of customer relationships can range from personal assistance to automated services to

communities and co-creation. Usually the relationship is driven by some motivation, which could be for example customer acquisition, retention or upselling. (Osterwalder and Pigneur, 2010)

Channels - This building block aims to define how a company communicates with its customers and how it aims to deliver the value proposition to them. Channels can be set up by the company itself or a partner and they can reach the customer directly or indirectly. Osterwalder (2010) divides channels according to the customer journey from awareness to evaluation to purchase to delivery and finally after-sales. Finding the right ways to reach the customer is key to delivering the value proposition to the customer in an effective manner. (Osterwalder and Pigneur, 2010)

Infrastructure Management

Infrastructure management pillar puts the focus on the company and how the company should structure its operations in order to effectively create value, reach customers and build relationships. (Osterwalder and Pigneur, 2010)

Key resources - A company's key resources are those assets that are most important in terms of offering value, reaching customer and building relationships. Key resources can be further categorized into physical, intellectual, human or financial resources. As with channels, they can be owned by the company or the company can acquire them from partners. (Osterwalder and Pigneur, 2010)

Key activities - Key activities identify those activities the company needs to do to facilitate activities on the customer interface. Key activities can be further classified into production, referring to designing, making and delivering a product to the market, problem solving, the purpose of which is to come up with new solutions to problems customers are facing, or platform, consisting of activities related to platform development and management. (Osterwalder and Pigneur, 2010)

Key Partnerships - Key partnerships refer to those supplier and partners that are required to make the business model work. Osterwalder and Pigneur (2010) classify partnerships into four types: strategic alliances between non-competitors, coopetition (partnering with a competitor), joint venture to develop new business and buyer supplier that ensure required supplies. (Osterwalder and Pigneur, 2010)

Financial aspects

Cost structure - This building block is made up of all the costs that have incurred from operating the business model, that is, from all the previously mentioned building blocks. Companies can opt from a wide range of business models that fall somewhere between value driven and cost driven. Value driven companies prioritise other aspects of the business model higher than the costs, which can be seen for example in luxury goods or highly personalized services. Cost driven companies on the other hand base their operations on optimizing the other building blocks so that highest value is delivered at a lean cost structure, a characteristic that is well visible in many cheap airlines. (Osterwalder and Pigneur, 2010)

Revenue streams - Revenue streams are made up of all the revenues that are generated from customer segments. A very important building block that answers where the company will generate earnings to stay in business. Pricing mechanisms can vary from asset sales to licensing but all companies should base their pricing decisions on aspects of the value proposition customers are willing to pay and how they would prefer to pay it. (Osterwalder and Pigneur, 2010)

2.3.3 Adapted business model canvas for multi-sided markets

It is also relevant to consider what the business model looks like for platform companies, as the market dynamics of platform-based business differ from traditional pipeline business (Alstyne et al. 2016). The main differences in business models are well visible on the value proposition and customer interface.

The first thing to note is that the customer segments of platform businesses are always two - or more sided: platforms are at the same time targeting those that will provide the service on the platform as well as those that will then consume the service. Therefore, in this adapted version on the business model canvas, I will talk about market sides instead of customer segments as customer segments focus more on what kind of people are targeted within a particular market side. (Osterwalder and Pigneur, 2010)

As there then are more than one side to the market, this has implications to all aspects of the business model which are most pronounced in the value proposition and customer interface. First, when there are several sides of the market to target, this means that the value proposition needs to be defined separately to both sides. (Osterwalder and

Pigneur, 2010) I will therefore divide the value proposition in to two aspects: demand side value proposition and producer side value proposition.

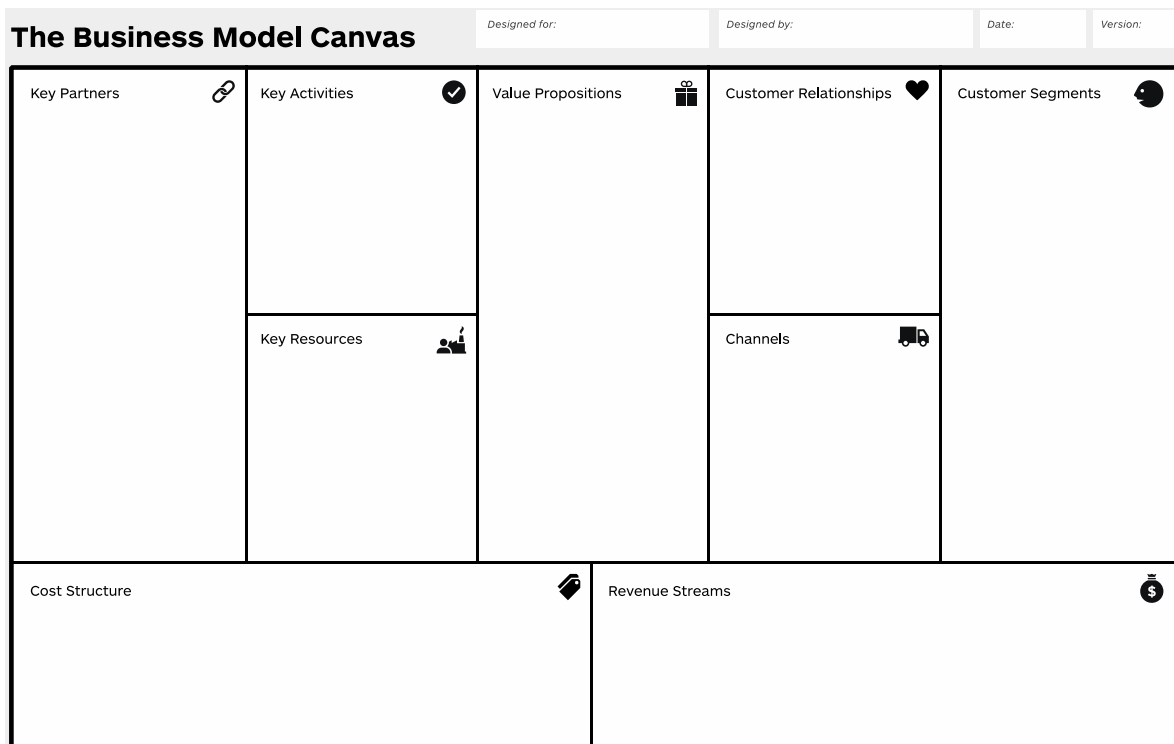
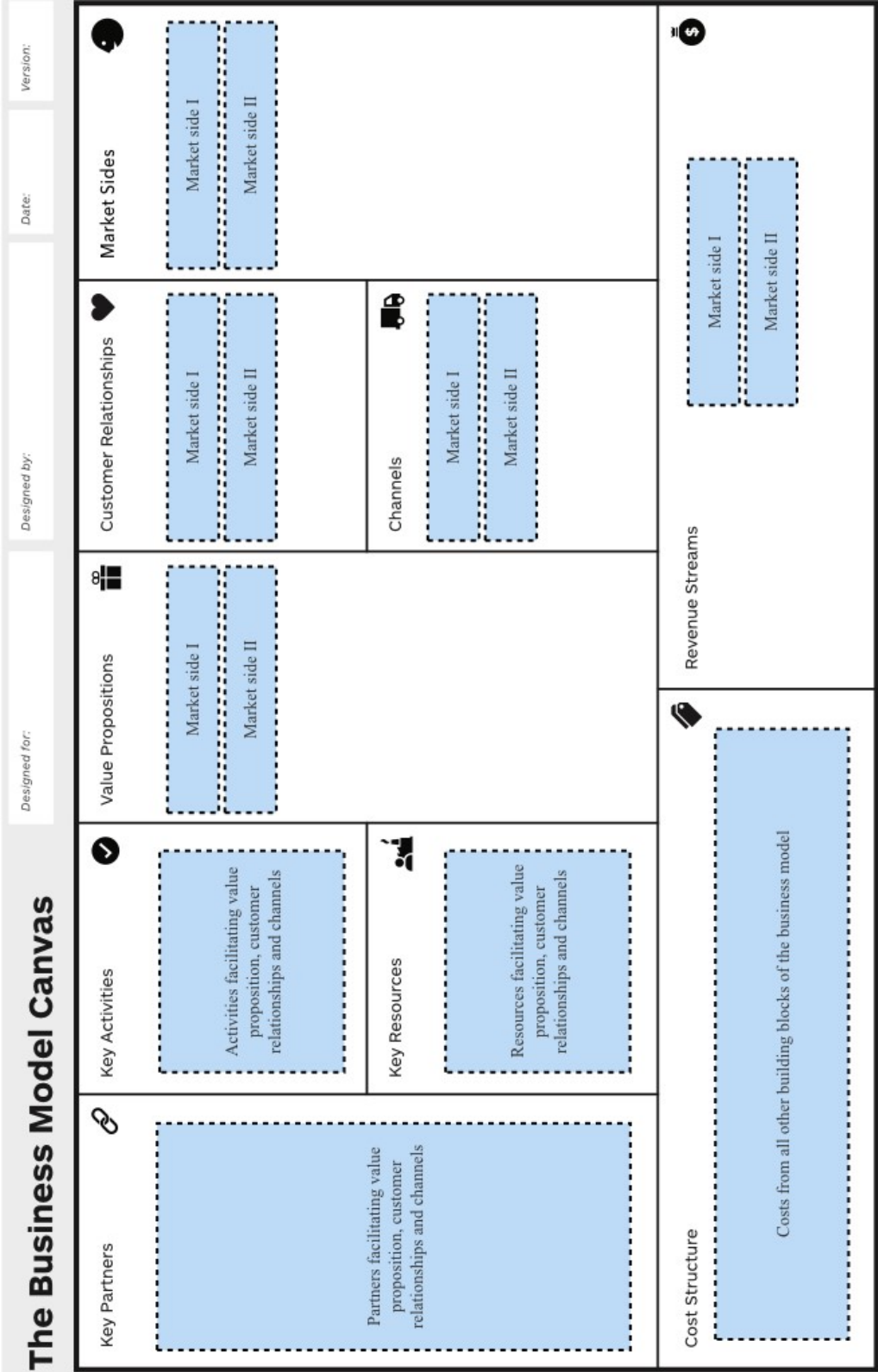


Figure 1. Business Model Canvas (Osterwalder and Pigneur, 2010).

The same applies for the other parts of the customer interface, channels and customer relationships. They will be analysed for all participating sides of the market separately. This is done because strategies on how to best reach and interact with market sides can differ significantly between market sides. Revenue structure, on the other hand, is analysed as a whole as the revenue structure often comprises of charges to one side of the market whereas the other side is more or less subsidised and together the pricing forms the platform's revenue structure. (Osterwalder and Pigneur, 2010)

As most of the infrastructure management side of the business model canvas is to large extent dictated from the customer interface, the multisided platform model has also implications on that. Both key resources and key activities should be analyzed for both sides of the market, however, it should be noted that companies can derive synergies from using similar or complementary activities and resources. Partnerships and cost structure, on the other hand, can be analyzed as single entities as they regard more on how the platform has chosen to structure its activities and resources.



3 Methodology

This section outlines the methodology of this thesis. I will briefly discuss the chosen method, multiple case study, go through how the cases were chosen and give a description of the case companies. The chapter will conclude on how data was collected and analyzed.

3.1 Multiple case study

A multiple case study is one method used in qualitative studies, that is in studies where data is gathered in a non-numerical form. Yin (2003) defines case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. Yin (2003) states that case studies are particularly useful when the investigator is trying to understand “how” or “why” related questions on a phenomenon, that is contemporary and very much tied to its context. Case study is also a good choice if the researchers do not have to have control over related behaviors. Because both the collaborative economy and platform cooperativism are very contemporary as a phenomenon and because exploratory study on business models do not require control over company behavior, case study is an optimal choice for this thesis.

Case study data is commonly empirical data gathered from organizations in forms of documents, records, direct observation, participant observation and/or physical artefacts (Yin, 2003). The insight cannot, however, rely on these data alone but must be built on previous knowledge. This study is exploratory in nature and aims to build upon research done on sharing economy platforms and platform cooperatives in order to provide a more detailed picture on especially platform cooperatives.

Case studies can be divided into single and multiple case studies. A single case study focuses only on one-unit analysis, and it is suitable for studying for example in testing a critical example of a carefully formulated theory or when the case represents a unique or extreme case. Multiple case studies, on the other hand, consist of several units of analysis and increase the generalizability of the study. A multiple case study is chosen for this research because the purpose of the study is not to look at a unique or extreme instance of platform cooperatives and using one case would not provide sufficient information of the overall phenomena. (Yin, 2003)

The designs of both single and multiple case study can be further classified into embedded and holistic designs (Yin, 2003). A holistic case study looks at each unit of analysis as a whole whereas embedded case study designs consist of several subunits of analysis (Yin, 2003). As this study looks at business models through business model building blocks, the research follows an embedded case study design.

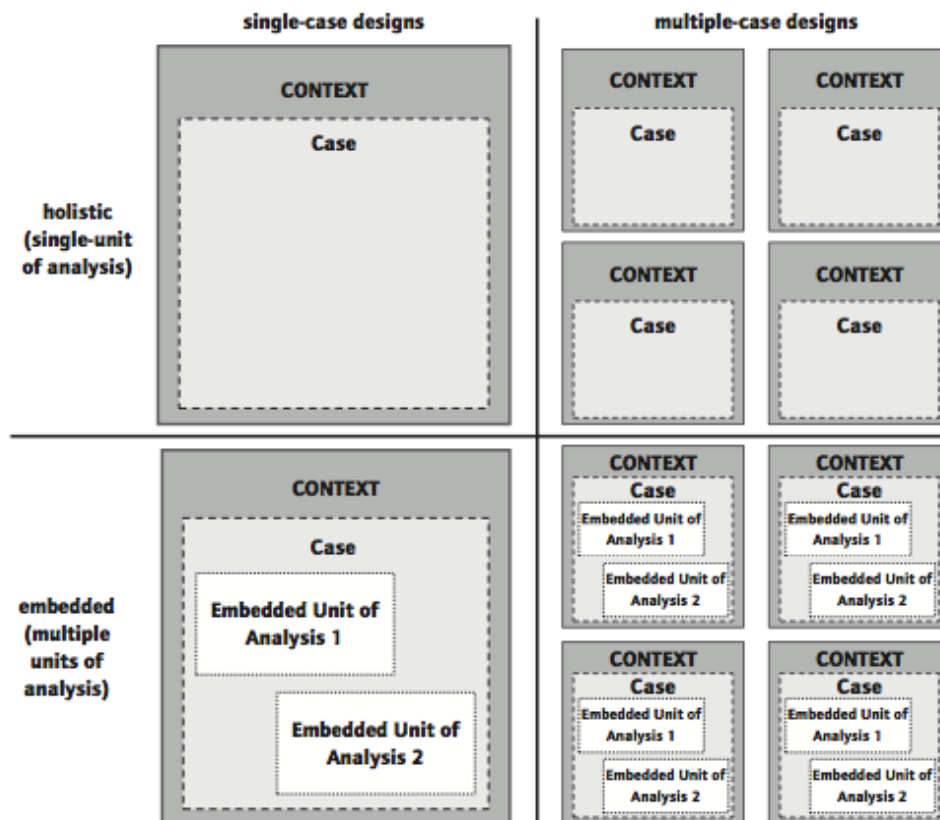


Figure 3. Case study designs (Yin, 2003).

Case studies are criticized for lacking rigor, overall scientific generalizability and causality as well as taking too much time to complete (Yin, 2003). Lack of rigor refers to the possibility of researchers being negligent in collecting data or having biased views on the results as well as to case studies often lacking fixed predetermined textbook guidelines (Yin, 2003). To alleviate these issues, the aim has been to collect data from several sources and on more than one occasion so that essential pieces of information would not be left out. As for the lack of specific guidelines, this holds true especially in terms of the method of analysis, cross case analysis, that does not have stepwise guidelines on how to proceed but the decision is left to the researcher. All the steps done in the analysis phase have, however, been listed for the reader in the data collection and analysis chapter. Lack of

causality, on the other hand, is a natural result from the fact that statistical methods are not often used in case studies. (Yin, 2003)

Lack of generalizability results from the usually low number of units of analysis of case studies (Yin, 2003). For these purposes, if the case is not a critical or unique example, a multiple case study should always be considered to ease the problem. Since not a single platform cooperative presents a unique example of the phenomena, and as this study is comparative in nature, four case cooperatives and their respective investor owned counterparts were chosen.

3.2 Selection of case companies

Platform cooperative case companies were gathered from Internet of Ownership, a website the purpose of which is to promote and advance platform cooperativism. On the website, there is a directory of 274 digital platforms, which was the main data source of case companies for the research. This data set was imported as a Google Sheets file after which I started to go through the organizations. The organizations were classified according to:

- category, referring to whether the cooperative actively governed the platform or only used it to conduct their business
- type, meaning the organizational status of the company
- activity, the sector of the economy the business operates in.

First, I excluded organizations the organizational status of which was not a cooperative, according to the focus of this thesis. Second, I included only organizations that were categorized as platform cooperative. The distinction between a platform cooperative and a cooperatively run platform comes from the fact that according to the classification on Internet of Ownership, platform cooperatives are “ICA-compliant co-ops that manage an online platform, sharing ownership and governance over it” and cooperatively run platforms are “ICA-compliant co-ops that primarily manage and do business through an online platform”. This was done to exclude organizations outside the scope of this thesis, such as organizations that support companies in platform cooperative ecosystem or cooperatives that operate a one-sided market, such as an online store where they are responsible for producing most of the sold products as well.

From this dataset of 98 platform cooperatives I set out to finding most typical platform cooperatives. I went through the dataset based on the activity column, that describes the sector the platform operates in. From this I found that

- 19 cooperatives were marketplaces
- 10 operated a transportation business
- 10 were platforms for freelancers from different fields
- 9 were financial platforms

Altogether the four most common sectors made up for 50% of the platform cooperatives, so I decided to take one cooperative from each category for further analysis. Suitable companies were found by excluding the ones that were in beta or otherwise in development and ones that did not have enough information for business model analysis.

The investor owned case companies were chosen after deciding on the suitable platform cooperatives. These companies were searched through search engines and had to work as intermediaries between a supply and a demand side, be shareholder owned and venture capital funded as well as offer similar services as the platform cooperative. Keywords used included “biggest online marketplaces/ride sharing platforms/crowd investing platforms/freelancer platforms”. This resulted in a number of lists of the biggest platforms in each business, from which it was easy to find a company the service offering of which was enough similar to that of the platform cooperative. The only case company that was more difficult to find was the freelancer platform as the search resulted in a high number of companies the service offerings of which focused mostly on digital services or hiring only. Additional keywords, like “services freelance platforms” were used in this case to narrow down the search results. The following section introduces the case companies, both platform cooperatives and investor owned companies, in more detail.

3.2.1 Case company descriptions

Loconomics

Founded in 2014, Loconomics is a San Francisco based platform multi stakeholder cooperative operating a platform for local service professionals offering their customers. For its service professionals Loconomics provides a way to promote their business and maintain their customer relationships as well as offer a community that helps them in

business development and build relationships among other service professionals. For the end users the value proposition is heavily based on helping local freelancers have better terms of working and fairer payment compared to other similar platforms. In addition, Loconomics brings services under one platform so that the users do not have to juggle between platforms that focus on certain niches of the services market.

The main channel of operation is the platform that can be used on desktops and mobile. The channels are relatively integrated for both sides, meaning that most of the activities in the customer journey take place on the platform. The customer relationships are mostly based on self-service apart from the community that Loconomics operates for its service professionals. The company's main activities are then maintaining the platform, customer relationship management as well as community management. It has partnered with third parties that host various kinds of events and courses for the community members. Loconomics's revenues are mostly based on monthly member fees from service professionals, since transactions on the platform are free. It does not give away too much information on its cost structure, however, the main cost drivers can be expected to comprise of platform management, business development and marketing costs.

Thumbtack

Loconomics is compared against Thumbtack, a company founded in 2009 to provide a end to end customer experience for service professionals and their customers. Thumbtack was chosen as its service offering resembled most to that of Loconomics, whereas most of the investor owned services platforms have limited their service to a niche part of the services market only, such as web development or home renovations.

Thumbtack is a platform for local professional services ranging from home renovation to cooking classes. For its service professionals, it has positioned itself as a sales tool, helping service professionals discover more leads and retain them as continuous customers. For their end users, Thumbtack promises to deliver a wide range of trustworthy professionals and an easy to use platform to interact with them on.

Most of the activities in the customer journey take place on the platform for both sides. The service is heavily automated in order to make the process as simple as possible. Thumbtack also provides a community for its users to interact, and that is used mainly as a support channel. As most of the service is automated for the users, Thumbtack's main

activities include platform management and development. It occasionally partners with third parties in marketing purposes.

Thumbtacks revenues comprise of the transaction fee they charge from all new leads they create from their service professionals on the platform. Costs are not revealed in detail; however, the drivers can be expected to include platform management and development and other related operating costs.

Fairmondo

Launched in 2013, Fairmondo has quickly become one of the fastest growing platform cooperatives. The company operates an open marketplace for goods. It is a multi-stakeholder cooperative, meaning that everyone from employees to customers can become members of the cooperative.

Fairmondo places additional emphasis on sustainable products. It has its own classification and filtering for products that reach certain standards in sustainability. In addition, it encourages non-monetary exchange, like swapping, gifting or borrowing of products.

The company's main channel for reaching its customers is the platform. The exchange is mainly based on self-service for both sides and as a support channel, Fairmondo uses email, phone, its blog and Q&A page. It promotes having an active community around its business, however, it remained unclear whether this extends beyond Fairmondo's online forum. Fairmondo operates also as a separate cooperative in United Kingdom and its other partners include for example companies offering website development services and providing APIs. In terms of revenues and costs, Fairmondo does not share specific information, however, it is known that most of its revenue consists of cooperative member fees as well as charges on exchanges, however, those apply only to customers that are classified as existing businesses. Peer to peer exchange on Fairmondo is free.

Ebay

Fairmondo is compared against Ebay. Fairmondo is often referred to the "cooperative Ebay" or "cooperative Amazon". The reason why Amazon was not chosen was that the

scope of its offering is much larger compared to that of Fairmondo. Ebay operates a similar business as it is mostly based on peer to peer exchange and users set the prices themselves.

Ebay was founded in 1995 and currently operates a very successful online marketplace globally. Its market sides are both people and businesses that sell their products and services on the platform as well as customers and business consuming those services. Its main differentiators from its competitors are its strong brand that has become a synonym for online auctions, its wide customer base that enables selling products in very niche markets as well as the resulting variety of products. Its main channel for reaching both market sides is the platform it operates as well as the channels or partner platforms that have specialized in specific product categories.

Ebay also provides its users an extensive community that enables interaction with other users as well as works as the main support channel for its customers. Ebay's main activities are therefore maintaining its brand as well as the platform, marketing and customer relationship management.

Moeda

Moeda was the chosen platform cooperative from the financial sector. Moeda is a platform for investors and startup companies in underbanked areas, that is in areas that do not have access to efficient and reliable credit which is one of the main factors inhibiting the economic growth in the area. Moeda focuses only on projects and companies that reach the United Nation's Sustainable Development Goals. For the funded projects it provides a way to access needed credit and for the investors it provides a way to fund socially meaningful projects in underbanked areas. In addition, it has built its platform on blockchain, which helps investors track the progress of their funded projects, providing an additional level of transparency for the investors.

The platform in the main channel for both sides. The journey for the investors is very much automated end to end whereas for the companies and projects aspiring to be funded go through an extensive vetting process and are assisted by Moeda throughout their journey. A lot of Moeda's activities then go to training the companies and tracking their progress. In addition, Moeda has partnered up with local cooperative instance in Brazil and does a lot of cooperation with banks.

Moeda does not give out a lot of information on its cost and revenue structure. Its goal is to license the platform and technology to banks as well as charge transaction fees on investments. Most of its costs can then be said to go into business development and platform management.

Wefunder

Moeda is compared against Wefunder, a crowdfundering platform founded in 2012. Wefunder started from a grassroots movement when its founders realized they could not invest as individuals in the startups and projects they believed in but in order to do so, they would have to be accredited investors. Now they offer a platform on which anyone, regardless of their status and wealth, can make investments in companies. For companies, they provide an additional source of funding that is easy to apply for and for the investors they provide an easy to use platform to fund companies they believe in.

All activities included in the service take place on the platform. Wefunder's platform is heavily automated and both companies and investors are able to set up their own profiles easily. Wefunder does not restrict companies on accessing the platform apart from a light background check on the founders of the company. Wefunder charges a transaction fee on successful projects but does not reveal specific information on its cost structure.

Tapazz

Tapazz is a multi stakeholder cooperative operating in Belgium. Originally founded in 2014, it is a car sharing service for local communities. Its market sides include people with vehicles they are willing to share to people in their cities as well as people in need of a flexible way of having a car in their disposal. Its value proposition is heavily based on environmental and social benefits on both sides as well as efficiency gains.

The main channel for the service is the mobile application that works as a platform from car owners and end users to interact on. The platform is open for everyone to use and there are no barriers of entry or monthly fees and in addition, customers set the prices for transactions. The service is based on self-service as car owners and users are able to complete the transactions on their own. The main assets and activities are related to the platform itself and Tapazz has also partnered with insurance companies to provide insurance for the cars as well as residential developers to discuss providing vehicles for

sharing for new housing developments, reducing the need for parking spaces. Its main revenues come from an optional membership fee when joining the cooperative as well as 30% transaction fee it charges on all transactions happening on the platform.

Turo

Tapazz is compared against Turo, a peer to peer car sharing company founded in 2009. Turo was chosen because it provided a peer to peer service whereas several other players in the market own the vehicles or the car owners drive the cars themselves. Turo's value proposition is based on efficiency and ease of use for both sides of the platform. In addition, it has a very wide range of cars available on several locations globally.

All activities related to the customer journey take place on the platform apart from raising awareness that can also take place in other channels or word of mouth. The service is automated end to end for both all sides of the platform. Turo has partnered with insurance companies to provide insurance services as well as with third parties to further develop the customer experience. Users of Turo can opt from setting the price of transaction themselves or let the algorithm do it, but in each case, there is a transaction fee of 25%. Cost structure for Turo is challenging to analyze but would include at least aspects such as platform management and development as well as marketing and partnership management costs.

3.3 Data collection and analysis

As mentioned, case study data can consist of documentation, archival records, direct observation, participant observation and/or physical artefacts (Yin, 2003). The primary data types in this thesis are direct observation and documentation. Direct observation comes in the form of observing the case companies' current websites and their online wikis as well as active social media channels and other online community activities. Documentation refers to letters, agendas, administrative documents and newspaper clippings. Other sources of data in this thesis refer to company bylaws, terms of services and pieces of news.

Table 3: Data source types observed per each case company

	Website and terms of service	Company wiki/bylaws	Company blog	Social media	Online community	Newsarticles
Loconomics	x	x		x	x	x
Fairmondo	x	x	x	x	x	x
Moeda	x		x	x		x
Tapazz	x	x				x
Thumbtack	x		x	x	x	
Ebay	x		x	x	x	
Wefunder	x					x
Turo	x		x	x		

After finding suitable companies for the research, I began gathering data on them. First, I looked at each company individually. I started by going to their website and familiarising myself with what they do and to whom they are offering their services. After that, I started gathering information on the building blocks of the business model canvas for each company. Osterwalder and Pigneur (2010) have provided in their framework a set of questions to focus on, which was used as a basis for gathering information. I always started with identifying the the market sides for each company. Second, I researched their value proposition, which were relatively easy to identify for all participating sides on the main pages of the websites.

Third, I looked at different channels the company is using to reach its audience. This required checking how the service works from information provided on the website, the terms of service or downloading the platform application, the company's social media channels as well as how their support services are organized. Fourth, I identified what kind of customer relationships the company has. This was also relatively easy to identify from the terms of service or observing the customer journey myself by signing in on the platform.

Table 4: Data sources used for platform cooperatives

	Loconomics	Fairmondo	Moeda	Tapazz
Website	https://www.loconomics.coop/	https://www.fairmondo.de/	https://moedaseeds.com/	https://tapazz.eu/
Company wiki/ by laws	https://loconomics.gitbooks.io/loconomics-cooperative-bylaws/content/	http://info.fairmondo.de/geno20/		https://tapazz.zendesk.com/hc/nl/articles/207239105-The-Co%C3%B6perative
Company blog		http://info.fairmondo.de/	https://medium.com/moeda	
Social media	Instagram, Twitter	Instagram	Youtube, Instagram	
Online community	https://www.loconomics.coop/feed	https://forum.fairmondo.de/		
News articles	https://blog.p2pfoundation.net/loconomics-gives-gig-workers-an-alternative-to-investor-owned-platforms/2018/01/21	https://www.shareable.net/blog/qa-with-felix-weth-of-fairmondo-the-platform-co-op-thats-taking-on-ebay ; https://blog.p2pfoundation.net/the-new-cooperatives-the-case-of-fairmondo/2018/03/28	https://www.shareable.net/blog/moeda-the-cooperative-cryptocurrency-that-aims-to-advance-financial-inclusion ; https://www.intelligenthq.com/moedas-platform-or-how-to-take-cryptocurrencies-back-to-the-people/	http://www.ecodesignlink.be/en/tapazz-case-1 ;

Table 5: Data sources used for investor owned platforms

	Thumbtack	Ebay	Wefunder	Turo
Website	https://www.thumbtack.com/	https:// www.ebay.com	https://wefunder.com/	https://turo.com/
Company wiki/ bylaws			https://help.wefunder.com/	
Company blog	https://www.thumbtack.com/blog /	https://community.ebay.com/ ; https://www.ebay.com/rpp/stories		https://blog.turo.com /
Social media	Instagram, Twitter, Facebook	Facebook, Twitter		Instagram, Twitter, Facebook
Online community	https://community.thumbtack.com/	https://community.ebay.com/		
News articles			https://www.businessinsider.com/if-this-guy-has-his-way-youll-only-need-100-to-invest-in-startups-2012-1?international=true&r=US&IR=T	

Fifth, I moved to the infrastructure management side of the business model canvas that includes key partners, key activities and key resources. For each building block, Osterwalder and Pigneur (2010) have determined you should look at how they support the value proposition, channels and customer relationships. In order to do this for the value proposition, I searched through the website indication of partners and also used search engines with keywords “company name + partners”. For the channels, I looked if any parts of the customer journey, like payments or other support, were taken care of by external companies.

In terms of key activities and key resources I combined information I had found on the website and related documentation to deduce relevant elements. As activities and resources, the company uses are not often something the company explicitly states on their website, they were analyzed on the basis of the value proposition, channels, customer relationships and partners. For example, if a company has an active community both online and offline and if it is an integral part of the value proposition, it can be said that maintaining and developing the community is a key activity for the company and that the information on the platform is a key resource. Alternatively, if a company’s customer journey is highly automated and integrated and this efficiency is a part of the value proposition, data and the algorithms become a key resource for that company.

Finally, I analyzed the financial aspects, cost and revenue structure. Finding information on the revenue structure was relatively easy as companies provide their pricing options on their websites. However, no company provided detailed information on their cost structure. Naturally the costs of the company include aspects like platform management, other operating costs as well as partnerships but this can be said for each case company, making it difficult to analyze any differences or similarities between the companies.

After gathering data on each case company individually, I did a pair wise comparison. This was done per each building block separately, highlighting the parts that were similar and those that were different. These notes were gathered on a separate document to create an overview on each pair. Finally, I gathered an excel with short notes on main similarities and differences to get an overview on all of the pairs.

These results are analyzed by using cross case synthesis, which, according to Yin (2003) is particularly suitable for multiple case studies. However, Yin (2003) does not provide detailed steps on how one should take conducting cross case synthesis. One option he presents is creating word tables, and something similar was done in the last phase of the data collection where a table was gathered on the main differences and similarities. From this table, it was easy to identify on an overall level those building blocks where most differences and similarities emerged. The main findings of the pairwise comparison are introduced in the next section.

4 Findings and analysis

In this section, I will discuss the findings of the research. Each case company pair is first analyzed separately per business model building block. After this, in section 4.5, I will discuss the main observations, including the key similarities and differences, that emerged from the research.

4.1 Loconomics and Thumbtack

Product interface

Value proposition

The value proposition of Thumbtack and Loconomics is somewhat similar in terms of the demand side (people looking for services on the platform) but different for supply side (people offering services on the platform). For the demand side, both companies promote convenience as a key value driver. Loconomics emphasizes that it brings all local services under one roof with a user friendly application. Similarly, Thumbtack promotes instrumental benefits of using their service, like time savings and risk management. With the help of several examples, Thumbtack also illustrates in several examples the different ways it can make the lives of its end users easier.

In addition, Loconomics puts a lot of focus on social aspects, calling to users' social conscience by elaborating on how difficult it is for service professionals to succeed in the market and how other similar, investor owned platforms, have too much power and are able to set the terms for participating on the platform themselves.

In terms of their service professionals, both platforms are focusing strongly on getting more service professionals on their platform. Thumbtack understands how difficult it is to find and generate new leads for service professionals that are small business with little resources to do sales and marketing. In the case of service professionals, the value proposition is heavily focused on sales, and Thumbtack is profiling itself as a sales tool. Loconomics has opted for a different approach, offering different bundles of services that focus on customer retention and relationship management for existing customers. It emphasises the fact that they are democratically governed cooperative that treats the service professionals fairly. In addition, Loconomics aims to create value for its service professionals through its community, that offers courses and meetups as well as its ownership model, which aims to improve ownership and income security of businesses.

Thumbtack's product bundles for both sides are simple. They provide the participants with an application and a website platform where service professionals and end users can arrange their activities. Additional services for end users include the company blog with several tips on how to make the most of the service and for service professionals the possibility to promote their profile for more hits as well an online community to ask questions. Both sides also have access to the company support services.

Loconomics' product bundles consist of free, growth and pro packages. The free package comes with access to clients, invoice system, insurance and Loconomics cancellation policy as well as support. In the growth package, service professionals are invited to monthly workshops, meet and matches and in addition they can influence their listing placement. They will also become members of the cooperative and gain rights to influence and vote on company matters. Pro members will, in addition, have access to scheduling and client management software, client specific pricing and zero interest loan.

In conclusion, Thumbtack is basing its value proposition on instrumental benefits, such as convenience and generating more leads whereas Loconomics profiles itself mainly as a social contributor. On the other end, Thumbtack is promising to its customers to be an all-in-one house for local service professionals and on the other end, it is creating value on the number of customers it has to bring value to its service professionals through improving their sales. Loconomics promises its service professionals a fair compensation, a community as well as business development aid through courses and classes. The value proposition for demand side customers is more ambiguously communicated but calls to customers' social conscience by emphasizing it is a platform where service professionals

have a say in how the business is run and that it does not charge commission of transactions happening on the platform.

Customer interface

Market sides

Thumbtack and Loconomics have very similar platform participants. Their services are designed for service professionals that can be both small businesses or individual professionals as well as individuals that are looking for services from qualified service professionals. Neither company poses any restrictions on who can participate. As the two companies are in different phases in terms of maturity, Loconomics is mostly focusing on getting more and more service professionals to join its platform whereas Thumbtack is aiming to retain as many end users as possible to make sure service professionals reach high enough levels in terms of quoting.

Channels

Thumbtack and Loconomics differ in their channel structure to some extent. Both platforms use social media and search engine marketing in raising awareness for both sides of the platform and Thumbtack has also set up a blog mainly targeting at raising awareness for the service professionals. For service professionals the path from evaluation to aftersales is similar, with everything happening on the platform to which all additional services are highly integrated. A key supporting channel for Loconomics is also its online community, where service professionals can get support from other participants as well as get tips in terms of business development and sign up for courses and events. Thumbtack has similar support services aimed to educate its service professionals but to a much smaller extent than Loconomics.

On Thumbtack demand side participants follow a similar customer journey as the service professionals. On Loconomics, on the other hand, the responsibility for planning of the end user journey is on the service professional. This means that Loconomics itself has not designed how the path from awareness to after sales for the end customers should flow, but the service professionals can choose and design whether the Loconomics platform is used only for raising awareness, booking the services or which other channels the customer

would use. The journey then is not equally integrated compared to Thumbtack where the customer journey for the end users is equally straightforward and equally automated compared to the journey of service professionals.

Customer relationships

Thumbtack and Loconomics differ from one another in terms of the customer relationships they have established with each of their market sides. Loconomics, being a cooperative owned by its service professionals, aims to create synergies with the service professionals in order to build a strong sense of community and common purpose among its service professionals. Even though it is not required for the service professionals to become members of the cooperative, it is strongly encouraged and, additionally, relatively active participation is expected from the members. In this sense it can be said that the service professionals co-create value together with Loconomics because the community is an integral part of the main value proposition. In addition, Loconomics aims to upsell service professionals various customer relationship management tools and courses/events in separate offerings. When it comes to its end users, Loconomics has taken a relatively distant role and offers its end users automated services through CRM tools it is providing its service professionals.

Conversely, Thumbtack's service is highly automated. The process is made very easy for the users on both sides, focusing on acquiring new customers and retaining old ones. Process is highly automated for service professionals as well, as algorithm decides on the ranking on professionals. Thumbtack aims to upsell service professionals its "promoted" service, the purpose of which is to rank higher on the listing. Similar add on is established on Loconomics too.

Infrastructure management

Key partners

Both companies use partners to some extent, however, for different purposes. Thumbtack does nearly all of its activities in house, as it operates a highly integrated platform. It has, however, formed partnerships with leaders in specific industries that can use Thumbtack professionals as a part of their own service offering. One example is the partnership with

Monrovia, an outdoor garden equipment provider that used Thumbtack professionals as workforce to do the installations for their products. In addition, Thumbtack has partnered with influencers who do content marketing on their own platforms. The goals of these partnerships are clearly marketing related, with a focus on boosting awareness as well as educating the demand side of the platform.

For Loconomics, an essential part of their value proposition is the community and the activities the community provides. Loconomics does not produce these activities itself but some are done by the service professionals on a peer to peer basis while some are acquired through partnerships with various industry players like other businesses or educational institutions. The purpose of these classes and events is to help service professionals with business development as well as bring the professionals, who are also owners of the company, together in order to create a sense of community. For Loconomics, these partnerships help to retain service professionals as well as bring cooperative values to the daily operations of the platform. Both companies have also outsourced their payment services to third party partners.

Key activities

As mentioned, the main value proposition of Thumbtack focuses on gaining more leads for service professionals and access to wide pool of local service professionals for end customers. Loconomics' value proposition entails more customers, business development help and a community for its service professionals and for end users access to local service professionals they know are paid fair. As most of the activities in the actual the process where value is created are done by the platform participants, the companies are in a supporting and facilitating role. For Thumbtack, the main activities in terms of the value proposition are to make sure the process runs smoothly as well as develop the value proposition further together with the platform participants.

The same applies for Loconomics as well, however, a key part of their value proposition is also development and management of business development tools and related partnerships and the value proposition bundle as a whole. In addition, the community and activities related to it are key activities. The Loconomics community aims to establish relationships between service professionals as well as work as a tool for co-creation between the Loconomics platform and service professionals. Its community

offers various kinds of events and courses, the management of which is the company's responsibility.

In order to make the channels and value proposition come to life and reach their customers, both platforms have to put effort in platform management. This entails platform development, maintenance as well as marketing. As the platform is highly integrated to the value proposition, activities related to platform management are one of the most important ones for both companies.

As the community is more interwoven to the value proposition for Loconomics than Thumbtack, Loconomics has more activities to maintain in terms of its customer relationships. This includes for example community management and developing their business development services. Thumbtack on the other hand, focuses only on online relationships and in addition to its forum has only its support channels to maintain.

Key resources

Both companies make use of similar resources. In terms of the value proposition, the most important resource for Thumbtack is the brand, as that is mainly what attracts users on the platform. Loconomics does not rely as heavily on the brand, however, the most important resources in terms of its value proposition are the customers and ensuing network effects. The same holds true for Thumbtack. Contributing and active service professionals as well as good relationships with partners and crucial resources for the community of Loconomics.

In terms of the channels, the platform itself and related intellectual property are a key resource for both companies. This entails resources ranging from the algorithm and IT servers to developers and managers. As Thumbtack's service is so heavily automated, the platform and its underlying algorithm are key resources in terms of the customer relationships as well. In the case of Loconomics the community is in a more central role, making human capital related to the community a crucial resource in managing customer relationships.

Financial aspects

Revenue streams

The two companies differ significantly in their revenue streams. Loconomics service professionals pay a subscription fee in three separate bundles that are mainly differentiated by the availability of business development tools and customer relationship management tools. Service professionals can set the price themselves and Loconomics does not take any commission on the orders of the service professional and the end user. Thumbtack service professionals too, can access the platform free of charge and set prices for end users themselves, however, the value proposition emphasises a sales focus for the service professionals, which is why the platform charges for new leads generated by the platform. Platform is considered to have generated a new lead once a customer makes contact to the provider through the platform. The price of the lead is dynamic and determined by the platform and depended on the size and scope of the task being offered. Both companies use third party services in payment, integrated on the platform and taking place online.

Cost structure

For both companies, platform development and management are the main costs, followed by community management and marketing costs. However, Loconomics can be said to be a value driven company, focusing on creating high value for its service professionals, whereas Thumbtack is cost driven, aiming to cut down on costs in terms of each resource and activity.

Table 6: Summary of key similarities and differences between Loconomics and Thumbtack

Block	Loconomics	Thumbtack
Value proposition	Demand side: local, trustworthy services where service professionals are paid fairly	Demand side: one place for local services
	Supply side: get fair price, platform for community and business development	Supply side: grow your business, find more leads
Customer segments	Demand side: Private people in local areas	Demand side: Private people in local areas
	Supply side: Local service professionals	Supply side: Local service professionals
Customer channels	S: Social media, website, platform, community, email, phone	Website, social media, platform, blog

	D: Platform	
Customer relationships	D: Decided by service professional S: Self-service, co-creation	D: Automated self-service S: Automated self-service
Key partners	Service professionals, business and educational institutions	Complementary partners, influencers, payment providers
Key activities	Platform management, development of business development tools, community management	Platform management
Key resources	Existing customers, intellectual property, community	Brand, wide customer base, intellectual property
Revenue streams	Three bundles of subscriptions, no transaction fee	Fee from new leads
Costs	Platform and other operating costs, community management	Platform and other operating costs

4.2 Fairmondo and Ebay

Product interface

Value proposition

Both Ebay and Fairmondo function as marketplace platforms on which sellers and buyers interact to sell and buy products. These two companies differ in terms of their value propositions for both buyer and seller side. Even though all kinds of products are accepted on the platform, Fairmondo's value proposition for the buyers is heavily based on social motives, such as sustainability and social responsibility. This is visible for example in the fact that it manages a product filtering system for finding products that reach certain standards. Ebay, in turn, exerts next to no control on the products sold on the platform, mainly providing its buyers a recognisable brand that works as a facilitator of trust for the buyers. It is heavily reliant on the network effects it is able to facilitate between sellers and buyers, which in turn results in a wide variety of products, increasing brand and user value. In addition, a key promise is Ebay's pricing system that is based on auctions, which gives customers a lot of power.

For its sellers, Fairmondo promises to be an ethical marketplace, providing fair compensation as well as optional ownership rights giving you the right to influence the company governance. It does not, for example, charge a commission for exchanges between individuals. Ebay, again, relies on the amount of buyers it has been able to collect through its brand, which enticises more sellers on the platform. The wide customer base makes it possible, for example, for very niche sellers to find potential customers.

In conclusion, both platforms aim to, in their own way, to facilitate trust between its buyers and sellers. Ebay has built this on its brand that has become a synonym for online auctions. Fairmondo does this by vetting its products and enabling extensive filtering based on sustainability aspects. Ebay has a very strong value proposition based on instrumental aspects for both sides whereas Fairmondo is basing its value proposition on social aspects.

Customer Interface

Market sides

In terms of market sides, both platforms are targeting a wide variety of customers from individuals to companies who will use the platform's filters to find products they need. Fairmondo is also a marketplace for everyone, however, it puts special focus on ethical and sustainable products, making that a specific target niche among its customer base. Neither platform restricts access for participants.

Channels

The structure of channels is very similar on both Ebay and Fairmondo. Both companies' main channel is the platform on which mostly all activities take place. Neither company has no need for any warehouses to store their goods, as they operate as intermediaries only. Ebay does extensive search engine marketing in order to boost its presence in the awareness and evaluation phases. It also offers APIs to promote their businesses on external sites. And partnered with influencers to boost awareness and outsource support functions. Fairmondo, too, uses APIs and social media in its marketing but to a much lesser extent than Ebay.

As for buying and selling, all activities happen on the platform for both companies. You can evaluate the products on the platform as well as communicate with buyer/seller.

Both have put in place a reputation system to increase trust among buyers and sellers. Neither company takes part in shipping of the product, however, Ebay has partnered with several carriers to allow the sellers several options to choose from. On Fairmondo, buyers organise shipping together with the seller.

The support and aftersales channels for both companies are somewhat similar as well. Ebay has successfully managed to build an active community around its business which includes several support functions traditionally taken care of the company. Buyers and sellers can pose questions on the forums or search answers from a large wiki. Fairmondo, too, has an active forum on which users can interact with one another, however, its main support channels are FAQ, email and telephone.

Customer relationships

Both Ebay and Fairmondo's services are heavily based on self-service, with Ebay having also automated and outsourced some aspects. Sellers on Fairmondo follow a self service process when setting up their products on the platform and buyers will then themselves filter through the products and agree on shipping and payment method together with the seller. Ebay's processes are highly automated, however, it does offer some assisted support to its sellers. In addition, Ebay has established communities that work as support channels and forums for people with similar interests. Fairmondo, too, has a very active online community that works mainly as a tool for co-creation. The forum has, for example, a lot of surveys and questionnaires from Fairmondo that are used to develop the Fairmondo platform further. On top of that, the forum is used for sharing information, interacting with other users and as a support channel.

Infrastructure management

Key partners

As both Fairmondo and Ebay are ecosystems that bring different sides of the networks together within their respective markets, partnerships are a key part of the expansion strategy for both. The internationalisation strategy of Fairmondo is based on partnerships with other cooperatives that can use the Fairmondo brand but otherwise operate their own businesses. One is already established in the United Kingdom, where Fairmondo UK is an online store for retailers that have high ethical standards. In addition, Fairmondo has

formed a partnership with Belboon that facilitates partnerships with website owners. Website owners can sign up for the affiliate program and receive an API and commission on successful sales done through it. Fairmondo in turn boosts its own awareness through this.

Ebay has opted for a different expansion strategy by diversifying some product lines into separate companies and then forming partnerships with them. These include Stubhub, a marketplace for concert tickets, shopping.com for comparing prices of products across different online sellers as well as a group of Ebay classified companies that operate on a local basis in order to facilitate local connections. In addition, Ebay partners up with certain sellers that meet specific standards. It could also be said that some key customers that are active on the support platforms are key partners for Ebay as they have taken up a key activity in the customer journey. The purpose of these different kinds of partnerships is to enhance the customer experience as well as eradicate competition in clear product segments that are strategically better taken care of as a separate business. Sellers and community participants bring legitimacy for Ebay as well as take care of the support channels.

In addition, a key partnership for Ebay is payment providers. This is needed to make sure business runs smoothly but is not done inhouse. It offers several options for payments whereas Fairmondo excludes itself from anything related to payments. Sellers, however, can set up PayPal accounts on or choose another provider to facilitate transactions on Fairmondo.

Key activities

The two companies have somewhat similar activities to take care of. To summarise, the value proposition for both companies is based on facilitating trust between buyers and sellers however through different methods. Both platforms therefore do not participate in the transaction of products where most value is created but facilitate and support the process.

The main channel for both companies is the platform that is heavily integrated in the value proposition. The platform is in an essential role of producing and delivering the value proposition, and therefore platform development and management are crucial activities for both companies. Ebay has also outsourced its support services to its

customers meaning that effective community management is also key in terms of its channel strategy. In addition, key activities in terms of the value proposition are brand management for Ebay and managing the product filtering system and vetting the products for Fairmondo.

As for their customer relationships, the service of both companies is heavily automated and therefore main activities related to customer relationships are linked to platform management. Moreover, managing their respective communities are a key activity for both companies.

Key resources

Also, the resources used are relatively similar for both Ebay and Fairmondo. The most important resource for Ebay in terms of its value proposition is its brand and wide customer base. It has high value stored in its trademark that is a source of trust and value to both buyers and sellers. In addition to the brand, Ebay's key resource is the data it gathers on its users and the algorithms that facilitate effective listing, search, sorting and purchasing of products. Similarly to Ebay, Fairmondo is also capitalizing on its brand, however, to a lesser extent. Its key resource is the categorization of products according to its own ethical standards. Moreover, both companies are depended on the users that interact on the platform, making them a key resource as well.

In terms of their channels, the most important resource for both companies is the platform and related intellectual and physical resources. For Ebay, the community works as a resource as well, as that is the main channel for pre and after sales support and guidance.

When looking at customer relationships, existing customers are a key resource for both as both platforms are heavily reliant on the positive network effects, they are able to produce between buyers and sellers. Intellectual resources, like algorithms and data also play an important role in facilitating the customer relationships as both companies rely on self-service or automated processes.

Financial aspects

Revenue streams

The two companies differ significantly in their revenue structure. Fairmondo does not charge any commission for transactions between individual customers. Its revenue then consists of commission it takes from transactions where the other participant is a business as well as member fees should an user want to contribute to and become a member of the cooperative itself. Ebay's revenue comprises of transaction fees it charges on listing products on the auctions, actual transactions and payment processing fees. In addition, it receives revenue from advertisement sales and other revenue sharing agreements.

Cost structure

Fairmondo's costs are made up of business development, dividends given to cooperative members as well as platform management. Ebay also spends heavily on platform development and branding efforts and other marketing costs.

Table 7: Summary of key similarities and differences between Fairmondo and Ebay

Block	Fairmondo	Ebay
Value proposition	D: Marketplace for socially and environmentally sustainable products S: Ethical marketplace providing fair compensation	D: Wide range of ,also niche, products, trust, recognisable brand S: High number of customers, trust, recognisable brand
Market sides	D: Anyone, especially people interested in ethical consumption S: Anyone, especially when looking for an alternative option	D&S: Anyone with an internet connection
Customer channels	D&S: Platform, APIs, phone, email,	Search engines, social media, platform
Customer relationships	D&S: Automated self-service, co-creation	D&S: Automated self-service, co-creation
Key partners	Other Fairmondo cooperatives, website and API development partners	Other Ebay subsidiaries, some sellers, other customers, payment providers
Key activities	Maintaining the product filters, platform management, marketing	Brand management, platform management, community management, marketing

Key resources	Brand, platform	Brand, platform, community, algorithm, wide customer base
Revenue streams	Member fees, transaction fee (for companies only)	Listing fee, transaction fee, payment processing fee
Costs	Platform and related operating costs	Platform and related operating costs, marketing and branding

4.3 Moeda and Wefunder

Product interface

Value proposition

As mentioned earlier, Moeda and Wefunder are companies focusing on equity crowdfunding. Wefunder provides individuals means to fund projects that they personally believe in or that are otherwise in their personal interest and Moeda is a platform for grassroots projects support United Nations' Sustainable Development Goals in areas where lack of access to credit limits economic growth. The value propositions between the companies are similar for the investor side but different for the founder side.

For the investor side, both companies focus on social motives as a cause for investing, however, they differ in terms of their approach. Moeda is focusing on underserved areas and truly focusing on addressing social problems with the help of technology whereas Wefunder's approach begins with one's own social circles. Wefunder encourages people to invest in projects they care about and believe in and through that enable a social movement of individuals investing in startups as well as boost economic growth.

Adding to the value proposition, Wefunder emphasizes past performance, as it has been able to become the biggest equity crowdfunding platform by equity gathered. Moeda focuses on bringing more transparency to the world of investing: it has built its platform on blockchain that enables secure and transparent ways for funding as well as works as means to transparently track the progress of the project.

For founders, both companies emphasize that by using their platform, they can overcome several obstacles related to receiving funding so that founders can put all their effort in developing their business. Wefunder leverages their brand in bringing new

companies on their platform, emphasizing the platform's prominence, growth and experience. They do not offer any business development services, whereas in the case of Moeda mentoring on for example business development and marketing comes with the platform.

As for the specific problems in their customers' lives the platforms are trying to solve, Moeda is trying to bring down information asymmetries related to funding grassroots projects and in this way bring more companies exposure to credit. Wefunder aims for the same on the investor side and tries to bring down barriers for non-professional investors to support new startups. For founders, both companies aim to reduce similar hurdles that are related to finding funding, doing the paperwork and being able to focus on their business.

In conclusion, both companies focus on the social benefits their platform is generating. Moeda's projects all take place in under credited areas and are proven to support UN's sustainability goals whereas Wefunder promotes social benefits that incur in their local areas and boost micro entrepreneurship. Also on the investor side both try to reduce hurdles new startups are facing in their respective markets, however, Moeda takes a much more active role in this compared to Wefunder.

Customer interface

Market sides

In terms of founder, Wefunder's customer base is larger compared to that of Moeda's. Moeda is targeting a very niche market aiming to bring on projects that fulfil a set of predetermined conditions. Wefunder on the other hand accepts all projects with little limitation, however, it is in their interests to focus their efforts in highly reliable as this will ensure the platform's future trustworthiness.

As for the investor side, both companies are targeting a wide range of customers. Moeda, however, can expect the market side size to be affected by the fact that exchange happens on crypto exchanges whereas Wefunder accepts traditional forms of payment.

Channels

Channel structure is somewhat similar between Moeda and Wefunder. Both companies operate highly integrated platforms with most of the activities taking place on the platform. Both companies use social media marketing, with main focus on Instagram and Youtube, to boost awareness of their operations for both sides of the platform.

For the founders, the customer journey's of the two companies differ. In the case of Wefunder, the journey follows a planned pattern: they make an application so founders can post their funding scheme on Wefunder after which Wefunder does small scale background check on them. Wefunder does not, however, offer a communication channel between the founder and the investor, but this is done through external channels, such as email or LinkedIn. Wefunder does not take an active role in the transactions but merely facilitates them and offers assistance in terms of FAQ and wiki.

Moeda, on the other hand, is also a very integrated platform, but it exerts more control over the transactions. Companies wishing to be a part of the platform go through an extensive vetting process to make sure they comply to the standards set by Moeda. Moeda does also extensive cooperation with grassroots organizations to find suitable companies for the platform. An integral channel to Moeda's business is the blockchain based currency exchange on which the currency is sold.

For the investor side, the channel structure is similar to some extent. In the case of both platforms, investors filter suitable projects to invest in. However, in order to invest on Moeda's platform, you have to first convert your funds into Moeda's own currency. On Wefunder, the process of investing is much more straightforward. On Wefunder, investors should receive regular updates from founders through external channels but Wefunder itself does not take part in making sure this happens. Moeda takes a more active role, using the platform as a channel to post on the progress the project is making.

Customer relationships

For the investor side, both Moeda and Wefunder have similar customer relationships. Moeda operates a service that is based on self-service and is partly automated, as potential customers can evaluate the projects and further follow their development process on the platforms themselves. Wefunder has also mostly automated its service for the investors. Investors are able to perform all required actions on the platform themselves and semi-automated assistance is provided in terms of support channels.

In terms of founders, the two companies differ significantly. Moeda offers personal assistance in terms of business development aid. They vet all the projects carefully, choosing only projects that meet rigorous standards. Wefunder allows for all projects to be on the platform, therefore operating a relatively automated business on that side as well, however, they do interact with companies by doing background checks on the companies and the founders of the company.

Infrastructure management

Key Partners

Wefunder and Moeda have a very different approach when it comes to partners. Moeda is aiming to become an ecosystem for funding and business development in underbanked areas, therefore aiming for cooperation with several institutions to make up a network of partners creating value together. Its main partnerships are formed with other cooperatives that are being funded or that support the ecosystem, governmental and municipal institutions, banks as well as technology companies assisting in development of the platform. These partners bring in new projects and opportunities, provide legitimacy as well as business development aid.

Wefunder's key partners include for example the bank that hold the funds in temporary escrow accounts as well as governmental institutions. Wefunder has done a lot of work in order to pass a bill in the United States that makes it possible for individuals to invest in incumbent companies and they are still continuing that work. What is acquired from these partners is an integral part of the business model, transferring of funds, as well as legitimacy and legal assistance.

Key activities

At the center of Moeda's value proposition is that investors can find projects that meet United Nation's sustainable development goals in areas where lack of access to credit limits the growth of companies. On the other hand, founders have access to funding, and, in addition, they receive mentoring for example in business development as well as marketing. Wefunder promises to be a platform on which individuals can become investors in early stage startups. For the founders it promises to be a platform working as an

additional way to fund their business so the founders can themselves focus on business development.

In terms of the value proposition, the most important activity for Moeda is finding the right kinds of projects as well as vetting them to make sure they meet the required standards. Wefunder accepts all projects on the platform and only does a minimal background check on the founders. To find suitable projects for its platform Moeda has partnered with other cooperatives in certain areas and therefore managing these partnerships is a key activity as well. In addition, a key part of Moeda's value proposition is mentoring the chosen projects the planning, organizing and management of which is a considerable activity for the company. Again, Wefunder does not provide similar services.

However, in the United States there are several regulatory obstacles facing equity crowd investing. Until recently, it was prohibited for individuals to invest in early start ups at all, which Wefunder changed through extensive lobbying. There still are regulatory hurdles which Wefunder is now tackling, making these activities key for the value proposition.

Additionally, Wefunder's most important activities are related to the choice of channel, the platform, and its management and maintenance. Platform management is also a significant activity for Moeda as they have to also facilitate the project logs on blockchain whereas Wefunder has left progress checks to the participants.

In terms of customer relationships, key activity for Moeda is making sure investors are being kept up to date on the progress of their funded projects. As for Wefunder, customer relationships are heavily automated making platform management a key activity in terms of those as well.

Key resources

With regards to the value proposition, Moeda's most important resources are the partnerships with cooperatives in under credited areas that help them find suitable projects on the platform. In addition, mentors that offer help in business development are important resources in making the value proposition come to life. For Wefunder, its most important resources include the brand that attracts new startups to the platform as well as the community they have built around it.

The platform is naturally one of the most important resources for both companies. Moreover, Moeda is built on blockchain, making intellectual property related to it a key resource. As Wefunder is spending effort in changing the regulatory landscape around crowdfunding as blockchain is an emerging technology, human capabilities become an important resource in connection with legal aspects.

Financial aspects

Revenue streams

Revenue streams are very differently structured on Moeda and Wefunder. Moeda aims to license its platform and technology to banks as well as charge transaction fees. On Wefunder, revenue comprises of a service fee that investors pay as well as 7% fee that is charged on every successful funding round.

Cost structure

For both companies, there is very limited information on their cost structures. However, it will most likely include aspects such as platform development and management and relationship management.

Table 8: Summary of key similarities and differences between Moeda and Wefunder

Block	Moeda	Wefunder
Value proposition	<p>D: Invest in projects in underbanked areas</p> <p>S: Overcome several obstacles in receiving funding, receive business development aid</p>	<p>D: Help people bring their business to life, invest in projects you personally believe in</p> <p>S: Gain additional funding to your idea</p>
Market sides	<p>D: Anyone interested in sustainable investing</p> <p>S: Founders of companies in underbanked areas</p>	<p>D: Anyone with extra money for investing</p> <p>S: Anyone with a good idea</p>
Customer channels	Social media, platform	Social media, platform, external channels

Customer relationships	D: Automated self-service S: Assisted service	D: Automated self-service S: Self-service
Key partners	Cooperative institutions in underbanked areas, banks, blockchain exchange	Banks, government
Key activities	Vetting projects, partnership management, platform management, updating project situations	Lobbying, platform management
Key resources	Partnerships, mentors, platform	Brand, wide customer base, platform
Revenue streams	Licencing fees	Transaction fee on successful campaigns
Costs	Platform and related operating costs	Platform and related operating costs

4.4 Turo and Tapazz

Product interface

Value proposition

Turo and Tapazz are platforms for car sharing, matching drivers with those who want to rent their cars. For the driver side, Turo's main selling points are based on practical benefits, that include a variety of cars to choose from and accessibility in terms an easy to use platform and locations where cars can be picked up and returned to. In addition, Turo promises economic benefits by claiming their fees are significantly lower than those of rental companies. Tapazz focuses in everyday benefits as well, promising flexibility in a sense of not needing to own a car as well as environmental benefits that result from car sharing. A key part of Tapazz's value proposition is also its pricing: it wants the platform to be as accessible to everyone as possible, so drivers only pay for what they use which is determined together with the renter of the vehicle.

Value proposition is similar for the renters between the two companies. Turo is promoting trust, as it has put in place extensive safety measures to achieve this. In addition, key aspects of the value proposition for drivers are ease of use as well as having

control over the transaction by setting a minimum price yourself. Tapazz encourages renters to use their service mainly through environmental and social benefits that result from car sharing and releasing your car to the use of your local community. Economic benefits are secondary as renters are able to set the price themselves. Neither company has bundled their offerings but provide the same service for all platform participants.

For Turo, businesses are also one side of the platform. The value proposition for them is based on convenience and variety of cars. It promises a better price/quality ratio compared to traditional rental companies.

In conclusion, Turo promises to be a hassle-free alternative to rental companies for its drivers. It emphasizes mostly instrumental factors, like accessibility, efficiency and monetary benefits in marketing its service, followed by environmental benefits. Additionally, trust and reliability are core to its value proposition.

Tapazz, on the other hand, focuses first and foremost on environmental benefits by emphasizing the fact that one shared car replaces several ones on the streets. Tapazz does not put so much emphasis on conveying its reliability as Turo but it too has partnered with an insurance company that offers coverage for damages.

Customer interface

Market sides

Turo operates all over the world. Its main customers are both people that own a car as well as people in need of renting one under flexible terms. Turo has also become a known operator of niche/luxury car renters. As for Tapazz, it is currently operating only within Belgium and its key customers are people within local communities whose cars are sitting idle to get them to more efficient use. Tapazz encourages renting within local communities where people are familiar with each other to reduce the barrier of lack of trust. In addition, Turo is targeting companies as well as business travelers to become users of their service. Tapazz is also planning on something similar but this is left out of analysis because it is still not a fully functioning part of the business.

Channels

Both companies' main channel is the platform which in the case of Turo includes both a website and an application. In the case of Tapazz, transacting itself happens through a mobile application only. Turo uses extensive marketing to raise awareness whereas Tapazz is still in the process of building its presence and marketing activities focus mostly on word of mouth. Most of the activities from evaluation to after sales happen on the platform and therefore both companies then operate highly integrated platforms. In addition, Turo has integrated support channels to its platform which include help on the road as well as insurance.

Customer relationships

The way that Turo and Tapazz manage their customer relationships is similar. In terms of its drivers, Turo's service automated so that drivers are able to complete the steps on their own. The same applies for the renter side, they follow an automated process with clear instructions. In case of issues, both sides have the ability to contact 24/7 on the road support service. Both drivers and renters also co-create value when interacting with each other as well as at the end of the transaction when they leave reviews on one another for others to see.

Tapazz's service is likewise heavily automated on both sides. Both sides are able to complete all actions related to the transaction on their own through the application with little intervention from Tapazz. Similarly to Turo, drivers and renters co-create value through the rating system. However, co-creation is applied on Tapazz through pricing as well, as drivers set it themselves whereas on Turo, users can also opt for a predetermined pricing scheme.

Infrastructure management

Key partners

Both Turo and Tapazz operate platforms that match those who have a car to those in need of one. The platform is the cornerstone of the value proposition and both companies do the main activities related to platform management themselves. However, as neither of the companies own any cars to rent out, it can be said that car owners are, on top of being customers, also key partners. Car owners provide a significant part of the service offering and are conceptually in a similar role than that of suppliers. In addition, both companies

have partnered up with providers and companies in order to facilitate its support services or develop the service itself further.

Both companies have partnered up with insurance companies, offering extensive insurance for damages for car owners and IT system providers to provide data centers and website development. In addition, Turo has partnered with other players in the markets, most recently Continental, with which it is developing a keyless mobility experience. Partnerships with insurance companies are a crucial to the value proposition as they add trust and legitimacy to the service whereas IT system providers bring in key support services. Partnerships with other players in the market are, in Turo's case, used to develop the service further and acquire resources in terms of both physical and intellectual that bring additional value to the company.

In addition, Tapazz has recently partnered up with residential developers to broaden its service. Together they are exploring the option where Tapazz would provide vehicles for new residential developments for the inhabitants to share. In this sense, less cars and less parking space would be needed for land developers to develop. For Tapazz, partnerships are in a key role in terms of developing the service further and clarifying the value proposition.

Key activities

Central to Tapazz's value proposition is flexibility in everyday life as well as open access to everyone. Turo, on the other hand, also promotes flexibility as well as a wide variety of cars as well as lower prices compared to traditional rental companies. For their drivers, both companies focus on promoting monetary benefits received from renting a car that otherwise would stand idle. As Tapazz is a new entrant to the market, its main activities in terms of the value proposition are educating users on the benefits of the service as well as new customer acquisition. As for Turo, a key activity for them is to retain the wide client and car base as well as design cost structure in a way they can continue providing the service at lower prices compared to other rental companies. In addition, Turo offers an extensive insurance policy making relationship management with insurance company an important activity as well.

The most important channel for both companies is the platform, and most important activity concerning that is developing and managing it.

When it comes to customer relationships, both companies need to focus activities on developing and maintaining the support services as well as relationships with insurance companies. In addition, an important activity for Tapazz is community management as it is encouraging car sharing especially in small, local communities and is also considering extending their business to integrating car sharing into residential development.

Key resources

In order to make the value proposition come to life, most important resources for both companies are a wide enough customer base to make sure there are enough vehicles on the platform, so that the required level of flexibility is achieved. For both companies the brand plays an important role as well since the car sharing market is heavily concentrated. In addition, a key resource for both are the partnerships with insurance companies.

In terms of the channels, platform and the algorithm including related physical and intellectual resources are the most important for both companies.

When it comes to customer relationships, brand has become a key resource for Turo. Additionally, a key resource are the recommendations that are left on the users as those are crucial in terms of trust building. Tapazz is still trying to find best practises in terms of building their recommendation system.

Financial aspects

Revenue streams

The revenue streams for both companies are relatively similar. Both charge a commission on each transaction, which on Turo is 25% and on Tapazz 30%. On Tapazz drivers and renters negotiate over the price whereas on Turo you can opt from setting the price yourself of letting the algorithm decide on it.

Cost structure

On Tapazz most costs are still going into product and platform development as well as marketing. Turo is already a more established player in the market its costs go to platform

development and relationship management and marketing. There is little information on both companies in terms of their cost structures.

Table 9: Summary of key similarities and differences between Tapazz and Turo

Block	Tapazz	Turo
Value proposition	D: Flexibility, pricing, environmental benefits, free participation	D: Variety of cars and locations, trust, economic benefits
	S: Environmental and economic benefits, free participation	S: Trust, economic benefits
Market sides	D & S: Anyone in local communities and neighborhoods	D: Everyone in need of a car for short term driving S: Anyone with a car looking to earn extra
Customer channels	Website, platform	Website, platform, support channels
Customer relationships	Automated self-service, co-creation	Automated self-service, co-creation
Key partners	Insurance companies, car owners, residential developers	Insurance companies, car owners,
Key activities	Platform management, partnership management, business development	Platform management, partnership management
Key resources	Platform, algorithm, data	Platform, algorithm, data , brand
Revenue streams	Transaction fee	Transaction fee
Costs	Platform and related operating costs	Platform and related operating costs

4.5 Observations from the analysis

This section discusses the main observations, including the key similarities and differences, that emerged from the research. The biggest differences emerged from the value proposition whereas all platforms resembled each other in terms of infrastructure management, apart from key partners.

Value propositions of investor owned companies emphasize instrumental benefits whereas those of platform cooperatives are based on social benefits.

For the supply side, investor owned companies' value propositions are heavily built upon direct, measurable user benefits, such as monetary gains (Turo, Ebay) or more leads for their business (Thumbtack). This applies for demand side as well, as all investor owned platforms most often promote a wide offering of services or products and ease of use. Wefunder interestingly differs in terms of this to some extent as social benefits and helping one's own community are relatively central to its value proposition.

When looking at platform cooperatives, however, it is well visible that their value propositions are inspired by cooperative principles of cooperation, fairness and equality. Loconomics, for example, advocated first and foremost a fair and equal compensation for its service professionals as well as its community the aim of which is to provide peer support and aid in growing their business. Fairmondo, on the other hand, has based its value proposition on promoting ethical and sustainable consumption as well as fair compensation. Moeda's key promise rests on its ability to battle against inequality of access in the financial sector as well as transparency of transactions and project progress. Tapazz wants also puts most emphasis on enabling equal access to car sharing as well as encouraging more sustainable consumption. All platform cooperatives have also included instrumental benefits, like monetary gains and time savings, in their value proposition, however, these are not emphasized nearly as much as the social benefits.

This was an expected result because it depicts the starting point from which platform cooperatives arise. Several of the sharing economy's most successful platforms are successful because they have been able to deliver value in a new, innovative and streamlined way that aims at reducing costs of operating. This is then exactly that advocated of platform cooperatives criticize, saying that sharing economy should be more about communal values and bring down barriers of entry and information asymmetry. Therefore, it can be expected that platform cooperatives emphasize, especially in their value propositions, values of fairness, equality and transparency.

Value propositions between demand and supply side are less differentiated in platform cooperatives compared to investor owned platforms

As mentioned, all platform cooperatives promoted social values in their value propositions for both sides of the platform network. However, looking more closely, it can be seen that platform cooperatives have not differentiated their value propositions per market side as distinctly as investor owned platforms. This is well visible especially in the case of Loconomics and Fairmondo. Both companies main value proposition for their supply side participants is that they provide fairer terms of operating compared to their investor owned rivals and that members are able to participate in the development of the business as decision making is always democratic. For their demand side, they differentiate from rivals using the exact same rhetoric, saying that the main benefit of their platform for the demand side is also the fact that they will know the supply side is treated more fairly. Looking then at Thumbtack and Ebay, Thumbtack has completely different value propositions for its demand and supply side and Ebay also communicates different and direct benefits per market side.

Similar dynamic is at play in the case of Tapazz and Moeda. Tapazz's investor owned counterpart, Turo, has separate benefits defined per market side. Tapazz does as well, however, in addition, Tapazz puts a lot of emphasis on the environmental benefits both demand and supply side can come together to create. Likewise, Moeda is aiming to get more investors to join its platform through communicating what good it does to the companies and what those companies can do with the right kind of support and funding.

In conclusion, it seems that investor owned platforms distinguish between market sides more clearly and clearly compete against their rivals within their respective market sides and try to define themselves in the minds of the users per market side. Platform cooperatives, on the other hand, promote cross market side benefits that both sides can come together to create using their service. This is good for cooperatives in a sense that it promotes the cooperative movement, and the good it can do, as whole, but can also result in challenges in terms of market penetration and growth, as they do not communicate direct value their demand side will gain from using the service.

Both investor and collectively owned platforms deploy similar channels to reach their network participants. In addition, investor owned platforms have adopted more automated processes compared to platform cooperatives

For each company, the platform is the most important channel to reach their customers. Within these case companies it was however evident that investor owned platforms used more third-party channels in raising awareness of their company among their customers. For example, all investor owned platforms actively used social media as well as search engine marketing especially in the awareness phase of the customer journey. Out of the platform cooperatives, Moeda and Fairmondo had an active strategy in terms of social media marketing. There could be several reasons for this, such as more mature companies have better resources do invest in marketing, or that cooperatives, as mentioned, fail to attract certain leaders with specific skills or the fact that the platform cooperativism as a movement in general is opposed to giving control or user data away to third parties.

All platforms are also highly integrated, meaning that most activities take place on the platform as opposed to through and added channel. As mentioned, in the awareness phase case platforms use third party channels but from purchase to aftersales users use only the platform. Some variation does, however, emerge when it comes to the support channels. For example, investor owned companies, support channels are integrated with the platform, but some cooperatives, like Fairmondo, Loconomics and Tapazz use external channels like email and telephone for customer support related aid.

Interestingly, investor owned platforms also tend to have more automated processes than platform cooperatives. Both demand and supply side customers are able to complete almost all of the steps in the customer journey themselves with next to no human intervention from the company. Only on Wefunder the staff does a short background check on the founders. In the case of platform cooperatives variation exists. Loconomics takes care of business help and leaves customer journeys for demand users to the suppliers, Moeda does extensive background checks and gives out aid. Tapazz and Fairmondo aim for automating several processes, however, their processes are yet not equally end-to-end compared to Turo or Ebay.

When it comes to customer relationships, platform cooperatives place more emphasis on community building by actively facilitating or managing their respective communities

As is stated in the cooperative values, cooperative movement values community and peer support highly. This is well visible in the business models too. Out of the platform cooperatives, Loconomics puts most emphasis on community building as it actively takes

part in managing and developing it. It also expects its members to take an active role in the community. Moeda follows a similar logic as well, aiming at establishing community relations between the founders and actively taking part in creating connections and facilitating interactions. Fairmondo, too, has an active online community on which users share ideas and organize meetups and Fairmondo shares information or holds for example polls to receive customer feedback. Compared to Moeda and Loconomics, Fairmondo is more in a facilitating role in terms of its community as it does not take an equally active role in arranging and organizing the activities happening on the platform. Finally, Tapazz does not have an active community in place, but it does, however, recognise the importance of community in its business as it targets sharing within communities where people know each other as well as developing its business to targeting residential developments.

Investor owned platforms, on the other hand, have varying communities in place and they are used for different purposes compared to platform cooperatives. Ebay as by far the most active community in place, similar to that of Loconomics. For Wefunder, Turo and Thumbtack, their communities take place online and focus mostly on service support instead of creating relationships within the users of each market side or facilitating cross side relationships.

This was an expected result. Cooperatives place a lot of emphasis on community and platform cooperatives could differentiate themselves from investor owned companies in terms communities. Investor owned companies are often blamed for aiming for too much streamlining instead of facilitating connections between its users, which too, was an early ideal of the sharing economy. When developed and managed properly, using a community in strengthening relationships and network effects could prove significant competitive advantage for platform cooperatives.

Platform cooperatives and investor owned platforms use similar resources and activities in making their business model come to life

In terms of the business model canvas, resources and activities are derived directly from looking at what kind of resources and activities are needed to bring the value proposition, channels and customer relationships to life. As was previously mentioned, platform cooperatives and investor owned platforms differ most in terms of their value propositions,

to come extent in terms of customer relationships and very little in terms of the channels they use, similar results are visible in companies' activities and resources.

When it comes to the value proposition, variation in terms of activities and resources emerges. For example, as several platform cooperatives have integrated their community into a key aspect of their value proposition or take otherwise an active role in the value creation process, they have a wider variety of activities and resources to manage. In comparison, investor owned platforms focus more on automation and streamlining of processes. The same is visible in customer relationships, where platform cooperatives put more emphasis on the community and co-creation than their investor owned counterparts.

What all companies have in common in terms of their key activities and resources, are activities and resources related to developing and managing the platform on which their customer interacts. These include intellectual property like the algorithm used and data provided on the platform as well as resources related to maintaining it, like server providers and website developers.

In addition, it seems that the more established the company is, the more important the role of the brand as a resource and activity becomes. This is best visible in the case of Ebay that bases a lot of its value proposition on its brand. The most established of the platform cooperatives is Fairmondo, which too relies on its brand especially in terms of its internationalization strategy.

Platform cooperatives use a wider range of partners and for different purposes than investor owned platforms

Both platform cooperatives and investor owned platforms use partners in bringing their value proposition, channels and customer relationships to life. There does, however, variation in terms of what kind of partners are used as well as for what purposes.

For example, several of the platform cooperatives cooperate with various kinds of stakeholders that their business is in connection to. Loconomics uses other businesses and educational institutions to develop their community and Tapazz is aiming to partner with residential developers to incorporate car sharing to city development. Fairmondo and Moeda, on the other hand, do a lot of cooperation with other cooperatives or governmental institutions in order to create an ecosystem and expand their reach. All partners are closely interconnected to the actual value proposition that its being delivered to the customers.

For investor owned platforms, partners are not equally integrated to the value proposition. The most common partnership is with payment providers and other supporting companies, like insurance providers. In addition, Thumbtack uses companies that complement their services as well as social media influencers for marketing purposes. Wefunder again deviates slightly from the pattern as it does close cooperation with governmental institutions to make investing more accessible to everyone.

As cooperatives in general place a lot of value on cooperation and partnerships. Platform cooperativism emphasizes this even more, stating that in order to truly compete with investor owned sharing economy platforms, platform cooperatives need to adopt ecosystem thinking and create strong ties with other cooperative companies and institutions. This is especially important because if cooperatives form partnerships with companies the values of which are completely different, cooperatives might have to compromise on their own values. For these reasons, the aforementioned result was surprising, as it would have been expected that each of the platform cooperatives would have been a part of bigger ecosystem and have formed even stronger partnerships than what was found in the research.

5 Conclusions

This chapter discusses the conclusions of this thesis. I will first go through the theoretical implications from this study, followed by the managerial implications for especially platform cooperatives. This chapter concludes with the limitations of this study as well as suggestions for further research.

In the beginning of this thesis I set out to find out how the business models of platform cooperatives and investor owned platforms differ and how the business model canvas as a tool should adopt itself to respond better to the needs of alternative ways of organizing economic activity.

The biggest differences in the business model arose in the value proposition block. In general, platform cooperatives were more value driven whereas investor owned platforms were clearly more cost driven. Platform cooperatives emphasize values driven from the cooperative values, like transparency, equality of access and fair compensation, in their value propositions whereas investor owned platform cooperatives mainly promoted benefits like time savings, efficiency and lower costs.

Interestingly too, the value propositions were more differentiated among investor owned platform than platform cooperatives. Platform cooperatives based their value proposition on the same benefits for both sides of the network, emphasizing especially better working conditions for the supply side. The direct benefits for the demand side were not equally strongly communicated whereas, when looking at investor owned platforms, the value proposition for the demand side was separately, and clearly, communicated.

In addition, differences arose in the role of the community in the business model as well as the role of partners. Platform cooperatives seem to put more emphasis in building an active community around them and encourage all new members and users to participate. For investor owned platforms, an active community could exist, like in the case of Ebay, or then the community's role is to act more as a support channel, like in the case of Thumbtack. Likewise, platform cooperatives used a wider range of partners compared to investor owned platforms that used partners in a more of a support role.

Platforms resembled one another in terms of channels, resources and activities. This can also be expected as the all studied companies operated a platform-based business and for these kinds of companies, the platform is one of the most key channels of reaching the customers in every step of the customer journey. Some variation did, nevertheless, emerge in terms of how integrated the platforms were for example in terms of how they had organized their support channels. As managing and developing the platform is one of the most important activities for platform-based businesses already defined by Osterwalder and Pigneur (2010), all the companies resembled one another in terms of activities and resources as well. However, as platform cooperatives took a more active role in community management and their communities were in a more integral role to the value proposition, this differentiated the building blocks to some extent.

5.1 Theoretical implications

This thesis adds to the growing literature on sharing economy, platform cooperatives and business models. I have divided the theoretical implications in two: first, I will discuss the synergies between the sharing economy, platforms and the cooperative movement. Afterwards, I will explain how the business model canvas should take into account the different ways of organizing economic activity of platform cooperatives.

5.1.1 Synergies between the sharing economy and cooperatives

The cooperative movement and the original promise of the sharing economy have a lot in common and several synergies can be found both ways. Both advocate for, for example equality of participation, transparency, community led action, cooperation and sustainability. It is clear, however, that several of the currently operating sharing economy platforms have diverted from these goals and operate on a different basis, aiming to use the platform mediated operating model to cut and streamline costs in order to reach their customers more efficiently. All in all, who benefit from the sharing economy and how value creation and extraction logic should be organized in the sharing economy is part of a bigger discussion on how value is created and distributed in the digital economy as a whole.

The cooperative movement offers the sharing economy a way to divert back to its original roots and values. In the literature review, I gave a detailed description on the themes for which the sharing economy has, in recent years, been critiqued. Based on this research, it can be said that cooperatives can indeed answer at least some of the issues that have arisen.

Cooperatives are well situated to alter the profit-sharing logic that has tilted in the favor of venture capitalists and company founders on the expense of their workers and customers. None of the studied cooperatives received any funding from venture capitalists and most of the studied cooperatives charge no or much smaller commission on transactions happening on their platform. Their main source of revenue then comes either from monthly subscriptions or member fees. Membership gives a customer decision rights on the cooperative's operations, however, as one person has only one share, majority in the hands of the few becomes nearly impossible. In addition, for example Fairmondo reinvests all of its profits back to the company and has capped the amount of shares a single member can own. This results in the fact that all activities focus on developing the offering for the sake of end users or members, instead of focusing solely on fast growth and increasing profits for the company owners.

Interestingly, worker, or supply sides rights would require further investigation. From the studied cooperatives it can be said that the supply side is paid more fairly compared to their investor owned counterparts. Investor owned platforms are additionally criticised for lacking insurance and/or pension as they employ people as independent

contractors. Whether platform cooperatives are better situated to answer the questions related to trampling of worker rights remains open as, apart from Loconomics, all of the studied platform cooperatives operated a purely peer to peer business where no human labor was a part of the offering. Loconomics, however, did not take any additional responsibility over their service professionals.

Cooperatives could also increase sustainable consumption within the sharing economy. From the studied platforms Fairmondo and Tapazz, both of whose main offering include exchange of physical products, advocated heavily for sustainability. Tapazz aims to truly decrease the utilization rates of cars by spreading the usage of one car to a wider population. Fairmondo labels their products according to their sustainability standards as well as allows for free lending and swapping of products on its platform. Moeda too, vets their projects carefully so that they fulfill the requirements of United Nation's sustainable development goals.

Technology related controversies, however, remain an issue. None of the platform cooperatives provide information on what kind, how and for which purposes the data generated on their platform is used. In addition, none of the cooperatives offer their customers ownership of their own data. Moeda remains an exception as it is based on blockchain, providing additional transparency to their operations. This was an interesting result as platform cooperativism advocates for transparency in terms of data and algorithms, however, it could be that being such a new phenomenon, platform cooperatives still lack sufficient partnerships in this area.

Cooperatives can, in turn, benefit from the sharing economy. Using the market logic of platforms, cooperatives can deliver value in new ways, increase both their scale and reach as well as foster cooperative ecosystems.

All studied platform cooperatives delivered similar services compared to the investor owned companies. Innovative offerings and platform mediated business models are inherent to the sharing economy, and, as online platforms are by nature very flexible market structures, they are well suited to serving the needs of companies with alternative goals of operating. This is visible in all studied platform cooperatives that have successfully managed to set up and grow their business while focusing on social goals as well as operating a platform structure. Remaining challenges are related to facilitating

strong enough network effects that are needed for the business to provide sufficient value as well as issues related to data ownership and transparency of algorithms.

Second, online based platforms provide platform cooperatives increased reach and scalability (Sutherland and Jarrahi, 2018). This is ground breaking for the cooperative movement as the reason for existing for each cooperative is heavily based on a group of people with similar values and motivations (ICA, 2018). Online platforms provide extended reach to find resources as well as like-minded people without geographical restrictions (Sutherland and Jarrahi, 2018). This is well visible in the case of Loconomics, the supply side of which consist of micro entrepreneurs that, through the use of the platform and the help of the business development courses, now have a wider reach to new customers as well as a community to belong to.

Third, platform structures should also provide cooperatives with increased scalability in terms growth as the role of the platform is often to be a facilitator of transactions. This could prove useful for platform cooperatives that often lack access to capital that would be required if the cooperative would start producing the services and products. Tapazz, for example, aims to make transport more sustainable by providing car sharing options straight to residential developers that would take spaces for car sharing into account already in the stages of housing planning.

Fourth, the cooperative movement encourages cooperation not only within cooperatives but also between cooperatives. Several of both investor owned platforms and platform cooperatives focus on providing their key value for their end users and acquiring resources or activities, that are more efficient to produce elsewhere, from partners or other suppliers. Digital business models provide this flexibility especially when the role of the platform is only to make the interactions and transactions possible (Sundararajan, 2016). Cooperatives in the digital sphere would be able to create significant benefits within their networks by forming partnerships and ecosystems with one another. This is exactly what for example Moeda is aiming to do through making partnerships with local cooperative institutions as well as banks.

Platform based business has also its challenges for platform cooperatives. Several of the fastest growing sharing economy platforms have managed to facilitate their network effects very successfully as well as scale internationally. As platform cooperatives are so focused on their social goals, their respective market sides would expect to be smaller

compared to those of investor owned companies. In addition, existing sharing economy network attract more users because of their prominence, making it difficult for any incumbent platform to gain sufficient market share (Sutherland and Jarrahi, 2018). Facilitating crucial network effects might then prove more of a challenge for platform cooperatives, limiting their potential growth and reach. This could be one of the reasons why the studied platform cooperatives all of which have been operating for several years, still remained relatively small as well as operated only locally.

5.1.2 Implications for the business model canvas

The second research question I aimed to answer in this thesis was related to how the business model canvas should take into account the alternative way of organizing economic activity of platform cooperatives. Business model canvas is a very general tool designed to help companies organize their operations in a customer centric way and is not limited to any specific company structure (Osterwalder and Pigneur, 2010). Despite of that, the business model canvas has been adapted on several occasions to depict better the needs and characteristics of specific types of companies, such as non-profits, social enterprises or sustainable business (eg. Boones and Ludeke-Freund, 2013). There is, however, not an applicable business model canvas specifically adapted to the needs of cooperatives.

As a research framework for this thesis it proved very useful as similarities and differences were easily identifiable from gathered data. There were, however, some limitations to using the business model canvas as a tool for platform cooperatives.

This mainly manifested itself in the product and customer interface blocks. The business model canvas focuses in its value proposition mostly on the value delivered to its end users, which in the case of multisided markets, refers to the customers providing and consuming the products or services. However, in the case of cooperatives, the main driver for doing business is to provide value to *the members of the cooperative*, referring to those that do not only consume the products and services but have shares and voting rights in the matters of the cooperative. All of the studied platform cooperatives were classified as multi-stakeholder cooperatives, meaning that you do not have to become a member of the cooperative to take part on the interactions happening on the platform. The approaches taken by the platform cooperatives varied, from Tapazz not wanting to restrict participation in any way to Loconomics including the membership in its product bundles. Fairmondo

offers the membership and shares as separate fees and Moeda does not provide enough detailed information on how to become a member of the cooperative.

The members of the cooperative might therefore not, in all cases, be the customers of the cooperative, yet, they play an integral role in cooperatives. As the value provided to the members is in such a central role to the cooperative movement, I have, in addition to the supply and demand, added the cooperative members as an additional market side in the business model canvas. This has implications for both the value proposition and the rest of the customer interface.

Aligned with the ideas of the business model canvas, when the members of the platform cooperative become their own market side, a separate value proposition needs to be defined for them. This makes sense as cooperatives are depended on their members to keep their business operating, but on the other hand, especially in multi stakeholder cooperatives, the company need to be able to explain to the members why the membership is useful and what kind of benefits can be gained from it. In the studied case companies, there was little or no communication that was directed at potential members but membership was framed as an addition to the services. This would be separated in the business model canvas as the cooperative value or social value the cooperative is generating. The main question that should be solved is *what kind of value the cooperative is generating for its members?*

Similarly, customer relationships as well as the channels used for reaching the members should be defined separately for the cooperative members. Especially in terms of the customer relationships the value to the members often manifests itself in the cooperative community that works as a tool for for example co-creation. Channels that refer to how the cooperative members will be reached should be defined as well. As in the case of multi stakeholder cooperatives these aspects can overlap with the business value, however, in many cases the cooperative also has customers outside the imminent member base. In these cases, defining separately the value the cooperative is generating and the business value it is generating for its users separately helps conceptualizing direct benefits for each side of the platform as well as clarify the purpose for existing as a cooperative.

All these aspects then affect the infrastructure management side of the business model canvas, as key activities, resources and partners are defined based on the customer and product interfaces. Cost structure is not changed significantly from including the

members into the business model canvas; however, member fees should be added in the revenue structure as an additional block.

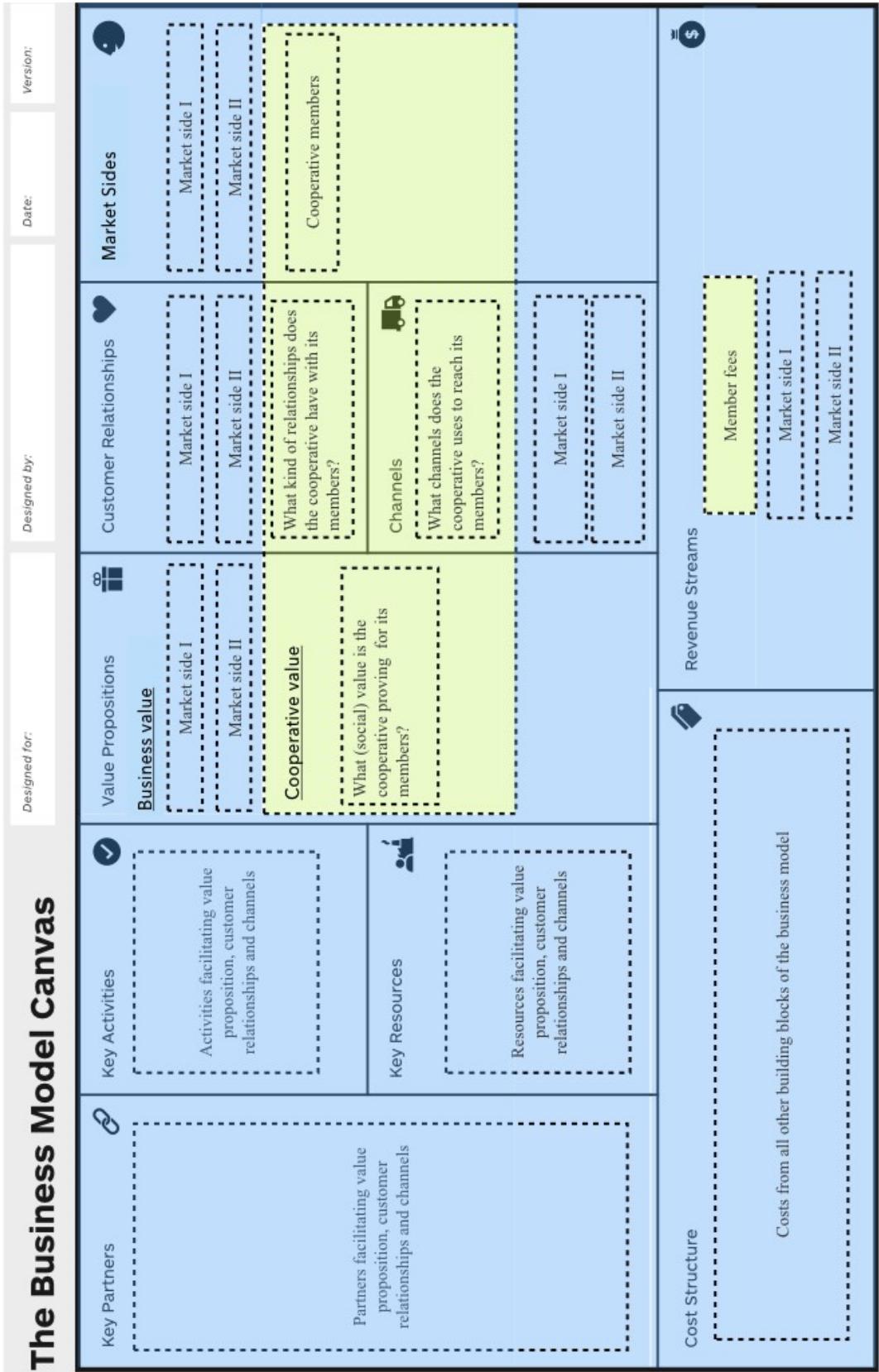


Figure 4. Adapted business model canvas for platform cooperatives

5.2 Managerial implications

There are several ways how managers in platform cooperatives can benefit from the aforementioned results. Managers should pay particular attention in defining clear value propositions with direct benefits with all market sides as well as put special emphasis on creating cooperative networks.

Define separate value propositions for all market sides

As mentioned, the biggest differences between platform cooperatives and investor owned sharing economy platforms arose in the value proposition block of the business model canvas. In addition, investor owned platforms had defined separate, clear value propositions for each market side whereas platform cooperatives tended to communicate the value to the demand side through the benefits incurring to the supply side.

Platform cooperatives would then benefit from doing the same as investor owned platforms in terms of defining clear value propositions for all sides of the platform. As stated in the Osterwalder and Pigneur's (2010) framework, the value proposition should define the specific problem the company is aiming so solve as well as the benefits that the users will gain for using the service. In multi sided networks these benefits should be defined for each participating side. Unless platform cooperatives are able to differentiate themselves with direct benefits for the demand side of the platform, their value propositions lack differentiation compared to the investor owned platforms. This puts the platform cooperatives in a challenging position in terms of competition as in multi sided markets established companies are already enjoying significant network effect benefits which decrease the probability of switching from service to another. Having a value proposition for the demand side with direct benefits in addition to social benefits would differentiate the platform cooperatives better from its competitors and bring the cooperatives closer to the demand side users.

Build cooperative ecosystems through partnerships

Cooperation among cooperatives is already defined in the cooperative values (ICA, 2018). However, when studying the selected case companies, only Moeda had included

partnerships with other cooperatives as a part of their business models. Fairmondo, Loconomics and Tapazz likely to be a part of cooperative networks, however, these partnerships are focused on support activities for the company rather than an being an integral part of the operative business. There would however be a lot of potential in cooperatives making partnerships with other platform cooperatives. The platform as a structure for doing business is very flexible and platform cooperatives could make use of their networks in organizing their business in for example raising awareness among new customers and members. Additionally, cooperatives could position themselves as platforms the market sides of which would be smaller cooperatives. Loconomics could, for example bring slightly bigger cooperatives in its network and position itself as a business development ecosystem for the platform cooperative movement. If platform cooperatives have stronger networks, they do not have to form partnerships with companies having different motivations for doing business. This would benefit the cooperative movement too and make it a viable option among investor owned companies.

5.3 Limitations

This section discusses the limitations of this study as well as ideas for further research. Some of the limitations of the case study were previously discussed in section 3.1.

In terms of the case companies, several platform cooperatives were new businesses and in the early stages of their growth. It is possible that they will, in the future, change their business logics, which would undermine the reliability of this study. Additionally, the pairs were in significantly different phases of their growth which could have had implications on the differences and similarities of the business model canvas building blocks.

The data itself also had its limitations. One clear limitation of this study is its small sample size in terms of pairs studied. Four companies do not provide detailed enough information to generalize the results to platform cooperatives as a whole. Therefore, in the future research could look at similar setting but on with more companies. Another limitation related to the data is the lack of information on the companies' cost structures, which too would have proved an interesting insight into whether cooperatives are more costly to maintain than investor owned platforms.

In terms of similarities and differences, the results are based on a data from several sources and it is possible that some key pieces of information have been left out. In addition, as the results have been interpreted from several data sources, another researcher might then reach different conclusion in terms of differences and similarities. This issue is alleviated by clearly pointing out the steps that were taken in the research process as well as providing summarizing tables on key differences and similarities per each case pair.

5.4 Suggestions for further research

Platform cooperatives are a very recent phenomena and deserve more research from several perspectives. Research should especially focus on what are the key enablers and challenges cooperatives are facing and how they have overcome those challenges. At the moment, research on cooperatives alone is relatively nascent and there is wide disparity in terms of whether the lack of them is due to them being an inefficient way of organizing economic activity or whether current, profit focused market structures hinder them from scaling and growing their business.

Additionally, future research could compare other solutions for re-organizing economic activity with cooperatives. Social enterprise research is another stream of research that too is trying to combine social and environmental aspects into profitable business. One manifestation of this are benefit corporations (B-corps), that are classified as investor owned companies and aim to turn profit and provide value to their shareholders but also have strict guidelines for doing more socially and environmentally sustainable business. From the studied investor owned companies, Wefunder is in fact a B-corp and as was visible in the observations from the analysis, it had similarities with its cooperative counterpart than the other investor owned companies. It could then be studied what kind promise B-corps hold in terms of addressing the issues in the sharing economy or how the business models between cooperatives and B-corps vary.

References

- Bardhi, F. and Eckhardt, G. M. (2012) 'Access-Based Consumption: The Case of Car Sharing: Table 1.', *Journal of Consumer Research*, 39(4), pp. 881–898. doi: 10.1086/666376.
- Belk, R. (2007) 'Why not share rather than own?', *Annals of the American Academy of Political and Social Science*, 611(1), pp. 126–140. doi: 10.1177/0002716206298483.
- Boons, F. *et al.* (2013) 'Sustainable innovation, business models and economic performance: An overview', *Journal of Cleaner Production*. Elsevier Ltd, 45, pp. 1–8. doi: 10.1016/j.jclepro.2012.08.013.
- Botsman, R., Rogers, R., (2010). *Whats' Mine Is Yours*. New York, HarperCollins.
- Bostman, R. (2013). *The Sharing Economy Lacks a Shared Definition*. Fast Company. Available at: <https://www.fastcompany.com/3022028/the-sharing-economy-lacks-a-shared-definition> Accessed 13.11.2018
- Brynjolfsson, E. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies* (First Edition.). New York: W. W. Norton & Company.
- Calo, R. and Rosenblat, A. (2017) 'The taking economy: Uber, information, and power', *Columbia Law Review*, 117(6), pp. 1623–1690.
- Casadesus-Masanell, R. and Ricart, J. E. (2010) 'From strategy to business models and onto tactics', *Long Range Planning*. Elsevier Ltd, 43(2–3), pp. 195–215. doi: 10.1016/j.lrp.2010.01.004.
- Cheney, G. *et al.* (2014) 'Worker cooperatives as an organizational alternative: Challenges, achievements and promise in business governance and ownership', *Organization*, 21(5), pp. 591–603. doi: 10.1177/1350508414539784.
- Cheng, M. and Foley, C. (2018) 'The sharing economy and digital discrimination: The case of Airbnb', *International Journal of Hospitality Management*. Elsevier, 70(July 2017), pp. 95–98. doi: 10.1016/j.ijhm.2017.11.002.
- Como, E. *et al.* (2016) 'Cooperative Platforms in a European Landscape: an Exploratory Study', *ISIRC Conference*, (September).
- Dave Grace and Associates, (2014) *Measuring the Size and Scope of the Cooperative Economy*. Commissioned by the United Nation's Secretariat Department of Economic and Social Affairs Division for Social Policy and Development (DESA).
- Dredge, D. and Gyimóthy, S. (2015) 'The collaborative economy and tourism: Critical perspectives, questionable claims and silenced voices', *Tourism Recreation*

- Research*. Taylor & Francis, 40(3), pp. 286–302. doi: 10.1080/02508281.2015.1086076.
- Edelmann, B. (2014). Digital Discrimination: The Case of Airbnb.com. Harvard Business School Working Knowledge. Available at: <https://hbswk.hbs.edu/item/digital-discrimination-the-case-of-airbnb-com> Accessed 13.12.2019
- European Commission. (2016). The use of collaborative platforms (Flash Eurobarometer 438. Available at <http://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm>. Accessed 12.12.2018.
- Fehrer, J. *et al.* (2018) ‘Future scenarios of the collaborative economy: Centrally orchestrated, social bubbles or decentralized autonomous?’, *Journal of Service Management*, 29(5), pp. 859–882.
- Flecha, R. and Ngai, P. (2014) ‘The challenge for Mondragon: Searching for the cooperative values in times of internationalization’, *Organization*, 21(5), pp. 666–682. doi: 10.1177/1350508414537625.
- Frenken, K. and Schor, J. (2017) ‘Environmental Innovation and Societal Transitions Putting the sharing economy into perspective’, *Environmental Innovation and Societal Transitions*. Elsevier B.V., 23, pp. 3–10. doi: 10.1016/j.eist.2017.01.003.
- Gawer, A. (2014) ‘Bridging differing perspectives on technological platforms: Toward an integrative framework’, *Research Policy*. Elsevier B.V., 43(7), pp. 1239–1249. doi: 10.1016/j.respol.2014.03.006.
- Guttentag, D., (2018). What Airbnb really does to a neighborhood. Available at: <https://www.bbc.com/news/business-45083954> Accessed 2.2.2019
- Henley, J. (2017) Uber clashes with regulators in cities around the world. The Guardian. Available at: <https://www.theguardian.com/business/2017/sep/29/uber-clashes-with-regulators-in-cities-around-the-world> Accessed 2.2.2019
- Hamari, J., Sjöklint, M. and Ukkonen, A. (2014) ‘The Sharing Economy: Why People Participate in Collaborative Consumption’, *Journal of the American Society for Information Science and Technology*, 1(6), pp. 2581–2583. doi: 10.1002/asi.
- Hansmann, H. (1999). The Ownership of Enterprise. Cambridge. Harvard University Press.
- Huet, E. (2015) Uber Tests Taking Even More From Its Drivers With 30% Commission. Available at: <https://www.forbes.com/sites/ellenhuet/2015/05/18/uber-new-uberx-tiered-commission-30-percent/#10fb3f9143f6> Accessed 2.2.2019

- International Cooperative Alliance. Online. Available at: <https://www.ica.coop/en>
Accesses 10.12.2018
- International Labor Organisation, 2016. Cooperative History Timeline. Available at:
http://www.ilo.org/global/topics/cooperatives/publications/WCMS_543387/lang--en/index.htm Accessed 10.12.2018
- International Labor Organisation. No date. Cooperatives and the Sustainable Development Goals: A contribution to the 2030 Agenda for Sustainable Development. Available at:
https://www.ilo.org/global/topics/cooperatives/areas-of-work/WCMS_445131/lang--en/index.htm Accessed 3.2.2019
- Kathan, W., Matzler, K. and Veider, V. (2016) 'The sharing economy: Your business model's friend or foe? - ScienceDirect'. Kelley School of Business, Indiana University. Available at:
<http://www.sciencedirect.com/science/article/pii/S0007681316300568?via%3Dihub>.
- Kurtulus, F. A. and Kruse, D. (2018) 'An Empirical Analysis of the Relationship between Employee Ownership and Employment Stability in the US: 1999–2011', *British Journal of Industrial Relations*, 56(2), pp. 245–291. doi: 10.1111/bjir.12254.
- Labrecque, L. I. et al. (2013) 'Consumer power: Evolution in the digital age', *Journal of Interactive Marketing*. Elsevier B.V., 27(4), pp. 257–269. doi: 10.1016/j.intmar.2013.09.002.
- Mair, J. and Reischauer, G. (2017) 'Capturing the dynamics of the sharing economy: Institutional research on the plural forms and practices of sharing economy organizations', *Technological Forecasting and Social Change*. Elsevier, 125(July 2016), pp. 11–20. doi: 10.1016/j.techfore.2017.05.023.
- Martin, C. J. (2016) 'The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism?', *Ecological Economics*. Elsevier B.V., 121, pp. 149–159. doi: 10.1016/j.ecolecon.2015.11.027.
- Martin, C. J., Upham, P. and Budd, L. (2015) 'Commercial orientation in grassroots social innovation: Insights from the sharing economy', *Ecological Economics*. Elsevier B.V., 118, pp. 240–251. doi: 10.1016/j.ecolecon.2015.08.001.
- Martin, C. J., Upham, P. and Klapper, R. (2017) 'Democratising platform governance in the sharing economy: An analytical framework and initial empirical insights', *Journal of Cleaner Production*. Elsevier Ltd, 166, pp. 1395–1406. doi: 10.1016/j.jclepro.2017.08.123.

- Mondragon Cooperative. 2019. Company website. Available at : <https://www.mondragon-corporation.com/> Accessed 11.12.2018
- Muñoz, P. and Cohen, B. (2017) 'Mapping out the sharing economy: A configurational approach to sharing business modeling', *Technological Forecasting and Social Change*. Elsevier Inc., 125(April), pp. 21–37. doi: 10.1016/j.techfore.2017.03.035.
- Murillo, D., Buckland, H. and Val, E. (2017) 'When the sharing economy becomes neoliberalism on steroids: Unravelling the controversies', *Technological Forecasting and Social Change*. Elsevier, 125(July 2016), pp. 66–76. doi: 10.1016/j.techfore.2017.05.024.
- Novkovic, S. (2008) 'Defining the co-operative difference', *Journal of Socio-Economics*, 37(6), pp. 2168–2177. doi: 10.1016/j.socec.2008.02.009.
- Osterwalder, A., Pigneur, Y. and Tucci, C. L. (2005) 'Clarifying Business Models: Origins, Present, and Future of the Concept', *Communications of the Association for Information Systems*, 16(July). doi: 10.17705/1cais.01601.
- Osterwalder, A. (2004). The Business Model Ontology - a Proposition in a Design Science Approach. Dissertation, University of Lausanne, Switzerland: 173.
- Osterwalder, A., Pigneur, Y. (2010) Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley & Sons.
- Price Waterhouse Coopers. (2015). The Sharing Economy. Customer Intelligence Series. Available at: https://www.pwc.fr/fr/assets/files/pdf/2015/05/pwc_etude_sharing_economy.pdf. Accessed 12.12.2018
- Rochale Pioneers Museum. Online. Available at: <https://www.rochdalepioneersmuseum.coop/> Accessed 10.12.2018
- Scaraboto, D. (2015) 'Selling, sharing, and everything in between: The hybrid economies of collaborative networks', *Journal of Consumer Research*, 42(1), pp. 152–176. doi: 10.1093/jcr/ucv004.
- Schor, J. B. *et al.* (2016) 'Corrigendum to "Paradoxes of openness and distinction in the sharing economy" [Poetics 54 (February) (2016) 66–81]', *Poetics*. Elsevier B.V., 56, p. 98. doi: 10.1016/j.poetic.2016.02.003.
- Scholz, T. (2014). Platform Cooperativism vs. the Sharing Economy. Available at: <https://medium.com/@trebors/platform-cooperativism-vs-the-sharing-economy-2ea737f1b5ad>. Accessed 9.11.2018
- Scholz, T. and Schneider, N. (2017). Ours to hack and to own. New York, OR Books.

- Seppelin, M., 2000. Osuustoiminnan jalanjäljillä : katsaus suomalaisen osuustoimintaliikkeen historiaan. Helsinki. Helsingin Yliopiston osuustoimintainstituutti.
- Stein, J., (2015) Baby, You Can Drive My Car, and Do My Errands, and Rent My Stuff... TIME. Available at: <http://time.com/magazine/us/3687285/february-9th-2015-vol-185-no-4-u-s/> Accessed 2.2.2019
- Stokes, K., Clarence, E., Anderson, L. (2014) Making sense of the UK collaborative economy. Nesta.
- Storey, J., Basterretxea, I. and Salaman, G. (2014) 'Managing and resisting "degeneration" in employee-owned businesses: A comparative study of two large retailers in Spain and the United Kingdom', *Organization*, 21(5), pp. 626–644. doi: 10.1177/1350508414537624.
- Sundararajan, A. (2016). The sharing economy: The End of Employment and the Rise of Crowd Based Capitalism. Cambridge, The MIT Press.
- Sutherland, W. and Jarrahi, M. H. (2018) 'The sharing economy and digital platforms: A review and research agenda', *International Journal of Information Management*. Elsevier, 43(July), pp. 328–341. doi: 10.1016/j.ijinfomgt.2018.07.004.
- Swayne, J. (2011) Californian woman has home ransacked after renting it out through Airbnb website. The Telegraph. Available at: <https://www.telegraph.co.uk/news/worldnews/northamerica/usa/8670605/Californian-woman-has-home-ransacked-after-renting-it-out-through-Airbnb-website.html> Accessed 2.2.2019
- Teece, D. J. (2010) 'Business models, business strategy and innovation', *Long Range Planning*. Elsevier Ltd, 43(2–3), pp. 172–194. doi: 10.1016/j.lrp.2009.07.003.
- Thompson, S. (2015) 'Towards a social theory of the firm: Worker cooperatives reconsidered', *Journal of Co-operative Organization and Management*. Elsevier Ltd., 3(1), pp. 3–13. doi: 10.1016/j.jcom.2015.02.002.
- Walsh, B. (2011). Ten ideas that will change the world: Today's smart choice: Don't own. Share. TIME. Available at: http://content.time.com/time/specials/packages/article/0,28804,2059521_2059717_2059710,00.html. Accessed 2.2.2019
- Zott, C. and Amit, R. (2007) 'Business Model Design and the Performance of Entrepreneurial Firms', *Organization Science*, 18(2), pp. 181–199. doi: 10.1287/orsc.1060.0232.

- Zott, C., Amit, R. and Massa, L. (2011) 'The business model: Recent developments and future research', *Journal of Management*, 37(4), pp. 1019–1042. doi: 10.1177/0149206311406265.
- Yin, R. (2003) *Case Study Research – Design and Methods*. 3rd Edition. California. Sage Publications.