
THE COLLABORATIVE ECONOMY



EVALUATING POTENTIALS OF DUTCH COLLABORATIVE ECONOMY PLATFORMS FOR SOCIAL CAPITAL GENERATION ON A NEIGHBOURHOOD LEVEL

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August 2016

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ACKNOWLEDGEMENTS

I would like to thank my supervisor Frank van Laerhoven for giving me valuable and much appreciated advice and guidance. Thank you for asking critical questions.

I am particularly grateful to shareNL, and Pieter van de Glind, who offered me the opportunity to carry out this rewarding research project and gave me access to their network. The guidance and trust I received was more than beneficial. I would also like to thank Nicole Stofberg for her valuable scientific insights and support.

I would like to thank all interview partners who found time in their busy schedules to provide me with valuable insights. It was very much appreciated!

Finally, I am grateful for the support I received from people close to me, in particular Steffen Olsen, for the patience, advice and help, and Doerte Land, for teaching me how to write.

SUMMARY

The collaborative economy (CE) is a new and, in many ways, upward-trending concept for tackling pressing problems related to overconsumption and unsustainable development, but also for providing opportunities to regain lost social networks of neighbourly support within urban areas. Basically, it enables users of digital peer-to-peer platforms to engage in exchange relations in order to share, rent, borrow, and collaborate to meet material and immaterial needs.

This study seeks to elucidate the potential that different types of collaborative economy platforms and their practices yield to generate social capital within neighbourhoods. Social capital is a concept coined by, among others, Putnam and Pharr (2000, p. 19), describing the “[...] connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them.” Building upon existing literature on potential sources of social capital, a set of indicators was developed as part of this study in order to evaluate CE platforms’ practices to this end.

The analysis of various CE platforms with this explorative, qualitative assessment reveals that CE platforms targeting sharing relations occurring on a regular basis tend to engage in practices that appear to increase social capital within neighbourhoods. This holds particularly true for platforms supporting exchanges of intangible goods and services. Their practices include a clear communication of shared values and norms of reciprocity and the encouragement of a supportive community identity. By contrast, asset sharing- or rent generation-based CE platforms focus on these aspects to a lesser degree and primarily seek to increase trustworthiness between end users via technical features and platform functionality.

This study also proposes reassessing the variables currently in common use to study the generation of social capital. As a result of reflection on the concept of social capital and its sources, some of the indicators used here to assess the platforms were redefined. For future research it is suggested to focus on the ways in which platforms create an in-group-feeling in their end users and the ways in which platforms enable interaction between users. The study also proposes new variables for future research in this field, including the leveraging of pre-existing social capital and the development of sharing skills. It is suggested that future research include these aspects when evaluating CE platforms’ potential to generate social capital at the neighbourhood level as well as when studying the sources of social capital within CE platform networks. Based on these findings, stakeholders in the collaborative economy are advised to follow practices that are likely to generate social capital within collaborative networks, with special attention to the newly-suggested aspects here.

INTRODUCTION

BACKGROUND AND PROBLEM DESCRIPTION

The “collaborative economy” (CE) as a concept has received increasing public attention and appeal over the last few years. Following the publication of Botsman and Rogers’ book “What’s mine is yours. How collaborative consumption is changing the way we live” (2011) and praise from news outlets such as British national newspaper The Guardian’s “sharing economies are offering a sustainable alternative to mainstream economics” (Riley 2014), there has been a great deal of enthusiasm in the public and academic debate surrounding the ‘hip new’ concept.

Given its acclaimed potential for economic, environmental, and social benefits to society, CE has been considered a path toward sustainability. For the purpose of this research CE is understood as a mode of collaborative exchange that helps people to fulfil material and immaterial needs via informal and often unconventional means. Often via web-based “platforms”, CE encompasses traditional forms of cooperation and collaboration such as renting, lending, swapping, sharing, bartering, and gifting, particularly enabled via an electronic platform and on a peer-to-peer basis between end users. (Botsman 2015; Hamari, Sjöklint, and Ukkonen 2015).

Users of online CE platforms offer their own idle assets and can access their peers’ idle assets. Instead of owning or purchasing goods or hiring out services, users share things like their household machines, usable space, or even meals or knowledge, such as home improvement or repair skills. These transactions sometimes involve monetary exchanges but are often also offered by users to one another free of charge, with the idea that those users may take advantage of another user’s goods or services in the future. A popular example of successful CE is the Dutch platform *Peerby*, where people can meet fellow sharing neighbours virtually and electronically place and review requests to borrow belongings.

By emphasizing access over ownership, CE is thought to help reduce consumption and incentivize both the production of and consumption of more durable products. As such, it is seen as a disruptor of the currently unsustainable practices of overconsumption of less durable goods driving our current economies (Botsman and Rogers 2011). The authors additionally argue that collaborative practices can promote more equitable access to resources as the price of accessing them goes down. This ability could be crucial as our world faces ever-growing population and a shrinking resource base (UN, 2014).

Aside from CE’s potential economic and environmental benefits, it is also seen as a viable contributor to social sustainability as well. As Bryan Walsh (2011) stated in TIME magazine,

“ ... The real benefit of Collaborative Consumption turns out to be social. In an era when families are scattered and we may not know the people down the street, sharing things – even with strangers we’ve just met online – allows us to make meaningful connections”

If trust among strangers correspondingly increases and norms of reciprocity and altruism emerge, this could give way to solving collective action dilemmas, facilitating more community-based activities, and eventually creating stronger social networks in neighbourhoods (Botsman and Rogers 2011). Proponents of CE also claim that the “Sharing Turn” induces new values of sharing and caring, which will lead to more sustainable lifestyles (Grassmuck 2012).

Policy makers at various levels throughout the world have been adding CE to their agendas. The European Commission recently released a policy paper laying out the Commission’s approach to CE (EC 2016). The commission stressed CE’s potential to contribute to the EU’s sustainability agenda, in particular in transitioning towards a more circular economy, by supporting new values and practices of asset sharing.

In times calling for large-scale societal transformations, understanding the basics of how people can live and prosper in accordance with the values they wish to live by is crucial (Schor, 2014). Urban development research suggests an increasing desire of citizens to reconnect with their local community (Albinsson and Perera 2012), and while overall life-satisfaction in the United States (for example) has consistently declined over the last 40 years, consumption levels have constantly risen, with adverse environmental impacts rising by association (Jackson 2009). By contrast, research has shown that with regard to overall well-being and health, scores for overall life satisfaction appear not to depend on the amount of goods one consumes once a certain threshold is passed. Instead, human well-being seems to be much closer tied to interpersonal connections and meaning in life (Diener and Seligman 2004).

CE could present a promising opportunity in this regard to achieve satisfactory lifestyles, while re-establishing and strengthening neighbourhood social networks, a possibility examined at the core of this research. The concept of social capital - understood as trust, social bonds, and shared norms and values - assists in framing this research focus. This research challenges certain notions that CE practices will become increasingly impersonal and detached from values like sharing, altruism, and reciprocity (Bardhi and Eckhardt (2015)). Despite the fact that this trend is observable in some market sectors, it is purported here that CE will reach its greatest potential as sustainable practice when it incorporates and values generation of social capital.

Opinions about CE’s capacity to cause meaningful impact in local communities and generate social capital remain divided. Observers and scholars alike have noticed an exploitation of CE’s economic potential for new sources of market revenue rather than for the common good (Levin and Wong 2016). The breadth of positive impacts proponents of CE stress is therefore ambiguous and still open for debate.

The following sub-sections outline the research gap present with regards to CE and its potential to generate social capital. Building on this outline, the research goals, question, and sub-questions are presented here – closing with a research process outline and a note on the relevance of this research.

KNOWLEDGE GAP

As outlined above, there is need for research into how an emergent phenomenon like CE can positively impact local communities most effectively (Schor 2014). Influences of the collaborative economy on the generation of social capital are not yet well-researched or understood (Schor 2014, Gordo, de Rivera, and Apesteguía 2016). Research thus far has focused on why CE platforms emerge and why people participate, or (for example) which conditions make participation in CE attractive to prospective users (Schor and Fitzmaurice 2015; Hamari, Sjöklint, and Ukkonen 2015; Lamberton and Rose 2012, Keetels 2012). An extensive review of recent literature conducted by the Joint Research Centre of the European Commission (Codagnone, Abadie, and Biagi 2016, p. 61) stressed that “[a] systematic follow-up [study] should expand the qualitative and quantitative evidence base on the presence and practices of the ‘sharing economy’ in Europe.” More concretely, there is not yet sufficient evidence for which preconditions show the greatest likelihood of impact of CE in the social realm of sustainability. This is in part due to the fact that measuring the direct impacts of sharing practices is challenging because quantifying and deducing impact is not always possible, the field is diverse, and CE practices are not very well-established yet (Demailly and Novel 2014; Keetels 2013; Lehtonen 2004; Rogers et al. 2011).

Existing studies regarding CE’s impact on local communities have yielded ambiguous results. Bardhi and Eckhardt (2012) explained (in their study of the social impact of a popular ride-sharing company) the platform’s potential to create new social experiences after which users might form meaningful, lasting relationships was quite low. Similar results were found in a study on a “time bank”¹ conducted by Schor et al. (2016) similarly seeking to determine if involvement in the platform actually yielded meaningful new social contacts. They found that practitioners of collaborative practices tended to engage mostly with people they considered similar to themselves- a tendency which is said to impede loftier goals of far-reaching community benefits of the collaborative economy (Ikkala and Lampinen 2015).

¹ “time banks” are on- and offline platforms that allow members to offer and receive services, like running errands, housework, repair works, or legal support. The service provided is accounted for in the time needed. One hour of work entitles the service provider to receive an hour of work from another member. Time banks seek to value effort and work not in monetary terms but in terms of time spent.

This finding is to some extent supported by Parigi and State (2014), who researched the extent to which members of the hospitality platform *couchsurfing*² acquired social capital by engaging on the platform. Their findings suggest that although loose connections of members increased, the fact that members relied on technology to meet each other seemed detrimental to the creation of meaningful relationships and close ties.

Yet, as Schnur and Günter (2014) claim, the collaborative economy does have the potential to improve social networks. The authors claim that engaging in these practices encourages norms of reciprocity and sharing that are not only beneficial to the user community, but ensures CE platforms' long-term success, which tends to be based on personal reputation, credibility, and a user group that favours said norms of reciprocity and trust (Grassmuck 2012). Seyfang and Longhurst (2013) propose that the platforms' recognition and support of social capital enables users to collaborate and improve community welfare, safety, and democratic institutions. It is also said to enable and encourage functional social networks and a sense of belonging and identity of community members as well as diversity and exchange among those members (Forrest and Kearns 2001). Trust in peers as well as the platform is a key factor that keeps people engaged on the platform and may even cause a spill-over effect on collaboration practices in other areas of daily life (Botsman and Rogers 2011). CE essentially relies on the presence of shared norms of trust and reciprocity among network members (Codagnone, Abadie, and Biagi 2016). Therefore, understanding the mechanisms by which CE platforms can create social capital is critical due to its potentially valuable contribution toward developing community in urban areas, and to ensure its long-term sustainability and ability to grow into mainstream culture (Schor 2014; Lampinen et al. 2015).

Research on social capital has focused on traditional forms of societal interaction, such as clubs or associations (see e.g. Putnam, Leonardi, and Nanetti 1994; Pharr and Putnam 2000). Recently with increased use of internet for social exchange purposes, research has also studied the rise of social capital in online communities (see e.g. Mathwick, Wiertz, and De Ruyter 2008; Chiu, Hsu, and Wang 2006). CE peer-to-peer platforms constitute a hybrid form of networks, connecting network members online, but enabling offline localised transactions and interaction (Hamari, Sjöklint, and Ukkonen 2015). For these reasons, an extensive literature review by the EU Joint Research Centre (Codagnone, Biagi and Abadie, 2016) indicated the need for further research into the mechanisms by which CE platforms generate trust and social capital in particular. Theory and empirical research on social capital has identified a broad and, often, vague and contradictory range of sources of social capital, which requires further refinement (Hooghe and Stolle 2003). As one of the most proliferated authors and researchers in the field of social capital, Putnam has often been accused of circularity in his reasoning (Portes 1998). The

² www.couchsurfing.com: An online platform that connects travelers looking for a place to stay with members that offer a sleeping place in their apartment to travelers for free

critiques state that social capital is often treated as an outcome and an explanation in the same argument. The concept of social capital can therefore not only provide a theoretical lens to study CE platform practices, but CE practices can also inform further conceptual development and research into sources of social capital within these hybrid communities.

Summarizing, there is a research gap both in terms of scientific knowledge on CE platform practices as well as the sources of social capital, for despite the vast use of social capital as an analytical tool, there remains a lack of studies elucidating precise sources of social capital and the reasons for its emergence (Hooghe and Stolle 2003).

RESEARCH GOAL AND QUESTION

Focusing on the emergent field of CE, the goal of this research is to evaluate the ways in which potential sources of social capital are created by CE platforms by tying the theoretical claims of sources of said capital to the platforms' current practices, and to draw conclusions for the use of the concept of social capital and conditions under which social capital is generated in hybrid off/online peer-to-peer networks in a neighbourhood context. The research's goal is explorative in nature, proposing and partially testing a framework that could be useful for future research in the field of social capital within the collaborative economy.

The resulting research sub-goals include the following:

Clarifying **which conditions** as identified by the literature on social capital are likely to enable the generation of social capital, especially at the neighbourhood level.

Analysing **to what extent and how** collaborative economy platforms create these conditions and which new patterns of social capital generation emerge in their practices, thereby:

Testing and validating the claims of the literature in practice, and identifying the **implications** of the CE platform practices **for the concept of social capital and its sources**, and based on this:

Building the foundations for an assessment tool for CE platforms' ability to create social capital that is rooted in scientific literature as well as CE platforms' current practices. This should also feed into recommendations for stakeholders in the field of CE, such as policy makers, practitioners, and civil society, on how to improve their performance in creating social capital.

The main research question that results from the goals of this research is as follows:

How and to what extent do different types of CE platforms provide favourable conditions for the generation of social capital on a neighbourhood level?

The sub-questions guiding the research process are:

- 1) Which characteristics define various collaborative economy platforms and what types of platforms emerge from this characterisation?
- 2) Which aspects of organisations in general are conducive to the generation of social capital on a neighbourhood level, according to social capital theory and research?
- 3) How and to what extent are the variables identified in 2) above put into practice by different types of peer-to-peer platforms?
- 4) Taking the observations of platform practices and the specific context they operate in into consideration, how can the set of variables be improved to fit a CE context and serve future analysis of CE platforms' potential to generate social capital on a neighbourhood level?
- 5) How can practitioners improve their impact on the creation of social capital with regards to their practices and goals, and how can this process be supported by policy-making?

RESEARCH OUTLINE

In order to answer the research question as well as related sub-questions, this report is structured as follows:

After shortly outlining the scientific and societal relevance of this research, the report moves on to chapter 2, providing background information on CE. This section concludes with presenting different approaches to building CE platform typologies and presents a CE platform typology, addressing sub-question 1). This typology serves as framework to structure the platforms under study. The following chapter addresses the theoretical foundation, by further defining the concept of social capital, as well as its relation to sustainable development at the neighbourhood level, and its relation to CE practices. The report proceeds to develop independent variables and corresponding indicators that social capital literature has identified as conducive to the creation of social capital, addressing sub-question 2). This is followed by a section outlining the methodological approach, the case selection, the data collection techniques, the operationalisation of indicators and the ways in which the data was analysed and conclusions were drawn. The empirical part of this research presents the results by comparing and evaluating selected CE platform types based on data from semi-structured interviews and qualitative content analysis, to answer sub-question 3). This section concludes with a summary of the findings in the form of a cross table and scores (+,+/-,-). Then it is specified which

practices identified by social capital theory are found in the CE practice and whether new practices and positions can be found as well, feeding back into theory development, addressing sub-question 4). In addition, this section provides advice for practitioners, policy makers, and other stakeholder on how to improve a CE platform’s potential to generate social capital, to answer sub-question 5). The subsequent section puts forward a critical reflection of the research design and methodology and findings and gives suggestions for further research. The final section gives concluding remarks.

The figure I below clarifies the steps undertaken to answer the research question.

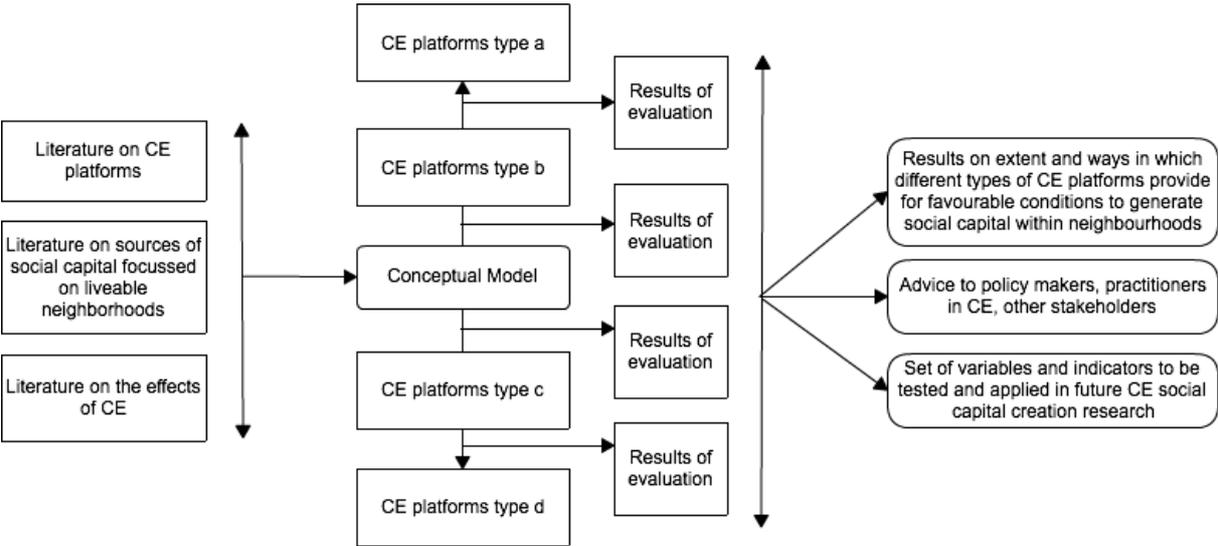


FIGURE I RESEARCH FRAMEWORK

SOCIAL AND SCIENTIFIC RELEVANCE

The rise of the collaborative economy is predicted to have a major impact on society (Hamari, Sjöklint, and Ukkonen 2015) and the phenomenon is expected to grow in size and importance over the next decades (The Economist 2013). The creation of social capital can have positive impacts on communities beyond their engagement in CE. Understanding how CE platforms improve their practices and foster the creation of cooperative norms on a neighbourhood level becomes crucial for practitioners, policy makers, and investors willing to support sharing platforms. A guideline of indicators and collection of success stories of social capital generation could therefore be useful for these types of initiatives.

A tested guideline of indicators seems particularly important in times when governments seek to foster collaborative practices while improving community life and enabling social sustainability. Research into the ways in which the collaborative economy affects the lives of people as well as its potential future effects and the underlying reasons gain increasing attention from political stakeholders. Very recently, the EC published a policy paper clearly pointing out the need for further inquiry (European Commission 2016) and as a direct follow-up, local governments of major cities like Berlin, Amsterdam,

and the Hague are currently commissioning inquiries into how to enable or constrain the collaborative economy and how to understand its effects (City of Amsterdam 2014; PeerSharing 2016; iShare n.d.).

From a scientific point of view, research on the sources of social capital is still sparse, despite its effects being well-studied (Hooghe and Stolle 2003). The collaborative economy therefore serves as an interesting example to study how different platforms make use of certain mechanisms supported by social capital theory and research. At the same time, the hybrid space between on- and offline interaction sets a new framework for studying the questions that research into social capital concerns. New social environments in which citizens take on the role of producer and consumer simultaneously are often (for now) beyond reach of governmental regulation and offer an insightful environment to test and apply assumptions put forward by social capital literature (Schnur and Günter 2014). Findings in turn feed back into theory development and advice for future research, and thereby advance the scientific understanding of practices in this specific field.

This research is carried out as part of a research internship at shareNL. As such, it contributes to the knowledge base of this organisation and supports the advancement of connecting practitioners in the collaborative economy network with science and research.

BACKGROUND

COLLABORATIVE ECONOMY

The concept of CE has been addressed in multiple realms of science, including economics (Cohen and Kietzmann 2014), sociology (Belk 2014a; Belk 2014b), and anthropology (Schor et al. 2016), and each employs a slightly different definition of the concept. Definitions of CE from these realms are summarized here before continuing with discussion of recent findings on people's motivations to participate and a conceptual typology of CE practices.

In the years following Botsman & Rogers (2011) publication there has been a lively public and academic debate about what exactly the sharing economy/collaborative consumption/collaborative economy is. Hence, a number of variations in definitions have to come into daily use. For the purpose of this research, collaborative economy is understood as the "[...] peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services" (Hamari, Sjöklint, and Ukkonen 2015). Collaboration between individuals to make ends meet is not a new practice in society, rather the degree to which it is now possible and occurring due to the possibilities of users to interact through ICT is what makes this phenomenon

a new development. The market share of economic activity classified as collaborative economy has grown rapidly over the last decade. Forbes magazine reported the collaborative economy to be among the fastest growing market sectors in the UK (Briggs 2016). With a rise in market share, many businesses are updating their model to be framed under the umbrella of the sharing economy, and some critics now fear that companies are “sharewashing” their products and business models to make them appear more socially and environmentally friendly to prospective customers (Belk 2014, Troncoso 2014). A variety of tools can facilitate CE, though most commonly a website and/or smartphone or tablet application are seen as the tools with the greatest “reach” into everyday life. As of the writing of this article, market spaces including goods, space, transportation, energy, money, food, care, knowledge, and other services are all facilitated by one or more CE-based web exchanges or applications (ShareNL 2016).

The organisations, their websites, and the corresponding tablet or phone applications that offer CE services are referred to as “platforms”. The term platform indicates a difference between these organisations and traditional companies. A platform is based on an active network of users that interact via the platform (multidirectional), as opposed to traditional ways of economic exchange, where consumers acquire goods or services from a company (unidirectional) (Gordo, de Rivera, and Apesteguía 2016). Some platforms act as service providers that only facilitate peer-to-peer exchange, without the business itself or a third party involved in individual end user transactions. A good example of this is *peerby*. *Peerby* allows users to post requests to users nearby for borrowing household items. The requests appear on users’ app interfaces as notifications, to which they can respond if they have and are willing to lend the requested item. Though the *Peerby* platform is the means of connecting the two users, *Peerby* as a business entity is not involved in the exchange (charging a fee, needing to review and approve the transaction, etc). Platforms that operate in this way are referred to as “peer-to-peer” platforms. By contrast, if an intermediary (either the business entity that provides the platform, or a contracted 3rd party) facilitates the exchange, then often users do not ultimately interact face-to-face. This is seen for example in the service *peerbyGO*, where users borrow items from their neighbours for a pre-determined fee and the pick-up and delivery of the item back and forth between the two exchanging users is handled by a 3rd party service provider. These platforms are typically defined as “peer-to-business-to-peer” (ShareNL 2015). In the example of users borrowing items they don’t have and lending items they have and are willing to share, it’s clear that CE platforms often involve users acting in both roles – the user and the provider of the good or service. Hybrid roles of consumers and producers are a particular characteristic of CE markets that differentiates them from more traditional markets. Therefore, when describing CE platforms, the term “user” often entails providers and recipients alike. Peer-to-peer platforms will be the focus of this study, since interaction between two users directly is crucial if any sort of social capital is to be generated.

The reasons for people to engage the CE are diverse. The initial motivation is often to save money or to earn an extra income (Hamari, Sjöklint, and Ukkonen 2015; Ikkala and Lampinen 2015). Ikkala and Lampinen (2015) found in their study of hospitality with the platform *Airbnb*³ (a peer-to-business-to peer platform where users rent out their living space to other users they approve) that although people usually join peer-to-peer hospitality networks for financial benefit, the longer they remained active users, the more the important social aspects of offering their apartments became:

“Money was often the initial driver of getting started with hosting, but over time the social factors tended to gain in importance, even for some hosts who earlier had not been interested in the sociability that network hospitality can entail. (Ikkala & Lampinen, 2015, no p.)“

According to Botsman (2015), beyond saving time and money, people feel an increasing desire to belong to a community and form part of a network that provides them with greater meaning. This is supported by market research exploring the needs of collaborative platform users. Studies have revealed a desire for a more sociable collaborative economy and that users participate not only for convenience or saving money but also as a way to socialize (Hamari, Sjöklint, and Ukkonen 2015). Financial crises are also believed to accelerate the evolvment of CE as an answer to financial hardships and shrunken job markets (Schor 2014). However, motivations tend to differ depending on the kind of collaborative practice people engage in. While short term rental of living space to travellers is most certainly motivated by financial incentives, offering a couch to travellers for free is possibly focused on the sociability and hospitability aspects of sharing (Belk 2014a).

COLLABORATIVE ECONOMY PLATFORM TYPOLOGY

The challenge for research at this point is not only to further refine the definition of the concept of CE, but also to structure the various organisational models currently existing and understand how they differ in their practices and societal impacts (Botsman 2015, Schor 2014). In order to answer sub-question one, *Which characteristics define various collaborative economy platforms and what types of platforms emerge from this characterisation?*, a typology of collaborative economy platforms will be outlined here that will shed light on the diverse goals, backgrounds, and income models of platforms to facilitate selection of a representative range of platform types in the proceedings of the research. This typology will ultimately yield four archetypical groups in which platforms can be categorized. These archetypes should be understood as categorizing platforms

³A platform through which users offer their homes to other users for and at nightly rates often lower than that of local hotels.

that may fall within a continuum for a given set of criteria, rather than as perfect, mutually exclusive matches, since reality does not reflect theoretical concepts perfectly (Cohen and Muñoz 2015). Various typologies to distinguish the diverse set of currently existing CE business and governance models have been suggested by practitioners as well as scholars and will be outlined here as well.

Taking governance model, type of exchange, and market sector into account, Cohen and Muñoz (Cohen 2016) have developed a sophisticated typology (see figure II below). They first distinguish the governance model of a platform (such as if it is corporate, collaborative, or cooperative), then consider the role of technology, transaction type, the business approach (for-profit or not-for profit), and the platform type into account. The compass is mainly designed to assist businesses and policy makers in understanding the many permutations of platform types that may exist.



FIGURE II SHARING BUSINESS MODEL COMPASS

Botsman and Rogers (2011) proposed a typology based on the kinds of exchange as well. However, the authors form broader categories and focus on the ways in which a product

or service is used and passed on. As a result, they suggest three types of CE exchange modes: product service systems (PSS), meaning a system in which users can offer products to rent out or to lend. This type is focused on the use of idle goods and assets; which members of a CE platform are willing to borrow or rent to other users. This can range from tools to cars to clothes. The second type are redistributions markets (RM), where used goods get a second life, this can be understood as traditional second hand markets. Also this type entails monetary transactions as well as gift giving. Thirdly collaborative lifestyles (CL) make up a type in this distinction. The term refers to sharing practices that include intangible goods such as knowledge and skills, the used of space, the provision of help and care, or shared experiences. The example of time banks, as mentioned above is a good illustration of a collaborative lifestyle platform. Members of a time bank to exchange service valued by the time spent providing a service.

Researching CE's contribution to sustainable production and consumption systems, Cohen and Muñoz (2015) developed a typology to distinguish different practices of sharing. The authors suggest two dimensions to be key when distinguishing sharing platforms: "production vs. consumption" focus, and "public vs. private benefit" business model.

A couple of key factors emerge from this literature review: Many typologies refer to the kinds of goods or services in question or the market sectors that are covered by a platform. Here, however, the types of exchanges that a platform facilitates (product service systems, redistributions markets, collaborative lifestyles; Botsman and Rogers 2011) are evaluated for typology as well. This degree of distinction in classification allows one to consider the different CE platform types more specifically, and is necessary given the premise that it may not be simply which market sector, but more specifically which types of exchange between users that have implications for generating social capital. While product service systems (PSS) have a slightly more functional touch and focus on material goods, collaborative lifestyle platforms might better encourage sociability amongst users.

The platform provider's business model and governance model also seem to play a crucial role in distinguishing different platform types (Cohen and Muñoz 2015, Cohen 2016). From a social capital perspective, the value orientation of a platform might be key. Value orientation is expressed in the greater goal a CE platform provider pursues, which may also have greater implications for the business model as a whole. Whether a platform operates for profit or not-for-profit is also essential and similarly could have implications for the overall goals and practices of the organisation and the kinds of norms it promotes amongst its users. The business model often also has implications for the governance structure of the platform as shown by the distinctions between corporate, collaborative, and cooperative models as suggested by Cohen (2016). To simplify the typology, this dimension will be simplified here to merely for-profit vs. not-for-profit. While for-profit comprises a traditional legal structure such as the Dutch BV, not-for-profit describes platforms that operate as a social enterprise or have the legal denotation as a foundation.

What results from the above distinctions are two dimensions that structure the typology used in the proceedings of this research. To visualize this, the typology is represented as a three by two matrix, by which one axis distinguishes for-profit vs. not-for-profit organisations, and the other axis distinguishes product service systems (PSS), collaborative lifestyles (CL), and redistribution markets (RM). This typology represents a schematic understanding of potential CE platform types. Ideally, for every type, there are one or more platforms to represent these characteristics. Pragmatically however, some forms are much more prevalent than others. In practice, there is a lack of redistribution market platforms. Famous online platforms in the Netherlands are *marktplaats*⁴ and *gratisaftehalen*⁵. One offline example found is the Utrecht based shop *weggeefwinkel*, which gives second hand clothing and items for free, based on material donations. The purpose of this study is to deepen the understanding of the generation of social capital in the collaborative economy realm, but redistribution markets often do not offer the possibilities of user interaction, a key feature of social capital. This is not to say that the creation of social capital within redistributive markets is impossible, but it is assumed to be relatively harder to achieve. This combined with a lack in redistributive platforms led to the restriction of the research to PSS and CL platforms. The section on case selection (see chapter *Case Selection*) discusses more in-depth which platforms of which types were selected for the study and how. The table I below presents the four types of platforms distinguishable according to this typology.

TABLE I CE PLATFORM TYPOLOGY

PSS for-profit	CL for-profit
PSS not-for-profit	CL not-for-profit

THEORETICAL BACKGROUND

This section presents a summary of claims in the literature on social capital in relation to sustainable development, neighbourhoods, the collaborative economy, and social capital's potential adverse effects as well. In order to answer sub-question two, *Which*

⁴ <https://www.marktplaats.nl>: A website where users can sell used products to other users, usually for a low price

⁵ www.gratisaftehalen.nl where users list items they intend to dispose of or destroy and other users can respond to request they can have the item instead

aspects of organisations in general are conducive to the generation of social capital on a neighbourhood level, according to social capital theory and research?, the concept of social capital and its theoretical foundations are then explained in greater detail and a literature study elaborates on the key variables defined in the literature likely to influence the generation of social capital. These are used in the empirical section as the theoretical basis for indicators that guide the analysis of platform practices.

SOCIAL CAPITAL AND SUSTAINABLE DEVELOPMENT

Three spheres are traditionally distinguished within the framework of sustainable development and are mutually supportive and should ideally be addressed by every policy aimed at sustainable development. These spheres are economic, environmental, and social sustainability. Dale and Newman (2010) propose to understand the three pillars in terms of a series of imperatives. Sustainable development in the view of the authors is the

“ [...] process of reconciliation of three imperatives: (i) the ecological imperative to live within global bio- physical carrying capacity and maintain biodiversity; (ii) the social imperative to ensure the development of democratic systems of governance that can effectively propagate and sustain the values that people wish to live by; and (iii) the economic imperative to ensure that basic needs are met worldwide.” (Dale and Newman 2010, p. 6).

Equal access to resources is stressed as fundamental to the implementation of sustainable development policies (Dale and Newman 2010). Dale and Onyx (2010) criticize that a great deal of effort has been spent studying the economic aspects of development but without taking adverse impacts in the social and environmental spheres into account. According to the authors, sustainable development always needs to be studied as a holistic concept paying heed to all three dimensions.

In the context of this study, the term ‘social capital’ is used as to assess the potential of CE for sustainable community development. That approach obviously leaves direct environmental impacts aside which are key to sustainable development. Without entering the discussion too deeply, there are studies that suggest links between social capital within rural communities and sustainable resource management and disaster management (Dale and Newman 2010; Dale and Onyx 2010; Pretty 2003). In their discussion of social capital’s link to sustainable development, Dale and Onyx (2010) also stress the interrelatedness of all three spheres, rendering conceptual distinctions arbitrary for real life applications.

Dale and Onyx (2010) put forth the argument that functional social networks are the foundation for successful sustainable development policies. According to the authors,

implementation of policies that tackle intangible problems such as climate change often times requires an inclusionary network of understanding of and dialogue around the policies among constituents. Any political or private effort to build this sort of network can play a crucial first step in enhancing trust and collaboration within society.

Similarly, Dempsey et al. (2011) argue that for there to be any form of economic activity and collective action, citizens need a stable social environment. This point is supported by Pharr and Putnam's (2000) claim that societies characterized as 'rich' in social capital tend to be more productive and more efficient. The authors attribute this to three main characteristics of social capital: 1) many problems in everyday life show characteristics of collective action dilemmas, where individuals would be better off if everyone cooperated. Yet in lack of assurance that everyone will contribute their share, individuals are better off behaving selfishly. Social capital can help overcome these dilemmas of collective action. 2) social capital enables communities to develop in a rewarding and positive manner and can generate greater wealth. Ostrom (2007) has shown that if communities are to prosper they need social capital in addition to financial and human capital. Social capital carries the potential to create a trustful atmosphere among community members, which increases economic activity and a propensity to collaboratively solve problems within that community (Wilson 1997). 3) the presence of social capital enables individuals to perceive their fate as enmeshed with that of their peers. This idea is essential in regards to sustainable development and is related to the point raised by Dale and Onyx (2010) that social capital improves people's understanding of intangible large-scale developments. Therefore, Wilson (1997) argues that the generation of social capital needs to be at the core of development policies.

Besides these large, overarching effects, a wide array of studies assembled by Pharr and Putnam (2000) reveal benefits of social capital on many aspects of people's lives, including education, safe neighbourhoods, economic prosperity, health and happiness, and democracy. According to the authors, the presence and utilization of social capital in communities leads to more civic engagement and political participation, resulting in higher trust among constituents in democratic institutions. The authors understand being engaged in civil society not only as a generator of social capital but also as a consequence of its presence (Pharr and Putnam 2000). In their study on activity of democratic institutions in Italy, Putnam, Leonardi, and Nanetti (1994) found that communal prosperity and civic virtue depend to a great extent on the social capital that communities possess. Furthermore, a high degree of social capital, measured as club membership, was shown to correlate with overall happiness (Glaeser 2001). Trust within communities was positively correlated with lower corruption rates, while high rates of social capital showed links to better health (Glaeser 2001). Lehtonen (2004) suggests positive impacts of social capital on community resilience, meaning the ability of a community to absorb shocks and adapt to changes in the environment. Participation in neighbourhood- or city-level planning efforts also becomes more feasible when civic virtues are more salient in citizens' minds, as shown in a study (Selman 2001) that reviewed various community

projects for sustainable spatial planning and their respective levels of social capital, measured using standardized surveys.

In their study on the benefits of time banks in the UK, Seyfang and Longhurst (2013) also show how an increase in social capital within communities can decrease social exclusion of disadvantaged groups, such as the elderly. An increase in social capital enabled these groups to build relations with other groups and individuals, a potential benefit considered key to sustainable development practices (Magis 2010).

The generation of social capital has received attention in the political arena as a means to foster sustainable development as well. The Worldbank (n.d.) claims that “[s]ocial capital [...] can improve project effectiveness and sustainability by building the community’s capacity to work together to address their common needs, fostering greater inclusion and cohesion, and increasing transparency and accountability.”, demonstrating the organisation’s commitment to incorporating the value of social capital generation in its sustainable development policies.

SOCIAL CAPITAL AND THE NEIGHBOURHOOD

Social capital is by definition a localized phenomenon, and its occurrence and recurrence are much more likely within tightly-knit and geographically-confined networks. Neighbourhoods are a good representation of such a context. Since the focus of this study is the neighbourhood level, it is necessary to define the term “neighbourhood”. Schnur and Günter (2014) define the neighbourhood in a socio-geographic way as the “central locus of daily life”, which is embedded in specific, socially-constructed practices. They see it a personal sphere of reference whose interpersonal overlap usually coincides with the geographic scope of a residential area. According to the authors, social capital, the notion of neighbourhoods, and the collaborative economy all find this locus within micro-level interactions. Potentials for conflict resolution and collective action are more likely to occur on a small, geographical, network-based scale. It therefore seems appropriate for this research to focus on the neighbourhood when studying potential for social capital generation.

Forrest and Kearns (2001) conceptualise social capital on the neighbourhood level as part of community social cohesion. According to the authors, the presence of social capital within neighbourhoods is reflected in a “[...] high degree of social interaction within communities and families; civic engagement and associational activity; [and] easy resolution of collective action problems” (2001, p. 2129).

If CE can in fact enable the generation of social capital within neighbourhoods, it could be similarly assumed that CE practices can serve to increase trust, strengthen neighbourhood networks, and facilitate collective action within neighbourhoods. Community members could engage and collaborate beyond a shared drill and organise at the neighbourhood level to improve overall well-being (Schnur and Günter, 2014).

SOCIAL CAPITAL AND COLLABORATIVE ECONOMY

This section will explore where and how the concept of social capital is enmeshed with the concept and domain of CE peer-to-peer platforms. One distinctive feature of CE is that it is web-based or web-enabled. In their analysis of the decline of social capital in the United States, Pharr and Putnam (2000) also discuss the potential impacts of the, then emerging, internet-based communicative possibilities. Traditionally, research on social capital generation has focused on offline situations such as clubs, neighbourhood organisations, or civil society. It constitutes a highly-localized phenomenon and is therefore an appropriate lens to study the neighbourhood. With the explosive rise of the internet for personal life, however, more research about online communities began emerging well (Williams 2006; Wasko and Faraj 2005; Hampton 2003, and Chiu, Hsu, and Wang 2006).

Pharr and Putnam (2000) express scepticism as to whether the internet could actually be a means to generate social capital. They acknowledge that it would probably, at a minimum, not inhibit generation, and may possibly even strengthen already existing relationships. More recent studies about internet-based activities' impact on the increase or decrease of social capital point more in the direction of an overall increasing impact, in particular when it comes to weak ties and highly specialised, single-issue online environments (Mathwick, Wiertz, and De Ruyter 2008; Chiu, Hsu, and Wang 2006). This leads to the conclusion that web-based or web-enabled platforms can on one hand reinforce existing social capital as well as lead to the creation of new streams under certain circumstances.

Collaborative economy platforms often blend the strengths of both the pre-internet, in-person, "offline" model described above and the new, post-internet, "online" model. On one hand, they operate online, enabling interaction between strangers with a specific goal. On the other hand, the interactions they enable are often highly localized and personalized, and frequently begin online but ultimately result in genuine, face-to-face personal interaction. New social and psychological phenomena meandering between increased exposure of "the person" on the internet and the increasing ability to interact online under anonymity, as well as the fact that these platforms are integrating private spheres with professional spheres and enable new modes of (economic) collaboration, necessitates new analytical tools for research. Thus far, studies exploring the impact of the collaborative economy on social capital generation have been few and far between (Codagnone, Abadie and Biagi 2016). Parigi et al.'s (Parigi et al. 2014) findings in their study of the platform *couchsurfing* however support the above argument that there is ambiguity in social capital generation when analysing platforms with a hybrid form of off- and online network building.

SOCIAL CAPITAL AND ADVERSE EFFECTS

Despite the abovementioned positive effects of social capital on communities, social capital is neither intrinsically beneficial or detrimental to communities of its own account, but the ends to which it is applied can be (Portes 1998). Despite the range of benefits of social capital on individual well-being, financial opportunities, and communitarian collective action, there are some potential downsides to the generation of social capital. Internal negative effects can stem from overly imposing norms of reciprocity, forcing group members to comply with norms they do not adhere to. Externally, members of a group with high internal social capital may turn against non-members. A classic example of this is the KuKluxKlan in the United States, an association with arguably a great deal of social capital because of the degree to which clan members meet, support, and protect each other, but who were ultimately widely-accepted by non-clan members as divisive, harmful, and exclusionary (Portes 1998). These types of downsides can either affect community members themselves or external groups and individuals. Therefore, Forrest and Kearns (2001) call for sensitivity to the various forms social capital can take on when applying it in scientific analysis.

SOCIAL CAPITAL IN THEORY

Social capital is a term coined by, among others, Bourdieu (2011 (1986)), Coleman (1988) and by Putnam et al in their widely-cited studies on the functioning of democratic institutions in Italy and their relationships with social capital (Putnam, Leonardi, and Nanetti 1994), as well as in the study “Bowling alone” on the loss of social networks in the United States (Pharr and Putnam 2000). As Pharr and Putnam (2000) suggest, the concept has been invented and applied in multiple ways over the course of the last century. Hence, there are numerous definitions of social capital. Pharr and Putnam themselves (2000, p. 19) define social capital as the “[...] connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them”. According to Pharr and Putnam (2000) this form of capital enables groups of people from communities to entire nations to function smoothly and to prosper – it makes groups’ and individuals’ lives more productive. With a slight shift in focus, Fukuyama (2001, p. 7) understands social capital as an “[...] instantiated informal norm that promotes cooperation between two or more individuals.” For the purpose of this research, social capital is understood in Pharr and Putnam’s sense.

What emerges from both definitions, however, is the guiding inquiry of studies on social capital: How does one conceptually grasp the (material and immaterial) benefits that arise from social networks? Coleman (1988) criticizes classic economic theory’s inability to account for these benefits. The underlying problem, as identified by Coleman (1988) and other authors (e.g. Ostrom 2007) is the rational choice assumption of classic economic theory. The assumption that actors direct their efforts solely to material benefit maximization and marginal cost minimization is unable to paint an accurate picture of

reality. According to Ostrom (2007), rational actors also consider norms and rules guiding social interactions, the outcomes of which are embedded in a history of collaboration, trust-building efforts, and network ties.

Therefore, Maloney, Smith, and Stoker (2000) understand social capital as a resource that facilitates collaboration and collective action in circumstances where they seem rather unlikely from a rational, individualistic point of view. Social capital then describes the capacity of an individual or a group to draw material and immaterial resources and benefits from other individuals or groups, based on the relation between the actors (see e.g. Portes 1998). It is a form of capital that is not owned by a single person, but which is inherent to relations between people or groups, and can facilitate collaborative activities or serve to overcome problems of collective action (Pharr and Putnam 2000; Maloney, Smith, and Stoker 2000; Fukuyama 2001).

Similar to more traditional forms of capital, social capital is seen a stock of capital that can be enriched or impoverished depending on how it is used. Usually, an investment in social capital, meaning an investment in interpersonal relations and networks, will lead to enrichment of the social capital inherent in these relations (Ostrom, 2007). It forms the basis for trust and is thus an essential feature of ongoing collaboration and an accelerator for the generation of more social capital. High levels of trust are conducive for future interaction and collaboration, which in turn increases the generation of social capital (Lehtonen 2004). This self-reinforcing characteristic of social capital was also shown to spill over to other parts of civic life, facilitating collaboration and collective action beyond the boundaries of singular networks or organisations (Pharr and Putnam 2000).

Ostrom (2007) distinguishes three building blocks of social capital that are important for understanding its effects on community life and its role as an accelerator of collaborative activity: (1) trustworthiness, (2) formal and informal rules or institutions, and (3) networks. Despite the distinction of three buildings blocks, social capital has to be understood as a dynamic system where each block is interrelated and both positive and negative feedback loops exist.

In the following section each of these three building blocks will be further examined and variables that make up each block outlined. Special attention is paid to variables that relate to the neighbourhood context, as defined in the *Social Capital and the Neighbourhood* section above. The variables found to enhance the building blocks of social capital are summed up in tables per building block. The tables also entail indicators corresponding to the variables, as identified in the literature.

TRUSTWORTHINESS

The first building block, framed originally as “generalized trust” by Putnam, Leonardi, and Nanetti (1994), Ostrom (2007) proposes to alter the focus of this category from trust itself towards the precondition for trust, which is trustworthiness. “Generalized trust”

describes the common attitude within a community as to how trustworthy other members and outsiders are.

Trustworthiness is important to assess at two levels: the ‘macro’ level, and the ‘micro’ level. The macro, or organisational level, entails the perceived organisational trust provided by an entity or network. The micro, or individual level, entails the trustworthiness of network members, otherwise referred to as ‘peer trust’.

A general expectation of trustworthy behaviour is assumed to result in more risky interactions among members; simply put, it can lead to interactions in which there is more at stake for all parties (Siegrist, Cvetkovich, and Roth 2000). Trustworthiness is therefore assumed to form the basis for interaction in a social network and is a crucial factor to consider when evaluating potential for social capital. Perception of trustworthiness followed by interaction among network members could lead to the creation of trust, which in turn enhances and accelerates future interaction and cooperation amongst network members (Ostrom 2007).

SOURCES OF TRUSTWORTHINESS

Organisational trust (or ‘macro-level’ trust), is created by a range of factors. Returning focus to CE platforms, factors such as end users’ perception of the quality of service and its ability to enable or force users to act trustworthily may be important variables for a platform to be considered ‘trustworthy’. Perceived competence in its field and the general reputation a platform already enjoys has been found to increase its perceived trustworthiness (Siegrist, Cvetkovich, and Roth 2000). Depending on the service a platform offers, security mechanisms and data protection measures provided by the platform can increase the perceived likelihood on the user side that no damage will be done to personal belongings. In terms of reliability, platforms can also make use of smart payment systems that guarantee both providers and receivers security of financial transactions (Gordo, de Rivera, and Apesteguía 2016).

In order to enhance peer trust (or ‘micro-level’ trust), the trustworthiness of platform members - platforms can provide for monitoring mechanisms and knowledge transmission mechanisms. Knowledge transmission and reputational systems are enabled by what Coleman (1988) termed as *network closure*, which means that members of a network interacting with a third member can afterwards exchange information about this third member, independently of this member’s interference (such as how closely that third member adhered to the policies and guidelines for behaviour set forth by the platform, or whether the user would work with that third person again).

The reputations of other members within social networks has been found to provide key information regarding their perceived level of trustworthiness within the network, as found by Keetels (2012) in their research of which institutional factors enhance trust among potential users of CE platforms. Some aspects found to contribute to trustworthiness in an online platform setting include verification mechanisms to check user

identities, insurance mechanisms, high information disclosure about the other participants, and strong cooperative norms. The user information provides trustworthiness for third users who have not yet entered exchange relations with that user. Information disclosure is likewise an incentive for members to act trustworthily if they wish to build a good reputation and increase their likelihood of future relations with other members. Ahn, Esarey, and Scholz (2009) have shown that individuals tend to share reputational information and are likelier to trust this information in decentralized, informal networks than through centralized institutions. Translated to CE platforms, this could be facilitated by offering the option to voluntarily provide user information, through e.g. vouching systems, online profiles, and reputation mechanisms like rating systems (Li Xiong and Ling Liu 2004).

Regularly repeated interaction with participants can also lead to a higher likelihood of network participants to act trustworthily (Cheshire, Gerbasi, and Cook 2010; Fukuyama 2001). Two studies on “time banks” (a system by which users share their time to help other users with projects and in turn can ‘spend’ that indebted time pulling other users into projects of their own) and their potential for the generation of social capital have shown that the highest degree of trustworthiness is achieved through frequent face-to-face interaction (Schor, 2015; Seyfang and Smith 2002). This is supported by a study conducted by Rogers et al. (2011) in which the authors concluded that neighbourhood walkability enhances face-to-face contact among neighbours and can lead to an increase in social capital. The focus on the neighbourhood dimension is of particular importance in the realm of this study and is therefore included in the indicator for creating peer trust. Table II below summarizes all the variables resulting from this literature study.

TABLE II SUMMARY SOURCES OF TRUSTWORTHINESS

Variables	Indicators	Literature
Organisational Trust	Perceived organisation competence and reputation Security and safety mechanisms	Keetels (2012), Siegrist et al. (2000), Gordo, de Rivera, and Apesteguía (2016)
Peer Trust	Knowledge transmission mechanisms Community-based user reputation User information and verification Repeated on- and offline user interaction within neighbourhoods	Li Xiong and Ling Liu (2004), Gordo, de Rivera, and Apesteguía (2016), Coleman (1988), Cheshire, Gerbasi, and Cook (2010), Fukuyama (2001), Schor (2015), Seyfang and Smith (2002), Rogers et al. (2011)

WORKING INSTITUTIONS

In the context of this research, formal and informal institutions (shortened here to ‘working institutions’), the second building block, are defined broadly as „prescriptions that specify what actions (or outcomes) are required, prohibited, or permitted, and the sanctions authorized if the rules are not followed“ (Ostrom 2007, p. 9). They can shape network members’ behaviour through sanctioning and rewarding mechanisms and might enable self-governance and conflict resolution. Norms, working rules, and underlying values are all elements in this building block of social capital. They are key for enabling cooperation. Working institutions can benefit communities and neighbourhoods increase a community’s ability to solve collective action dilemmas ranging from the use of public spaces to providing community-based childcare (Ostrom, 2007).

Scholars include norms of reciprocity, voluntarism, and social trust in certain institutions as key aspects for the generation of social capital within their community (Mathwick et al 2008). The norm ‘reciprocity’ has the potential to shape social interactions in such a way that beneficiaries of an action are expected to and indeed will return favours, either directly or to some other member of the community (Woolcock and Narayan 2000). ‘Voluntarism’ as a norm can lead to altruistic and supportive behaviour, and ‘social trust’ in key institutions has been found to enable rich community life by increasing the perceived potential benefits and diminishing perceived potential risks of collaboration (Siegrist, Cvetkovich, and Roth 2000). These norms each contribute to “pro-social behaviour”, defined by Penner et al (2005, p. 366) as a „[...] broad category of acts that are defined by some significant segment of society and/or one’s social group as generally beneficial to other people”.

SOURCES OF WORKING INSTITUTIONS

The functioning of institutions, norms, values, and rules is said to critically depend on how the rules are devised and implemented, as well as on the common understanding of them (Ostrom 2007). Translated to the context of CE, there are several levels at which working institutions can be facilitated by a platform. The design and functionalities can influence the way in which norms, rules and institutions are devised, and the perceived and communicated identity of a platform can play a key role in conveying its norms and values to its users and influencing their behaviour in exchange relations.

Design and functionality aspects of a platform entail mechanisms by which rules, norms, and values are devised and applied in user interactions. They can enable certain forms of behaviour and can sanction others (Gordo, de Rivera, and Apesteuguía 2016). Self-governed networks are said to be more effective in building and upholding such rules-in-use, as they are well known and accepted by network members (Ostrom 2007). A certain sense of ownership or participation in rule making processes is seen as conducive to cooperative norms and behaviour. This can happen formally or informally by giving users the opportunity to develop their own rules-in-use. Feedback-based rewards for pro-

social behaviour and sanctions for undesirable behaviour can also be built into the platform design. Devising 'shared' rules-in-use where users play a role in establishing working institutions requires frequent user interaction, thus providing the functionality for platform members to easily and frequently interact is a crucial aspect in this regard.

Research has shown that pro-social behaviour mostly emerges from socially internalized norms that reward reciprocal, cooperative behaviour (Eckhardt and Bardhi 2015). Despite many CE platforms' relative anonymity, these norms can be mimicked by the platform. Studying online file sharing networks, Strahlevitz (2003) found that reciprocal, cooperative behaviour amongst users could be achieved by clearly showing users that other users are cooperating as well. By seeing other users cooperating and acting altruistically, norms that reinforce ongoing cooperation are established (Strahilevitz 2003). Additionally, Schor et al (2016) found that the most inclusionary CE platforms have an institutionalized mechanism to overcome dissimilarities among users, which helps the platform appear 'accessible' to newcomers, such as welcome packages or meetings with more experienced members

Platforms often establish known and accepted norms of reciprocity, voluntarism, and social trust through a written code of conduct as well as the platform's written and practiced stance on their impact on society. In a study on members' willingness to contribute knowledge to online communities (Chiu, Hsu, and Wang 2006) researchers found a platform employing a shared language of pro-social behaviour increased user knowledge contribution. Habibi et al (2016) distinguish platforms along the lines of "sharing" versus "exchange" characteristics. They assume that supporting "real sharing" increases the platform's impact on its user propensity develop cooperative norms. While some platforms tend towards enabling sharing, others facilitate what the authors identify closer to traditional monetary "exchange". Aspects that describe real sharing can be drawn from Belk's (2014a) work on sharing, and include "social bonds", "joint ownership", "social reproduction", and "[little] money importance" (Habibi, Kim, and Laroche 2016, no p.). The OCU study (Gordo, de Rivera, and Apesteguía 2016) also found that absence of monetary exchanges was conducive to the creation of cooperative norms. In their 2001 study, Forrest and Kearns found that a certain sense of belonging or identity helps support the establishment of working institutions and that creating a sense of belonging strengthened social capital in neighbourhoods. A closed, personalized platform seems therefore more likely to create this "in-group-feeling". The "in-group-feeling" is also closely linked to the identity and vision communicated by a platform, which can promote a set of shared values (Siegrist, Cvetkovich, and Roth 2000; Chiu, Hsu, and Wang 2006). Devising shared norms and an identity is an iterative process, whereby each interaction reinforces a certain set of rules and norms. Therefore, community-building activities and shared experiences can also result in a set of working rules, norms and institutions (Ostrom 2007).

Finally, organisational trust and peer trust are keys factors that enable the above-mentioned mechanisms of self-governance and the establishment of norms and values that favour pro-social behaviour.

TABLE III SUMMARY SOURCES OF WORKING INSTITUTIONS

Variables	Indicators	Literature
Design and Functionality	Options for users to create and apply working rules Built-in rewards and sanctions Mechanisms that make platform services accessible to newcomers Platform design that favours reciprocity and altruistic behaviour Options for user interaction	Strahlevitz (2003) Ostrom (2007) Gordo, de Rivera, and Apesteguía (2016) (Siegrist, Cvetkovich, and Roth 2000).
Platform Identity	Written and practiced stance on pro-social behaviour/ support of “real” sharing “In-group-feeling”/platform identity Degree of private sphere and personalization Shared experiences	Eckhardt and Bardhi (2015); Gordo, de Rivera, and Apesteguía (2016); Habibi et al. (2016) Siegrist, Cvetkovich, and Roth (2000); Forrest and Kearns (2001); Chiu, Hsu, and Wang (2006)

NETWORKS

Networks, the third building block, are seen as the structural and essential component of social capital. In many ways they are the result of the kinds of institutions and the level of trust that a community has established (Hooghe and Stolle 2003). Networks also describe the geographical scale of social capital. Scholars of social capital distinguish ‘close’ networks as having strong, bonding ties among members, from ‘loose’ or ‘open’ networks, where so-called bridging ties are eminent. Bonding ties are relations with close relatives and friends, while bridging ties are connections with less known or more distant individuals and communities. Bridging ties occur horizontally, in between communities or groups, and vertically between a community and upper tier organisations, such as government, businesses, etc. (Dale and Newman 2010). Whereas bonding ties are considered important for developing a sense of community, well-being, and safety; bridging ties may improve a network’s information sharing, diversity, and economic prospects (Williams 2006). This observation is supported by Dale and Newman (2010), who studied the social capital that formed in a community in Vancouver, Canada, after its

members formed an organisation that provided support to socially disadvantaged members of the community. The authors argue that diversity of contacts among groups and institutions, thus bridging ties, increased the communities' prosperity and development.

In addition, Pharr and Putnam's work (2000) has defined different characteristics of bridging and bonding ties. While bridging ties are said to widen one's horizon and establish diffuse norms of reciprocity by making contact with new people, interacting in heterogeneous groups, and forming a sense of broader community. Bonding ties may increase inward-focused solidarity, emotional support for group members, and offer access to scarce or valuable resources. A well-integrated network of bridging and bonding ties allows for information and knowledge to flow more easily, which in turn contributes to the network's or community's ability to engage in collective action, while promoting both trustworthiness and institutions as well (Woolcock and Narayan 2000). In the context of this research, 'networks' will be framed as neighbourhood networks.

SOURCES OF NETWORKS

Neighbourhood networks are a key building block with regards to the research question. None of the abovementioned variables can effectively foster social capital on a neighbourhood level without local networks. Networks, especially those with bonding ties, occur within the vicinity of one's home and form part of a larger community. The kinds of networks that are formed as a result of CE practices naturally also depend on the other two building blocks of social capital – trustworthiness and working institutions form an environment that is more or less conducive to the formation of networks. The aspect of face-to-face interaction has been found to strengthen existing ties in neighbourhoods and create new ones (Fukuyama 2001). Rogers et al (2011) have shown that walkability of neighbourhoods increases face-to-face interaction, which in turn suggests an increase in bridging ties within a neighbourhood. The authors of the OCU study (Gordo, de Rivera, and Apesteguía 2016) list a couple of preconditions for CE platforms to build networks in local communities, including the development or promotion of localized interactions and connections and stimulating on- and offline interactions amongst members of one's neighbourhood. These aspects have been included however in either the *Working Institutions* or *Trustworthiness* sections and are therefore not duplicated as variables conducive to network formation.

Two additional variables are key in addition to the above-mentioned characteristics of networks, namely *place attachment* and the *network members*. 'Place attachment' or 'rootedness' was found to facilitate the establishment of bridging and bonding ties within neighbourhoods (Cheshire et al, 2010). This can take the shape of place-specific attributes in design, pictures, and language employed. In addition to place-related variables, the network members are a key variable. A study of various forms of local economic collaboration (such as a "time bank" and a "makerspace") by Schor et al (2016)

found that effective matching of members for collaborative activity increases the likelihood for participants to continue their relationship and form bonds. Effective matches are more likely to occur with a higher diversity of members, which requires a high number of users within a certain locality (user density). Efforts by platforms to break into and integrate all kinds of user groups, including economically or otherwise disadvantaged groups, increases diversity and the likelihood for effective matches, according to the study's authors (Schor et al, 2016). Since neighbourhoods usually constitute a more diverse setting than, for example, sport clubs, a focus on user diversity within a small geographical scale can be considered key to generating social capital within neighbourhoods.

TABLE IV SUMMARY SOURCES OF NETWORKS

Variables	Indicators	Literature
Place attachment	Local rootedness	Cheshire et al. (2010)
	Local attributes	
Network members	Member diversity	Schor et al. (2016)
	Member density	

IMPEDING FACTORS

With regards to this wide array of factors that could foster the creation of social capital within neighbourhoods, various studies about CE (Lampinen et al. 2015; Ikkala and Lampinen 2015; Schor et al. 2016; Bardhi and Eckhardt 2012) have also shown that certain mechanisms can actually preclude individuals and groups from participating and, thus, generating social capital (Pharr and Putnam 2000). This section will explore potential impediments to the generation of social capital.

Social capital, as discussed above, can result from the formation of bridging and bonding ties. While bonding ties are important to an individual's capacity to form close friendship or family relations, they can also work as an exclusionary mechanism. This is the case when inward group bonding leads to outward hostility and exclusion of those who are not perceived as part of the group. Instead of fostering the generation of social capital on a neighbourhood level, sometimes only certain individuals are able to benefit from closely-knit networks. Schor et al. (2016) found this to be the case at a local food swap as well as a local time bank. Within the food swap, distinguishing practices by members such as referring to certain members by the term "foodies" led to the exclusion of those who could not contribute this kind of food or who had no knowledge of what is considered by the members as "real" food, albeit the food swap's goal to broaden the public's access to "good" or "real" food.

Research has also shown that discriminatory practices occur on CE platforms where users have to insert a profile picture or operate under their real name to increase credibility. This opens avenues for conscious and unconscious discriminatory practices, including the fact that, on average, people with pictures or names that hint a racial minority earn less money for the same service and are less likely to be accepted as exchange partners on hospitality platforms (Edelman, Luca, and Svirsky 2015; Edelman and Luca 2014). In addition, a study by Lampinen et al. (2015) found that people in challenging life situations, such as single parents, who would benefit most from collaborative services for childcare have less time and energy to participate. This can lead to a self-selection within CE of wealthier members who do not rely on the practice in their day-to-day life.

Aside from exclusion from CE practices, other factors have been found to impede potential users from access to the means by which they would potentially engage in CE. These include any obstacles hindering citizens from making use of smart devices or the internet, both of which CE's functioning relies on. These obstacles may include low device literacy, little time or ability to learn, low 'user friendliness' (which may particularly affects the elderly), or not having the financial means to purchase said devices or services (Chadwick 2006; Holgersson and Karlsson 2014).

All these aspects need to be taken into consideration when studying the practices and the potential of a platform to generate social capital. It may be difficult to draw a line between when a platform is identity forming, which can be understood as conducive to generating social capital, versus creating a hostile environment for outsiders, which may lead to strong inward identification and bonding ties.

CONCEPTUAL MODEL

The sections above illustrated the theoretical basis of the study by first illustrating the sustainable development effects of social capital, its relation to neighbourhoods, and the collaborative economy. The concept of social capital was broken down into three building blocks – trustworthiness, working institutions, and neighbourhood networks – and their contribution to the creation of social capital on a neighbourhood level. Finally, variables influencing each building block were extracted from empirical and theoretical literature on social capital and impeding factors were discussed briefly.

To clarify the theoretical claims underlying the following research process, the causal model (figure III) below shows the assumed relations between CE platforms' practices, social capital creation and potential outcomes. The practices of CE platforms are the subject of this empirical study.

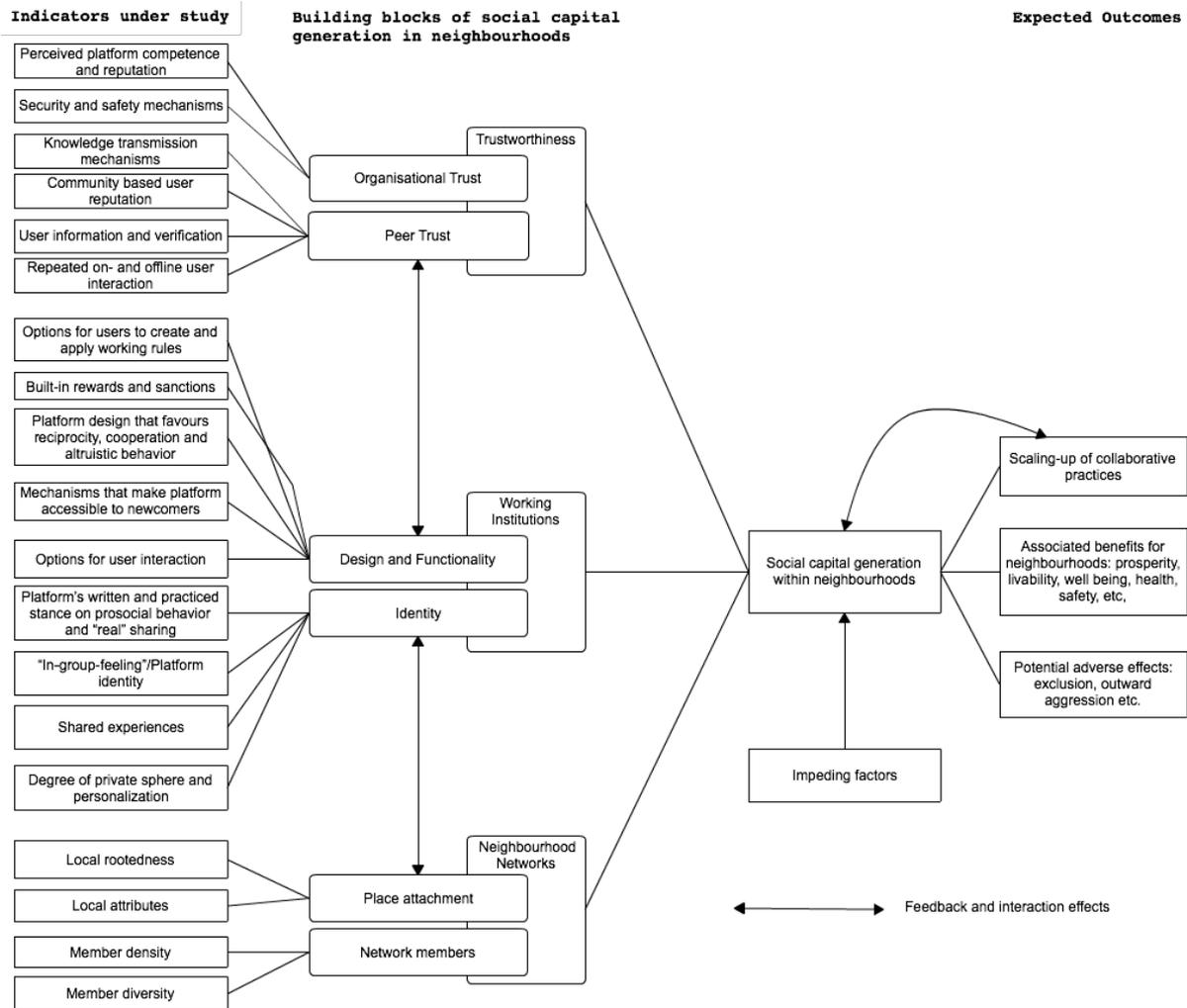


FIGURE III CONCEPTUAL MODEL

RESEARCH DESIGN AND METHODOLOGY

The goal of this research is to analyse how the different types of CE platforms enable the generation of social capital at the neighbourhood level and simultaneously test and validate claims in the literature about sources of social capital in the context of CE. This section will outline the empirical approach to answer this research question. First the case selection strategy will be outlined and the cases under study presented. Subsequently, the variables extracted from the literature will be operationalised to render them measurable. Data collection methods will then be illustrated, before closing with an outline of the data analysis strategies and a brief discussion of shortcomings in the analytical approach.

CASE SELECTION

A ‘case’ in the realm of this study is understood as one CE platform. The typology built in the section *CE platform typology* defined four different types of CE platforms (PSS for-profit, PSS not-for-profit, CL for-profit, CL not-for-profit). In order to be able to compare types of CE platforms, a representative number of cases of each type is necessary. The scope of the research and its explorative nature did not allow for a high number of cases; therefore 8 platforms were selected from a larger pool of Dutch CE platforms (see table xx below). The sample selection does not perfectly represent each platform type, with only one PSS not-for-profit platform compared to three CL for-profit platforms. This study relies mostly on interview data (see *data collection*), and therefore depended on platforms’ willingness to participate in the study. Time and resource constraints of many platforms restricted the study to the eight platforms selected. The empirical part of this research is exploratory in nature, and although this number and selection of cases is by no means wholly representative, it is solid enough to give insight into potential directions for future research. The table V below lists all platforms studied in their respective platform type.

TABLE V CE PLATFORMS UNDER STUDY

	PSS	CL
For-profit	<i>Barqo</i> <i>Snappcar</i>	<i>Tuinshare</i> <i>Konnektid</i> <i>Nextdoor</i>
Not-for-profit	<i>HeelNederlandDeelt</i>	<i>Thuisafgehaald</i> <i>WeHelpen</i>

OPERATIONALIZATION

In order to analyse the CE platforms’ practices, the indicators used and that were developed based on the literature are operationalized in the table VI below. The operationalization is adapted to a CE context, including a focus on the neighbourhood, and in parts based on the work conducted by the OCU (Gordo, de Rivera, and Apesteguía 2016). The operationalization includes a scoring matrix of + (very good), +/- (neutral, ambiguous) and - (poor), in order to assess each platform type with respect to each indicator and

thereby to obtain a clear picture on which platform type among the platforms under study shows the greatest likelihood to provide for the generation of social capital at the neighbourhood level. This set of operationalized indicators will be used in the analysis, therefore the data sources needed for each indicator are mentioned as well. The indicators and their operationalization presented in the table below are the result of an in-depth literature study and then validated by experts in the field. The validation session was conducted with Amsterdam-based collaborative economy consulting start-up *ShareNL* (Pieter van de Glind) and an independent researcher (Nicole Stofberg, UvA).

TABLE VI INDICATOR OPERATIONALIZATION

Trustworthiness			
Indicator	-	+/-	+
Organisational trust			
Perceived platform competence and reputation	<p>The platforms do not assign high value to user communication and service, based on the platforms' own assessment, and web content analysis.</p> <p>The platforms do not promote a specific reputation, and the means are limited (news, social media, labels, connections to third parties), the social capital-related values they focus on when doing so are limited based on the platforms own account.</p>	<p>The platforms assign value to user communication and service, based on the platforms' own assessment, and web content analysis.</p> <p>The platforms promote a specific reputation, by various means (news, social media, labels, connections to third parties), there are some social capital-related values they focus on when doing so, based on the platforms own account.</p>	<p>The platforms assign high value to user communication, presence, and good service, based on the platforms' own assessment, and web content analysis.</p> <p>The platforms promote their reputation, by very diverse means (news, social media, labels, connections to third parties), there are many social capital-related values they focus on when doing so, based on the platforms own account.</p>
Security and safety mechanisms	<p>Deposit and insurance mechanisms are not available. Safe payment environments do not exist (based on interview data and web content).</p>	<p>Deposit and Insurance mechanisms are available. Safe payment environments, if applicable, exist, but are generally not used or do not play an important role. Mechanisms are rather formalized (based on interview data and web content).</p>	<p>Deposit and Insurance mechanisms are available. Safe payment environments, if applicable, can be formalized and enforced by platform or done informally through practices like leaving an ID card in exchange for a borrowed item (based on interview data and web content).</p>

Peer trust			
Knowledge transmission mechanisms	There are no ways or very limited ways for users to formally or informally exchange information or to get information via the platform.	Some of the following options are available to users and they are occasionally used: Discussion forums, chat functions, pin walls, blogs, videos, groups	A variety of the following options are available to users and are frequently used to exchange knowledge about the platform and its services, showing reference to the local context, such as neighbourhoods: Discussion forums, chat functions, pin walls, blogs, videos, groups
Community-based user reputation	No or very limited mechanisms exist to allow users to rate or leave a review for other users based on their transaction, through points or written reviews, accessible to future users.	An unsophisticated mechanism exists to allow users to rate or review other users based on their transaction, through points or written reviews, accessible to future users. The character of reviews is rather functional (based on interviews and web content).	A well-functioning mechanism exists to allow users to rate and leave a review for other users based on their transaction, through points or written reviews, accessible to future users. The character of reviews is highly personal (based on interviews and web content).
User information and verification	There is no way of identifying if a user is real. Profiles, if they exist, contain little to no relevant information	One of the following options is available to verify user authenticity, but use is not required: Vouchers given out by a platform, confirming a user is real, based on an address or a small financial transaction, other means of user identification. User profiles which provide information about the user, such as a self description, former activity on the platform, and a profile picture.	Many of the following options are available to verify user authenticity, and use of them is expected: Vouchers given out by a platform, confirming a user is real, based on an address or a small financial transaction, other means of user identification. User profiles which provide information about the user, such as a self description, former activity on the platform, and a profile picture

Repeated on- and offline user interaction	Users rarely interact with the same person twice. Face-to-face contact is minimal. The platform does not actively encourage this aspect.	Users sometimes meet again or multiple times. There is an option for face-to-face contact. The platform slightly encourages this and perceives it as a positive side effect.	Users usually meet more than once. There are local events like meet-ups available for user to attend. These activities are focused on the local level. This aspect is highly encouraged by the platform.
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Working Institutions			
Indicator	-	+/-	+
Design and Functionality			
Options for users to create and apply working rules	Rules regarding the use of the platform are not informed by member feedback. Member communication about a set of rules-in-use is poor and knowledge and application of said rules by members is low or non-existent. The platforms barely value this aspect (based on interview data).	Rules regarding the use of the platform are informed to some extent by member feedback. Member communication about a set of rules-in-use is present. The platforms value this aspect (based on interview data).	Rules regarding the use of the platform are informed by member feedback. Member communication about a set of rules-in-use is present and well-known and applied by members. The platforms value this aspect highly (based on interview data).
Built-in rewards and sanctions	Non-cooperative behaviour and disregard for the rules is sanctioned to a minimal extent & cooperative behaviour is not rewarded (based on web content and interview data).	Non-cooperative behaviour and disregard for the rules is often sanctioned & cooperative behaviour is rewarded, but mostly by platform/centralized institution (based on web content and interview data).	Non-cooperative behaviour and disregard for the rules is consistently sanctioned & cooperative behaviour is rewarded, mostly by decentralized means such as other users or the community (based on web content and interview data).
Platform design that favours reciprocity, cooperation and altruistic behaviour	Reciprocal/altruistic/cooperative behaviour of members is not commonly occurring or noticed by other members (based on interview data and web content).	Users can anticipate other users' reciprocal/altruistic or cooperative behaviour to some extent (based on interview data and web content).	Reciprocal/altruistic/cooperative behaviour of members is frequently occurring and presented as the behavioural norm of the platform, for example through telling "success

			stories” (based on interview data and web content).
Mechanisms that make platform services accessible to newcomers	Outsiders are not very welcome, the platform has a “cliqey” feel to its network (based on interview data and web content).	New users are just as welcome as regular users. There is no specific mechanism of inclusion. There is no specific geographic focus (based on interview data and web content).	Newcomers and especially those with difficulties accessing the platform are given means to integrate into the platform and use it easily. The platform is focused on users within the same neighbourhoods (based on interview data and web content).
Options for user interaction	The service minimizes user on- and offline interaction(based on interview data and web content).	There are options available to support user interaction to the extent it is necessary to enter exchange relations (based on interview data and web content).	The platform functionally supports and also encourages users to interact with one another, beyond the scope of the platform’s services (based on interview data and web content).
Platform Identity			
Platform’s written and practiced stance on pro-social behaviour and “real” sharing	The tone and expectation set by the platform regarding its users’ behaviour in ratings, reputation schemes and profile requirements does not stress norms of reciprocity, cooperation, and trust - neither in written content nor in practice and user communication (based on interview data and web content).	The tone and expectation set by platforms regarding its users’ behaviour in ratings, reputation schemes, or profile requirements stresses norms of reciprocity, cooperation, and trust to a limited extent. The content displayed by platforms and communicated to users promotes “real” sharing to some extent, covering some of the following attributes: “social bonds”, “joint ownership”, “social reproduction”, “[little] money importance” (based on interview data and web content).	The tone and expectation set by a platform regarding its users’ behaviour in ratings, reputation schemes and profile requirements highly values norms of reciprocity, cooperation, and trust . The content displayed by platforms and communicated to users promotes “real” sharing, covering the following attributes: “social bonds”, “joint ownership”, “social reproduction”, “[little] money importance” (based on interview data and web content).

“In-group-feeling”/platform identity	The platform does not support a sense of community (based on interview data and web content).	The platform refers to its users as a community, for example through the use of “we” language, or words such as “family”, “community”, “home”, and targets group-specific language (based on interview data and web content).	The platform actively promotes a sense of community among its users through use of “we” language, or words such as “family”, “community”, “home”, and target group-specific language (based on interview data and web content).
Shared experiences	There are no formal or informal shared experiences available or promoted via the website and platform communication. This aspect is not valued by the platform.	The character and nature of the service provided by the platform creates shared experiences, such as attending events or offering classes to members.	The service and platform actively encourage shared experiences among its members. Those experiences take place beyond the practical purpose of the platform, e.g. neighbourhood markets, events organised by the platform or its users. The platform facilitate and value this aspect.
Degree of personalization	The platform and its users are not portrayed as very personal. Communication is rather impersonal (based on interview data and web content analysis).	The platform and its users are portrayed as personal, real-life characters. Communication is rather personal (based on interview data and web content analysis).	The platform and its users portray a very personal, real-life character, as in photographs, videos, or the like. Communication is very personal (based on interview data and web content analysis).

Neighbourhood Networks			
Indicator	-	+/-	+
Place attachment			
Local rootedness	The platform is not based in a specific locality and does not include the local context. The platform is not locally accessible through an office- or other kind	The platform is based in a specific locality and includes but does not focus on the local context and specific neighbourhoods. The platforms are not accessible through an office or other kind of	The platform is based in a specific locality and includes the local context through maps, as well as a focus on specific neighbourhoods. The platform is locally accessible through an office or some other

	of space (based on interview data and web content analysis).	space(based on interview data and web content analysis).	kind of space (based on interview data and web content analysis).
Local attributes	Attributes on the website do not include the local context(based on interview data and web content analysis).	Some attributes on the website include the local context, such as language, traits, signs (based on interview data and web content analysis).	Many attributes on the website and in user communication refer to the local context, such as language, traits, signs. The platform identifies with specific localities (based on interview data and web content analysis).
Network Members			
User diversity	Diversity in age, education, financial situation, and ethnicity is not valued by the platform (based on interviews and web content).	Diversity in age, education, financial situation, and ethnicity is valued to some extent by the platform (based on interviews and web content).	Users are very diverse in age, education, financial situation, and ethnicity. This is highly valued by the platform (based on interviews and web content).
User density	User density in platform's area of focus and possibly beyond does not play a role as identified by the platform itself.	User density in platform's area of focus and possibly beyond does play a role to some extent, as identified by the platform itself.	User density in platform's area of focus, in particular neighbourhoods, and possibly beyond does play an important role, as identified by the platform itself.

DATA COLLECTION

The methods used for the case studies are qualitative. Therefore, two strategies of data collection were employed: semi-structured interviews, and web content review.

To gain deeper knowledge about platforms' practices and their underlying norms and stances on social capital, semi-structured interviews with platform owners or employees were conducted, with one interview per platform. The interviews were structured around the indicator framework developed, but deviated slightly depending on the background of the interviewee and their responses. The majority of interviews were between 30 and 45 min and were recorded and later transcribed. Appendix I provides the interview guidelines, appendix II all interview transcripts. Interviewees were selected by

contacting a variety of Dutch CE platforms formally via e-mail or informally via personal contacts. The ShareNL network served as primary source of contacts for interviews.

The second source of data is the web content and utilities provided by the platform. This includes the design and functionality of the platform as well as their written content and their general communication to users. This source of data gave additional insights into the platforms' positions on the indicators. To limit scope and make web content comparable, the 'about' section was used as website content. Appendix III provides a list of links to the respective sections used. To gain access to all functions available on a platform, the researcher made a user account on each platform under study and, where possible, ran a trial transaction (monetary transactions excluded).

The empirical data is primarily self-reported and in the form of interviews. The self-reported data certainly bears the risk of platforms overestimating their impact and their concern with social capital generation in neighbourhoods. The choice to rely only on the above-mentioned data sources was made in order to keep the data collection and analysis within the scope of the research. However, further analysis should take third sources into consideration as well. These could include samples of users of CE platforms, as well as information from news, social media, and other channels.

DATA ANALYSIS

The collected data was analysed in two ways. First, *nvivo* software was used to analyse the interviews and web content. Second, the platform's applications were analysed based on the indicators' operationalization.

Techniques *Nvivo* is a qualitative data analysis software that allows one to code written content with the help of analytical categories in order to connect various sources of data and develop new analytical categories. The reasons for using this software are that it allows the researcher to mark ("code") fragments of written content as a certain category ("node") and sub-category ("sub-nodes"), and thus to analyse the extent to which platforms put indicators into practice. This assists in testing and validating existing theoretical categories and concepts based on new data and reformulating existing claims and further developing them. The building blocks of social capital were created as "nodes" and their respective indicators were created as "sub-nodes". The written content (interviews and "about" sections) was analysed with the help of the nodes. Statements that, according to the indicators' operationalization, fit a specific indicator were coded under the "sub-node" that corresponded to that indicator.

The coding process in *Nvivo* allowed for analysis of the written web and interview content. In addition to this content, the researcher also performed a qualitative content and functionality analysis of the platforms' websites. This process focused on those indicators that concern technicalities of the platform itself. For example, "options for user interaction" could entail a chat function, a discussion forum, or a 'pin wall' on the

platform’s website. Specifics as to whether an indicator was analysed in this way are included in the operationalization of the indicator.

Evaluation The results of the data analysis are presented in two ways. The first section summarizes the findings per platform type and variable in words (sections *Trustworthiness*, *Working Institutions*, *Networks*). In this section a score is first assigned for each indicator. Then, a final cross table presents the scores for each indicator for each platform type (see *Summary*). The data analysis is followed by a reflection on the indicators used, an introduction of new potential indicators, and the development of an altered set of indicators.

Using *Nvivo*, certain patterns of social capital generation strategies and the value assigned to social capital indicators began to emerge. All ‘sub- nodes’/indicators belonging to one variable were first selected in *Nvivo*. The coding process was oriented around the operationalization of the indicators as presented in table VI above. The screenshot (figure IV) below illustrates this process. It shows the sub-node “platform’s written and practice stance on pro-social behaviour and ‘real’ sharing”, and all corresponding statements from a single platform’s interview or web content that were coded under this node.

The screenshot shows the NVivo interface. On the left, a tree view displays the following nodes:

- Working Institutions (0 nodes, 0 references)
- Platform's written and... (12 nodes, 46 references)
- Options for user intera... (10 nodes, 36 references)
- "In-group-feeling" (12 nodes, 35 references)
- Options for users to cr... (9 nodes, 29 references)
- Platform's written and practiced stance on prosocial behavior and "real" sharing (7 references, 6.69% coverage)

The selected node, "Platform's written and practiced stance on prosocial behavior and 'real' sharing", is expanded to show a list of references:

- Internals\Interview Nextdoor**
7 references coded, 6.69% coverage
- Reference 1: 1.33% coverage
cause in the end it is all about transactions, you need something, you want something, or you have something that you want to lend out and it's all about having two people, one that has something, one that needs something and to bring them together and you know have them share something, you know that's the whole point.
- Reference 2: 0.72% coverage
the majority of interaction on nextdoor are simply utilitarian interactions, like I need a painter, who knows one, or I lost my keys, very simple day-to-day interaction.
- Reference 3: 1.07% coverage
I mean if you don't have the answer, still start engaging them in figuring out what the problem is, the real issue, the question. And be open and honest. Even if you can't help or can't solve it, explain how it is and why it is. Be transparent about those things.

FIGURE IV NVIVO SCREENSHOT

The analytical process was interpretative and is outlined in detail in the *Results* section. All assumptions regarding the practices and underlying values and notions of a platform or platform type are based on statements in the interviews, their web content, and their application’s functionalities. The analysis is based on the way in which indicators were

operationalized in above (see table xx). Specific attention was paid to the importance assigned to specific “nodes” (or indicators) by the interviewees or that emerged during review of the platform’s design. Since the goal of the research is to compare platform types, the scores are used as a means of rendering the types comparable. All results were first summarized per platform type, then per indicator. To make platform types comparable, then contrast their practices, the major aspects for each platform type and each indicator are presented in a cross table, including the score assigned (+, +/-, -). A final section summarizes the main findings.

In order to reflect critically on the sources of social capital as put forward in the literature, their use in the realm of CE platforms, and the set of indicators in use, the interrelations between indicators (as ‘sub-nodes’ in *Nvivo*) was checked (see *Theoretical Implications*). In the process of coding with pre-formulated ‘sub-nodes’, interrelations between some of the indicators were uncovered. Statements of interviewees that applied to multiple sub-nodes were coded under all possible nodes that fit the statement. ‘Matrix coding’ in *Nvivo* helps outline the amount of times one node overlaps with another. This feature generates a cross table with the amount of times one node’s coding overlaps with another node’s coding. In order to visualize the connections and amount of overlap between different nodes, the network visualization software *gephi* was used. The graph generated in *gephi* shows links between two nodes if they overlapped according to the matrix coding cross table. The linking lines’ thickness indicates how often one node overlapped with another. To visualize the use of different nodes, the amount of times one node was used in the coding process is visualized by its size. Finally, the nodes for which factual and thematic overlap was found are discussed, as well as potential reasons for overlap, and suggestions are made on how to integrate overlapping indicators into a new indicator.

The goal was also to account for emergent (new) patterns of practice to define or redefine key variables of social capital generation in the CE realm. In the process of coding, new analytical categories (“nodes”) were created and all corresponding content coded under the new nodes. The outcomes of this process are presented in the same manner as the integration of existing indicators. New categories, the potential reasons for their existence, and the potential to formulate them as indicators for future research are discussed.

In order to reassess the platform typology used to select the cases, the divergence within platforms of one type is addressed based on the research findings, and suggestions for new analytical types are made. Finally, the results are summarized in the form of recommendations to policy makers to inform their support of socially feasible and desirable CE practices, as well as to practitioners that wish to improve their performance in generating social capital or simply to engage more members on their platform.

Using qualitative methods of study and small sample sizes bears the risk of lack of accountability on the side of the researcher regarding the conclusions drawn from the

data. To provide for clear and transparent reasoning, the use of data and the conclusions drawn from it are reflected and depicted critically at each step of research. Descriptions of the relevant data sources provide additional accountability and robustness. Finally, the explorative nature of the empirical section should be underlined. The empirical foundation is not sound enough to allow for generalizable conclusions. It does, however, give insights into a new field of applying concepts of social capital to CE platforms.

RESULTS

In order to answer sub-question 3 *How and to what extent are the variables identified put into practice by different types of peer-to-peer platforms?* this chapter first presents all cases (CE platforms) under study, then presents the findings for each type of platform, each indicator, and the scores assigned. The results and scores are then presented and summarized in a cross table. Emergent new aspects and reflections on the categories and their application in future research are subsequently presented before closing with recommendations to stakeholders, practitioners, and policy makers.

CASE BACKGROUND

Barqo is a peer-to-peer boat rental platform that was founded in 2014 in Amsterdam. The concept is to connect boat owners to people who like to sail or navigate boats. The boat owners name and collect their fee for boat rentals, a share of which has to be paid to the platform. The platform covers boat rental as well as insurance and “break down” service. This platform focuses on leisure time activities rather than daily needs. As such, this platform is a for-profit PSS platform, enabling material collaboration between platform users.

Snappcar is a platform that enables peer-to-peer car sharing. Users can register their own car and offer it for a daily price. Other users can get make contact with the car owner to request a car rental. The terms of the rental are negotiated between the two parties and drop-off as well as pick-up happens between the car owner and the platform user. The platform charges a percentage of the price car owners earn by renting out their car. *Snappcar* provides an insurance and has some additional requirements in place for renters as well as owners to provide safe transactions. With these characteristics, *snappcar* is a for-profit PSS platform, with the restriction that it clearly aims at higher societal impact than monetary profit and was recently declared a b-corps (an organisation that pursues societal goals in addition to generating profit).

HeelNederlandDeelt is a newly established (2015) sharing platform that seeks to include all different types of CE practices, such as sharing, lending, bartering and offering services, for a fee or for free. The goal of the platform is to encourage local activities in the Netherlands beyond usual hubs of the CE, such as Amsterdam, Rotterdam and

Utrecht. Therefore, the main platform launched sub-platforms that cover a certain region or city. The platform operates as not-for-profit, and since it mostly enables the sharing or lending of goods, it is qualified as a PSS type of platform.

Nextdoor is a platform that offers inhabitants of neighbourhoods to interact with each other, to self-organise neighbourhood security, to share devices, share advice, or to meet-up with neighbours. The application offers the possibility to publish posts on the neighbourhood's interface, which is confined for inhabitants of a specific neighbourhood. The users have to use their real name and prove their residence within that neighbourhood. Because of its multiple use cases, this platform is qualified as a collaborative lifestyle platform. It enables multiple ways of self-organisation that include sharing of assets, but explicitly encourages users go beyond that. Although the platform does not generate an income in the Netherlands yet, it is planning to develop a business and income model. Therefore, it qualifies as for-profit platform.

Konnektid is a platform that offers knowledge exchange and learning among its members. Users can offer to teach in their own fields of expertise, as well as find other members to teach them skills in their fields of interest. As such, the platform is a collaborative lifestyle type of platform, facilitating the sharing and exchange of the intangible goods skills and knowledge. The platform is demand-driven, meaning that if a member wishes to learn a specific skill, she posts a request to platform members within proximity. The platform also offers the option for professional teachers to register classes and charge for them. Professionals are accepted based on an official qualification or diploma. The platform operates as a for-profit platform, with income generated from advertisements that the professional teachers place on the website.

Tuinshare is a garden-sharing and renting platform, founded in 2015. It is still in progress and does not have many users yet. It allows people that own a garden to share parts of it or the entire garden with people who would like to engage in gardening. It is also based on a pay-for-use principle, where garden owners can charge garden users for a year of garden sharing. However, the platform does not charge a margin of the transaction cost. Long term plans currently intend to move towards a revenue model though it is currently free. Because a payment model is their goal, it is classified here as a for-profit platform. Since the sharing of space – a garden – falls more under intangible goods, this platform is also part of the collaborative lifestyle platforms.

Thuisafgehaald is a peer-to-peer platform that was founded in 2012. It targets people who wish to cook for or pick up a meal from their neighbours. Home cooks can create a profile and offer dishes, either on an “offer” or “on-demand” basis. Users of the platform can see offers in their neighbourhood and get in contact with the home cooks if they

want a certain meal, then pick it up from the cooks directly. The costs that cooks ask for their meals usually only cover the costs of ingredients and preparation. Since 2014, *bijzonder thuisafgehaald* was founded as a branch, in particular for those people that are in need of regularly prepared meals and unable to pick them up by themselves. Home cooks that contribute to *bijzonder thuisafgehaald* commit to a regular schedule of cooking, such as once a week and delivering their meal to the person in need. With this service, the platform hopes to establish informal networks of care and neighbourly support. The platform was founded as a foundation and is partially supported by donations. In addition, the platform also experiments with other income models, such as charges for advertisements. Therefore, it is categorized as not-for-profit. With sharing meals being on the verge of a PSS and a rather intangible good, the platform nonetheless is categorized as a collaborative lifestyle platform.

WeHelpen is a platform aimed at facilitating help and care among neighbours and within communities. The help that it aims to generate is targeted at people for whom difficult life situations currently restrict their ability to cover day-to-day tasks– a kind of non-commercial care. It enables strangers to offer their help and ask for help with specific tasks. It also offers services for existing social (care) networks to organise themselves via the platform by means of organisational tools and information sharing. The service is organised as a cooperative and supported by various partners, including foundations and health care sector organisations. It is thus a not-for-profit operating within the collaborative lifestyle realm.

TRUSTWORTHINESS

ORGANISATIONAL TRUST

Organisational trust was evaluated by means of the indicators “perceived platform competence and reputation”, and “security and safety mechanisms”.

PSS For-profit Platforms Two platforms were included under this platform type: *Snappcar* and *Barqo*. Their reputation was clearly a matter of concern for both platforms. Both framed their recent growth in terms of media attention generated through the platform that then resulted in higher user numbers. The language employed to describe this was descriptive of their attitude towards media attention, because, as one respondent points out “...people were really buying this new solution!” They also outlined their focus on creating a reputation by publishing the platform’s societal impact and reasons for people to use it. Both interview partners stated that they are dedicated to improving their service, which they identified as a key driver of higher user activity. As one interview partner put it “people get more familiar with a platform that actually works all the time and improves and I think that’s it”. However, the interviewees referred to quality

and reputation mostly in the sense of marketing and promoting their platform to a broad range of users. The major source both platforms were aiming to tap into was word of mouth, thus using existing social capital to leverage a higher user base, which could, according to them, be built on a good reputation. Both platforms emphasized responsiveness, presence, and personalization of the user service as important aspects of their work. One of the platforms took community feedback as a particular means to improve service. They claim to call users in cases of bad feedback and attempt to maintain a personal relationship with users. As a baseline for this category, the patience and personal style of communication with users seemed to be key. Reputation among this type of platform is thus used to establish a certain need and familiarity with the specific service.

Both platform security and safety mechanisms received a high degree of emphasis and importance during interviews as well as on the platform's websites. One respondent identified the fact that security mechanisms like insurances exist as the crucial reason for users to trust the platform in the first place. Furthermore, since both platforms work in the area of highly valuable items (personal cars and boats), both emphasized "break down" service as a key aspect that increases trust in the platform among their users. In addition, safe payment environments were mentioned as a factor for trustworthiness as well. Both platforms achieve this by requiring users bring forms of identification to present during the exchange of keys. They also ensure payment happens via the web site to in turn assure users they will receive payment for renting out their asset.

CL For-Profit Platforms This type includes the platforms *tuinshare*, *konnektid* and *nextdoor*. For collaborative lifestyle platforms that work for profit, organisational trust proved to be a key element their success as well. All three interviewees stressed their platform's reputation as key variable for creating trustworthiness. The platform reputation was often linked to higher values, ideals, and platform likeability. As pointed out by one interviewee, "[...] at that time a lot of enthusiasts joined, just people that liked the story, the vision and were like, 'that's cool, we wanna do that'". All interviewees referred to their reputation and competence as a key factor in reaching what they perceived as a 'tipping point' in user numbers, as well a means to making "word of mouth" a viable strategy for increasing their user base. The quality of website, app, and related functionalities was also stressed by one interviewee as a determining factor that creates trust in the platform. In terms of user service, two interviewees alluded to the importance of responsiveness and personal contact a sign of competence. They perceived themselves and their user service mostly in a mediator function to ensure that users feel taken care of and respected. This was also underlined by one interviewee, stating that users need to feel they know the people behind a platform to perceive that they are "[...] just a team of 8 - 10 young people, and [they] couldn't have done it without [their users]" Overall, the interviews suggest that reputation for this type of platform is a means to activate potential users, by creating a certain set of values and attributes they associate with this respective service, such as likeability, personality, and sociability.

Security and safety mechanisms played somewhat of a lesser role for this type of platform, which can be partially explained by the kinds of services they are offering. Intangible goods do not bear the risk of being broken and fraud is harder to commit. None of the interviewees mentioned a special mechanism, however the platform's websites show that this aspect is not entirely trivial. They do refer to ways in which both provider and recipient of a certain service or space can create a safe operating space. These factors, however, are beyond the platforms' sphere of influence and need to be negotiated between users.

PSS Not-for-Profit Platform The platform that falls under this category is *heelnederlanddeelt*. This platform similarly stated that media attention was the primary path to developing their reputation. In their communication to members they also particularly stressed their values as a not-for-profit platform that does not facilitate commercial advertisements. They emphasize the fact that they enable sharing in all senses of the word, including lending, borrowing, and renting out private possessions and space. To provide security and safety mechanisms they offer a tool that serves as safety fund, into which members contribute and in case of damage, withdraw. Insurance for larger items is also available.

CL Not-for-profit Platforms This type includes *thuisafgehaald* and *wehelen*. The reputation and values these platforms represent were highlighted by respondents as key success factors and trust enhancers. When asked about the success of his platform *thuisafgehaald*, one interviewee stated, "people are convinced it's good, they know there is a need for it." On their website, *thuisafgehaald* transmits this image by stating, "we are entrepreneurs who aim at improving the world. We take a professional approach, but our social objective is of chief importance." Both platforms mentioned receiving early media attention supporting their promotion of trustworthiness as a key source for drawing in potential users.

Both interviewees highlighted the need to provide an inviting environment for users so that they feel empowered to ask for help or support. This resonates with users having concerns about platforms' competence and how to establish the image of competence. One interviewee phrased this challenge as such: "It is really complex to create a setting where people feel comfortable to ask for help and also to deliver help where both parties feel at ease." Both platforms thus also advise their users as to how to optimally use the service for their needs.

Another particular aspect of this type of platform is the extent of cooperation with third parties to create trustworthiness. Both state that collaborations between them and other care providers helped them to create a trustworthy environment for their users.

Regarding security and safety mechanisms, one interviewee stressed the need to scan the platform for members with bad intentions as well as the need to provide members with the knowledge necessary to maintain a safe environment when interacting with other members.

PEER TRUST

The categories of peer trust were “knowledge transmission mechanisms”, “community based user reputation”, “user information and verification”, and “repeated on- and offline user interaction”.

PSS For-profit Platforms The above categories play a large role according to these platforms’ interviewees which reflects on the platform’s websites as well – particularly in the functionalities they offer to their users to verify their identity and leave a rating for other users. One interviewee pointed out, with regards to knowledge transmission mechanisms, that user knowledge is very important to other users and should thus be facilitated by the platform for on- and offline meet-ups: “But that answer given by someone else is more valuable and probably also more trustworthy than if I would say, you have to do it this way.” Both interview partners mentioned review systems as a key mechanism to create trust among users and especially to create an incentive to abide by the rules. Especially in the realm of product service systems, the interview data suggests an importance of user verification mechanisms, such as a voucher that identifies them as who they are or a picture of the asset they’re renting out (e.g. boat, or car). Furthermore, both interviewees indicated that they keep personal contact with users, which increased their certainty of the users’ authenticity and thus individual trustworthiness. Peer trustworthiness also mattered in terms of trusting users’ skills since they’re being trusted to be able to steer a boat or drive a car. These aspects were covered as well by the verification mechanisms, such as requiring a driver’s licence or equivalent. However, neither interviewee particularly emphasized repeated on- an offline interaction. Only when asked did they indicate that users tend to establish more stable collaborative relations with certain users after having a good exchange experience with them.

CL For-profit Platforms Knowledge transmission mechanisms were mentioned by these platforms as a way to exchange particular information like recommendations or tips regarding the specific activity in the domain of the platform. One platform envisions providing functionality in the future in the form of a forum where knowledge and expertise on certain topics, as well as spaces could be exchanged. Another interviewee stressed the fact that there were closed neighbourhood online groups within the platform where members exchanged recommendations and tips around practical issues. Community-based user reputation played a crucial role in this regard. All platforms have or envision some form of user-based rating system, including written text by one user

about another user engaging in an exchange relation. Verification mechanisms play an important role for *konnektid*, where professional teachers need to provide proof of their qualifications before being able to offer their services on the platform. Similarly, *nextdoor* members need to be verified and provide their full name before they are able to enter the platform – a feature that they identified by the interviewee as crucial to creating trust. In that sense, the platform actually confines the scope of the neighbourhood concept because only verified residents of a confined neighbourhood are allowed to create a profile, and they only have access to the profiles of members within their neighbourhood. All platforms offered the possibility to create user profiles with information about the user and a profile picture. When asked about personal interactions as a means to create trust among users, interview data suggested these small informal factors play a large role. As one respondent described, “First people need to know each other in a casual way, then they build trust. Doing simple little things together helps [...]”. This was echoed by the other two respondents’ view on repeated interactions, suggesting that usually good experiences among users extrapolate their levels of trust and trustworthy behaviour.

PSS Not-for-profit Platform On this platform, members can exchange knowledge within closed groups of individuals that already know each other, which builds on existing trust. In addition, this platform facilitates user reviews that are publicly available to other users, though at the time of the interview use of this feature was not wide-spread yet.

CL Not-for-profit Platforms When asked about knowledge transmission mechanisms, one interviewee often referred to the platform’s two Facebook sites. One is maintained strictly for online communication and a second is a closed group for members – a space where members actively engage in knowledge exchanges about platform-related topics and more. This, according to her, also serves as a “self-help tool” where members can solve problems and questions themselves. The interviewee from *wehelpen* envisioned a similar mechanism, stressing that different user groups need different kinds of information. The platform thus aims at creating circles in which users can exchange information and knowledge among each other. In addition, user verification mechanisms are in place to some extent, but more on a personalized, informal level. The platform administrators do know some of their most active users personally and make an effort to stay in touch with them. *Thuisafgehaald*, as an example, showcases their most popular cooks and in this way reaffirms their cooks’ trustworthiness. Review systems also play an important role on this platform, where users can leave ratings in the form of written reviews. The platform encourages users to formulate reviews in a positive manner.

Both platform interviewees state that repeat interactions among their users do occur and are highly appreciated and encouraged due to the bonds of trust that result from repeated positive experiences. Both platforms provide their users with anecdotes of other users that have grown closer through the use of the platform.

SUMMARY TRUSTWORTHINESS

To summarize this section, a few key points are noteworthy. First, PSS platforms use different mechanisms to create trust than CL platforms, regardless of their profit orientation. Formalized mechanisms, such as verification, insurance, and safe payment systems play a large role for these platforms, while CL platforms appear to rely more on personal interaction as a means of verification and their platform's reputation and the values they present to their users as a means to appear trustworthy. For all platforms named above a personal touch in user services seemed key, as well as their perceived competence in their field of work.

WORKING INSTITUTIONS

This building block of social capital consists of the design and functionality provided by a platform most likely to create working institutions and the aspects that contribute to what was above termed as "platform identity".

DESIGN AND FUNCTIONALITY

The design and functionality aspect of working institutions entails the categories "options for users to create and apply working rules", "built-in rewards and sanctions", "platform design that favours reciprocity and altruistic behaviour", "options for user interaction", and "mechanisms that make platform services accessible to newcomers".

PSS For-profit Platforms On this type of platform, the technical means allowing members to create and apply their own working rules are rather limited since interactions are clearly regulated by the platform, such as the payment process or the handoffs of assets between users. This practice in some instances goes as far as attempting to restrict members from communicating about ways to circumvent the rules of the platform, for example to avoid platform transaction fees. This is understandable from the platforms' point of view as they would like to earn money from the transactions that they facilitate. It was however pointed out in one interview that members sometimes create their own "code-of-conduct", in which they thank the owner of the rented product in non-monetary ways, by giving a gift or taking the car to a car wash before returning it. One interviewee felt that their platform was under constant review by their members, whose feedback serves to improve the service and create new tools. Also the review system was

mentioned as a “self-filtering process” in which members of the community created the rule-in-use of leaving clear, and transparent reviews to “weed out the bad guys”.

In addition, they indicated that sanctions for rule violations do not apply immediately; rather the platform’s user service tries to engage with those users that do not act according to the platform’s rules and remind them of the rules in place. Only continuous rule violation is punished, often by platform exclusion. Both platforms reward successful owners in multiple ways for renting out their car or boat. They often make personal contact with these users and showcase them on their website to tell their story to other members. One platform also runs a loyalty program in which active and successful owners are rewarded by giving them a prominent spot on the website, in turn making them more likely to be selected by renters. In the case of both platforms, these reward systems are linked to the goal of keeping owners active, since the platform relies on their assets.

The communication channels available to users also facilitate the creation and application of rules-in-use by members. While *barqo* only provides a chat system that restricted the exchange of contact data to avoid payments outside of the platform, *snappcar* seeks to facilitate communication online via forums and offline via member meet-ups.

In terms of design that favours reciprocity, cooperation, and altruistic behaviour, both platforms showcase successful stories of collaboration between their members. As these examples are limited to interactions taking place on the platform, it is debatable how much pro-social behaviour these showcases actually encourage.

In terms of integrating newcomers, neither platform possesses a dedicated mechanism other than enabling their users to invite friends to the platform via e-mail or Facebook. One interviewee pointed out that they support new members during their first interactions, often via personal contact.

Design and functionality that encourage reciprocity, cooperation, and altruistic behaviour are not a prominent element of this type of platform, although basic aspects such as the development of rules-in-use by users that go beyond monetary interactions do exist, and the platforms do showcase successful collaboration and good experiences.

CL For-Profit Platforms One platform, *nextdoor*, stands out when it comes to providing options for users to create and apply working rules. The platform does not have a strict “code-of-conduct”. Instead it is the user’s responsibility to create and apply rules-in-use in their own user environment, for example in group discussions. Unwanted topics or comments can be flagged and community moderators can delete them or communicate with specific users to delete their posts. All platforms heavily rely on user feedback; one platform in particular, *konnektid*, was developed in cooperation with their users. The feedback is continuously incorporated into all platforms’ functionalities. One interviewee also referred to informal rules of appreciation, where members give gifts or

offer favours, like sharing skills and knowledge, in return for the interaction. Sanctions are applied on all platforms in a rather informal manner, such as on *nextdoor* where members themselves weed out unwanted behaviour, but similarly on *konnektid* and *tuinshare*, where review systems allow sanctioning undesirable behaviour. Moreover, these platforms see themselves as mediators in conflict situations. Reward mechanisms are in place on all platforms: On *nextdoor* members can “like” posts or interactions; *konnektid* showcases successful interactions and allows members to rate each other; on *tuinshare* these systems are not as established, however rating and showcasing is expected to grow in the future. In addition, *konnektid* is planning to reward successful and popular lay teachers to offer their lessons as professionals, thus charging money, simply based on merit and without needing an official qualification. The interviewees all underlined the importance of showcasing good examples of pro-social behaviour by presenting successful interactions among members on the website and telling stories about interactions in the form of blogs and Facebook posts.

A range of mechanisms is available for users to interact on the platforms of this type. All interviewees identified member interaction as a key factor for their success and an option that is used and encouraged by the platforms themselves. To name a few examples, members can become “friends” with other members and communicate via chat, and on *nextdoor* specifically, discussion groups were available as well. *Nextdoor* also enables users to connect with the platform and respond to other users solely via email. All platforms also provide virtual maps that indicate other users’ location and interests, which helps facilitate interactions for first-time users.

Mechanisms that integrate newcomers on the platform were available as well and were referenced in the interview as a means to increase diversity on the platform. The platforms provide means to invite friends as new users, and *nextdoor* also encourages this by challenging its members to find new contacts within their neighbourhood in a short time span. All platforms point out contact with other institutions as key means to increase their user base and reach people not likely to engage an online platform, such as the elderly.

In summary, design and functionality on this type of platform can promote pro-social behaviour while still mostly allowing members to develop their own rules-in-use.

PSS Not-for-Profit Platform This platform claimed it supported virtually any kind of sharing or collaborating. According to the interviewee, this broad range of exchange relations results in a broad range of rules-in-use developed by users. Because existing social groups, like sport teams, can create their own closed group on the platform, to the platform actively encourages the development of members’ own working rules. Sanctions in the case of rule violation are applied on an informal level by communicating

with the user and reaching an understanding of the inappropriateness of their behaviour, such as in a case where the user uses the platform as a place to post advertisements for their own private business. Ranking and review systems are also available as a means for members to sanction other members. In terms of rewards, the platform is envisioning a system where members can earn points for sharing on the platform that could then be used as a virtual currency for new interactions. In addition, they challenge neighbourhoods to become “best sharing neighbourhoods”, which then would be rewarded with a neighbourhood party. User interaction is possible in closed groups and chat rooms but the platform organises offline meet-ups as well, often for new neighbourhoods or communities that enter the platform. These meet-ups or events are also used as mechanisms to integrate new users on the platform. Functionality of inviting friends via e-mail and Facebook is also provided to make the platform accessible to newcomers. The platform design also encourages reciprocity, cooperation and altruistic behaviour by showcasing members’ positive experiences with the sharing on the platform and their reasons to do so.

CL Not-for-profit Platforms These platforms had options for users to apply rules-in-use but in a much more informal way. Although user feedback on the service is used by both platforms consistently, most rules-in-use, according to the interviewees, develop as a result of user interactions. This goes hand in hand with sanctions applied in user-to-user interactions. As one interviewee put it, “[...] if you put macaroni and cheese for 20€ neighbours will complain about it and email the cook to say, your mac and cheese is a little bit expensive.” Thus, on this platform, undesirable behaviour is mostly self-filtered by other members. On the platform side sanctions in the form of banning members become appropriate whenever user safety is at stake. This is mostly applicable in the case of *wehelpen*, where the interviewee stressed the importance of excluding members from the platform that attempted to use it for undesirable purposes. On the other hand, rewards are available as well. The *thuisafgehaald* interview partner stated that their platform regularly thanks the most popular cooks via e-mail or postcards and presents their story on the platform. Moreover, members can get badges for all different activities they engaged in. Members can reward home cooks with a good review, in which the focus is quite personal by nature of the structure of the review form provided: “We don’t have a ranking with stars or numbers, so it’s very personal”. And on *wehelpen*, members can create so-called “presents” for other members where they offer very specific activities, like going for a walk, or cooking together as a sign of appreciation or gratitude.

Both platforms strongly focus on platform design that favours reciprocity and cooperation by encouraging members to leave decent reviews and to thank other members for the experience, even if they personally didn’t like the food for example, or by encouraging members to look out for new possibilities to help. Stories of successful interactions that

encourage new members to engage in helping others or providing food are showcased on both platforms. This was emphasized as an important means to bring the general message across: “[W]e are setting great examples on how people are helping one another, so we are talking about that [...]”.

In terms of options for user interaction, this again was stressed by both interviewees as a crucial aspect to their platform. In both cases members can engage online, via the platform and Facebook, and the platforms encourage them to do so. *Thuisafgehaald* also facilitates the organisation of offline events and publishes them to all members in the vicinity of said event. In addition, *wehelpen*'s use-case is inherently based on offline interaction, therefore the platform offers an array of tips and guidelines for interacting with other (unfamiliar) members. The platform also encourages users to always reply to other user's requests, and assists members looking for help in formulating their requests and overcoming social barriers.

The design and functionality of both platforms of this type are clearly oriented towards cooperation and reciprocity, which can be in part explained by the nature of the service they facilitate. Both interviewees stress the importance of the design aspects for their platform and their application by users.

PLATFORM IDENTITY

The platform identity touches upon more intangible values, practices, and interactions put forward by the platform and heavily relies on the evaluation of interview data. The categories for this section are “Platform's written and practiced stance on pro-social behaviour and ‘real’ sharing”, “In-group-feeling/platform identity”, “Shared experiences”, and the “degree of private sphere and personalization”.

PSS For-profit Platforms The platforms' practiced and written stance on “real sharing” was by far the most prevalently used category in the analysis. Both platforms stated on their websites that they believe in sharing assets and the multiple benefits sharing confers on users and society as a whole, as exemplified in platform *barqo*'s statement during their interview: “We believe that ‘sharing’ is what makes this world go round, and the best way to go around the world is by sailing, together!”

However, in the interviews the respondents from *barqo* mostly referred to efficiency and practicality aspects of “sharing”, or rather peer-to-peer renting. In contrast, the *snappcar* interviewee alluded to the platform's stance on pro-social behaviour as a key aspect of their organisation and their member communication: “We want to have an impact in the world and the impact is on the social sort of agenda, so that there is more connectivity in neighbourhoods and all that.” He also emphasized that they as platform need to take the lead in encouraging pro-social behaviour, for example through personally

thanking active members or giving gifts when renting a car themselves. Their goal is to trigger a public discourse that questions general assumptions about car ownership and status, which is pursued by publishing blog articles around this topic. Yet, “real” sharing is rather weeded out than encouraged, since there is an obligation to ask money for one’s assets, and to pay transaction fees.

Both platforms employ a user-specific language on their website that implies belonging to a specific group. This can assist in creating “in-group-feeling” and identification with the platform. On *barqo* this takes the form of sailing-specific vocabulary, which was also underlined in the interview, stating that members love sailing and join the platform because of a personal connection to the sport.

Aside from referring to the *snappcar* community, the *snappcar* website is not as specific and focuses more on the cost efficiency aspect of car sharing. However during the interview, it became evident that users generally appreciate a certain level of identification with the member community, as the interviewee stated: “that’s the feedback we get, like, I don’t know what happens, but people who use your platform are just really nice!” Shared experiences are encouraged by *barqo*’s website, by stating that over the platform members can find sailing partners and sail together. The *snappcar* interviewee gave some anecdotes of shared experiences, where renters and owners of cars would have a drink after returning the car, they are however not actively encouraged, facilitated, or showcased on the website. User profiles on neither website are very personalized, but they do offer users the possibility to include a picture and a self-description.

In sum, identification with the platform and the promotion of values of real sharing and pro-social behaviour is present on both platforms of this type and welcomed by the interviewees, but to a limited extent and not as prominently promoted as practicality aspect of the platform.

CL For-profit Platforms The practices and values guiding this type of platforms’ interactions were in line with “real” sharing but particularly focused on pro-social behaviour. On their website, *konnektid* states that “All we ask in return [for taking a lesson] is that you share your skills with our community so people can learn from you too!”, which clearly taps into norms of reciprocity. During the interview, *nextdoor* framed their stance on the matter the following way: “[...] everybody wants to have a neighbourly neighbourhood. And it’s such a basic need, and it’s not going to go away with digitalization or globalization.” And the interview partner from *konnektid* framed their main mission as “[...] we are all about making connections people between people to help each other”. She also underlined that their own practices within the company align with these values and that they try to embody this motto as a business. These aspects were to a lesser extent present on the *tuinshare* platform. Except for *tuinshare*, the other two platforms

enable free-of-charge interactions among their members, which aligns with a notion of “real” sharing.

The statements listed above also resonate with the sense of community and group feeling that these platforms seek to cultivate among their members. The kind of language the platforms used in their communication with their users was mentioned as a tool to create this sense of community: “Obviously, we think personalized language is important! We are trying to build a community, so I expect the other to treat me like a person!” The websites of these platforms reflected their goal of creating an “in-group-feeling” by employing community-oriented language that suggests a person-to-person relationship with the platform itself. Identification with the product/service that was offered by the platform was also stressed by one interviewee as a key factor in generating an in-group-feeling.

Along with in-group-feeling also go shared experiences among members. These were defined as the core idea of the platform by *nextdoor*. Similarly, the other two interviewees pointed to shared experiences as something that they would like to facilitate among their members, also as a way to create a vibrant community. Regarding personalization, *nextdoor* and *konnektid* differ considerably from *tuinshare* in that they offer and encourage high levels of personalization of profiles. In addition, *nextdoor* preserves members’ private sphere by only making user profiles available to members of the neighbourhood. As alluded to above, personalized communication is of high importance to all interviewees. As one interviewee put it: “I know that people really like the fact that there is a person responding to them.”

In summary, platforms of this type vary in the extent to which they emphasize and cultivate user identification with the platform and its services, though it became evident that the pro-social behaviour plays a prominent and important role in the platforms’ practices and overall goals.

PSS Not-for-profit Platform This platform’s interviewee believed firmly in promoting all kinds of sharing, including altruistically-motivated activities but also renting in exchange for money. This is underlined by the statement “the sharing economy is all about connection, cooperation, and collaborating”. The platform seeks to cultivate an in-group-feeling by organising offline events and gatherings that create cohesion among its members, which simultaneously represent shared experiences. The ‘personalization’ aspect is present as the interviewee demonstrated her high regard for the value of personal communication with users. Additionally, closed neighbourhood groups are available to users. However, user profiles vary greatly in their degree of personalization and the language on the websites does not explicitly create a personal tone.

CL Not-for-Profit Platforms This type of platform most clearly demonstrated their stance in support of “real” sharing and pro-social behaviour, which matched the general identity that these platforms try to embody for their users. This can be illustrated by one interviewee’s statement on the platform’s values and goals: “[W]e need to organise care ourselves. So you need more people around you to help. So we think neighbours can help especially if they can cook very well.” And further stating that “[...] another value is we really like that people are getting to know each other in their own neighbourhoods, because in cities for example it can be very anonymous to live somewhere and not know your neighbours”. These general statements resonated throughout the interview and depicted a clear picture of the platform’s pro-social values. Similar findings hold true for the interview with *wehelpen*, during which the interviewee stated that “we believe that everybody is willing to do something for somebody else and everybody needs help from somebody else at a certain point in their lives.” This is to some extent self-evident, due to their goal of increasing and facilitating neighbourly care among people.

The sense of community and in-group-feeling that both platforms promote is similarly strong. This became evident in the interviews when one interviewee stated “We love great food, lots of people love to cook, the values are not coming from that”. This indicates users enjoy an in-group feeling based on identification with the interest in cooking and eating good food. At *wehelpen*, the interviewee puts special emphasis on creating an in-group-feeling, stating that “we [wehelpen] really feel that we need to take people by the hand, not in a top down way where we tell others what’s good for them but by offering people a lot of possibilities”

Similarly, *thuisafgehaald* presents itself on its website as a “community of food lovers”, shares a very personal story of the founder, and states, “We are overwhelmed by the enthusiastic responses and nice stories from cooks and foodies.” All of this potentially creates a warm sense of belonging for members. A similar picture is painted on the *wehelpen* platform, where users are addressed directly: “Help jij al mee?” These factors also contribute to a high degree of personalization within the platform, supported by features for creating detailed member profiles (use of which, however, is not required).

Shared experiences seem to play an important role for both platforms. On *thuisafgehaald* it is possible for members to organise food events and the platform even organises events of its own. This was reflected in the interview data by statements such as “we are really liking it that people have to be in the kitchen of the other person, and people talk a little bit”, and further, “in that way it’s connecting people more in person and make them eat together.” The aspect of shared experiences was underlined by the *wehelpen* interviewee as a means to create a more meaningful relationship, which then could result in more commitment on the side of the helping person.

SUMMARY WORKING INSTITUTIONS

To sub-summarize the most important findings within the building block of working institutions, all platforms do value their members input and feedback, and acknowledge the establishment of certain rules-in-use. Yet there are some clear differences to be observed between PSS platforms and CL platforms. The former has shown a lesser commitment to informal practices of rule-setting including rewarding and sanctioning, and rewards within these platforms are mostly coordinated by the platforms themselves, through loyalty programs or promotion on the platform's website. In contrast, CL platforms showed a high commitment to the identity of the platform, manifested in their stance on pro-social behaviour and norms, as well as the kind of community they seek to create.

NEIGHBOURHOOD NETWORKS

The network building block of social capital entailed two dimensions: the “place” dimension, which describes the rootedness of a platform's activity in neighbourly structures (“local rootedness”) and its identification with local traits (“local attributes”); and “users”, which describes the platforms stance on a dense and diverse user network (“user density” and “user diversity”).

PLACE ATTACHMENT

PSS for-Profit Platforms While *barqo* did not claim to focus on local rootedness and instead aimed for a more international scope, the interviewee nonetheless indicated that the platform relies on local attributes, like a love for sailing and boats, to be successful and integrate members. The interviewee from *snappcar* did not indicate any specific focus on local rootedness, but mentioned that neighbourly networks are more vibrant car sharing communities. The platform does not show any local attributes, although for on the Dutch national holiday “Kings' Day” the “car sharing Kings” were nominated and portrayed with a crown on the websites. This shows a certain level of identification with locality specific attributes.

CL for-Profit Platforms Two of these platforms (*nextdoor*, *konnektid*) strongly emphasized their focus on the neighbourhood level, with one stating “those are also market-places that make sense to do locally, simply because the travel time is shorter, [...] so you know where they live and that's already a lot easier.” This interviewee (*nextdoor*) also stressed the value of trust and that it is often easier to establish in a neighbourhood

environment. Similarly, *konnektid*'s website pronounces their mission as “We transform your neighborhood into your university”, putting a clear emphasis on local knowledge as well. Turning neighbourhoods into vibrant communities was identified as a major goal by *konnektid*. With regards to local rootedness, the *konnektid* interviewee also alluded to their company's own local rootedness, stating that “they (users) actually know where we're located, they know what we look like, so I think that's what people like”. Similarly, the interviewee from *tuinshare* claimed it's interested in providing local food markets with the harvest from shared gardens and though that to integrate more into local communities.

In terms of local attributes, the *nextdoor* interviewee pointed out the importance of this factor since their platform faced major difficulties and rejection from users for the fact that they are a U.S.-based company. The platform was consequently forced to reposition itself, actively adapt more to the local context, and communicate effectively about its mission with its users.

PSS not-for-Profit Platform This platform showed a clear interest in rooting collaborative activities in local communities in ways also beyond the “classic” centres of collaborative economy platforms. Therefore, they established local subgroups with the name of each specific community. This demonstrated a move towards local rootedness as well as local attributes and identification with the place, and their interviewee stated “what our vision is that sharing economy is all about local activities”. This is reinforced by the platform's approach to find local community managers that can integrate neighbourhoods on the platform to make it accessible to communities in a localized way. The platform also similarly works with local clubs and associations.

CL not-for-Profit Platforms Both of these platforms operate at a national level, with *thuisafgehaald* also striving for international presence. However, rootedness in neighbourhoods appears a focal point of their work. To illustrate this, the interviewee stated that “we really like it that people are growing their own network in their neighbourhood.” In addition, *Thuisafgehaald* has “projects” in various cities where they engage with home cooks directly and create closer bonds with the local community. *Wehelpen* is almost exclusively based in neighbourhood networks and thus inherently locally rooted. The interviewee also pointed out how the platform is supporting local interactions and developing local networks by presenting its users a map of willing helpers in their neighbourhood.

PSS for-Profit Platforms Both platforms expressed interest in finding ways in which they can increase their user base. Neither, however, mentioned a specific mechanism they're employing to increase user density. The *snappcar* interviewee hinted at the fact that density of potential users at the neighbourhood level drops off slightly to significantly in different areas beyond the Randstad centres of the Netherlands. And the *barqo* interviewee indicated that their user base still needs to increase tremendously. In terms of diversity, *barqo* did not appear particularly interested in diverse members and instead focuses on a very specific target group of higher educated, wealthy members. *Snappcar* indicated that there are improving their mechanisms to attract more car owners with a more diverse set of cars, for example, through a referral program.

CL for-Profit Platforms The interviewee of *nextdoor* as well as *konnektid* pointed out that they enjoyed a large, early growth in users which after some time has stagnated. All three platforms are, naturally, interested in increasing their user base. *Nextdoor* and *konnektid* named a couple of mechanisms that increased user density in specific places, like referral programs or encouraging word of mouth. All three platforms seem to appreciate user diversity as well, and *konnektid* is actively looking into other means of integrating different members in the platform, for example by attending offline events. Their respondent stated "We [konnektid] need a lot of people especially if you're looking for a certain set of skills that is a little bit more unique." the respondent from *nextdoor* also stressed diversity as a key success factor for achieving "perfect matches" on the platform.

PSS not-for-Profit Platform This platform works actively to broaden their user base by incorporating new cities in their platform over time. They appear thus more focused on generating a diverse user base rather than increasing density in active user communities.

CL not-for-Profit Platforms Both platforms identified the need to increase user density, especially beyond the typical centres. In particular, the interviewee from *wehelpen* pointed out that they aim at a diverse user base that can provide help for people in diverse situations and with diverse needs. This is done by designing the platform accommodating for various needs and giving users a selection of options for the ways in which they can help. For *thuisafgehaald*, diversity was not such an evident need, however the interviewee mentioned that a higher diversity of home cooks and their offers increases the likelihood for users to find a good match.

SUMMARY NEIGHBOURHOOD NETWORKS

In summary, it appears that all platforms are working hard to increase their user numbers. The growth mechanisms rely mostly on existing social networks, with some also moving beyond by integrating local stakeholders or making appearances at local events. Independently from platform type, the type of exchange seemed key in determining how invested platforms were in rooting locally. Platforms that rely on short distances and neighbourly cooperation are more active in this regard. In addition, if user diversity enhances the quality of the service, this becomes a focus point as well, which results in more offline activities and more diverse channels of communication to increase their user numbers and diversity.

SUMMARY RESULTS

In the analysis above the practices regarding factors that could generate social capital on a neighbourhood level illuminated several important elements. In reviewing their written content, design, and practices, it appears all platforms cover many of the variables under study. There were, however, some disparities regarding which variables were covered and how. The tables VII, VIII, and IX below outlines which platform type covered which variables and in which ways, and the score (+, +/-, -) is assigned.

TABLE VII SUMMARY RESULTS TRUSTWORTHINESS

Trustworthiness			
Organisational trust			
Perceived platform competence and reputation			
PSS For Profit	CL For-Profit	PSS not-for-profit	CL not-for-profit
Reputation based on media attention and perceived competence to trigger word of mouth “Bcorps” label as means to create reputation (<i>snappcar</i>) Responsiveness, presence, personalization of user service	Reputation based on values, ideals, and platform likeability Responsiveness of user service and personal contact, mediator role in user service Competence and website quality as means to trigger word of mouth Creating a safe operating space and providing guidelines, reference to neighbourhood context	Media attention to create reputation Stressing non-commercial values in user contact Tap into existing structures to use their trustworthiness, reference to neighbourhood context	Reputation built on values, promoted on website. Perceived competence through inviting online environment, reference to neighbourhood context, mediator role in user service Cooperation with third parties. Creating a safe operating space and providing guidelines
+/-	+	+/-	+

Security and safety mechanisms			
Important role of safety mechanisms, insurance and break down service Safe payment environment	Safe payment environment (<i>konnektid</i>), only applicable for professional users	“Guarantee Fund” for reimbursements in case of damage	Individual checks of platform for users with wrong intentions or platform misuse (<i>wehelpen</i>)
+	+/-	+/-	-
Peer trust			
Knowledge transmission mechanisms			
Forum for knowledge exchange envisioned, not put in practice	Forums for knowledge exchange, platform internal closed groups and Facebook groups, reference to neighbourly exchange (<i>nextdoor</i> , <i>konnektid</i>)	Closed groups of people that know each other, not used a lot in practice	Closed Facebook groups and closed circles for information exchange available, reference to neighbourhood context
+/-	+	+/-	+
Community based user reputation			
Rating systems with stars and written text, rather functional	Ratings systems with stars and written text, degree of personalization varies	User reviews which are not used a lot in practice	Focus on personalized feedback and reviews, badges for participation in activities
+/-	+/-	-	+
User information and verification			
User profiles, focused on products User verification, also in terms of qualification to use service	Extensive user profiles encouraged Real identity verification (<i>nextdoor</i>), qualification check (<i>konnektid</i>)	User profiles available, use and degree of information varies	Complete, personalized profiles available and encouraged Individual checks on website for users with bad intentions (<i>wehelpen</i>)
+	+	+/-	+
Repeated on- and offline user interaction			
Existing in practice, a one-off meet-up (<i>snappcar</i>) but no major encouragement	Existing in practice, encouraged in part (<i>nextdoor</i>) by character of the service (<i>tuinshare</i>)	Not particularly encouraged but existing in practice	Highly encouraged with various tools to create “help circles” (<i>wehelpen</i>), existing in practice (<i>thuisafgehaald</i>)
+/-	+/-	-	+

TABLE VIII SUMMARY RESULTS WORKING INSTITUTIONS

Working Institutions			
Design and Functionality			
Options for users to create and apply working rules			
Highly structured transaction environment, rule-in-use development limited Anecdotal evidence for informal “code-of-conduct” Member feedback incorporated	Few set rules, room for users to establish rules-in-use User feedback key for product development Informal “code-of-conduct” to show appreciation	Anecdotal evidence of broad range of rules-in-use	Rule-in-use development possible Transaction environment open Inclusion of member feedback in platform rules
+/-	+	+/-	+
Built-in rewards and sanctions			
Review system as self-filtering and self-sanctioning process Platform exclusion as last resort sanction Rewards for active members, including personal contact, display on website, loyalty programs	User review-driven informal sanctioning, platform exclusion as last resort Rewards in form of “likes” for interactions, prominently displaying success stories, “upgrading” members	Informal, user driven sanctions; platform exclusion as last resort Planned point system, like a sharing currency Planned award to “best sharing neighbourhood”	Platform exclusion as last resort measure Showcasing the amount of meals shared and assigning “badges” for participating in activities (<i>thuisafgehaald</i>) Personal thank you notes to committed members Option for members to create “presents” for other members (<i>wehelpen</i>)
+	+	+/-	+
Platform design that favours reciprocity, cooperation and altruistic behaviour			
Encouragement of cooperation by showcasing user success stories and good experiences Members relations focused on monetary interactions	Encouragement through showing other members’ practices and experiences	Showcasing of successful cooperation among members	Thanking and responding to other members highly encouraged Triggering creativity in offering help to others (<i>wehelpen</i>) Showcasing many examples of successful cooperation
+/-	+/-	+/-	+
Mechanisms that make platform accessible to newcomers			

Options to invite (Facebook) friends and e-mail contacts	Options to invite friends via e-mail or Facebook, gamification (<i>nextdoor</i>) Contact to other organizations to reach potential new members	Offline meet-ups	Contact to third organizations to reach new members Search for new members via diverse means (online, offline events, printed press)
+/-	+	+/-	+
Options for user interaction			
Chat function with restrictions Meet-up (one-off event) and forum for knowledge exchange planned	Option to “become friends” on the platform, chats, discussion groups, contact also via e-mail (<i>nextdoor</i>), neighbourhood maps	Offline meet-ups	Highly-valued, chat, forum and discussion groups, closed Facebook group, closed member circles (<i>wehelpen</i>) offline events Service based on user interaction: provision of tips and guidelines
+/-	+	+/-	+
Platform Identity			
Platform’s written and practiced stance on pro-social behaviour and “real” sharing			
Written content pronounces commitment to “sharing”; efficiency and practicality aspects similarly emphasized Triggering public discourse to question general assumptions about ownership (<i>snappcar</i>) High money value, “real” sharing weeded out	Clear support of pro-social behaviour, asking members to “give back” Enabling free exchanges, encouragement of reciprocity	Various kinds of sharing and collaboration, monetary and non-monetary	“Real” sharing as core identity, by explicitly stating willingness to improve cooperative, neighbourhood networks, little to no money importance
+/-	+	+/-	+
“In-group-feeling”/Platform identity			
User group specific language, reference to “community”	Personalized, community-oriented language	Created through offline events and connections to existing social groups Personalized language	Creating identification with service through stressing shared commitment Community-focused, engaging language and personal stories Offering support to engage with the platform on a personalized basis

+/-	+/-	+/-	+
Shared experiences			
Options for shared experiences/activities (<i>barqo</i>), anecdotal evidence for shared experiences (<i>snappcar</i>)	Shared experiences as core goal of platforms		Options to “create” events; events organised by platform Experiences seen as a way of creating meaningful, lasting relations
+/-	+	-	+
Degree of personalization of platform and users			
User profiles focused on assets to be shared and skills needed, personalization possible Personalized language use Employees introduced with name, picture and personal story	Highly personalized profiles encouraged Disclosure of personal information only to personal network (<i>nextdoor</i>) or after getting in contact with another members (<i>konnektid</i>) Employees introduced with name, picture and personal story	Member profiles with varying degree of personalization	Personalized chat with employees of the platform as pop-up window on the website (<i>wehelpen</i>) Personalized recommendations (<i>wehelpen</i>) Personal stories of platform owner and platform users
+/-	+	+/-	+

TABLE IX SUMMARY RESULTS NEIGHBOURHOOD NETWORKS

Neighbourhood Networks			
Place Attachment			
Local rootedness			
Appreciation of active neighbourhoods, without targeted action	Explicit focus on the neighbourhood on website communication Physical presence and reachability Use of neighbourhood maps Justification of different national background (<i>nextdoor</i>)	Local subgroups Local community managers Working with local organisations	Focus on rooting in local social structures and neighbourhoods City projects with physical presence Neighbourhood maps
+/-	+	+	+
Local attributes			

Use of local attributes and traditions	Justification of different national background (<i>nextdoor</i>)	Subgroups named after respective communities	
+	+/-	+	-
Network Members			
User diversity			
Low interest, but working on more diverse product range	Appreciation for diversity Attending events to reach different potential users (<i>konnektid</i>)	Diversity-oriented by including more peripheral cities	Diversity needed and encouraged in communication
-	+/-	+	+
User density			
Focused on increasing members numbers	Focused on increasing members numbers, particularly in confined neighbourhoods (<i>nextdoor</i>)	Focused on increasing members numbers in peripheral areas	Density beyond classical centres desirable
+/-	+	+	+/-

The tables above indicate that all variables derived from the literature are at least to some extent present on CE platforms. This could substantiate the conclusion that CE platforms at least possess the potential to generate social capital on a neighbourhood level. The fact that all platforms under study refer to the need to build a vibrant community underlines this argument. Yet there are variations in the ways and the extent to which all variables are connected to the CE platforms under study.

In regards to trustworthiness, both for-profit platforms scored relatively high in organisational trustworthiness. In regards to peer trust, CL not-for-profit platforms scored excellent, followed by CL for-profit platforms, PSS for-profit-platforms, and lastly PSS not-for-profit platforms. In regards to working institutions and the design and functionality aspects that foster social capital within neighbourhoods, both CL platforms scored well (not-for-profit, for-profit), followed by PSS for-profit platforms, and lastly PSS not-for-profit platforms. The identity variable was also best covered by CL platforms (not-for-profit, for-profit) again followed by PSS for-profit, and PSS not-for-profit.

In order to generate social capital within neighbourhoods, physical proximity of users appears to be a precondition. However invested a platform is in creating an active user community, when focusing on a local level, it is crucial to determine whether or not a platform is invested in building a close community of users within proximity of each

other. When observing the scores, a mixed picture is revealed. The PSS not-for-profit platform (with its focus on peripheral local communities) scores highest in both place attachment and members. The CL for-profit platforms came in second in both categories. Also the PSS for-profit platforms rank second in place attachment, and third in network members. CL not-for profit platforms came in third in place attachment and tied for second for network members. The finding that otherwise high scoring CL platforms score relatively low in this section is noteworthy given their apparent potential to generate social capital specifically at the neighbourhood level. There are however differences within types.

Two different approaches to engage in a local context of platforms are observable: Platforms either enjoy broad popularity and thus have a high amount of frequent users living in the same neighbourhood, or platforms explicitly seek to build communities around the structure of the neighbourhood. The former was found to be the case for *snappcar*, and (to some extent) *thuisafgehaald*. The latter was particularly true for *nextdoor*, *wehelpen*, and (to some extent) *heelnederlandeelt*. These last three platforms also scored high for their respective platform type in the categories of place attachment and network members. With regards to the research question and its focus on neighbourhood networks, the platforms that score high in the field of neighbourhood networks, while simultaneously providing for the other aspects conducive to social capital generation, are likely contributing towards social capital in the neighbourhoods their platform is used in. Regardless of platform type, the overall results suggest that this is particularly true for *nextdoor* and *wehelpen*, and to a lesser extent for *thuisafgehaald* and *snappcar*. This conclusion has to be treated with care, since the data is rather limited. Some platforms also scored high in many categories. It is thus not unlikely that those bear potential for social capital generation at the neighbourhood level as well.

Platforms appeared to show variation in the extent to which they promoted “real” sharing and pro-social behaviour, which seemed to be unrelated to whether or not they were for-profit. Instead, the PSS platforms under study focus more on (monetary) efficiency aspects of sharing, while CL platforms put a stronger emphasis on values such as reciprocity, with some exceptions, (*tuinshare* (CL) and *snappcar* (PSS)). It appears that platforms targeted at intangible goods and services (CL platforms) promote more intangible values and identification with pro-social behaviour. This might result from the fact that their success highly depends on members’ willingness to invest in the community, since their services usually require more time (cooking, helping, teaching) and more personal interactions than PSS platforms. Meanwhile PSS platforms tend to promote the objective trustworthiness of the platform, for example through providing insurances, member verification, and technical support.

Personalization seems to play a crucial role in the process of creating trustworthiness for all platforms. A couple of platforms underlined the fact that they see themselves, the site administrators, as “being just one of their users”, thus not engaging in a top-down, hierarchical relationship but acting as mediator. This was particularly the case for

wehelsen, *thuisafgehaald*, *konnektid*, and *snappcar*. Personal contact with members plays an important role to most of the platforms in maintaining this sense of proximity to the platform itself. Along the same lines, physical presence of the platforms, either by an office, presence at local events, or even directly organising such events was mentioned as either happening already or planned in the future. In terms of place attachment, the PSS not-for-profit platform *heelnederlanddeelt* stood out by creating local subgroups with local community managers. The only platform to adopt a similar approach was *nextdoor*. This is a particularly important point for the extent to which platform activity influences the neighbourhood level.

The extent to which platforms value and provide for shared experiences and regular user interaction varies as well. CL not-for-profit platforms focus particularly on this aspect as a way in which members have positive experiences and keep active on the platform, and CL for-profit platforms seem to see this aspect as their core mission as well. Meanwhile, PSS platforms seem to treat this aspect rather as a positive side effect (*snappcar*, *barqo*) or plan to improve this aspect (*heelnederlanddeelt*).

This summary shows a slightly stronger potential for CL platforms, whether not-for-profit or for-profit, to generate social capital within neighbourhoods. This is not to say that PSS platforms do not show any potential, particularly those not-for-profit platforms shown to be invested in neighbourhood networks. The anecdotal evidence from the interviews also suggests that bridging ties do occur on the platforms (*snappcar*, in particular). PSS platforms could play an important role in familiarizing future users of CE platforms with the phenomenon as they provide convenient and trustworthy ways to lend, borrow, or rent (out) ones belongings. In particular those platforms that operate in day-to-day interactions (such as care, food, mobility) seem more prone to invest in social capital within neighbourhoods as compared to platforms with more particular target groups (sailing, gardening).

THEORETICAL IMPLICATIONS

To answer sub-question 4 *How can the set of variables be improved to fit a CE context and serve future analysis of CE platforms' potential to generate social capital on a neighbourhood level?*, this section synthesizes the variables under study and adds newly developed indicators into one assessment tool that could be used in future research in the realm of social capital generation by CE platforms. Furthermore, the adequacy of the typology that served this research is discussed and new archetypes are suggested.

Indicators Beyond the results found for specific building blocks of social capital and specific platform types, analysis indicated that some variables extracted from literature overlap in practice to a great extent but other times may even contradict each other. The visualization in the figure V below shows how strong the factual overlap between two “sub-nodes” is. Overlap in this case means the amount of times that content has been coded at both nodes. The connecting lines indicate whether a statement has been coded

at two or more sub-nodes simultaneously (For example: a statement coded under “rewards and sanctions” has also been coded under “Security mechanisms”, therefore the line connects the two). The thickness of the connecting lines indicates the amount of times statements have been coded under both connected sub-nodes (For example: multiple statements that have been coded at “Options for user interaction” have also been coded at “Knowledge transmission mechanisms”). The size of the nodes indicates the amount of times a specific node was used in the coding process. The graph includes new sub-nodes that have been added during the research process, which will be explained in the section below.

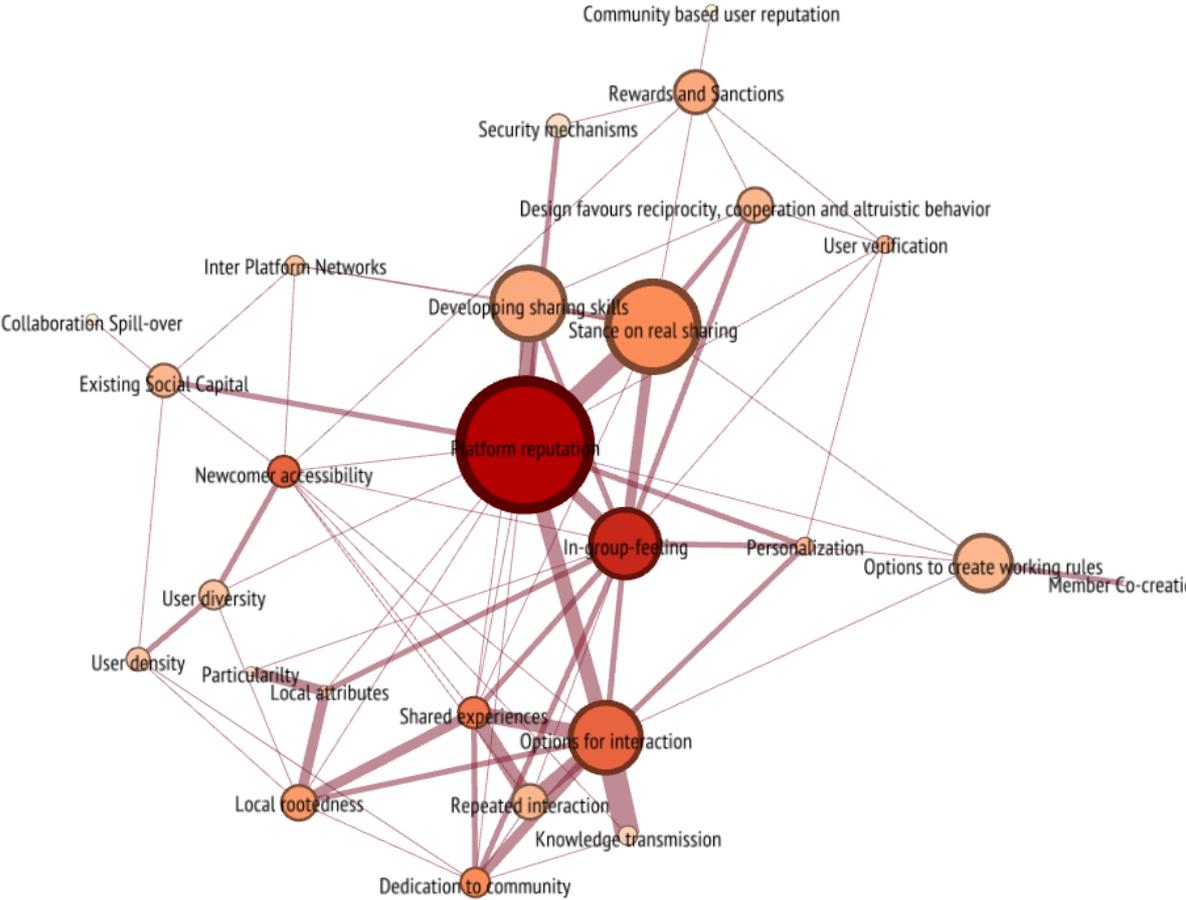


FIGURE V INDICATOR OVERLAP

The graph shows that almost all indicators overlap with at least one other indicator at least once. It also indicates a stronger overlap between some indicators in particular. First and foremost, options for user interaction (an indicator of the design and functionality variable) has a high degree of overlap with other interaction-related indicators, especially repeated on- and offline interaction, knowledge transmission mechanisms and shared experiences. It seems evident that a platform that wishes for its members to engage with each other offers options for users to interact on- and offline and to exchange knowledge. It is therefore suggested to combine these four indicators into a new ‘member on- and offline interaction at neighbourhood level’ indicator to stress the notions of

neighbourhoods, and include technical and application features as well as possibilities to attend events and share experiences in the operationalization of the indicator. This resonates with Fukuyama's (2001) claim that the most important aspect of social capital generation is face-to-face contact of network members.

The platform's 'perceived reputation and competence' is a somewhat ambiguous indicator because, while good reputation certainly suggests trustworthiness, any platform or organisation would want to create a good reputation. When evaluating the capacity to generate social capital, this reputation should thus be linked with the pursuit and promotion of the values associated with social capital. It is therefore suggested to alter the indicator to 'perceived competence and reputation based on values associated with social capital'. Interestingly, a high overlap occurred between platforms' stance on "real" sharing and pro-social behaviour and the platform's 'reputation' indicator. This suggests that at least some of the platforms under study get their reputation in part from their positive stance on "real" sharing (overlap occurred for *thuisafgehaald*, *konnektid*, *heelnederladdeelt*, *snappcar*).

Another indicator cluster that overlapped are the indicators referring to the local context, local attributes, and local rootedness. Due to this overlap, the practicality of analyzing both indicators separately is questionable. It is therefore suggested to combine both aspects into one variable, 'local rootedness', and including local attributes in the operationalization of the indicator.

Furthermore, the question of user density showed to be somewhat redundant during the research process as it is clear that all platforms would like to increase their user density in the places they operate. This factor would be more relevant to study in a different way, taking user numbers in relation to their dispersion into account for example. A high density would indicate higher potentials for generating social capital within neighbourhoods. This is under the condition that platforms would be willing to disclose their data on their user locations. However, user diversity and mechanisms to integrate newcomers are still a valuable variable to study since they both give insight into the platforms' general orientation: either towards diversity and inclusiveness or towards homogeneity and exclusiveness. These indicators also show some overlap. From a social capital perspective, it is difficult to judge which of the two orientations is more likely to generate social capital. While Schor et al. (2016) claim that 'good matches' and thus increases in social capital are more likely in diverse networks, other scholars of social capital (see e.g. Portes 1998, Pharr and Putnam 2000) have also pointed out that homogeneity within groups increases bonding ties. Among the platforms under study, some lean more towards homogeneity, while other embrace diversity. As the goal of this research is to analyze the neighbourhood level in particular, which is not a self-selected environment based on interest or values, the inclusion of diverse inhabitants should be more relevant. The two indicators could be integrated into one, 'accessibility for a diverse range of members'.

Due to overlap in meaning as well as overlap in practice, the ‘personalization’ indicator could possibly be combined with the “‘in-group-feeling’/platform identity’ indicator. Both indicators refer to the extent to which platform members can identify with the platform on a personal level and the ways in which this identification is desirable to the platforms. It is suggested here to simplify the indicator to ‘in-group-feeling’ to grasp these notions, and include personalization and personal language in the operationalization of this indicator.

Due to the factual overlaps between building blocks of social capital it is suggested to not analyse the indicators influencing each building block separately, but instead to look at the bigger picture and study the variables as an interconnected system. The notion of building blocks then mainly serves as a conceptual understanding of social capital but not as an analytical unit.

In addition to the findings presented thus far, new aspects emerged from the data analysis which should be taken into consideration when evaluating other CE platforms or practices regarding their potential to create social capital. Platform types that demonstrated commitment to generating social capital also indicated that they build their user base on *existing* social capital. The fact that word of mouth was mentioned as the number one marketing tool by multiple platforms stresses this point, but also with regards to user relations five respondents pointed out that they become more stable when embedded in existing social capital, like neighbourhood groups, sport clubs, families etc. From this starting point CE platforms have the possibility to connect various existing networks and extend social capital beyond narrow circles. An analysis of social capital should thus take on a systemic perspective and analyze how existing social groups are connected to a larger network.

All respondents mentioned the need to cultivate a certain culture, knowledge, habit, and skills level before users are inclined to engage in collaborative practices. Particularly in cases of care, *nextdoor*, *thuisafgehaald*, and *wehelpen* all mentioned the social barriers that exist for people to ask for help and support, despite the willingness of their users to provide help. Two respondents pointed out that their users are more inclined to use their CE platform because of past CE experience. Another respondent mentioned that their members claim to be more willing to engage in CE practices in general since they started using the platform (“collaboration spill-over”). This indicates that ‘cultivating sharing skills’ might be a valuable variable when analysing the extent to which a platform could create social capital.

The literature on social capital suggests that contributing to the establishment of rules-in-use is an important factor to facilitate the generation of social capital, as this engages network members and creates a sense of ownership (Ostrom, 2007). What becomes obvious from the results is that platforms go beyond this step and offer their members to co-define the platform’s identity, as exemplified by the *snappcar* interviewee, stating “we are a crowd ideated platform”. While community feedback is commonly used as a means

to improve the service of a platform, it also constitutes a way in which members become dedicated to the platform community (“dedication to community”). It might be fair to assume that this process influences social capital generation among members. A future analysis of this topic should thus include the variable ‘extent of identity co-creation’. In addition, five respondents indicated that their development relied on their own network of CE platforms and other service providers. It is thus valuable to take ‘inter-platform networks focused on local organisations into consideration to account for this and to stress the aspect of local interconnections. The table X below summarizes the new set of indicators, calling out the merged and the new indicators in *italics*, which should be tested and applied in future research in the field.

TABLE X NEW SET OF INDICATORS

New set of Indicators	
<i>Perceived competence and reputation based on values associated with social capital</i>	<p style="text-align: center;">Social Capital</p> <p>Trustworthiness: Organisational trust, peer trust</p> <p>Working institutions: design and functionality, identity</p> <p>Neighbourhood networks: place attachment, member networks</p>
Security and safety mechanisms	
Community-based user reputation	
<i>Member on and offline interaction at neighbourhood level (including repeated on- and offline user interaction, technical options for user interaction, shared experiences)</i>	
User information and verification	
<i>Local accessibility for a diverse range of members (including member diversity, accessibility to newcomers)</i>	
Platform’s written and practiced stance on pro-social behaviour and “real” sharing	
Built-in rewards and sanctions	
<i>“In-group-feeling” (including personalization, identity)</i>	
Platform design that favours reciprocity, cooperation, and altruistic behaviour	
<i>Local rootedness (including local attributes)</i>	
<i>Existing social capital</i>	
<i>Cultivating sharing skills</i>	
<i>Extent of identity co-creation (including options for user device working rules)</i>	
<i>Inter-platform networks focused on local organisations</i>	

Typology In terms of the typology used for this analysis, the PSS vs. CL distinction proved helpful, as discussed above. However, the results show little overlap between platforms of one type in the case of the for-profit and not-for-profit distinction. A differentiation that seems much more helpful in this case is one between platforms specializing in day-to-day interactions vs more ‘occasional’ exchange relations. Platforms focused on very particular, specialised areas were generally less inclined to actively promote social capital creation (*tuinshare*, *barqo*). The particularity of a specific platform also has implications for their ability to create social capital on a neighbourhood level, since the service is only targeted at a specific group of people (sailors, gardeners). On the other hand, this might strengthen an in-group-feeling and thus inward solidarity. Platforms with a clear focus on daily needs, like *thuisafgehaald*, and to a lesser extent *snappcar*, were more invested in creating bonds among members and cultivating an active community. For future typologies it is therefore suggested to take the product or service in terms of relevance to daily needs into consideration.

PRACTICAL IMPLICATIONS

This section aims to answer sub-question 5 *How can practitioners improve their impact on the creation of social capital with regards to their practices and goals, and how can this process be supported by policy-making?* The suggestions for practitioners, policy makers and other stakeholders in the realm of the collaborative economy are based on the literature on social capital and the findings resulting from the empirical data. It has to be kept in mind that the empirical base is limited and conclusions drawn from it should be considered with care and with regards to the specific political, societal, and economic context.

Engaging in practices that are likely to generate social capital was valued by all interview partners to varying degrees. This supports the starting premise that social capital benefits CE platforms and accelerates collaborative practices. Any stakeholders wishing to push the economy more in the direction of access over ownership should keep this finding in mind. The results also indicated that not all platforms were particularly invested in creating neighbourhood networks. This could be an area for improvement if stakeholders wish to revive the local community and go beyond the creation of a vibrant online community. This can be done by engaging local coordinators, initiating local collaborative economy projects, and reserving subsections of the platform for local discussions and within-neighbourhood organisation.

Another main take-away in this regard is that PSS platforms operate differently than CL platforms. A platform seeking to establish product sharing among their members should build a reputation of trustworthiness; by providing good, personalized service and a solid safety back-up (insurance, safe payment environment), as well as by building a reputation of trustworthy service. These measures can however seem securitizing to potential members of CL platforms. This type of platform could focus on creating a shared identity, by explicitly including them in the identity building process.

Options for users to interact face-to-face as well as to exchange knowledge have not only constantly been reported to increase trust and create positive experience among members, they also constitute a key variable of social capital creation within neighbourhoods (Hooghe and Stolle, 2003). Therefore, any platform that wishes to engage new users and build a vibrant community should take this point into consideration. Depending on the service that a platform offers, this could be put into practice by organising local events, facilitating exchanges focused on the neighbourhood, or creating a physical space in addition to the website that neighbourhood inhabitants can identify with. Knowledge exchange about platform use seems to be a particularly important factor in that regard (see interview *thuisafgehaald, snappcar*).

It also became evident from the interviews that the establishment of more stable relationships is somewhat of an undervalued asset in the platforms' practices, with the exception of *wehelpen*. Despite all platforms' proclaimed goal to establish a vibrant community and the observation that repeated interactions yield more positive experiences, the platforms thus far have no specific mechanisms or communications targeted at repeated interactions and stable relations, a factor that CE platforms that wish to generate social capital should consider integrating or improving.

Particularly for policy makers and governments that seek to support CE it is important to consider the systems of social capital that new CE projects could be embedded in, instead of creating entirely new structures. This facilitates trustworthiness and makes use of the positive feedback loops resulting from increased collaborative interaction. Since all CE platforms reported a need to develop sharing skills, this task could also be incorporated in public policy making. Policy could give incentives for citizens to increasingly value access over ownership. One initiative of this kind is the Amsterdam municipality's aspirations to integrate access to CE platforms in the 'stadspas' (City of Amsterdam 2016). More generally, many collaborative economy platforms, and in particular their users, still operate in a legal grey zone because they generate revenue. This is a fact that has to be considered and addressed by policy makers. A stable legal situation, potentially including financial or other support to locally operating CE platforms, could enhance CE platforms' long-term viability and improve their positive impact on neighbourhood social capital.

In addition to this, policy makers at the local level should also seize the opportunity to increase diversity and user density within CE platforms and thereby increase their potential to create social capital within neighbourhoods. This can be done by further encouraging partnerships of CE platforms with third parties or possibly government bodies. These third parties can include healthcare organisations, social security services, childcare facilities, educational facilities like schools and universities, and other welfare organisations.

DISCUSSION

METHODOLOGICAL LIMITATIONS AND FURTHER RESEARCH

A couple of limitations are inherent to the research design and data collection methods, some of which require further scientific inquiry.

The way this research was organised presumes a certain impact that CE platforms might have on people's daily lives. Yet, impact can only result under the condition that people actually engage in CE practices. While a platform can be good at providing certain pre-conditions, the final impact lies within the ways in which members use the platform's services. Future research should therefore determine the extent to which people could participate in CE in the future, and the conditions under which the likelihood or participation increases. Potentially, platforms that generate social capital are also successful at engaging members on their platform.

The empirical data substantiating the conclusions of this research is rather limited, and all general conclusions should thus be treated with care. However, even this small sample size (justified by the explorative nature of the research) validated existing variables and indicators in the realm of CE to some extent. Therefore, the newly developed set of indicators should be tested to determine each variable's independent influence on a platform's ability to generate social capital. This could be done with the help of platform user surveys inquiring specifically about the indicators developed and their impact on the platform members' social networks.

It is noteworthy that the variables under study all concern the internal modalities of a platform. It is likely that external factors are equally influential with regards to generating social capital. Possible external factors could be the actual overall popularity of a platform (here platform reputation was based on the platform's own account), which increases its user base and its use, but also the preconditions found in a specific community, such as existing social ties or an intrinsic affinity for sharing. Former research has shown that social capital is not only a result of CE but also a precondition, with early adopters being mostly young, well-educated, middle class citizens, possessing social capital already (Schor et al. 2016).

This also touches upon a more general problem within the concept of social capital – circularity of reasoning (see e.g. Portes 1998). The circularity of social capital generation is again revealed in the findings that existing social ties and existing social capital are the best entry point for CE platforms to get foothold in a neighbourhood. It is also likely that citizens using a collaborative platform are more predisposed to interact with strangers and build new networks, which leads to self-selection among CE platform users. This could be particularly the case for more pronouncedly social platforms that attract members more inclined to show pro-social behaviour. Notwithstanding these limitations, the CE platform can always function as an accelerator of these factors. In order to tackle the question of whether engaging in CE practices has an impact at all,

future research could conduct large-N studies about the actual impact of CE on levels of social capital, including a treatment and control group and controlling for potential explanatory factors such as age, health, gender, etc.

Future research also needs to determine how much predetermined variables like the aforementioned influence social capital in a neighbourhood who in engages in CE. A comparative study between two neighbourhoods, one with high and one with low levels of social capital, and with a similar number of recent CE platform users, would be an appropriate setting to test the extent to which CE practices influence levels of social capital. A setting like this would however be rather difficult to find in reality.

The sources of data used in this study could have biased the results as well. Platform owners might be susceptible to overestimating their platform's investment in social aspects as well as their levels of success. As stated above, future research needs to address this caveat by conducting CE platform member surveys and determining actual levels of social capital among the user base.

DISCUSSION AND INTERPRETATION OF EMPIRICAL RESULTS

The empirical data was relatively limited, making general assumptions less valid. A more specific problem arose from the fact that some platforms were more experienced and had been on the market for longer than others. In all cases, the older platforms (*thuisafgehaald*, *nextdoor*, *konnektid*, *snappcar*, *wehelpen*) showed more dedication to generating social capital, regardless of the type of exchange they facilitated or their type of platform. This is an interesting finding in itself, because it could indicate that platforms with more experience have uncovered social capital generation as a means to increasing their platform's reach.

Another, rather interpretative assumption that could be made based on this research concerns the role of predetermined processes and rules. While all platforms have rules and codes of conduct to some extent, the extent to which processes are predetermined by the platform varies. We see for example *nextdoor*, which leaves a lot of space to its members, opposed to *barqo*, where the foreseen interactions are quite predetermined. The assumption goes that rules and processes that are less predefined combined with a clear platform stance on norms and values could lead to members being more compelled to engage with other users to negotiate these voids, which then could result in stronger bonds, feelings of belonging, and hence social capital. This assumption is backed by the literature on social capital as well (Ostrom 2007). A lack of "set-in-stone" rules should therefore not be seen as impeding social capital, but rather future research should instead analyse it in combination with the norms and values that underpin a platform's activities.

It is tempting to interpret all findings in terms of social capital generation as this was the lens applied to the empirical data. However, the interviews also indicate that the

support of social capital generation in neighbourhoods could be a tactical marketing decision because dedication to the platform community naturally results in higher user satisfaction and a spread of word of mouth. Yet, some interviews (*snappcar*, *barqo*) also hint at the fact that members “learn to share” on other platforms and then turn to these services. This supports the assumption put forward in the beginning of this research, namely that the creation of social capital could also lead to a collaborative spill-over. The question that remains is hence whether the motivation to create social capital has to be philanthropic, or if a tactical choice can still lead to overall improved liveability of neighbourhoods, sociability, and the establishment of pro-social norms that in turn result in extended collaborative practices.

CONCLUSION

Unsustainable social developments such as people in urban areas feeling less connected to their neighbours necessitate creative solutions. The emergent phenomenon of collaborative economy promises an ability to tackle these challenges. Focusing on the social realm in particular, this study set out to determine and analyze the ways in which CE platforms contribute to the generation of social capital at the neighbourhood level. It addressed the research question, how and to what extent different types of CE platforms provide favourable conditions for the generation of social capital on a neighbourhood level? In order to answer this question, this research was structured by a set of sub-questions.

Which characteristics define various collaborative economy platforms and what types of platforms emerge from this characterisation?

CE platforms pursue differing goals in their operations. While some operate for-profit, other work as not-for-profits. In addition to this distinction, platforms target different kinds of collaboration. While some operate in the sector of product-service-systems, facilitating the exchange and use of goods, others provide for collaborative lifestyles, enabling people to share time, knowledge, or space. These two dimensions served as types for the distinction of platforms. The empirical research has however shown that a distinction between for-profit and not-for-profit does not always lead to variation with regards to the platform’s potential to provide for the conditions likely to generate social capital.

Which aspects of organisations in general are conducive to the generation of social capital on a neighbourhood level, according to social capital theory and research?

Studies on sources of social capital as well as theoretical explanations served as conceptual framework for framing the empirical research. The key variables for generating social capital within neighbourhoods as identified by said bodies of literature served as analytical categories to evaluate a set of data, interviews with platforms and their web content. The practices of four different types of platforms, eight platforms in total, were then evaluated and scored on a scale (+, +/-, -) by the help of these categories.

How and to what extent are the variables identified put into practice by different types of peer-to-peer platforms?

The analysis has shown that particularly those platforms with a stake in social relations and a clear goal of improving neighbourly networks cleverly combine means of offline social capital creation with online tools. Platforms that enable interaction with a meaning for daily life show to be more invested in this aspect as well. The degree to which platforms focus on the neighbourhood level, and thus increase the likelihood of social capital generation at a local level however differed. Product service systems platforms make a point of creating a trustworthy online environment, where users can share or rent out their assets to trustworthy peers. Meanwhile, most of the collaborative lifestyle platforms under study intertwine a focus on face-to-face interaction between users with a platform identity that is inviting to new users and creates an in-group-feeling. Only some platforms stood out with a particular focus on the neighbourhood level.

Taking the observations of platform practices and the specific context they operate in into consideration, how can the set of variables be improved to fit a CE context and serve future analysis of CE platforms' potential to generate social capital on a neighbourhood level?

The objective of this research was two-fold. Besides evaluating the practices of CE, it aimed at further developing the theoretical concept of social capital in the context of hybrid on/offline networks within neighbourhoods, with special attention to the sources of social capital. Some indications for concept development could be made and a new set of indicators for future CE platform evaluation was suggested. Mainly, it merged some of the indicators employed here due to practical and factual overlap and kept those that proved helpful in the analysis. Additionally, practices related to social capital generation as employed by the platforms under study were formulated as assessment indicators. They include the use of existing local social capital, the development of sharing skills, the extent to which platform identity is co-created, and local inter-platform networks. It is suggested that future research applies these indicators when assessing CE platforms as well as when studying sources of social capital with CE platform neighbourhood networks.

Looking at the bigger picture, the concept of social capital is often accused of a circular line of reasoning, and an inability to point to concrete reasons for the sources of its

emergence (Portes 1998, Hooghe and Stolle 2003). What the limited empirical evidence of this study suggests is that social capital never emerges from a void, since there are barely any blank spaces in society. Individuals are connected and will stay connected, the more interesting question for CE platforms is how to leverage this desire for connectivity and how to tap into existing neighbourhood bonds and broaden networks. As for theory development on the sources of social capital, this also implies that scholars of social capital need to get to terms with the fact that it is inherently circular, a fact which cannot be argued or modelled away. Any inquiry into the sources of social capital or changes of levels of social capital thus needs to measure existing levels as a starting point.

How can practitioners improve their impact on the creation of social capital with regards to their practices and goals, and how can this process be supported by policy-making?

The study concludes that practitioners in the collaborative economy, owners of platforms, should explore their potential to create stable relations at a neighbourhood level among their users, to increase local and physical presence and accessibility, to tap into existing networks, and to invest in creating a sense of community. Meanwhile, policy-makers and other stakeholders should similarly promote cultural norms of sharing and support CE platforms' local activities, in order to leverage the possibilities for CE practices to scale up, while improving their impact at the neighbourhood level.

When new societal and technological developments emerge it is important not only to critically analyze them but also to adapt our existing analytical tools to do so. This study was a first step in that direction. Its results provided a refined notion of potential sources of social capital at the neighbourhood level and the extent to which hybrid on-/offline spaces like CE platforms provide for such. The newly developed set of key variables and indicators, based on the presented sources of data, needs to be tested on a larger scale and in particular used to test CE platforms' actual effects on the micro level - the users - and on the macro level - the community or even society level.

In 1979 Cedric Price (Price 1979) asked "Technology is always the answer. But what was the question?" The question this study addresses was - broadly phrased - how does one create good, liveable, connected neighbourhoods in times when traditional social networks have fallen apart (Putnam and Pharr 2000). Can "technology" provide an answer? Collaborative economy platforms are enabled by technology to provide their services to a broad spectrum of users. Yet, as this research has shown, a functional website and smart phone application is the mere skeleton of social interaction. Some CE platforms have filled this technological infrastructure with life that is promising for the future of quality urban life and prosperous neighbourhoods.

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APPENDIX

APPENDIX I INTERVIEW GUIDELINES

What is your vision for your platform?

How far do you think you've gotten?

How has your platform grown over the last years, what are the patterns that you observe?

So as community builder... What do you define as your identity? What can users identify with? And do they/to what extent do they? How important to you think this aspect is for a sharing platform?

Why do people use your platform, and why do you think, more people should use it? What do people mostly use it for?

What is the feedback you get from your users regarding the services you offer?

What kind of values drive your platform? How do you communicate them?

How do you ensure quality? And why do people trust your platform? Why do people trust each other?

Where are most of your users living at the moment? Do you want to extend your geographical scope? Why?

How do you target people to interact/ get engaged in your platform?

Do you observe an establishment of stable relations?

Is there such thing as community meet-up where people can for example exchange knowledge?

How diverse is your user population? What do you do to increase diversity?

Do you have a specific target group? How do you address your target group(s)?

How do you see your role/task in communities and cities?

As user service, do you have a lot of work on your plate?

How do you react if a member seems to misinterpret your rules/values, how do you weed out the bad guys?

How do you apply sanctions? Are there any? If members are unhappy with another member, are there „informal kind of sanctions” that they apply?

What is your experience with complaints?

In conflict situations, what do you do to offer solutions, how do you approach people?

And if people are really happy with someone, how do they reward this person? Do you for example show case success stories? I have found one already so that means something =)

What is the kind of language that you prefer to use and establish among members?

Or, can members build their own circles/rules/is there a feedback mechanism?

Do you encourage members to interact in a certain way? Have you observed that your users have established their own kind of „code of conduct“ or behavioural rules? Like, always giving back when they received something?

Do you think that there is oversupply of certain classes/and higher demand of others?

How do you view the use of money on your platform?

Do you have experienced that users also show gratitude in other ways, or rare even „shy“ to pay money after an interpersonal relation?

APPENDIX II INTERVIEW TRANSCRIPTS

a. Interview Barqo

Q: Can you tell me a little about Barqo and focus a little on the kind of community you envision for your platform?

- We started with a pre-registration website and then we just plugged in with several media parties and just started building the website, so we started growing out of that attention, also in the team, but also in sign-ups, but we didn't have the actual platform ready. So after that we noticed that there was good media attention and that people were really buying this new solution, so figured out we really got something here, so let's go start build this thing! And then we went live 2014, so we had one month in the summer then, and after that we raised money, built a team from there, constantly improved the product, but we are really busy with the insurance deal we just closed with the biggest insurance company of the Netherlands.

Q: How do you feel about the community you are building with your platform? Who are your users and what kind of community do you want to build?

- We really want to build, well everybody wants to build a community where people are active as users, but we really want to.. well we have of course boat owners who really love sailing and people who love to sail but don't own a boat but also people who actually

never thought of sailing before coming to our platform, so we really want to build an active community. It is of course a different community than for instance snappcar community that is really out of use and that people need a car for using it, but in terms of Barqo it's way more to leisure!

Q: How do you want your community to look like in 5 to 10 years?

- We target our community well, mainly our community consists of people who are middle or higher educated and who live in urban environments, and you could say we are tax heavy. And our ideal community would be people, a large community especially of those people, and in terms of use it would be great if they not only rent out their boat to each other but also for instance international boats to each other and that's what we see now and we are starting up a collaboration with a French peer-to-peer boat sharing platform and we are going to have really look how those two communities are going to combine. So it's hard to say ideal, ideally it would be that community and of course you want an active community, that's something we are really focusing right now, getting the acceptance rate and the response rate as high as possible because you can better have a 100 active users than 10000 dead users, so we are really focused on activating them.

Q: What has your experience been, what keeps users active?

- You have of the users and the boat owners so you have to keep the boat owners active on the response rate so we give them a motivation that's something we're now building on our platform, a reward program, so how often they have quick response and they do not try to fix payments outside of our platform, all those kinds of parameters. If they eventually come up with some really good points, we give them extra credits and their boat is more highlighted than other boats and that's how we really try to motivate the boat owners. On the user side a lot of people think it's really fun what we are doing so we also try to constantly keep them activated and motivated to actually put in their minds that renting boats is fun and is especially fun via peer-to-peer platforms. And we foresee them with content and interesting stuff, and a lot of fun communication with several different styles of copy writing but in general also try to make it fun!

Q: So why do you think people trust your platform?

- Because we now have an insurance. We just got it on board 2 weeks ago, that was a big bottleneck, but we fixed that, and we have 24/7 break out service, so if people pay via our platform they are also insured if the boat knocks down. And we have a safe payment environment.

Q: Why do think people trust each, why does somebody rent out a boat which in the end is really expensive, to somebody else?

- Well, people get more familiar with the sharing economy, and also what comes up again, big insurance companies back it, it is way more trusted and people get to know each other via our internal chat system for instance and we noticed that people who use our platform also use for instance peerby or Airbnb or snappcar. So people are familiar with the concept so in general, when the sharing economy grows, or platform economy how you name it, the trust also grows, and I think that's very important and of course big companies that are backing these start-ups, and of course you constantly evolve, our platform wasn't even a little bit compared to what it is now, two years ago, so people get more familiar with a platform that actually works all the time and improves and I think that's it, I think it's technology, it's insurance, and the general crowd of the sharing economy/platform economy

Q: So you just mentioned this chatroom, do people use it and what do use it for? are there other ways of interacting?

- They use it purely for booking! First there was way more room to chat with each other but we now mocked a lot of information so you can't exchange phone numbers, e-mail addresses, cause there were still a lot of people going outside of the platform and that's fine in the beginning cause it's all about growth and user sign up, but now you have to earn some money. And a lot of people are willing to share the money they made from the rent of the boat, but there are still some who don't. So the actual chat environment now is purely to conceal the booking but there is also room for chit chat because people want to to know, who is renting their boat.

Q: do you see that over time there are more stable relation between specific boat renters and owners that establish?

- Yeah, people who have a good experience with the boat owner the first time, they book it a second time! So we definitely see relationships be created.

Q: Do you also have a way of information exchange among boat owners, or meet-ups?

- No, not really, not yet, but we were thinking to make that maybe in the future. That definitely is on the but not on the actual short list. But you know how those things go, you have of course really successful meet-ups for Airbnb now in Amsterdam. I reckon, we are going to a lot of meet-ups ourselves, we are really in the sharing economy scene now, we have a lot of contact with Pieter and Harmen but to create an actual meet-up on itself, well I think our community is growing and it is kind of big right now but you have to create a bigger community But what we actually do, when you look on our website, in the Qmmunity, you see actual video testimonials, that's what we're actually going

to do much more often, to actually interview the guys who rent out their boats specifically and what it means for them.

Q: What do you do if you find that some members misinterpret your rules or somehow don't act according to your values?

- People who try to go outside of our platform we have now started to work with a sort of strike system, well we can see all the chats in the database and we are now building some kind of algorithm to get announcements when people are trying to go outside of the platform, and the first time we kindly remind them that that's not the deal on our platform, and the second time they get a warning, and the third time we strike them out. So that's something we do in terms of boat owners and users, actually don't really misinterpret the rules, well sometimes also, but we really try to actually teach our users how to use our platform, and that it is the best for them to book it via the platform because you have for instance the insurance and the 24/7 break down service.

Q: Regarding your reward systems, how can users reward each other?

- We are now fine tuning our review system, and then of course you get reviews etc. and users as well as boat owners get ratings, and especially boat owners. And before this we are now also working with a loyalty program to get boat owners who are doing a good job in renting out their boats in a fair and easy way that we are going to reward them?

Q: Do you also see that, aside from the money that people pay via your platform that they thank each other in other ways?

- We don't know about this yet. And we are actually scaling up right now, and we have so many things... and this is an actual thing we are... there is coming a guy this Friday, and he's actually actively going to communicate with our community, to call them, to maybe get better photographs of your boat on the platform, well that's one example, or just call the girl or guy who rented the boat last weekend, to share experiences.

Q: Do you think people are more attracted to your platform because you offer a really specific service, around boats and sailing, does it have to do with people's identities?

- Well, the hardest thing of a platform is getting the actual boat owners a board, because the users – you know everybody wants to sail. The Netherlands is a country full of boat owners and people who constantly when there's only one small sun in the sky, people go out and go boating, and that personality is really good for our platform. We really notice this. So in that way we don't compete with snappcar, because it is a different of activating users and getting them on board because it is pure out of necessity, and for us it is leisure,

so we compete more with theme parks, or other thing you can do in your spare time than with these forms of transport.

Q: Thank you for the interview!

b. Interview Snappcar

I started working at community support, because I think it is very important to have interaction with the people who use your platform and now I'm slowly moving up the community management/head of of community kind of a role, it is a bit less in the action, and a bit more conceptual looking how can we develop programs or systems or ways of interacting with our user base.

What do you mean by saying "in the action" then?

Basically the action is, I have a question for example "how do I sign up" and people would sign up and don't understand, and then I just answer their question, so very much like service or helpdesk kind of work, which is very valuable and continues to be valuable, but I think I cannot do that for the next like three years, so I need to move up a little and think of different ways how I can get my creativity going.

So you moved more into the conceptual community building work? What are the goals you pursue in that?

Well, my goal is to create a higher level of engagement among users but also between users and us. I don't believe I have all the answers to all the questions people have. I don't want to be the know-it-all, so ideally I want to create this sphere where people can actually help each other. Be it online in some kind of forum situation or offline during the meetups. I mean I don't have the answers! I can join, I can facilitate when I'm there and kick off some kind of discussion or whatever, but I'm not sort of the holy god who has all the answers. And there are people who do this more often when they rent out their car and who have more experience. I mean I work with the company, but that doesn't necessarily mean that I have more experience.

Do you see that this is already happening, that members help each other out?

Not a lot, it kind of depends on where you look at. In some cities for example or in some streets, you have people living on top of each other so first floor and second floor, and they are both renters, or owners and renters and then you have a very strong sort of offline connection, which is not visible for us as well! Or it's not tracked so to speak. But I do believe that those interactions are very valuable for us as sort of facilitating platform online but especially for them because they deal with renting out their car and sharing it, they are more in the action than we are.

So when do you plan to create this helping community?

I think several things. This is my idea, we haven't put this forward yet in the company. I want to create this online forum with first a selected group of people which we know very well and which we know that they can contribute with their knowledge and their experience and then I want to slowly open that forum up to basically ever participant on snappcar! Where you upvote some subjects or start a new thread, kind of like reddit style. But that's one thing. And then when people have a question about, say, hey my tire is flat, how do I deal with it? I mean there's probably someone else who will tell them you have to tell the accident service. But that answer given by someone else is more valuable and probably also more trustworthy than if I would say, you have to do it this way. And it also saves us energy, which is a secondary benefit.

Why do think members become trustworthy when they use snappcar?

There is not like a set of steps that they have to take until they get to their place, it is rather an attitude so to speak, and either you have that attitude right away when you start or you develop that attitude. I think at some point it is basically a question of labelling, say, hey we know this guy, and basically also following your gut saying, we think this is a trustworthy guy and we put him on the stage and we'll see. We have to take the lead. That's the most important.

So when you say put him on the stage you also showcase some members.

Yes! And so we did a little meet-up in March or February, and several people got there and it was a lot of fun! It wasn't as highly visited as I wish it would have been, but that also indicates that... it was in Amsterdam ... So basically there were people who were not renting out and other people who actually rented out a lot of times. So the person who was new asked, so how does it work? And then the second guy is like, I'll tell you how it work! So I said, well just tell her. And then he took the stage in answering all her questions, and then she looked at me after ten minutes asking, is that it? And I said, yeah that's it! I mean yeah, he is the expert! And then at some instances I would just a little bit of detail or nuance.

Nice! Are you planning o do more of these meet-ups?

Yes!

Also in other cities?

At the moment only in Amsterdam. There is two things, I think meet ups won't work yet in for example Tiel, there is too little people. So Amsterdam, Utrecht, basically the bigger centres with the focus now on other centres.

I also saw you opened a snapp bar? How is that going?

Yes, well it was basically a fun thing. It was on Aprilfoolsday, and this was the the whole idea, so I think this was also the intent on my side, so yes it was an april fools day joke, but I hope what this will bring forward is a discussion, when people who then read the blog and go to a bar, I hope that the association then will pop up, bar – carsharing – discussion. So that’s the kind of line I would to put forward. And I think people don’t talk about thing like how much does my car cost, how much does your car cost per month? How many times do you use it, is it economically viable, can’t we do this in different way? That discussion is not a very open discussion, and I think it should be open. So that’s what I ... I know there are a lot of cars, I cannot believe that all these people accept that they are using it effectively. So they should be thinking about it!

Let’s talk the not so positive sides ... How do you deal with whenever there is a conflict, or there is a problem between two people, misunderstandings, misuse of rules, how do you deal with that?

So basically what we do is that, the message comes in to us, saying, the renter was not so kind, or the owner did something wrong they always get to us first, saying this was the situation. And we notice, and we say, okay thanks for mentioning, we will look into it, so we always do sort of a research, we always involve the other party, and say tanks, we will get back to you. But obviously we need to have the other side of the story! So then basically we check with the other person, and we say hey, a message has come to us about a certain booking, can you tell us what happened? So we ask an open question. So basically we mediate a little bit, saying hey, it sounds as if there was a misunderstanding, maybe people didn’t know the process or didn’t know the rules, they would tell that these are the rules we live by. And in that process of in Dutch we say “hoor en wederhoor”, at some point you say, these have been the things we have learned in that process when reaching out to these other people and we make a conclusion. And that’s the idea.

In terms of feedback, positive feed: what are the things people get really excited about, what are some positive things that you hear? Are you getting any positive feedback?

Yeah, sure! Everytime I call car owners! Most of the times I call car owners I get so many positive words about the renters, they’re like, oh these renters are just so kind, they are such friendly people, and they are just great to have them drive my car. So that’s the feedback we get, like, I don’t know what happens, but people who use your platform are just really nice! When I rent a car on snappcar myself I always give a little gift to the car owner because again I think you have to take the lead and you have to put your balls on the block, so you have to you know, just give a little extra! You have to represent the brand so to speak, or represent it.

Do other people do that too, giving gifts or something?

Yes sometimes..., last year we did an interview with a lady who after a certain booking, the car was returned after a day, and it was like a sunny day, and then the owner would say, why don’t

you join for a little glass of wine in the garden, and then they sat down and had a little glass of wine, and then some other neighbours joined, and they would talk a little bit, for an hour or two and then something would arise. There is people who take the car into a car wash, just before handing them in saying hey, thanks for the experiences, I'm taking care of it and give a little bit extra! Or they slip in a little candy box, that kind of things. It's very cute. But obviously there is also people who don't. I mean you can't... So left or right, the car, and that is more of a social discussion, but the car represents a lot to a lot of different people, so to me it represents getting from A to Z, and then you have different shapes, forms, sizes. But for other people it represents status, power, wealth, achievements, ego. Driving a big car can really fuel their ego which some people need. There are also places where people think, so now I have a car I have rented car, now I will take it for a spin! And yes I have to take it back on Sunday at 6 o'clock but you know what? It's nice weather, I will bring it back 3 hours later. And they kind of screw the system, and then we are there to provide the safety net to the owner. So we tell them, don't worry, your car is insured, we are gonna take care of this, calm down. And then we get in contact with the renter, saying, hey it's 6:30, you haven't brought back the car yet, the contract has ended, please bring back the car as soon as you can, and then we have a lot of mechanisms in place how to push the person basically towards getting there, like e-mails, but also deactivating the profile. So we say, if you don't bring it back in 15 minutes, you know you are out of business, you never be able to rent on snappcar! We will put you on some kind of blacklist. And then they say, oh no no no! And so this is the question of alignment again, so what is it that we are a person, so how do you align your values with the values of the renter? Because we see there is a mismatch sometimes, so if you have a big Mercedes and you rent it out to some pumped up little boy who is 23 years old, and interested in the kind of status he assigns to the car, but there is some kind of mismatch of values.

With this alignment you are talking about, have you seen that grown over time? Have you seen more people get behind the idea of carsharing?

My gutt would say yes, and I don't know why, but are also... so basically in a community there's people who enter the community and who step out of the community and I think the people who are in the community basically at the moment are the right people so to speak, and we make sure that the people who some way or another don't really fit the guidelines or the values, we don't have them enter the community anymore! That's a very technical process, but that's based on age, based on experience, or if you as a renter don't follow the rules you get a bad review, and left or right you can't rent a car anymore, because people see your bad review, and they think, you have done something wrong, like you have harassed someone, so I won't borrow my car to you. So basically it is a self-filtering process. And I think also we are just pushing the car sharing message a little bit more than we did before. We are talking about impact, we are sharing PR stuff to newspapers about our impact, about the users are they attracted, why they enter, what sort of conversations they have, so the whole sort of story lives a little bit more.

But you also a lot of political back-up now, right?

And so the societal wind is going in the right direction, and I think the... I mean there is various concepts in the market, and I believe the peer-to-peer model is just a very new way of organising how you go about transport and owning material. And that's what I like about the peer-to-peer model above some kind of you know car to go, or greenwheels, they put new cars on the road, and we believe there are enough cars, we just have to organise better.

Coming back to the feedback situation, how do you take up negative feedback?

So we have a huge backlog of feedback that users have for us revolving around the platform so if they encounter a bug on the platform they say hey, I see the bug, so that's what's in the log, and the developers are working on that. In terms of our community support we have weekly meetings where we look at what went well, what didn't go well. There is satisfaction scores given to all our emails or communications we send out. It's automated, so if you would send me an email and I would answer it four days after you would get a request to rate the customer support. And if people rate bad for an email I was involved in I usually have the approach to call the person, and say, hey I see you have reviewed me in a negative way, fair enough, but maybe I wasn't clear enough on what I want to express, so it will inform me a bit better about the situation. And that's very much towards Snappcar as a party basically, but also when we get feedback from renters about owners, we follow that up and vice versa, if we get a complaint from an owner about a renter, there is always the "hoor en wederhoor"

Did you also have meetings with your users where they gave you suggestions, or do you have requests from your users?

Yes that's coming in like a river flowing all the time. I mean we are crowd funded, and we are also sort of crowd ideated. So we have ideas flowing in by email, and we always say, hey thanks for your feedback, it's an issue, we would love to develop it, we will put it on the list, but unfortunately there is not enough time as we wish to. And of course a lot of ideas coming in that are already on our list. The only thing though, and I think this is a problem for any platform or company, is that there is 1000s of users that means 1000s of ideas and demands, needs, wishes, and we can only listen to so many. We cannot change each unique part for that one specific user. So if one person says I want this, and he's the only one, we have to tell them, hey you are the only one who wants this so we are not gonna put it very high on the priority list.

Is there anything you would like to ask?

What are the target groups that you still want to get on board?

I'm not in marketing! But in the moment we need more car owners, and we are undertaking a variety of exercises to get them on board, so a referral program, one is gonna be an improved landing page for car owners. We have actually had a moment in place that if a car owner would

sign up and he would have his first rental request, we would call them and them, and say congratulations, Patrick, this is your first rental request, awesome! Thanks for being with us, is there anything I can do for you? I mean, anything you do for the first time can be a little tenacious and you have to cover that from I to Z I believe. On the other hand we hear the majority of people that sign up, are referred by others. So they say, hey I've heard about it from a friend and she was really, you know, excited about it! So I thought I'd sign up as well. So that connection, that's the strongest. The only thing then you can do is improve, improve improve yourself as an organisation, continuously, and let this do its own work.

How do you see the use of money on your platform?

That depends on who you ask. There are people who are really motivated by monetary reasons, so they really make the calculation, they really look at it like an economic game, Hey I have a car, I have to put it this high, at this amount of kilometers. So they are really tweaking their goal continuously. So they view money as an (-). But there are also people who say, I mean it's a Volvo, it's strong as hell, go drive it, for 30 bucks per day, drive as far as you want, because I fully trust in the car, and I don't give a damn about whether it's 30 or 40 bucks, and they are more in it for an environmental, or even social motive. Or even an efficiency argument! Actually one of our top owners in Amsterdam, an old lady, she's almost like 70, and she owns the Peugeot minivan, and she said a couple of days ago, aaaa I don't know, I got a request from a person who wanted to take the car abroad for 9 days. And she was wondering, should I accept it? It could break down, but on the other side it could stand still for 9 days here and I don't want that either. So it was very funny to understand and follow her considerations about the request.

I was also wondering, I saw on your website that you are a Bcorps now, does that mean you are not-for-profit?

It's a labelling question! So there is this bcopr's institute which assigns bcopr's sign to companies. And we are a social enterprise, in the sense, yes we do make money to make sure that everybody can remain to work there but on the other hand we are not in it for profit only. We want to have an impact in the world and the impact is on the social sort of agenda, so that there is more connectivity in neighbourhoods and all that. The impact is also on a monetary agenda, saying that people by sharing out the car can actually reduce costs. So it's a tool for individuals to go about managing their own financial situation basically. And the other agenda is environmental! So along those axes we have... So the report you also mentioned at the beginning is looking into those cases. And I think that means that we are a bcopr's.

c. Interview Konnektid

What is your vision for Konnektid?

- Make education available to everyone, especially for adult learning. Because we see that after university, education is often left to itself, which we think is a waste, and we see the economic trend of people changing jobs more quickly, and obviously that requires more and more skills. Including the fact that everything is getting more and more digitalized. And so you need to continuously keep learning, and obviously we want to do that worldwide. We started in the Netherlands, but we have bigger dreams. We want to create a vibrant community of teachers, students, and knowledge sharers all at once.

How far are you with that project until now?

- Not as far as we wanted it to be. It's going good, the Netherlands doesn't seem to be the right market to start something like this. Because if you look at a market like America, education is way more on people's minds, they know its asset, you pay money for it. And we are always so used to education being free. Something we have to do instead of something fun. So it's a completely different attitude. When we tell our story to people in America, they immediately get it. In the Netherlands, they go like: why? You can go to school, and school is not that expensive. So it is a mindset. But we're doing well and we're growing. But the growth in number of users doesn't say anything, we need a growth in connections.

Are there any patterns you observe when you're growing? Are there some predominant places?

- Definitely! We started in Amsterdam. And it is the capital not only of the Netherlands, but also when you start something, people are way more open about it, it is a very diverse population, and also a lot of expats, and they like something new. So, in Amsterdam our community is huge. But when you look at other major cities, it is less. And the growth is going, and it's less fast. It differs very much and you can see that you need a certain tipping point. You need people to invite their neighbours and friends.

So you would also say that you rely on these sort of informal relations that already exist?

- Yes, they are still the strongest. Any growth mechanisms, word of mouth or tips from friends is the best, because you trust them. We need more people inviting their friends to reach a certain tipping point.

What do you think, or what do you define as your identity?

- So we like to think, obviously, we're transparent, we're optimistic, we like learning, we are positive, and we are really people focused, we are all about making connections people between people to help each other?

Do you think that users that come to your platform are attracted by this identity you just described?

- I don't think that if you would ask someone outright about that, that that's the first thing they would say. But I do think, as a community manager, and getting all the feedback, I know that people really like the fact that there is a person responding to them. When we started, we hosted a lot of feedback pizza sessions, so we invited some core users, bought them pizza, and then they could test it. And people quite like that. So we try to live it!

So what is the feedback you get from your users?

- the interesting thing is, and maybe that's a Dutch thing, when you like something, you don't really say it, but when there's a problem, you do. So when people give good feedback, it means they're really ecstatic. Because they have taken the hurdle of actually writing something. So we do get good feedback. What we also get a lot is product improvement suggestions, and I quite like that too, because it means that they really like it, and have taken the time and are invested. So they are sympathetic, they are committed, they think it's a nice company, let's help them! Instead of just signing on and never coming back.
- Personal responses, making sure you respond in time and asking a lot of people to help us, showing them we're just a team of 8 – 10 young people, and we couldn't have done it without you, we're actually building it for you, so please let us know what you think! We actually need our users to help us. People to feel like it's just another big bad company, they actually know where we're located, they know what we look like, so I think that's what people like!

So, coming back to the question of getting new members: aside from word of mouth, how do you make sure to integrate a lot of new/active members on the platform?

- We tried several techniques because every platform develops the way it grows, especially our platform, because we depend on people of course. We need a lot of people especially if you're looking for a certain set of skills that is a little bit

more unique. So we try to stimulate word of mouth, of course. By giving them tools to invite friends, we use a little bit of advertising, PR, disperse it in the media

How do you see right now or in a utopia situation, how do you see your role in communities, in neighbourhoods?

- As a resource! We really want to be on top of the mind when people feel the need to learn something new. For example when they found their dream job but really need some skills, they should think of us as the place to go to. As a resource, as sth that people like to use, that is easy to use and that it is at the top of their mind when it comes to acquiring new knowledge. I really hope that we can make learning sexy again. Because when we grow up, we develop a negative attitude towards education, so when people grow up, they don't want to learn anymore. They should learn again.

When you're saying your goal is to build community instead of just getting more users, is it important to you to also build more stable relations?

- That's what people are doing themselves already! We have people that are meeting up quite regularly, we have people that meet up just once, and that's fine, they don't have to become friends. But just to give you an example, I have had a lot of connections already, and now when people have a question, they just send me an e-mail. And the other way around. And that's not because we have become best friends, but because we have expanded our network and we are willing and able to help each other. So I think that's a really great way. We have this great story about refugees seeking help, so these people have become friends, but a lot of people meet regularly. And this happens for about 10% of the connections, but that's fine.

How do you react if members disregard your rules or misuse the platform?

- It happens, most of the time we just assume that people do it unintentionally, that they are not aware of the rules, and that's how we approach them. So if we see this we maybe send them an e-mail, or call them, explain the situation and give them some options and let them know. And obviously then if they insist or continue to misbehave then you have to delete the user. But that's not what you start with. You start with having a conversation. 99% of the time people are simply not aware of their mistakes.

Have you seen any informal rules establish among the users?

- Yes! For instance I had a connection the other day with a really nice woman from Russia and she brought me chocolate! It is not obligatory, but it was just a nice gesture. So that happens, especially when people meet more often, they start feeling obliged and helping out with other stuff as well. That's just contact between people!

Regarding feedback, how is your review system at the moment working out?

- it is a relatively new feature, we launched it summer last year, and sometimes people don't really know how to use it, and leave a request instead of a review. There is no edit button. But we working on it and it is up to us. It is not working as well as we want to.

Are there any other ways of reward for people who are really committed?

- Not yet, but we are thinking about introducing the possibility for very active teachers to get qualified as professional teachers and be able to ask money for their lessons. So community teachers that have proven to be good and invested, they can be professionals as well even though they have no official certificates. So we upgrade them. Some are not interested in that though, they don't want to ask for money or rewards. Their reward is helping other people

What kind of language or tone would you like to be established among your members?

- Obviously, we think personalized language is important! We are trying to build a community, so I expect another treat like a person! So we are also encouraging users, if they issues, to just talk to each other instead of approaching us. Doesn't happen very often though, mostly when somebody is showing up. But is still good feedback, because it helps us to create new means of communication, like a date planner or interacting via what's app. We see ourselves as facilitators

What skills are high in demand, and which ones are high in offer?

- We are a demand driven platform, so of course whatever is demanded will be offered. What is really popular is Dutch culture and Dutch language. Spanish is a hit as well, playing guitar or more professional skills, like google analytics, giving a pitch, etc. and that's what we want to focus on, the more professional skill.

Do you feel like members are more inclined to offer lessons after they took a lesson?

- Yes! Absolutely. People want to give back, and that's what we see happening all the time. Usually people first sign on to see what's in it for them. But when members have had a great experience, they want to give back as well. Because they know how it works!

d. Interview Nextdoor

Q: What is your role at Nextdoor?

- Now, as you might know we are the first satellite organisation, we are the first country outside of the US where they were founded. Nextdoor has been around for four years, they have now half of the communities in the US and the ambition is of course to go global. So you have to start somewhere, so we started here! We started in November with a private data, resulting in 93 hoods in December, in February we launched meaning we became open for everybody. So we've only been around for four months now, and we've had an explosive growth, we have more than two thousand neighbourhoods that were active on nextdoor, so if you look at the growth, it took four years, to get half of the US neighbourhoods, which is 90000 neighbourhoods and we are gonna do that way faster, we don't know how fast yet. So we have started with some pilots in the UK as well, so that's the third market. At the moment we basically have two sets of data, the US, and the Netherlands. So I a caveat for the whole interview I guess, we don't know much yet, because we've only been around for 3 months. And our experience is that neighbourhoods take time to mature before their using the product to the full breadth of the product. One huge difference between most of the sharing economy companies, is that most of them are verticals, so a one use case. We are a platform, and we are not good and anything but we are good at everything, because it's a very simple way to communicate. It's all about communication and activating people, and the exact use case is not so relevant because you don't need so many tools to come to a transaction, cause in the end it is all about transactions, you need something, you want something, or you have something that you want to lend out and it's all about having two people, one that has something, one that needs something and to bring them together and you know have them

share something, you know that's the whole point. And to do that you need scale. It needs to be a perfect fit, if it's not a perfect fit, why would people do that? Because it's all voluntary. So you need scale and that's the advantage of a platform, so we have scale! But the disadvantage is that we don't have cool features to facilitate whatever the transaction is so every vertical will have better features, why? Because that's the use case that they support. Like selection, preformatted selection of stuff, if you... the best example is peerby, if you feel inclined to share stuff it's incredibly easy, then literally within 10 minutes you can have your full garden shed online. Because it's a library, you just click on it! You can imagine that all of those things are not possible on our platform, and that's ok because we are offsetting it with having people connect. It's very broad, and generally the way we talk about it, it goes from something typically Dutch "gezellig" which is all about community, connections, communication, contacts, hanging out together, getting to know each other, to useful, where the idea is that... the majority of interaction on nextdoor are simply utilitarian interactions, like I need a painter, who knows one, or I lost my keys, very simple day-to-day interaction. All the way through what we call "important" and important is things related to safety, disaster, but also care, people who need help, that's the important part. So you have the full range from trivial or seemingly trivial of meeting people and knowing people all the way to very important things, and the interesting thing is that you cannot do this if you don't do that and that's one of the issues of platforms that really wanna do good, for example platforms that are focused on safety, prevention, those type of things or platforms that are focused on bringing together the supply and demand of care. It's really difficult if you don't do that. There's 10 reasons why that doesn't work! First people need to know each other in a casual way, then they build trust. Doing simple little things together helps, so if you need a ladder, you just borrow that ladder, and then you know somebody, you have your first relationship, you know their name you know where they live, you've helped them or vice versa. Then, when help is needed it's a whole lot easier.

So what would you describe as the vision for the platform?

- It's very simple, it's better neighbourhoods. It's very very simple. And it's interesting because it means something completely different to different people. And that's the beauty of nextdoor is that it's not a.. there is not one nextdoor, like there is one twitter or one facebook. Every nextdoor neighbourhood is different and therefore every nextdoor neighbourhood can have their own [...] and for some people that means simply more gezellig or more fun and for other people that means more security or more neighborliness where people help each other, and then ideally it works on all of those levels. And actually when you look at

Maslow's pyramid, things up there are more relevant, things down there are less important. SO of course people want safety, but the Netherlands is a safe country, even though there is a little bit of obsession with neighbourhood safety.

What do you think, why do people join your platform?

- I think we're still going through that maturity curve, so in the beginning there were a lot of people who started, because they had already worked with other platform, so the cohesion was already there. So we analyzed this because we had a tremendous growth in the beginning. In certain hoods we grow faster than any hoods than the US has ever shown. Which is exceptional, because if you have 90.000 hoods, because we started with 18 hoods, some of those hoods went faster than any of the US hoods, and that's awkward, we didn't understand that, so we had to analyze that, what's going on, what's happening. And what we realized is that all of those hoods where there was already social cohesion and they were already using digital platforms to enhance them. In the old days you had churches, you had football clubs, community houses, it is not all gone, but generally that's not the central point if the community anymore. And in these cases that was already the case for a group of people that stayed in contact via digital means. Via their website, their e-mail list, and all that stuff. And they had decided they wanted to use the next big thing, so they got on board and that grew like crazy and that made sense cause they already had the email addresses, and then it becomes very easy to invite other people. Those were people that were really caring about their neighbourhood and about having a network of people joining together. Then we launched. And I think at that time a lot of enthusiasts joined, just people that liked the story, the vision and were like, that's cool, we wanna do they, but they wouldn't necessarily always have that network. So they joined as individuals. And those they grow a lot slower, so they can take up to a month before they even have ten members. And we have a mechanism with a bit of gamification where we go for the first member to the 10th member, if you don't do that within 3 weeks, you lose that neighbourhood. And that's very important because you what you don't want is a whole country of sleeping nextdoors, where nothing happens, because when new people come in and see nothing's happening, they go out and they never come back. We want new people to come in and they see stuff happening, and then they participate. So we have this mechanism. So therefore we know pretty well how long it takes from one to 10. And back in February there were a lot of those hoods. And so there is quite a big difference between how they grow in the very beginning and how they grow now. But still, we are just at the beginning, because size wise, what happens the hoods they just keep growing and growing! We have three hoods with a 1000 members, in the US that's very common, that's everywhere but we only have three of those, a mega hood. Two in Breda, and Nijmegen. What is interesting, you don't have to be technologically savvy but you have to be technologically interested, and think

there is this idea that may be in the Randstad, people are technologically savvy and that is not true, the Netherlands is so small and there are no real remote areas, some, but generally not. I do think that if you wanna do something radically different, and we talk about many aspects of the sharing economy, that are quite new, lending out stuff to strangers, than I can imagine you have more people in the hip or innovative areas.

Why do you think people trust nextdoor as their facilitator platform?

- It is very important that the product works well and looks good, because that gives trust, when you go in there and is not working, as many platforms when you go in and stuff is not working well, there are issues, these are technological product, and if you look at the apps, like every two weeks we have a new release, and if things break down, that decreases trust, so I think that's the basis, and it's trivial, but to a large extent in anything tech related that's the core. If it doesn't run super smooth, very easy to understand. If it doesn't look good, you're not gonna succeed. And that's the advantage that we have because we inherited a product that has been around for four years and has been used by millions of people. So it's super smooth, it simply works, when you need it. We have users that only interact with our product via email. You don't need to log into our platform! IF somebody posts in the neighbourhood and you receive an email you can actually respond to that email. So going from email to website to apps and being stellar in all those platforms, nobody has that! There is all kinds of cool companies that have cool apps, there is all kinds of less cool companies that have ok websites, there is hardly anybody that does the email bid right. And all of them? There is nobody. And that means that you are inclusive. That mean you can work across generations. Probably up to 75, I'm fairly confident that the majority can interact on our platform, with all of our users. So they can really be part of the community. And that's product! Have a great product. So that's one, and the other thing I think is how you communicate about your product. What are the stories that you tell, how do you address questions and concerns? So made a huge investment in both areas. So I started in November, and in December I already had two team members, one focusing on the communication aspect, and the other one focusing on the service and community aspect, which is totally in the inside, among your own members, and the other one is outside, to prospective members. And if you get those things right, people will trust you. And if you don't get them right, people will not trust you

Q: What have you found, does it mean to do it right, both internally and externally?

- Be fast, be responsive, that' important, if somebody has a problem or a question be really quick addressing that. I mean if you don't have the answer, still start

engaging them in figuring out what the problem is, the real issue, the question. And be open and honest. Even if you can't help or can't solve it, explain how it is and why it is. Be transparent about those things. One of the things is that we are an American company and a lot of people have an issue with that. And so that is what it is and if you are open and transparent about it and explain how we address that, what we do about that then generally people feel good about that, and trust us.

Q: SO what did you do about it?

- We changed certain things, like member agreement, privacy policy, everything, a giant amount of work to get it according to standards. And then there are things that we couldn't fix! Because we still grow, and then, just be open about it. And then people can make the decision and generally people understand that

Q: What have you seen so far, why do people join the platform, from their own needs perspective?

- I guess there is a bit of wishful thinking, what I do know is what the use cases are. But they influence each other and that's the stories that we tell and I think that convinces them to join. I don't think there are many people that look for a solution. I think that's hardly ever the case. I'm not sure if people are really self-motivated. It's usually somebody tells them, hey this is cool. And then they decide to join. In fact there is a lot of effort we put into making that step as easy as possible, to be an ambassador for the user. If you are a happy member we really make it easy to invite other people. And that's something what also makes us successful, to make it extremely easy. But are those motivations... well again I think there are those three things, where probably the majority is in the middle part and that's a big mixed bag of all kinds of stuff. People understand that it's handy that you can ask for help and recommendations, so that there is a lot of knowledge in the neighbourhood, practical things, because people do that in other cases as well. In fora, on facebook, so they know this. Once they understand that this is really good for the neighbourhood then they get that, oh I can do that now, so that's the component of knowledge. There is always the component of I won't say fear, but hey this could be handy when my pet is lost, or I lost my keys, or I see somebody in the neighbourhood that I don't trust. All of those things that are hypothetical and they hardly ever happen. But I think people intuitively understand that you should be part of a network before it happens than after, it's almost like an insurance. Like that's handy, I wanna be part of that. But I think those are the important motivations, and I do know that there are people that are

very much indeed engaged with the prevention and security aspect. Although most of them are on what's app so if there are neighbourhood watch group, that's all taken care of. And then there are some but not so many that purely use it for the [...] and quite frankly, if that is what your into, then you are already doing it, then you are already organising barbeques, know everybody, if you are a super social person than you don't really need the platform.

Q: Do you also see spillovers happening in motivation?

- Totally and all the time. Cause the beauty is that there is only one timeline, so you are exposed to it. And people are people and that's the cross-fertilization that's happening all the time and that's a good thing. That's where you build relationships, exchange the social, you build the social currency that helps you get the help where it's needed. That's the beauty and that's the power and that happens all the time.

Q: How do you react to bad feedback or bad experiences, people that don't act according to your rules and values?

- Most of the time it's not us, but it's the top members, so every neighbourhood has their top members and they are moderators essentially, they help to keep the discussions decent and clean. And if that doesn't happen, then they are the ones typically that can resolve it. At least until now, and that can change of course, if you have a thousand cases, there will always be one or two cases that cannot be resolved at that level and then we come in as a facilitator and help them resolve it. And yeah, we use simple tools, so everybody is responsible to keep it decent, not only by being decent but also if you see something that you don't like, you flag it! And the guidelines are pretty broad. And so there is a lot of grey area for example around commercial messages. There are a lot of people who run their own businesses, and they wanna show what their good at, what they're doing, and some neighbourhoods hate that, they kill that in a bud, and other neighbourhood find that's the neighbourhood business, and that's ok. And both are ok with us. There are simple and clear lines though. Mind you if in the whole community nobody would flag a racist group, because we don't want that. So there is the community that takes care of it. But that's generally what we want, because people are generally very diverse, there is not one nextdoor. In other places in the social media, groups are not diverse, and then you get those issues of single minded thinking and extremism.

Q: How do you see the use of money on your platform? Is that happening?

- Yes it's huge in the US, and in a way we have marktplaats here... it's huge in certain areas, but not all. I have neighbourhoods where people don't do it at all and I don't know if that's because marktplaats is so big here, literally everybody uses marktplaats, so what's the added value if you have less people. Or if they're are not using it yet, so if you go there and you're already using marktplaats, you haven't see the advantages yet, that ultimately will evolve as well. So that the marketplace case. Then there is the area of without money exchange but recommendations, when people need professional help like a plumber or looking for a dentist, or you need somebody mown the lawn, that happens at extremely advanced levels, because people need help every day, and it's so convenient to ask somebody who is in the neighbourhood, and knowing that if somebody likes them, that it's good, and they do a good job, that's very valuable. But there is no money going through the platform, but the value of those recommendations is tremendous. And that is in the end where we believe we can make our money because we now don't make any money, so there is no business model. But the local economy is such an incredibly large economy that we believe if we add value we can also extract value. Then there is the casual labor, those are thing like babysitting, those are also marketplaces that make sense to do locally, simply because the travel time is shorter, but also in the case of the babysitter, those are typically young girls and parents would also like to know where their daughters are going and vice versa, you're leaving your baby with young people and you want to understand, are they coming from an ok family, so you know where they live and that's already a lot easier. So the casual labour is a huge one as well on nextdoor.

Q: How are you planning to involve local business in your own business model?

- Probably similar to yelp. Because the real value is in the recommendations. People find that by far the most important thing. So you would get as many profiles on board as possible, you get as many opinions on it as possible, you don't have to worry about that, people are quite opinionated. And then you start charging businesses for advertising or services such as could be a quote engine, people could ask for a quote, and through nextdoor they would get 3 quotes, and then businesses would have to see how to pay for a mentions. And there is multiple ways to extract value out of that market. Which one exactly is the best, we'll have to experiment. We probably don't have to invent one, cause there are so many, and we can try them, and just see what works best. One is just to get as much status as possible.

Q: In terms of diversity is important to you, how do you target new groups?

- We don't it's just word of mouth.

Q: What are the basic values, or what is the basic identity that you have at nextdoor?

- Oh there is a very simple answer and that is neighborliness. So that is something we all understand, but also something we all need, because everybody wants to have a neighborly neighbourhood. And it's such a basic need, and it's not gonna go away with digitalization or globalization. We always still value, the way I see it, in walking distance, I want to know people, and I want to trust people, and people you know and you can ask for things but also where you can invest, people like to invest in people, and why do you do that? You can do that in very remote places or in your own neighbourhood. And that common value, that every individual has, not in the same level of course, and I also see an age thing here, or it's not so much age, but just what phase of your live are you in, and the moment you are settling, that's when you have this urge to invest, and investing means that you go out there. And that's what we want to facilitate, because we don't do anything, we are a platform, we facilitate that behaviour.

Q: Regarding the timeline that you use, are their other means of communications, or organising yourself?

- You can create groups! Open and closed, so it's not like on other platforms. And I think what is a huge difference with other solutions is the map. It's very important. There is two things, one is that a nextdoor neighbourhood is confined, so it has boundaries, and every individual needs to be verified. And with that, if you have that, you can create a map. And a map, it is very handy, and it's very visual and people are visual. So if you zoom in you see the actual plats, the houses, and a color coding, where green is nextdoor member, you get a sense of who that person is. And orange is somebody that has been invited and red is just not a member. And the advantage is twofold, one it is growing, because if you know that person, you can invite that person and that's' how it grows. It also means that if there's certain areas in the hood that are underrepresented, you as members can actually actively invite people. You can't do that on facebook or what's app cause you don't have that visual. You don't understand where people live. And then the second benefit is that, how many names do you really know? Because in your neighbourhood you know a lot of people because you see them in the bakery, or you might even say hi, or you might have have met them at a barbeque but you have forgotten their name, well this is the perfect cheat cheat, because you can simply check and see this is this person. And you know that helps, because with that cheat cheat you can more easily remember who they are

Q: And you only have access to the information on your neighbourhood, right? So you don't have access to the data in other neighbourhoods?

- Correct! So then when you do one of those little transactions, so for example I had a Ikea table that I wanted to get rid of, and they are not expensive, and you can either then throw it away which is a shame, you can't really sell it, but you can offer it for free, and literally within 20 minutes, I had somebody there who wanted to have it. So I had a good feeling because I helped the environment, literally because this thing was going to be repurposed, and then I actually established a relationship with people who picked it up by foot, they just walked by and we talked for 20 minutes in my living room, about how is the neighbourhood, and how is their house and you know that' where you see that in this middle area, the utilitarian, you are actually building those relationships and next time when there is something that might be more important, and then I know people on this side ... so simply cycling through your own neighbourhood is completely different. So particularly in the care area, because I understand it's really difficult to get it work there, well we don't want to get any of the verticals and make rock stars out of them, because it's not our ambition, but it's a shame if something is not working, especially in the Netherlands now extremely important to get ... we could imagine that we could create as we have it right now, if you post something right now, you could thank the post, which essentially saying like, hey, thumbs up! You could potentially do that as well when people do any transaction to actually log it with something. But then you start creating a real virtual currency, but for some things you might wanna make it more explicit, for example if you talk about care, one of the issues with care and helping is that there is plenty of people that want to help, but oddly enough people that need help are very hesitant to ask a question. What if you can lower that by showing that there are a lot of things happening. If you make that visible it's a whole lot easier to post your own request. So that is a territory yet to be explored, but I can imagine that that could work really well.

Thanks for interview!

e. Interview Tuinshare

Where are you at with Tuinshare?

I launched in March, and I had the idea some time last year, and then I just started building, and I wanted a plan and all that, but it's all in my free time so, the thing I like

the best is to just start building a website and see what happens. And then I really wanted to finish before March because I think March is a good time for that, because it's about gardens. So then I launched it, and shortly after that, you know just some e-mails to get some attraction there, and I also set up some meetings, like with Pieter from Tuintje delen. And we met like a month ago. Then we met with his whole team because they used to be four or five and then we try to kind of integrate it. Because for me it's really difficult after office hours. For me, it was just hoping that somebody would pick it up, that there was some kind of journalist who would think who thought oh well this is a good idea, but that did not really happen. There was some attraction, people were posting on twitter, and I figured it was on some websites, in the beginning phase I got quite some visitors on the website, but after that it would just flow away, but my problem is that I don't spend enough time to work on it now. But it's good that we met with Pieter and the operational team, because there is one girl in his team who said, well I really want to continue with it. And then we really try to, especially for next year we try to combine the information they have, because they have made a whole plan and information, and I have the website, so why not make one thing out of it.

So because you are just new, you probably have an idea about where you are trying to go with this, so what is your vision for this website or platform?

I think it is ... so my parents used to live in Arnhem, outside the city, with a really big garden, and I had a friend and they had some kind of community garden. And I think the nicest would be if his parents would just come to my mom's place, just got a piece there and work there instead of getting it somewhere else, so that's the idea, to just basically connect people and also see that you have people who have a big garden but don't have time for it and then you have young people, who want a garden, but when you see the community gardens, it's almost 100m square. It's too big, you have spend every night there, and you are not allowed to share it in most cases and it's really old fashioned, and it's also difficult to get, you have to write a letter somewhere, it's not on the internet, you have to go somewhere and talk to some people to get it fixed and I think the generation now just wants to go on the internet.

I think the best thing is I think, if you do this thing, people will meet, the land owner and the people rent it will meet and if you have multiple people using the same land those will meet and they are all same minded of course because they all have similar idea, and I think that's really the good thing about it.

Which places do you look at and which people do you have in mind when growing your platform?

It's kind of whatever happens happens, I would really like to see how it grows out of itself, but I think then I talked with Pieter as well and he said maybe you should go to restaurants as well, because if you have your own garden, you could go to a restaurant, and you could have a community of gardens who could sell to one restaurant, because that's a trend with restaurants to have local food, so I think that's a nice way to go. But of course then you need enough people. And the problem here is you really need a lot of people with a garden to get a community out of it. For example with Airbnb you rent out your room for one or two days, and then you rent it out to somebody else, but now you rent out your garden for let's say 6 months, because you won't rent your garden for 1 month because then you can only plant and you cannot get it. And that's kind of the problem you need a lot of people advertising and that's always the problem, who gets first: if there is nobody advertising their garden, then nobody will pick it up and the other way around.

Why do you think that people with a garden are interested in sharing their garden?

I think especially about pieces, if you have enough, why don't you share it and earn something out of it. Maybe meet some new people and otherwise, if you don't do anything with your garden it doesn't look that nice but if you got somebody who is doing for you then you basically get a nice garden in front of your house and you don't have to do anything for it but you get to enjoy it! Especially when it's so big!

Do you think that people who live in the centres of cities, they somehow have to get in touch with people on the outskirts!

Yeah that's true.

So what is the feedback you have gotten so far?

Basically I sent out a bunch of emails to people who own a volkstuin, what happened there is that they say "we are not allowed to share our piece of land" and I think that's really short sighted, because if you are not allowed to do it why do you not even consider it, but I was like, those volkstuinen have mainly an old population, because they have the time but then again, in a lot of other cities there are a lot of empty ones, people that want them but people don't know how to get it because they have to go to the office or make an appointment with someone during business hours instead of just .. so that's why I thought let's consider that as well on the website so people can consider, either they want a private garden or they want a volkstuin.

When you think about in 5 years, what do you think your community would look like?

What I would imagine is that next to the site we will build some kind of forum and people will give advice on when do you need to plant your strawberries... you know all that kind of. And people could share pictures, and that's really a community thing because you have all people who are interested in doing this so for example, I want to know what this plant is here, and I will send a picture and probably there are some people out there who know what it is, and will help you, and then you would get it more and more into a community thing and then you would also do the rental of the gardens next to it.

How do you make sure that people who rent (out) a garden can trust the service but can also trust other users?

I was planning to do a payment thing on the website but what I do now is that you can just book it. And then there are the contact details who booked go to the people who offer it. It is basically a webshop! They can get in contact and they actually don't need the site anymore and they can get in contact privately and they can arrange if they want to pay 20 Euros a year, or they meet up before they book it because it is kind of a long term commitment. You don't want to directly pay for it and then see what happens.

Have you thought about reviews?

I was planning to do that and there was a functionality to do that there but I didn't really build it out further because that one of the things that was a nice-to-have, not a must have, which would just be great if it was picked up. Also if you spend more time in this is one of the things you should build. Because yeah it's possible that somebody would rent out 10 gardens because he has a really big piece of land, and then it's really nice that you have the reviews and people can see you have this and that, and share knowledge about the guy. And then also for the guy renting it out he can easily resubmit the thing and it's just back online, because for some people it is just too far away, or something, there are all kinds of different reasons why you don't want to do it.

When building the platform, did you incorporate views from potential users or people who would be really passionate about it?

It was the plan to do that but then I just started building, but I discussed with people of course and everybody was like, that is a really good idea, I would use it! So I got some feedback, but not on paper or whatever.

How would you dream of the role of your platform in cities or neighbourhoods?

I think it would be really nice if you could go to a local food market or something with some gardens, but you could also make that bigger, and of course also in the city, they are demolishing a building and you could make a garden there, with a nice little shop next to it.

How do people use money on your platform?

I could see somebody pay for a garden, it is basically a piece of land! So you could pay somebody for that.

In terms of prices, can you set them yourselves?

Yeah you can ask whatever you want, first I wanted to do it on a monthly basis but then I discovered that at the Volkstuinen, they charge like 150 a year, they are not too expensive so I made it on a yearly basis, you can just fill it out.

What is your own income model?

At first you do the google model, you just give it away for free and then later you ask people to pay for it. Either you could ask people to pay when they advertise or you could say, well you ask 100 euros a year for your garden, so the customer has to pay 10 percent to me so basically Airbnb is doing that, and that is the best thing. And next to that you could work with big gardening shops to get some kind of arrangement there, no direct marketing, but I would say, work together with them and then well, you get a free gift certificate every time you book a garden. And then I get money from them, because people go there.

So, there is probably not so much conflict going on yet...

Yeah, well that's one of the reasons I made the payment out of system, because if somebody would book a garden, and somebody wouldn't pay, and then the guy who is renting is still expecting me to pay him. So I thought, well if I take out myself as a middleman, they can do it together and find out how much, so that's easier if you're just starting up. You don't need a lot of money to start this thing up, because you don't have a lot of risk.

Then if you build up and you get a name in the field you can do that because then people trust you already.

So people also build up just by engaging in the service and participate...

Yeah you know if you hear from your neighbour that they are using the website, then you use it too and are willing to pay for it...

Is there anything else that you would like to share with me?

No

f. Interview HeelNederlandDeelt

What is your vision for your platform now?

- Well, we started in November 2015, so we are in the starting phase now and our vision is to expand the sharing economy over the whole Netherlands because what we see is that sharing economy is mainly focused around Amsterdam, Rotterdam, Utrecht. The activities there are very high but when you look at the rest of the Netherlands, there is not shared a lot in our view. So what we would like to do is to make the sharing economy available and we want to enable it for everyone in the Netherlands and we have chosen to launch a general platform where everyone in the Netherlands, not only inhabitants but also initiatives, clubs, sport clubs, like everyone who is living in the Netherlands can share everything so not only stuff, but also services, facilities, knowledge, skills, etc. What we have done is, that we have launched heel Nederland deelt, so that's the general platform, what our vision is that sharing economy is all about local activities, so people share equipment or stuff within their neighbourhood so we launched 393 platforms as well for every city or village in the Netherlands.

What do you see as your identity?

- We think that the sharing economy is all about connection, cooperation, and collaborating, so we didn't want to launch another sharing platform by ourselves but our goal is to work together with existing platforms to let the sharing economy grow as quick as possible, so that's why we are working with croqqr for example

or with floww2 because they are all working in the same field in the Netherlands and I think that it is better to collaborate so we can expand as soon as possible.

Do you get a general sense what the feedback to your platform is so far from your users?

- Well, we are active in the sharing economy since 2012 with floww2, because I work there as well, I'm responsible there for communication and marketing, and what we see for companies is that it is very hard to change from possession to usage, so it takes a lot of time. They are very interested in the platform, and they acknowledge the profit that it can give for companies but it's going very slow and we see the same things at hnd, we see that people are very interested, we get a lot of media attention, there are a lot of publication, we have a lot of radio interviews, and since December we have about 6000 members, so that's ok. I think it's very important to acknowledge that it's not only the online platform that will develop the sharing economy, but that it's very important to have local, offline presence as well. So we decided to launch the 393 platforms at once. What our goal is for this year is to find as many local community managers as possible, because we think that a local offline person, for example an independent professional, who is going to connect everyone in the village but also who is going to inform them and activate them to share everything with each other and we are focusing on finding existing clubs of people within one city. So for example a sport club. So what we do, we have found a local community manager, we have about 15 now I think and what we do, we try to contact the media, to publish our message and then we are organising a round table conversation and we invite a lot of parties within that city so sportclubs, as I said but also neighbourhood clubs, all kinds of clubs, which have people that are a member or that are involved with that club so what we are trying to do for example in Oosterwijk, where I live, because I am the community manager there, we have contacted the local hockey club, and they said, we as a hockey club we can share a lot, because we have playing fields, sport materials, we have a sport café, etc, and we can share that with schools or with other sport clubs in our city, but next to that they say, okay, we would like to have a closed group on hnd, so we have the option for existing clubs to have closed groups where a lot of people can share with each other.

So relating to trust, in closed groups people tend to trust each other more of course, but are there also other ways that you observe or that are possible for people to interact on you platform?

- Well we facilitate user reviews of course so they can review each other and then for example when a street or a neighbourhood creates a closed group on the platform, they can talk to each other as well, so that chatroom is also available, so that are the things that we are trying to facilitate now, but in the future we would like to organise offline events as well. So if there is a community, and they are active, we are organising offline events, like the round table, but also we would like to organise offline sharing markets, so where people can meet and where people can get used to the sharing phenomenon. Because another thing is, it's still very new, so people have to get used to it. So for example if I'm with 10 friends or so only two of them really know what the sharing economy is. When you look at the rest of the Netherlands, especially in the east people are used to sharing a lot of things with each other for a long time. But they do that with their neighbour or a family member but they are not used to use an online platform.

I'm wondering, regarding the rules that guide the process, do users set up their own informal rules?

- What we try to do is that we offer people all kinds of sharing, so they can exchange, and they can exchange for money, they can give away products if they want, they can borrow, so all kinds of sharing is facilitated on the platform. I think they can set up their own rules.

If you see that people now start to engage in your platform is it also happening that you get bad feedback or that people misuse the platform, and how do you handle that?

- Of course we see that, for example people can create an account and it's free to do it as well so we really need to manage or have a look at the platform every day, to see who creates an account but also what kind of advertisement they're uploading, so for example last week there was an advertisement that somebody uploaded about workshops on how to... vrouwen versieren! And that's not really our goal to make it possible for people to do that, because the company whose core business is that kind of workshop so we deleted the advertisement, and I have some contact with him that it's ok to share all kinds of stuff, so he uploaded a beamer as well and that's ok of course, because he bought a beamer once and wants to share it with his neighbours but he also put this advertisement about workshops as well, but he was really understanding.

So you have a certain set of rules or values that guide your decision as to what you want and what you don't want on the platform?

Yes, because I really want to focus on what the sharing economy is all about. And that is that we make more efficient use of what people already own and what's already produced, and that's the kind of stuff we want and what we are focusing on and we are focusing on that neighbours help each other out, so like painting jobs or whatever. We don't want to have commercial websites to promote their core business on our website. That's not our business.

On the other hand, the positive experiences people have, is there any way of rewarding people?

- Well that's a bit early to say, because we are developing this at the moment with our IT team. Such a system that we can give people some kind of award or points when they share a lot. We can also give them a percentage or reduction on stuff, for example if people want to share or exchange for money we can then give them something like "deeltegoed". And we are now working on a competeion as well. So what we are now doing we are making local competitions focused on a city. We are developing something like that you can be the best sharing street or the best sharing neighbourhood within 2017. So that will activate people to share as much as possible, and we are awarding them with a neighbourhood party, and then we would like to organise the party by just sharing everything, when there is a street that has been sharing the most within a city they get a neighbourhood party which is organised by us but where they have bring their own stuff, so they have to bring their own meal etc.

Do you see that there are some things that are higher demand and others that are higher in supply?

- You see that there are a lot stuff to offer, so beamers and gardening tools. And when you look at the demand people are mostly asking, so volunteers for example at sport clubs, but also painting jobs, the klusjes.

You said it's for free to offer things on your website, but you can also ask for money, so how do you see the use of money on your website.

- Well its being used very much. So people want to give away their stuff, or they want to exchange or they want to rent it out but they don't want to have money in return. But it depends really on the kind of item. When it's really expensive, like gardening equipment, or a drill, they're asking money for it. And cars as well.

And are there also security mechanisms, like insurances?

- Yes, we have a rental agreement when people use the platform, so people can find that upfront the sharing moment. But we have a “garantiefonds” as well. So we don’t have an insurance, for cars we have an insurance of course, but for the other things like equipment or other kind of jobs, we have the garantiefonds. And people can make use of that by putting 1€ in the garantiefonds, and if something happens by exchanging or lending out, they can make use of the fonds and we will solve the problem.

g. Interview Thuisafgehaald

Q: What is your function at thuisafgehaald

- I am looking into how to support people in need if „bijzonderthuisafgehaald“. So I am work with care organisations about the ways in which they can use it in their field of work. So social workers, or nurses who are in contact with elderly or people in need. And then they contact us to fin a home cook for them. Or we put an announcement in the local newspaper about us and then those people contact us. They don’t usually have computers. So we need the professionals, and we arrange a cook fort hem.
- And it has been really successful, because we already have a community for 4 years, so we know the home cooks, and we can get in touch with the home cooks immediately and try to find matches for those in need.

Q: What is your vision for thuisafgehaald

- People need their social network if they stay at home, and right now we cannot depend on the government anymore, and things are shifting. And we need to organise care ourselves. So you need more people around you to help. So we think neighbours can help especially if they can cook very well.

Q: How has this grown over the last couple of years?

- thuisafgehaald has grown explosively, when people got to know it they immediately wanted to join. It was exponential, but now it has stagnated, it was a hype in the beginning. And when we started bijzonderthuisafgehaald, a lot of people called us and we added a feature to show if you want to also cook for people in need. So 10 000 members also cook for people in need. So normally you are not required to cook regularly, you can do it five times a week, once a week, once a month... And so bijzonder thuisfgehaald is a stronger commitment, because you are cooking on appointment and regularly, let's say every Monday or twice a week. And we see that lots of people want to cook, we have a lot cooks. On the other hand, we find it hard to get the questions for it. People are convinced it's good, they know there is a need for it. But you need to get the requests from people directly, so you a little bit of encouragement from nurses for example who go to the people directly. Or we get a lot of requests from coincidence, when people read about it and say, oh I need this, and then they call us. So at the beginning, it was a slow but steady growth, so we had a request once a week, so we worked to make a match, and we were really happy about that. And after that we get four or five requests every week and it's staying like this right now. So it's still growing and growing, and we are happy about that but we think the need is bigger than that. So it's hard to reach for some people, we are an online community, and online company, so it's very hard to reach people who are not online, so we try this with flyers, but that's a different road we need to go.

Q: Yes I read about this, that people are more reluctant to ask for help than to offer help.

- Yes, we experience that here. And we have lots of different people who are asking for the help, and some of them are, more humble and grateful, but others are very used to professionals in their lives. So they are struggling with that also, so if you have a lot of people, every day every night around you, you are more used to it, to getting what you want.

Q: I was wondering too, what are the basic values that drive thuisfgehaald?

- Betrokkenheid, social betrokkenheid, engagement. This is hard to translate. We love great food, lots of people love to cook, the values are not coming from that. So in the beginning, Marieke and her husband, they were eating a lot from their neighbours, because they didn't have a lot of time to cook. Because we attract people who like to cook and who don't like to cook so that is a big value, and another value is we really like that people are getting to know each other in their own neighbourhoods, because in cities for example it can be very anonymous to live somewhere and not know your neighbours, most of the time people are

thinking it is only about food, nice food, but we are really liking it that people have to be in the kitchen of the other person, and people talk a little bit, you don't have to but we really like it that people are growing their own network in their neighbourhood.

Are there things that you do as thuisafgehaald to encourage people to do that?

- for example if you have made a meal for another person, so for example I am a home cook and people were at my house to get the meal and they went home, and you get an email that asks you to thank the cook, of course you don't have to, but if you like to do that. So I am a homecook, and in my e-mail I receive a mail from people about how they liked it and we are putting it in a very positive way. We don't have a ranking with stars or numbers, so it's very personal, and you can only, if you are negative, you can say it, but we have a box to check saying "it's not really my taste" so we don't have a feedback item that says you are a bad cook, but you can tell somebody, this wasn't really what I liked. And the other options are very positive, and then you receive the email, and the thanks you notes they are on your profile, and other people can see that. And then we are counting for everybody how many meals someone has shared. So in that way you can see how active somebody is, and how popular, and then we have in our community, or in the communication to the people who are a member we are talking about a match between somebody who is working very well, this cook is helping this women very well to eat better, or we are setting great examples on how people are helping one another, so we are talking about that too. And we have two facebook things, one is a group where people can share with each other, what they are cooking and what they liked about it. And in the other one, we are only asking and sending all kinds of...

Q: So in the facebook group where you're asking, how do you see it's received by you members?

- So really just the page, we only get information about, say, how many likes something gets. And how many reactions. But that's different every day. Because we are also very surprised, about this small ice cream for example we put on it with a face on it, it gets a 100 likes or reactions, or one day maybe we talked about a healthy candy for children in a school class, and we get lots of reactions, going like "that's not healthy", yes that is healthy!" and we have a lot of members going like "if you want healthy you have to do this, and that" so they are talking a lot in facebook, underneath the pictures. So for example, we put an initiative we like very much, and sometimes when we do that people don't like it and they think we are making advertisement and they are angry about that, but this week we had a great initiative from "Mamas" it's called "mamas cooking", and that's a small

business mostly by Moroccan and Turkish women who cook for catering, and that picture got a lot of likes! And we find it really funny! And most of the time we are not only posting but asking “how do you like this?” or “would you like to cook that this Saturday?” so we try to interact a little bit with them

So you feel like people are committed?

- Yes! We don't know always why but they are really committed to food and to...

I can imagine that people sometimes also have negative experiences, so what kind of feedback do you get and how do you handle the feedback?

- if they are not happy with the homecook the consequence is that they don't go there anymore, so the cook doesn't get any orders anymore, because he or she can't cook very nice. So that's more like a question-balanced thing. But if we have negative reactions we see it in the email or on facebook, and we have to react to it! Sometimes we see on facebook people help each other already, so somebody posts a question about how to reach a cook, and then another homecook answers, you have to make a reservation for a meal and then it's solved. So we are not always the ones to give the answers or if other reactions in email are negative we just have to react and talk to people again and again, and once or twice a year we have somebody who is really angry and they want to unsubscribe from the website, and that we know because we have people who don't want to get the emails anymore and they unsubscribe, and that's usual, but then if... so last year I was talking to a guy and didn't want any care providers, so welzijnorganisaties, he didn't want them to cook for the website, for example if you have a kitchen and elderly people come there, your meals are only 4 euros, so you can put the 4 euro meal on thuisafgehaald, but actually you have a professional kitchen but your meals are very cheap. But we like people to connect, because this small kitchen is in the neighbourhood, meals are very cheap, and elderly people go there, so why not invite other people from the neighbourhood? So this is our statement. And somebody who was a member said, well I only want homecooks, private homecooks, and he was really angry about it, and we talked about half an hour about it but he said, but that's not the way I want to see thuisafgehaald, I am angry at you. So well, I think most of the time it's just to try and talk to people. Maybe they don't understand something, or they have a wrong idea about how it works.

Let's say a cook is doing really well, and is really popular, you said you have this thank you system, but are there other ways in which members can reward each other?

- We are trying a lot of things. We had personal contact with lots of the cooks who cook a lot, so lots of the popular cooks, we know who they are we talk about it on the phone, we have personal contact with them. So last year for example we brought flowers to the most popular cook, because we know her already, and we talk to the popular cook on facebook a lot. Or if we receive an email that they are sick and can't cook for a while, or somebody died in the family. And then we give them a gift or send them a postcard so we try to do more for them but we also are improvising more in this period, how can we do more things, so we are looking every week who has shared the most meals and then we are writing them an email, "did you know you shared the most meals this week, congratulations" So we are getting to know a lot of cooks personally like that and we do this because we don't have a lot of budget so can't send everyone gifts of course, but we can say thank you in small ways, by sending them a post card.

I have seen that you also organise meet ups

- we have groups in different municipalities, we call the projects. And we can focus on these cities. In these cities it is a way for us to meet the cooks in person. It's a way for us to connect more people and also to let them meet each other, so not only bringing and getting the food, but also to get more strength in those cities, and also to talk about *bijzonder thuisafgehaald*. And in cities people can make their own food events, they can just add it on the websites. It's also very different how people react to it so sometimes. A small thing like a home cooked dinner with 6 people is very popular and already fully booked and then other times you have something like a cooking workshop from an organisation that's very popular or we have food events that are very general, like a market, so if you are putting a market on it we don't see the members subscribing because it's very general, it's just working like a way to make some advertisement. So if you have an organisation where they want to cook for the neighbourhood then they can use it as advertisement with the *thuisafgehaald* members. In that way it's connecting people more in person and make them eat together.

Do you also see that over the years stable relations establish?

- Most of them are between cooks and *afhalers*, because cooks are getting to know each other on facebook, but not in person because they live in different cities, or in cities where we have food events where we have food events, so they get to

know each other so that's possible, but the most sustainable relations are between cooks and afhalers, for example if they come every week or if they always sign up for the meals and then we know nice stories about them because people start looking out for each other and then even if it is not bijzonder thuisafgehaald they are caring for each other or if for example an afhaler always comes from work at 5 o'clock to the kitchen, and if it's 6 o'clock and they don't come, the cook is calling "where are you?" so they start looking out for each other. Or we have a really popular cook who has invited most of her afhalers to her wedding, or people are going on holiday or they are making other arrangements like looking for pets and things like that, and last week! Well 6 months ago we asked in the facebook group, did anyone fall in love via thuisafgehaald, but then nobody reacted, So we thought, well it's a blunt question. And then last week we got an email from someone saying she met her big love on thuisafgehaald. And we already twittered about, we found our first couple!

Is there oversupply of something, or higher demand of other things on thuisafgehaald?

- If you're just looking at the thuisafgehaald community, you see that the balance has to be right between cooks that are actively putting their meals on the website and you have to have afhalers who are reacting on them. So you have more afhalers than cooks, but that's good, because one person can cook for five people for example, and we see that in the memberships. So we have a smaller number of cooks and a greater number of afhalers. That's a good balance, but you have small cities or small cities, and in big cities you can always find a cook somewhere and if you like the way they cook, you have a good supply and demand balance. That's great. Sometimes you have a small village and you have a great cook and they are making their own campaign around them so they are attracting a lot of afhalers, so it's working very well. On the other hand you have a small village with an afhaler, and they say well, there is nothing happening here, I really want a cook. Some of these people can be unsatisfied about how many meals there are but you always see that there are more meals sent than there are... So there are lot's of meals sent by email and they won't be picked up. If you send four meals in one village it's possible that you are getting a reservation for two, but most of the time.. so the whole community is about the balance between supply and demand.

And how do you see the use of money on thuisfgehaald

- Well, we are not really saying you cannot put a meal on it for that amount of money we get complaints about it if people do. So, for example if you put macaroni and cheese for 20€ neighbours will complain about it and email the cook to say, your mac and cheese is a little bit expensive. But, also another thing is this meal won't be in the e-mail we send to afhalers, so we won't make advertisement for it. And it's also a little bit the supply and demand, because if you see this in your e-mail, you think "what? 20 Euro?" you're not going to this cook to get it.

So people expect the price to just cover the costs of cooking, right?

- Yes, that's right, and I think sometimes the afhalers can be really critical about it because somebody is cooking a couple of hours for you and they don't want to pay more than 3€ for it, no, I don't like that, because they think well the ingredients can't be that expensive, but well I think they can't be very efficient, because you need to have more afhalers in your kitchen to be very efficient. I think the way they are getting ... So if they know the cook, they are willing to give more. Because if they know and they like the cook they are willing to pay more because they know how long they have been in the kitchen already for three hours. So if you don't know the other person you are a little bit critical "why should I pay you that kind of money for this meal".

Do you have feedback mechanisms from your community that allow you to change your website?

- Yes, because we already have planned everything we want to change on the website. But cannot change it during the weeks, we two big periods in the year, and everything that happens, we are putting into writing for example, somebody calls us, if something is really wrong at that time we can change it, we can ask the website builder to change it. But the other things that are not urgent we are gathering and then we plan everything that needs to be changed or that people asked for or wishes or things that could go better, and then we are gathering and then we have a week or so period, where people from the website change it, then we have to check it, and then we put it live again. So there are really big moments where we can make it better.

Do you have any other remarks?

- Well if you look at the values, as you asked in the beginning, about how can you be more social, I think that's a very important question, because for us as a company it is rather difficult to have a really social website because we also need to make money and to sustain us. But on the other hand, we as a group we really believe in the social values of it, we really think it's not all about the money, it's

really about getting to know your neighbours and getting a big network where you can ask for help, so there is a balance if you answer on your research is we need to be more social... well we still need to sustain ourselves.

h. Interview WeHelpen

I'm running the wehelpen Lab, where we manage experiments, small projects, to learn about the community and we also develop new propositions for specific target groups. That's what I do.

What do you mean by target groups?

Our community. Our target group is actually everybody who lives in the Netherlands, which is a bit vague. If you look at specific groups of people, we are looking for people who we feel can really benefit from more informal care, from more informal help from other people. Either from people you do know or people you don't know. We have a cooperative business model so the people who finance our organisation are health insurance companies, are welfare organisations, are care organisations like hospitals. And their benefit is that people who are in a state where they need professional help or they are in a state where they need less professional help, where they can diminish professional help. And the quality of life of people should increase. So if you for example, on our platform, I could create a group that helps me that need to move houses, but in the long run that's very nice for me and maybe for the people who help me, but there is no benefit for our members in the cooperative. However, if for example I take care of my partner who is terminally ill and it will take a long time there is a high risk that I will collapse myself. And will be incapable of taking care of everything that's needed. So if we focus on the group of carers, people who take care of somebody else, who is in need of long term care, if we make sure that those carers get the informal support that will help them there is a big benefit, both in terms of quality of life and monetary value and in terms of the municipalities who still have a responsibility, the government, to make sure that people can express themselves in life and can express their possibilities. So that's their direct purpose which is a completely different focus from stimulating by organising a group of people who help you around the house.

It is also very complex. It is really rewarding, and it is a very good feeling but especially help between strangers is difficult. Because it is extremely difficult to ask a question, to ask for help from somebody else. And sometimes it is also difficult in terms of the relationship that's being formed between two people can also be complex, because sometimes, for example a person is willing to do something for somebody else, so it is very difficult, like they want to bring someone to the hospital, but they don't want to build this relation.

We helpen has a real potential but if you look a bit further, it is really complex to create a setting where people feel comfortable to ask for help and also to deliver help where both parties feel at ease. There are many ways in which we can learn and help facilitate and stimulate this, especially if you talk about help between people who do know each other, but there is a lot to do.

What have you found so far in your work, what are the ways in which you can actually stimulate help between people who don't know each other? How can you make that relation easier?

What happens a lot is that there is a third party in-between, like a health care organisation that helps people to overcome their shyness, for both asking a question and for expressing their needs on a platform or... you don't always have to express your needs on the platform you can also link to the person who offering help but fairly often there is a welfare organisation or another kind of organisation, like a voluntary organisation who helps to make the first link. So that's definitely an important one. And what we're working on now is to create a proposition with the same kind of functionality that we have on our present platform, but where we create an interface, but directly focused on people who are in this heavy care situation. We're actually even focusing on a very specific group of people who have brain damage. We chose this group because for one thing, the founder of wehelpen, he got brain damage 8 years ago, that's where the whole idea came from, what happens in a brain damage situation, the care for someone who is the first care-taker is long term and really heavy. This is a group that has a high risk of falling over themselves, so, what we do is that we develop a proposition, that we actually identify potential users of our platform already in the hospital, so we work together with the whole professional chain in this situation, the hospital, the revalidatie, the doctors and all the others, the municipality nurses etc, they are all linked in our chain, so what we want to do is that as soon as a situation arises, the carer is made aware of the fact that they are in a new life situation and they might need help and we actually direct them towards our platform, where once they enter the platform, we want to make sure that they say, yes this is the place for me, so not only functionality where you can actually ask for help, but where you can also communicate with the people around you, where you can

find information about the situation you are in, so we are going to create a really warm environment where people feel, yes this is where I find what I need now! Be it information, support, and a great communication tool with people who are around you, who you want to involve in this whole situation.

So you really see yourself not only as a connector of people but as a facilitator of a whole environment for care.

Right, yeah! Which is also a huge task! I hope we are going to manage this, because this is really big. And what we really want, but we can't do it yet in our present platform but we can't do it yet, but we really feel that we need to take people by the hand, not in a top down way where we tell others what's good for them but by offering people a lot of possibilities, a lot of support, a lot of potential triggers that we know of in society to stimulate bonding between people and help. So I really feel that we need to go way more into an interactive system where we trigger people constantly, to give them some suggestions for the things they can ask for from others and also really working on the psychological barriers of opening up to others.

Yeah, definitely! I already heard from thuisafgehaald how important that is.

So, what I wondered, could you explain a bit more about how you want to decrease the barriers for people to ask for help, what are your strategies?

Well maybe I should start with the idea of the circles, we call the open or closed circles, so we actually communicate and ask help from people you do know or you do not know. So we ask help from the general community or we create warm circles for our people, to giving them the capacity to draw from warm circles. And I think, what we envision or what we hope that there can be mixture of circles that people use. So for example, for a couple of people if you look at a care situation, there are people with whom you want to share a lot of information, the care agenda and other things. Then there may be a circle of people who you inform what the situation is, with news updates etc, of what's going on in your home environment, and you could ask them occasionally to help out, and then there is the "coldest" circles, which is the community consisting of people living in the neighbourhood who might also be willing to participate in your system, either by becoming a new contact and actually afterwards becoming part of this personal circle, so they become acquainted with you on a really incidental basis where someone dies something for you, on a one off, like doing the groceries once. And then people are really

in the most distant social relationship. But we are playing with these circles and I think the social dynamics in these circles are really different, and the way we trigger people in these positions will also be really different and what we want to do is to create a much more interactive system where we as a system communicate with people in those different circles, so we can not only help the person who is in this care situation or in this needy situation with triggers that might lower their barrier to ask for help for example by showing that asking for help is not something to be embarrassed of or by showing that asking for help actually offers the other the opportunity to do good so somebody else can feel good and there can be many different triggers you can give, or for example as well, giving examples of really practical things that somebody can ask for is a path for stimulating, but we can also educate or support people who are willing to offer help to a person they know by showing that by saying “oh if I can do something for you just let me know” that’s not real help, because somebody will never contact you, however, if you say “can I cook dinner for you either Wednesday or Thursday, and do you want Spaghetti or do you want Pizza?” it’s really concrete and much easier for somebody to say yes please. So we are going to support people in their different role so they have an assistant. What we envisioning, but we haven’t realized it yet, is for example if you have this closed circle of people around you, who are willing to do something for you, and for example you ask, if you type in your agenda or as a question to your closed circle that you need transport for your partner to the hospital, we could also show a map of the people in your vicinity, who you do not know, but who live in your neighbourhood and are willing to or who are offering transport, to trigger people, well you might also look for somebody new, you have so many neighbours in your neighbourhood who are willing to drive someone here or there, give it a try!

What has been your experience so far with relationships that build with the help of your platform?

We got quite a number of user stories! I haven’t been in touch with people personally because that’s not the role that I’m in, so that’s more my colleagues. And these are of course the positive stories, but there are also incidents of mismatches, where for example a care giver wants to do something, wants an errand, and the care taker would really like to have a longer term relationship. So there’s also all these imperfections in the ways in which people are willing to do things for each other and expectation management is a really important aspect! We really need to develop systems, methodologies, tips, triggers to lower those social barriers.

Is there anything you have so far discovered is like a key aspect in doing so?

I don't know yet, I got many ideas. But we need to lower the problem. At present our system has very little interaction between the system and the users, there are more interaction between users but we do not have the facility, we don't have a lot of possibilities yet to trigger people or to help people

I am also interested in knowing how you deal with negative feedback or bad experiences people have?

At a couple of different levels. We have community managers that roam our platform to search for people who might have different objectives than we want. You know people... Sometimes you see there is either a request or an offering that asks money or has a sexual undertone or there might be somebody who we think we do not want and then we contact those people and sometimes we block them so cannot reach our site anymore, sometimes we do this that if some of our users notifies us that there is a strange person on the platform and then we stop said receiver. We also have a helpdesk where we both support user who do not understand something but we also use it as a service line for when people encounter things that are odd. It is also very human labour, so we haven't built systems in our website yet that automatically trigger to certain words, like money or sex. And now we just see what's happening and we respond when we hear those things. We also give advice to our users on how to create a save setting when for example first meeting somebody and what to do with an awkward feeling, so we do give advice in that direction.

And as for money, you mentioned there is never money involved, but are there any other ways in which people show gratitude or rewards that people give to each other?

I do not know, I suspect it though. Well the interesting thing is, just before I had an interview with somebody who has done 6 in-depth interviews with people who have used wehelen for a longer period of time and they actually mentioned that there is nearly always a conversation about money. Either because the person who offers help requests for money or because the person who asks for help wants to offer money, to lower the social barrier. So it does play a role. Perhaps at one point in time we have to reconsider whether it needs to be free. And of course we don't know what people do themselves, it's a free world, we match people and what they decide between themselves is between them! And then at the same time I suspect that there is fairly often, also by my personal experience with for example peerby, if I borrowed something I always give it back with something which I feel is an appropriate thank you gift, a box of cholate, biscuits, or something else. If I lend something out on peerby, as I did a couple of weeks ago, and I received my suitcase back with a "thank you" and that was all, I was a bit disappointed. Even if I would have received a bar of chocolate, I wouldn't have eaten it,

because I don't eat chocolate basically, it's something more than nothing! And actually for it isn't even the matter of a time or size, it's the gesture. So one day I lend out something really small but the person gave it back to me with a free dvd that she had received, about nature, it's the gesture! It can be anything! And I really appreciate that, but that might be my personal opinion. It might also be because in the first interactions I've had on peerby that's what happened so that has become my norm, but of course I don't know if it is normal on peerby.

One last question: What according to you are the values that drive wehelen and what are the values that you communicate to your users?

I'll give you a few answers, one is our slogan which is "the power of each other". Most people are willing to do something for each other, we believe that everybody is willing to do something for somebody else and everybody needs help from somebody else at a certain point in their lives. That's really what we want to communicate. And there is also the feeling even in Dutch slang "naarbuurschap" neighbourhood, we are a social species and we want to live in a social society.

Finally, is there anything you want to share with me and you haven't said yet, but you feel is important?

No, but feel free to contact me again!

APPENDIX III 'ABOUT' SECTION PLATFORMS

Barqo	https://barqo.co/over-ons
Snappcar	https://support.snappcar.nl/hc/nl?flash_digest=5a5ca7f193de58bc2bd7be1d9dcd3a61f811cc3a
Nextdoor	https://nextdoor.nl
Konnektid	https://www.konnektid.com/about
Tuinshare	http://tuintjedelen.nl
HeelNederlandDeelt	http://www.heelnederlanddeelt.nl/wat-is-het-hnd.html
Thuisafgehaald	https://thuisafgehaald.desk.com/customer/portal/articles/1971296-over-ons

Wehelpen	https://www.wehelpen.nl/wat-is-het/over-we-helpen/
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