

“Growing and Sharing Together”:

*A Case Study of the Social Impacts of Libraries of Things
Towards Community-Based Scaling*

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Abstract

Libraries of things (LoTs) have potential to create positive environmental and social impact. However, not enough is known about their social impact, especially as LoTs scale. This thesis studies the case of Circle Centre (CC), a LoT in Lund, Sweden and analyzes the social impact of LoTs through interviews and a survey. After understanding the social impact, participants in a participatory qualitative interview workshop explore through drawing and discussion, how impacts will look in future LoTs. The results indicate that LoTs provides positive social impacts, but the extent varies among stakeholders. LoTs need to prioritize physical space, grow connections between community members, adjust to local contexts, and collaborate with external stakeholders as they scale, all of which requires thinking beyond loaning operations. As a result, LoT leadership, funders, and societal collaborators can better understand the social impact of LoTs and how to maintain social impact while scaling.

Keywords: Social Innovation, Sharing Economy, Libraries of Things, Scaling, Social Impact, Sharing Community

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List of Abbreviations

CC - Circle Centre

LoT - Library of Things

LoTs - Libraries of Things

RQ – Research Question

SE - Sharing Economy

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1 Introduction

Consumption continues to increase in the Global North, with a material footprint in high-income countries that is 10 times higher than low-income countries (United Nations Department of Economic and Social Affairs, 2023). At the same time, access to goods and services remains inequitable, with many goods that are owned, such as cars, houses and appliances being under-utilized and idle (Frenken & Schor, 2017). The sharing economy (SE) emerges as an area that can address the underutilization of goods in a way that is considered more accessible (Frenken & Schor, 2017). The SE has provided positive impacts such as an increase in access and affordability (Curtis et al., 2020). Many SE initiatives start with good intentions, but as they scale, they can fail to provide these impacts (Acquier et al., 2017; Benoit et al., 2022). For example, the SE company AirBnB, started as a way to utilize empty vacation homes (Frenken & Schor, 2017) but has led to negative social impacts such as discrimination, exploitation, gentrification, and social exclusion (Curtis et al., 2020). Furthermore, current research suggests that environmental benefits of the SE should not be assumed and may not always be positive (Murillo et al., 2017).

Libraries of things (LoTs) have opened around the world as a facet of the SE in recent years to provide alternatives to over-consumption and build a sharing community (Ameli, 2017; Bradley & Persson, 2022). Many LoTs are community-based and operate in the context of the local needs, creating a diverse range of libraries, inventories, and operations (Baden et al., 2020). To scale impact (Moore et al., 2015), LoTs first must be able to understand their social impact in order to understand how they create value in communities. Based on impact reports, LoTs have had a haphazard approach to understanding impact, with a focus on quantifying environmental impact and less on community-building aspects (Claudelin et al., 2022; Library of Stuff CIC, 2022; Library of Things Ltd, 2023; SHARE Oxford, 2022). Current literature regarding LoTs recommends examining social well-being and how to further this impact (Claudelin et al., 2022). Despite the community-focus, there is little research regarding how these facets of the SE can scale their impact as a part of a larger sustainability transformation, which motivates this research. Current literature instead focuses on studying the beginnings of LoTs, through case studies of how they are developed (Claudelin et al., 2022), how LoTs can further sustainability in the SE (Ameli, 2017; Kunert, 2022), potential business models of LoTs (Silva, 2022), or understanding how they operate (Baden et al., 2020).

Furthermore, even considering the organizations part of the SE that are grassroots-based and non-commercial in nature such as LoTs, there is still a chance of mission-drift, where these organizations stray away from their original intentions of impact and change as they become more institutionalized (Martin et al., 2015). Even if the sharing services are utilized, creating a sharing culture and having these positive impacts are crucial then as the environmental benefits cannot be assumed and the SE may just become an economic decision for consumers, instead of changing mindsets or values (Murillo et al., 2017).

1.1 Research Aim and Focus

To be able to bring about more impactful sustainability transformations in a way that is still community-focused, research needs to be conducted on the social impacts LoTs create in the SE and how these impacts can be cultivated as LoTs scale. The aim of this thesis is to better understand the social impacts LoTs provide to local communities and how the social impact can be cultivated as LoTs scale, to avoid mission drift and negative social impacts.

1.1.1 Research Questions (RQs)

RQ1: What social impacts can LoTs provide to their communities?

RQ2: How can LoTs work towards maintaining social impact as they scale?

1.2 Relation to Sustainability Science

Scaling the SE is a key to sustainable transitions and decreasing our problem of overconsumption in the Global North (Chakori & Hopkinson, 2021). The SE has the potential to reduce ecological impacts on communities and societies while also creating access to items, goods, and opportunities (Ameli, 2017). LoTs focus not only on reducing consumption through their library format but also providing educational events and a community space (Lynch, 2023). Knowing how to scale each of these impacts is key to scaling the entire LoT and its mission.

Furthermore, many LoTs also are not economically viable alone and rely on support from municipalities and donors (Baden et al., 2020). Understanding the impacts LoTs provide to their community would provide a basis for donors and municipalities to better appreciate their impact when providing support for LoT projects, especially as a gap currently exists in understanding how share and repair organizations such as LoTs contribute to urban resilience (Voytenko Palgan & Mont, 2023). Sustainability science is a research field aimed at action (Kauffman, 2009), and this research aims to create tangible solutions within

the SE while working alongside the organizations and community. The basis of this research is solution-oriented, to find opportunities for LoTs to scale and maintain social impact, which aligns with sustainability science's priorities of applicability (Spangenberg, 2011).

2 Background

2.1 Brief Overview of the Sharing Economy

The sharing economy (SE) is an alternative way of consumption based on temporary access to items, promoting efficiency of resources and requiring trust amongst participants (Szymańska, 2021). This allows access to goods that are otherwise underutilized (Claudelin et al., 2022). The SE includes diverse sectors that range from mobility to food (Szymańska, 2021). Within the SE, scaling is an important consideration as community-based initiatives may face competing interests of scalability and community-focus (Acquier & Carbone, 2018). The SE exists both online and offline, but online platforms have been a large area of focus for academic research, such as how the SE can connect people who would not have otherwise access to the resources (Cherry & Pidgeon, 2018). This thesis then allows for further research into the offline aspects of the SE, as libraries of things (defined below) operate as physical spaces.

2.2 Libraries of Things

Libraries of Things (LoTs) is an extension of the library concept to items beyond books (Baden et al., 2020; Claudelin et al., 2022). LoTs are a part of the SE, utilizing the “community-based access” model where temporary access is provided to users, and organizations have a social mission (Acquier et al., 2017; Laukkanen & Tura, 2020). The libraries can be an extension of existing traditional libraries, or a free-standing organization which may charge a fee to borrow items (Claudelin et al., 2022). An example of a LoT and types of items or inventory can be seen in Figure 1. Research regarding LoTs and especially their role in the SE is relatively limited. Previous research considers environmental sustainability of items borrowed (Hiteva & Foxon, 2021), a case study of how LoTs are launched with greenhouse gas calculations to show environmental sustainability of LoTs (Claudelin et al., 2022), social and spatial dynamics of LoTs (Lynch, 2023), socio-technical challenges of growing LoTs (Fedosov et al., 2023), LoT operations and potential to broaden (Baden et al., 2020), Human-Computer Interaction potential in LoTs (Jones et al., 2023), and analysis of current LoTs to understand discrepancies between supply and demand (Ameli, 2017). In addition to themes of LoT research described in the introduction of libraries of things, common

topics mentioned also include issues relating to financial viability (Baden et al., 2020; Deflorian, 2023; Lynch, 2023; Mathiasson & Jochumsen, 2023), consideration of environmental impacts (Ameli, 2017; Claudelin et al., 2022; Hiteva & Foxon, 2021; Lynch, 2023), and reliance on volunteers for LoTs (Ameli, 2017; Baden et al., 2020; Deflorian, 2023; Hiteva & Foxon, 2021; Lynch, 2023).



Figure 1. Example of Items in a LoT. (Author's own photo, taken 23 September 2023 at Circle Centre Lund).

2.3 Social Impact

The definition of social impact varies. Though social impact may have historically taken a positivist definition of equating the impact to social value that can be measured, there is also discussion that social impact is a socio-political process (Logue, 2019). Viewing social impact as positivist takes away the value-laden context it operates in (Logue, 2019). Social impact is complex and qualitative, meaning assigning quantitative values to social impact is not always effective and the impacts are highly dependent on people's personal experiences (Pitkänen et al., 2023). Studies and literature relating to the circular economy and SE measure social impact as a proxy for social sustainability, which this thesis also follows (Curtis et al., 2020; Pitkänen et al., 2023). Overlapping concepts of social sustainability include social capital, social cohesion, social inclusion, and social justice, which is seen in how social impact is assessed for the SE (Curtis et al., 2020; Dempsey et al., 2011). This thesis follows this definition of social impact which includes, "changes to a person or people's way of life, culture, community, political system,

environment, health and wellbeing, personal and private property rights, as well as fear and aspirations” (Curtis et al., 2020, p. 6).

Curtis et al. (2020) attempts to create a more nuanced understanding of the social impact in the SE by creating an adaptable framework with key aspects and measurable variables of social impact. The social impact variables are categorized into 4 social aspects which are used to guide the results and discussion in this thesis: trust, empowerment, social justice, and inclusivity. When defined as social aspects in the SE, trust includes transparency to build trust, available data regarding impacts, and mutual integrity for the users and the platforms (Curtis et al., 2020). Empowerment is when users feel like they have a voice and ownership and that they are a part of something bigger, allowing them to influence the governance of the platform (Curtis et al., 2020). Empowerment also includes sharing knowledge and skills as well as inclusive participation so that people have the power to shape their community (Curtis et al., 2020). Social justice includes providing safe spaces so that different groups can participate in the SE as well as having processes that prevent judgment, bias and discrimination (Curtis et al., 2020). Inclusivity is similar to social justice, meaning that there is equal participation where people can share the benefits and feel included and involved (Curtis et al., 2020).

Previous research looking at social impact in the SE has also provided criticisms, considering it as “neoliberalism on steroids”, meaning that social progress promised does not always equate to positive outcomes in the operations of the SE (Murillo et al., 2017). Positive social impacts are not inherent to the SE (Murillo et al., 2017). Furthermore, within the SE, social impact has been evaluated for food sharing platforms which found the need to manage multiple tensions, such as reducing food waste while also addressing social inequalities, but the study did not focus on material goods such as LoTs (Michelini et al., 2020). Relating to social impact, other studies have looked at how the SE online has improved quality of life for individuals in a community (Szymańska, 2021). Socialization of users was also found to be a social benefit for makerspaces in the SE (Singh, 2022).

3 Approaches and Theory

3.1 Social Innovation

My research questions and methods are situated in social innovation research, as organizations in this approach attempt to increase impact to bring about sustainable changes that are system-wide (Lam et al., 2020; Westley & Antadze, 2010). As a definition, social innovation are, “a complex process of introducing new products, processes or programs that profoundly change the basic routines, resource and authority flows, or beliefs of the social system in which the innovation occurs. Such successful social innovation have durability and broad impact” (Westley & Antadze, 2010, p. 2). Fundamentally, social innovation aims to create social impact (Logue, 2019, Chapter 5). Social innovation include the need to scale ideas that create disruptions to existing systems and behaviors, in ways that are not always commercially oriented (Westley & Antadze, 2010). This is seen in many LoTs’ business structures, as they do not seek to rent items to make profit, but establish a broader sharing community (Ameli, 2017; Baden et al., 2020).

Furthermore, framing LoTs in social innovation highlights the system-wide changes that are apparent as LoTs seek to change how people view ownership of items and build a strong sharing community (Ameli, 2017; Baden et al., 2020; Lynch, 2023). Though many LoTs look at addressing environmental problems, affordability and access to goods also play a role in how and why LoTs operate (Ameli, 2017; Baden et al., 2020; Lynch, 2023). Social innovation differentiates itself from social enterprises and social entrepreneurship as social innovation has a system-wide view, as opposed to organizational or interpersonal view (Westley & Antadze, 2010). Social innovation help frame how LoTs address the societal problems they seek to solve. Research suggests that for-profit organizations in the SE do not contribute to social innovation transformations and could potentially worsen social inequality, whereas social innovation are found more strongly in not-for-profit organizations in the SE (Lazzari et al., 2021).

3.1.1 Theoretical Underpinnings of Social Innovation

Social innovation as an approach and practice has not historically been grounded in theory, but later research explored several theoretical perspectives in order to provide a foundation for future research (Mulgan, 2012). Complexity theory as a theoretical underpinning of social innovation connects social innovation with complex adaptive social systems (Matei & Antonie, 2015). Complexity theory is itself complex and a wide-ranging theory (Mulgan, 2012). Feedback loops, chaos, and the idea that solutions themselves are complex and not one-dimensional are key tenets of complexity theory (Mulgan, 2012).

Complexity theory also emphasizes the non-linear way social innovations take shape, and how unpredictable the innovations may be, requiring iterative processes (Matei & Antonie, 2015; Westley et al., 2014). Solutions should be adapted to local conditions and not implemented in top-down prescriptive ways, emphasizing feedback (Mulgan, 2012). Within social innovation literature, Westley et al. (2007, pp. 21–22) suggests 4 guiding points that reflect complexity theory - (1) focus on questions instead of answers, (2) tensions and ambiguities, (3) relationship can provide understanding to the complexity of social innovation, and (4) embrace a mindset that focuses on inquiry and multiple perspectives. Complexity theory can also be considered as an overarching theory to the SE, highlighting complexity and non-causality between different factors such as economic and social considerations (Altinay & Taheri, 2018).

3.1.2 Scaling in Social Innovation

Social innovation literature also considers the implications of scaling (Westley & Antadze, 2010). The focus of scaling in social innovations means scaling towards greater social impact (Santos et al., 2013), which is why it is critical for LoTs to first understand their social impact in RQ1 before looking at scaling in RQ2. Scaling means taking an innovation beyond the original testing stage, and should not be a top-down approach (Rayna & Striukova, 2019). Moore et al. (2015) describe scaling in three ways when advancing social innovation, which this thesis will utilize: scaling out, scaling up, and scaling deep. Scaling out involves an organization trying to impact a greater number of people (Moore et al., 2015). Scaling up is when an organization attempts more systemic change by trying to change laws, policies or institutions (Moore et al., 2015). Scaling deep requires organizations to impact the culture of the society, for example through changing values, beliefs, or mindsets (Moore et al., 2015). Also important to scaling is cross-cutting, where multiple types of scaling intersect (Moore et al., 2015). These types of scaling in social innovation will be analyzed in relation to LoTs through RQ2.

4 Methods

4.1 Research Philosophy

This thesis employs critical realism as a research philosophy. Critical realism recognizes reality yet understands that what is observed is one way of understanding and knowing that specific reality (Bryman, 2012, p. 29). Drawing from the complexity theory underpinnings of social innovation, critical realism helps recognize, “the constructed nature of the representation and acknowledging that such representations

are also real in their consequences” (Byrne & Callaghan, 2022, p. 118). Critical realism also claims that reality exists independent of personal knowledge, whereas science can provide knowledge about this reality (Danermark & Ekström, 2019). In social sciences, researchers cannot claim a completely value-neutral position, therefore a critical dimension exists (Danermark & Ekström, 2019). Experiences, events, and causal mechanisms are key concepts in critical realism research (Bhaskar, 2008; Fryer, 2022). Context is important in critical realism, as it provides insights on what promotes or impedes causal mechanisms (Bryman, 2012, p. 29). Critical realism can work in a wide variety of methods, including case studies (Sayer, 2000). Qualitative research methods such as interviews allow for a critical realist approach to better understand the object of research and social world phenomena (Bhaskar, 2008; Brönnimann, 2022; Sayer, 2000). Critical realism guides my research methods as I aim to understand social impact, but for a specific case of Circle Centre. Using RQ1, I aim to develop a nuanced understanding of social impact for LoTs and use this information to inform research in RQ2.

4.2 Case Description and Selection - Circle Centre Lund

To answer my research questions, I conducted a case study analysis of Circle Centre. Circle Centre (CC) is a LoT located in Lund, Sweden. CC started in 2018 by students at Lund University who aimed to address overconsumption (Circle Centre, 2023). CC is currently located at Petroleumhuset at Stenkrossen, a building hosted by Lunds Kommun, and in 2023 had an inventory of 1465 items (Circle Centre, 2023). CC is open Tuesdays from 17.30-19.00 and Saturdays from 10.30-12.00 (*ABOUT*, n.d.). As of December 2023, Circle Centre has had over 1500 members sign up since their start, with over 600 current memberships (Circle Centre Lund Lend Engine, 2024b). 391 of those members have an active loan (Circle Centre Lund Lend Engine, 2024a). Though CC started with a focus on students, leadership is considering how to expand beyond students (Interview with CC Leadership). CC is entirely volunteer run, with a leadership team split between officers and board (*TEAM*, n.d.). The officers commit one year of volunteer work in a specialized area such as organizing events or distributing loans, which runs the daily operations of CC (Circle Centre, n.d.; *TEAM*, n.d.). The board members volunteer longer-term, running the administration and implementing the long-term vision of CC (Circle Centre, n.d.; *TEAM*, n.d.).

Examining one LoT will provide the platform for evaluation in the community-based context that LoTs operate. Previous LoT studies also utilized case studies (Baden et al., 2020; Claudelin et al., 2022; Deflorian, 2023; Mathiasson & Jochumsen, 2023). Based on complexity theory, case studies enable researchers to understand the “core features and dynamics” of the system, to uncover dynamic and

unpredictable results (Byrne & Callaghan, 2022, p. 121). This case study can still provide opportunities to create “generative rules” instead for other LoTs and allow for feedback (Mulgan, 2012, p. 43). CC has been hosted by Lunds Kommun in Stenkrossen, a cultural center in Lund, but have been outgrowing the space and looking at what options are for scaling (ABOUT, n.d.; Circle Centre, 2023).

4.3 Methodology - A Qualitative Approach

The methodology to answer both RQs is guided by qualitative approaches. To answer these research questions I employed group and individual interviews, a qualitative survey, and a participatory qualitative interview in the form of a workshop. RQ2 builds on RQ1 to expand beyond quantifying social impact to understand what it means to LoTs as well as how the social impact of LoTs will be impacted by scaling, visualized in Figure 2. Qualitative approaches align with complexity theory in social innovation, as approaches are required that are “framed by inquiry, not certitude, one that embraces paradoxes and tolerates multiple perspectives” (Westley et al., 2007, p. 22).

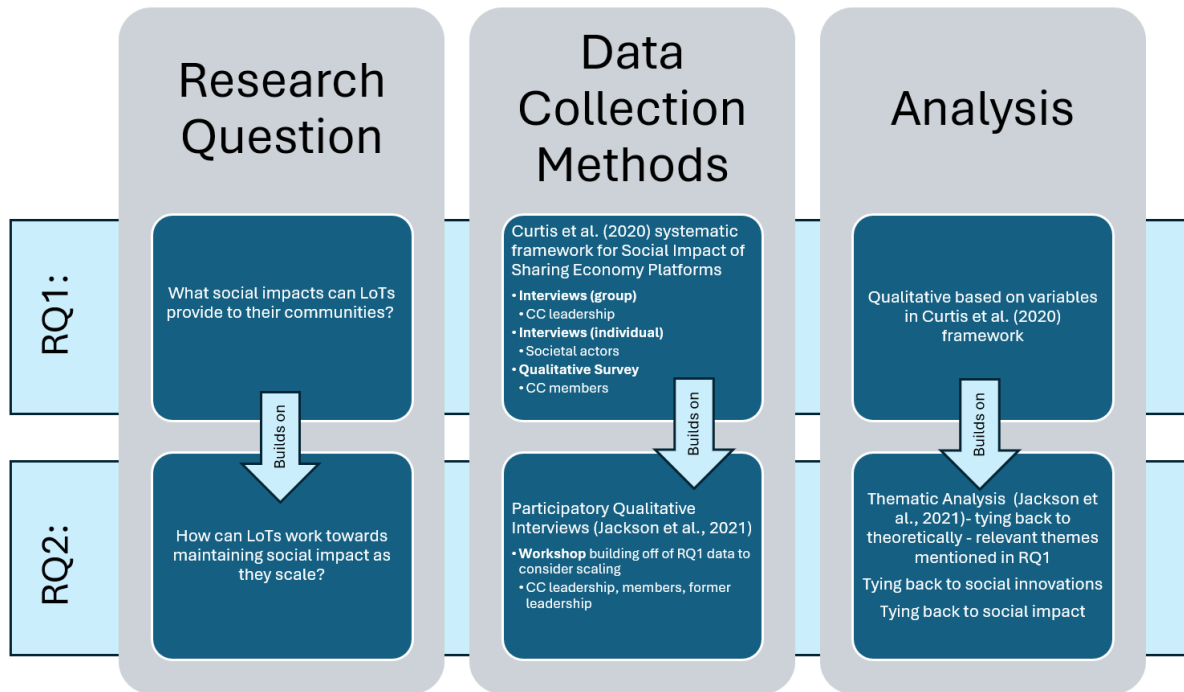


Figure 2. Visualization of Research Process. (Author’s own figure, referencing Jackson et al., 2021 and Curtis et al., 2020).

4.4 Utilizing a Practice-Oriented Tool to Assess Social Impact

To answer RQ1, I adapted the Curtis et al. (2020) framework for assessing social impact in SE platforms. This framework is meant to be adaptable to organizations and their different contexts (Curtis et al., 2020). Since CC is not an online platform, but still an organization operating in the SE, not all of the framework variables were applicable, specifically questions relating to online platforms such as identity verification. All variables mentioned in the framework were considered to start, and then systematically excluded based on applicability. Curtis et al. (2020) recommends data collection through methods such as surveys, interviews with society actors, and interviews with the owners and resource users. This also prioritizes impact from the view of the community the LoT seeks to serve, reflecting social innovation in prioritizing active contributions from those the social innovation serve (Westley & Antadze, 2010). In the context of assessing the social impact of the SE, Curtis et. al. (2020) identifies the actors needed to assess the social impact, including resource owners and resource users. Resource owners are the actors who supply the resource (Curtis et al., 2020). Though CC does not have different resource owners lending their own items, there are leadership and voluntary positions of members who run CC, coordinating the loans, returns, and membership outreach of the library (*TEAM*, n.d.). Resource users then are on the demand-side of the resource (Curtis et al., 2020), such as the members who loan items. Curtis et al. (2020) also recommended data collection from the sharing platform, but when looking at the website coordinating loans for CC (Lend Engine), this data (such as anti-discrimination training or number of jobs created) was not being tracked by the platform.

4.4.1 Survey of Circle Centre Members

To collect resource user data for the social impact framework, I implemented a survey for CC members that includes responses on a Likert scale, indicating based on variables, how strongly or weakly they agree or disagree of CC impacts with regards to variables from the framework. Examples of variables based on resource users are seen in Table 1. To construct the survey, I followed Bryman's (2012) social research methods literature. Bryman (2012) recommends a survey as convenient to respondents. The Likert scale included strongly agree, agree, neutral, disagree, and strongly disagree based on the measuring variables from the Curtis et. al (2020) framework. I reviewed whether the questions answered what RQ1 sets out to know, avoiding ambiguous terms and long questions (Bryman, 2012). Though the Likert scale makes answers more comparable and allows for respondents to easily complete a survey, I made sure to change questions to be both positive and negative to better identify respondents who may just answer "strongly agree/disagree" for all and reduce the amount of leading positive questions (Bryman, 2012). To have a

successful Likert scale question, the questionnaire consisted of questions that were statements, all the items related back to CC, and the scale was consistent (Bryman, 2012).

The questionnaire was piloted and tested by eight people before being sent to members to ensure that the questions made sense and the survey could be completed in under 10 minutes (survey can be found in Appendix 1). My goal for the survey was to get as many responses from CC members as possible. To do this, I printed posters to display a link to the survey in the CC space and worked with CC leadership to email the survey to members as well as post about the survey on their social media. The survey was sent via Google Forms. Volunteers from CC also distributed posters to their networks, and I went to opening hours to encourage members who were stopping by to fill out the survey and share the survey. Though these questions were employed as a survey, they are one part of a larger, qualitative approach and thus will not be used in data analytics, but as a part of understanding the social impact CC provides to their members.

Table 1. Excerpt Table of Variables from Social Impact Framework (Reprinted from Curtis et al., 2020, p 24).

Aspect / Indicator	Measuring Variables			
	Platform	Resource Owner	Resource User	Society
Trust				
Inclusivity				
Social Inclusion	<ul style="list-style-type: none"> Measures to promote the opportunity to participate in the activities of the platform (IwSP) Mechanisms to safeguard review and identity verification system from bias or discrimination among users (IwSP) Anti-discrimination trainings (SPD) Dispute resolution mechanisms to deal with issues of exclusion (IwSP) Number of transactions by e.g. age, race, gender, proportional to society 	<ul style="list-style-type: none"> Perceived effectiveness of platform measures to promote the opportunity to participate in the activities of the platform (IwRO, US) 	<ul style="list-style-type: none"> Perceived effectiveness of platform measures to promote the opportunity to participate in the activities of the platform (IwRU, US) 	<ul style="list-style-type: none"> Perceived effectiveness of platform measures to promote the opportunity to participate in the activities of the platform (Iw3, CS) Possibility of citizens (i.e. non-users) to make suggestions or participate in dialogue
Social Cohesion	<ul style="list-style-type: none"> Practices to promote forming of new relationships (SPD, IwSP) Demonstrated awareness of platform impact on social ties among its users and community (IwSP) 	<ul style="list-style-type: none"> Perceived degree of interaction during the practice of sharing (US) Evidence of forming new relationships (IwRO, US) Perceived strength of social ties within sharing community (IwRO) 	<ul style="list-style-type: none"> Perceived degree of interaction during the practice of sharing (US) Evidence of forming new relationships (IwRU, US) Perceived strength of social ties within sharing community (IwRU) 	<ul style="list-style-type: none"> Perceived impact of platform activities on the sense of community (Iw3, CS, M)
Social Capital	<ul style="list-style-type: none"> Prioritises trust-building mechanisms to promote interaction (IwSP) 	<ul style="list-style-type: none"> Perceived time, effort, resources invested in sharing on the platform (IwRO) Perceived quality of interactions on the platform (IwRO, US) Improved personal outcomes (e.g. health, happiness, well-being) (IwRO, US) 	<ul style="list-style-type: none"> Perceived time, effort, resources invested in sharing on the platform (IwRU) Perceived quality of interactions on the platform (IwRU, US) Improved personal outcomes (e.g. health, happiness, well-being) (IwRU, US) 	<ul style="list-style-type: none"> Perceived impact of platform activities on civic engagement, economic prosperity, consumer safety, and societal institutions (e.g. public transport, media) (Iw3, PD, CS)

Proposed data sources: citizen survey (CS), interview with resource owner (IwRO), interview with resource user (IwRU), interview with sharing platform (IwSP), interview with society actors (e.g. citizens, investors, regulators, and municipal actors) (Iw3), media (e.g. newspapers, blog posts, social media) (M), public data (PD), sharing platform data (SPD), user survey (US).

<https://doi.org/10.1371/journal.pone.0240373.t005>

4.4.2 Group Interview of Leadership

I also interviewed CC leadership (CC Leadership Interview) who are volunteers that commit at least a year to helping operate CC, regarding assessment measures from the groups of platform and resource owner. Platforms are traditionally the technology that connects users to sharing (Curtis et al., 2020) but in this case, the leadership of CC does this by connecting members with items. These questions needed to be adapted to interviewing those who operate CC to get their perspective (the interview guide can be found in Appendix 2). When choosing between similar questions of platform and resource owner, I tended to choose the “platform” question since leadership makes the choices about the platform, as opposed to being more affected by how they lend out items. Though CC utilizes an online lending system to manage loans and reservations called Lend Engine, Lend Engine is not synonymous to CC as an organization. I designed questions for a group interview setting, to encourage discussion from participants’ roles and perspectives, aligning with the benefits of semi-structured interviews which aim to understand an interviewee’s perspective (Bryman, 2012). I chose the group interview approach because the leadership of CC (especially the officer team) are usually specialized in an area of the organization, from managing loans to organizing events. Bringing people together allows for more holistic responses through leadership building on each other’s thoughts and answers, allowing multiple perspectives on the same question and further inquiry. This aligns with the guiding principles of complexity theory in social innovation, as tensions and ambiguities can be unpacked through questioning and multiple perspectives need to be tolerated to better understand a system (Westley et al., 2007).

4.4.3 Individual Interviews of Societal Actor

Regarding the societal actors category in Curtis et al. (2020) framework, I interviewed a representative from Lunds Kommun (Societal Interview 1) that provides a broader overview of social impact in the community beyond CC members. Lunds Kommun provides financial support to CC (*Our Sponsors and Partners*, n.d.), so this municipal partnership can provide insight from a societal perspective. I also interviewed a leader from the organization ABC Sweden (Societal Interview 2), another sustainability-focused organization that CC collaborates with for events. This interview is also considered a societal-actor as the organization representative provided input on how CC impacted the community beyond its own members, including the organization ABC its members. Semi-structured interviews were utilized because this method helps explore how interviewees view the world (Bryman, 2012). Curtis et al. (2020) recommended interviewing as a method for societal actors to understand the social impact from a larger

societal perspective. The framework established by Curtis et al. (2020) incorporates fewer variables of social impact that are specific to societal actors (noted as lw3 in the framework), with many sections being marked as N/A. This is reflected in the fewer amount of questions asked during the interviews (the interview questions can be found in Appendix 3).

4.5 Participatory Qualitative Interviews Through a Workshop

RQ2 builds off of RQ1's answer through a participatory qualitative interview (Jackson et al., 2021). Designed as an interactive workshop, participants draw together (Figure 3) and design the future CCs. This method builds on RQ1 through the results from RQ1 informing some of the workshop. Participatory qualitative interviews also align with social innovation and complexity theory, as this method is nonlinear and chaotic, allowing for multiple viewpoints and centering the participants (Jackson et al., 2021; Westley et al., 2007). Furthermore, participatory approaches in research are supported by complexity theory, justifying that, "the recognition of participation as the basis of knowledge creation represents a significant departure from positivism, requiring rethinking the status and purpose of evidence" (Byrne & Callaghan, 2022, p. 123). The workshop was advertised on CC's social media, to survey participants, and with posters. Societal actors were also invited but did not attend. Nine people attended the workshop, with 2 general members, 1 former officer, 3 officers, and 3 board members (Appendix 4 contains a summary of participants).



Figure 3. Picture of Workshop Space and Drawings. (Author photo, 23 March 2024)

The workshop approach allows stakeholders to directly contribute to the future impact of CC, giving the direction on its social impact and what needs to be improved. CC leadership provided a draft of a recently-created vision for the future of CC. Through participatory qualitative interviews, this workshop enabled feedback and for participants to contribute through their own experiences and feelings, how they view social impact will be affected in the future visions of CC. Participants were asked to take part in an activity where they draw the future CC based on the vision and goals mentioned in leadership’s draft. The participants were then able to depict how this future looked in their perspectives. This accompanying activity was used to help guide the interview and allow for participants to contribute, following the participatory qualitative interviews approach (Jackson et al., 2021). During this activity, participants discussed impacts they saw, people affected, and how this future vision fits with CC (see Appendix 5 for drawings). This answers the research question in a participatory manner by including the reflections on social impacts and who is affected. Steps for conducting the workshop through the participatory qualitative interview approach are outlined in Figure 4.

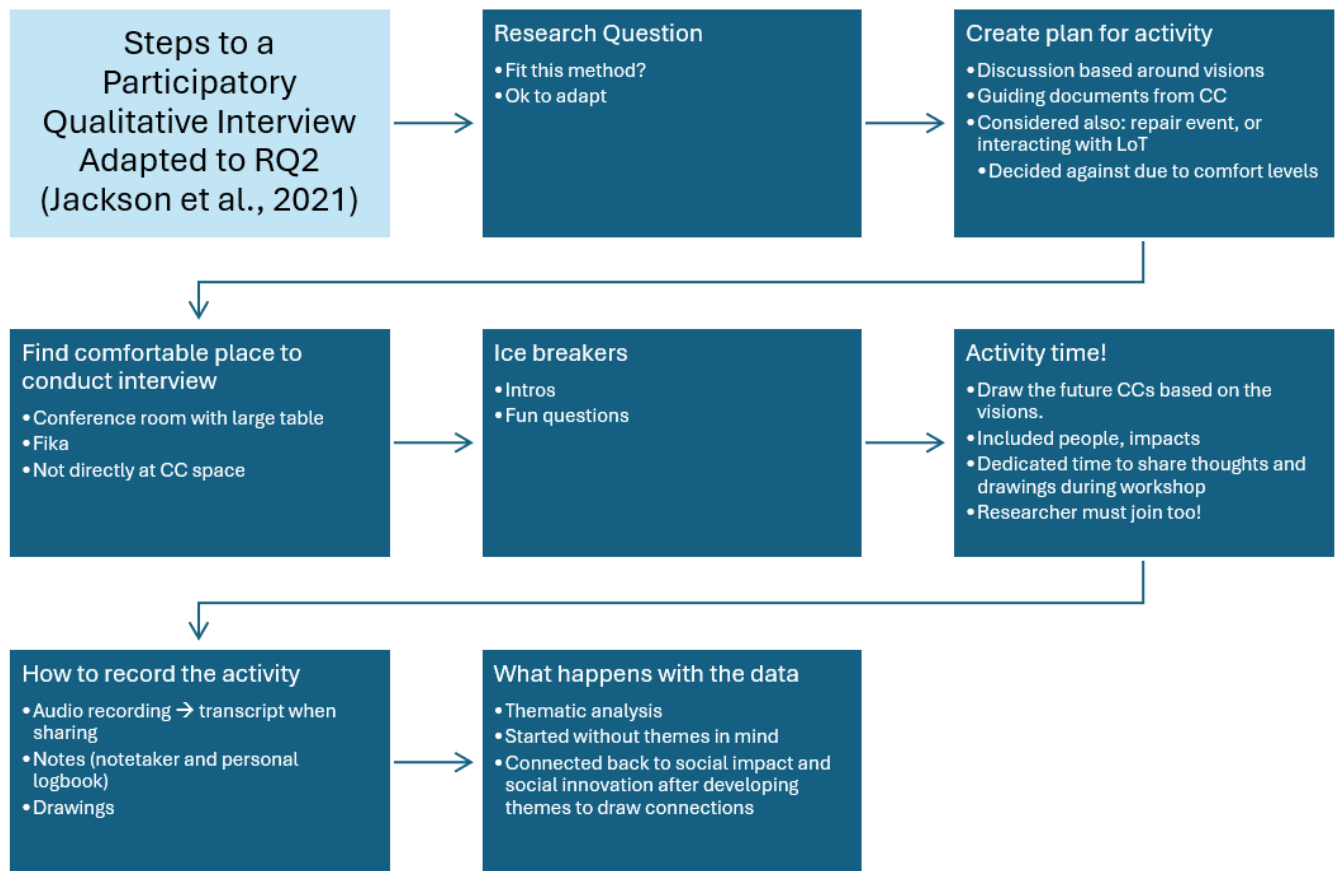


Figure 4. Steps to Participatory Qualitative Interview (Author’s own figure, based on Jackson et al., 2021).

4.5.1 Steps for Conducting Participatory Qualitative Interviews - from Jackson et al. (2021)

Central to the method is an activity or activities (Jackson et al., 2021). I decided to have drawings of visions that were done collaboratively as participants discussed their thoughts (Figure 5). During the activity, participants discussed amongst each other, but I also included time to go around the circle and share thoughts, to make sure everyone contributed. Interviewers are encouraged to also participate in the activities to make the activity feel more relaxed and open to participants (Jackson et al., 2021), so I also drew alongside participants. Though I participated alongside participants to create an egalitarian space, I did not include my reflections or portions of my drawings as part of the analysis. Since this type of interview does not look for direct answers to questions but instead analyzes the conversations and ideas produced along the way, a thematic analysis was employed to find recurring themes discussed (or drawn), with emphasis on the discussions as recommended by Jackson et al. (2021). I followed the critical realist approach to thematic analysis (Fryer, 2022). Once I established the themes relating to social impact, I looked through transcripts, notes, and pictures again to make sure I did not miss other instances of this theme and tracked quotations and interpretations of these instances in a dataset. In the analysis, I also draw connections between the types of scaling and the social impacts found.

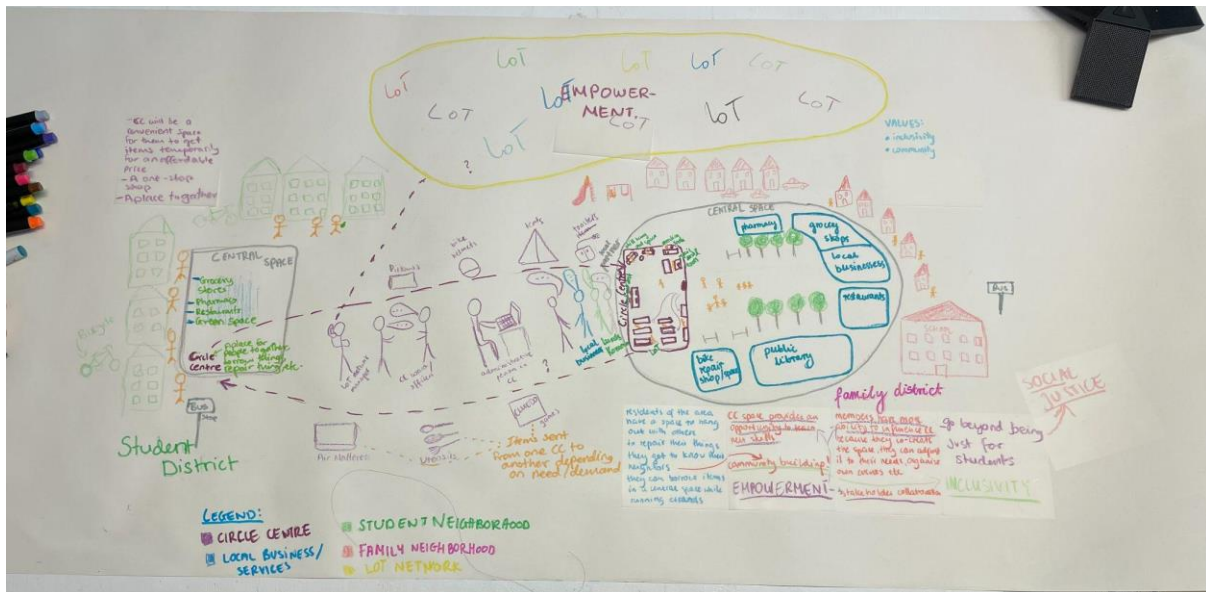


Figure 5. Example of Workshop Activity. (Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024).

4.6 Research Ethics

I employed several practices to ensure informed consent so that participants knew of their rights and participated freely (Bryman, 2012). This included introduced the purpose of my research both verbally at the start of interviews and the workshop as well as in writing. I also included information on how I would be collecting and storing research data, participant anonymization, and the ability to not answer questions and leave at any time. Participants also received an information sheet, and signed a copy that I kept and stored safely as well as verbal agreement when beginning the interview. One participant (Societal Interview 2) chose to provide verbal consent before and at the beginning of the recording instead of signing, and still received a copy of the information to ensure informed consent. I also included information at the beginning of the member survey, seen in Appendix 1. Participants were also provided with my contact information so they could reach out with questions or concerns.

4.7 Limitations of Methods

I identified several limitations, which I addressed during the research process. The survey was developed to get as many members' input as possible. However, membership engagement was not strong and only 45 members filled out the survey despite reminders through email, social media, posters, and even during opening hours. However, the point of the survey is to inform and provide a wider picture of how members are affected by CC, with a focus on social impact. It is also important to note that members may be international students who stay in Lund a short time, as CC actively works with partners to help international students at Lund University loan items (Circle Centre, 2023). This means they may still be a member despite not being in Lund currently. From January 2023- December 2023, there were 391 members who loaned items (Circle Centre Lund Lend Engine, 2024a).

Conducting a group interview can provide some challenges, such as ensuring that people are not being influenced by group norms (Bryman, 2012, p. 518). Though this cannot be completely mitigated, I made sure at the beginning of the interview to express that the participants will remain anonymous, as well as trying to direct questions to people's direct experiences as a part of leadership rather than building agreement. CC leadership already had methods for fair participation by indicating whose turn it is to speak through hand gestures. It is also important to note that board members comprised of six out of the seven interviewees. The interview was scheduled for the time that worked best for both officers and board members, but the same day, 2 officers canceled their participation prior to the interview. This potentially

influences results as board members oversee the longer-term vision, while officers handle day-to-day operations. However, current officers were also present in the visioning workshop where they also had the opportunity to provide feedback and insight.

The workshop presented some limitations with regards to the methods. The recording of the workshop, drawings, and taking of notes were able to capture the key points, but it's possible that some smaller discussions between participants were lost when conducting the analysis as I was unable to transcribe the multiple simultaneous discussions. I made sure a notetaker was present who could take notes of discussions outside of the time we went around to share our thoughts. Furthermore, the combining of leadership with general members, as well as people discussing and presenting with one another could potentially introduce power dynamics, as members might defer to leadership's thoughts. I attempted to mitigate this by ensuring that everyone speaks when sharing. I also made sure that general members could be some of the first to share so that they did not feel as influenced by leadership's ideas.

4.7.1 Positionality and Previous Work with Circle Centre

It is important to acknowledge my positionality in the research process. I became involved in CC in 2023 as an officer. In 2024, my term as an officer ended and I chose to step back from any leadership positions when conducting research. Though my previous involvement in the organization may change my bias or feelings towards the organization and SE, I also have been able to gain more insight into the SE by being directly involved. In fact, it was my involvement with CC that inspired me to explore this thesis topic. My experiences allowed me to be more direct when interviewing leadership, as I already experienced some of the struggles of the organization. I also need to understand my positionality in terms of the dynamics of interviews. For example, within the workshop, I knew all participants. Though this created a friendlier space in the workshop as all participants were familiar with at least one other person, this still changes the relationship between interviewer and interviewee. I made sure at the beginning to describe my research and purpose for the workshop to ensure that participants knew my positionality as well as the research aims and focus.

5 Results and Analysis

5.1 RQ1 – Social Impact of LoTs

After evaluating the interviews and survey, it is clear that CC provides social impacts, but stakeholders are affected differently. The analysis also uncovered opportunities to increase social impacts. When conducting the social impact assessment through the idea of social innovation, it's clear that the social impact of CC cannot be condensed to one simplistic answer or one number for social impact (Pitkänen et al., 2023), but this approach provided a holistic assessment of the social impacts CC provides from multiple stakeholders. In total, 45 members filled out the CC member survey. Members overwhelmingly saw CC as an inclusive and transparent space but fewer agreed that they were empowered or had influence on CC. Leadership discussed strong positive social impacts of CC as well as current weaknesses and areas for future improvement. Leadership has mentioned that they have considered many aspects of trust such as user satisfaction, or other social impact variables, but have not created formal mechanisms to measure this or other variables such as dispute resolution (CC Leadership Interview). The societal actor interviews yielded answers to their perspectives on CC's contributions to societal impact in Lund. Both societal actors have reported working with CC in the past, bringing up tangible examples when providing answers on their thoughts of social impact such as CC's presence in the international community in Lund (Societal Interview 1 and 2). The following results and analysis describe the impacts found through the interviews and survey, presenting the results (summarized in Table 2) through the 4 aspects of social impact: trust, empowerment, social justice, and inclusivity (Curtis et al., 2020).

Table 2. Summary of Social Impact of LoTs according to Curtis et al. (2020) framework.

Aspect	Indicator	Leader Results	Member Results	Societal Actor Results
Trust	Satisfaction	Informal ways to measure	Members satisfied (44/45)	<i>(did not ask)</i>
	Transparency	<i>(did not ask)</i>	Perceived as transparent (42/45)	There is access to what data is available Annual report is helpful Not always clear communication
	Dispute Resolution	Rules followed Informal dispute resolution	Helpful when problems occur	<i>(did not ask)</i>
Empowerment	Power to Influence	High power to influence as a leadership team member	Less ability to influence as a member (34/45 are neutral)	Depends on actor - reports of both experiencing ability to influence as well as feelings of less ability to influence despite wanting to help
	Personal growth	Reported lots of personal growth	Less evidence of personal growth (14/45 agree that they learned a new skill)	<i>(did not ask)</i>
	Job creation / financial independence	Very affordable, especially to students	Saved money (43/45 agree) and access to new resources (41/45 agree) BUT not strongly helping with financial independence (7 disagree and 19 are neutral / 45)	Very affordable, especially to students Too affordable?
	Stakeholder collaboration	Encouraged but formal mechanisms missing with volunteers Tried but low success (ex: annual meeting)	Less feelings of openness to collaborate	Yes and no depending on actor and form of collaboration
	user engagement	<i>(did not ask)</i>	Less feelings of engagement	<i>(did not ask)</i>
Social justice	distributive justice	Equal access but not equitable Affordable Mainly students Burnout of volunteers?	Strong feelings of fair distribution Benefits beyond saving money	<i>(did not ask)</i>
	cultural justice	Very open Fits into Lund's culture	Very inclusive space Fits into Lund's culture	<i>(did not ask)</i>
	associational justice	Accessibility - improvements for space but accessible through affordability Participation pathways - have tried (varying formal mechanisms) but no success	Issues with opening hour time (25/45), less with location (11/45)	Noticed sustainability-student "bubble" Participation through leadership being students, community members
	fairness	Believes it is to provide fair for everyone	Strong feelings of fairness (38/45 agree)	Depends -thinks price is too low - higher could mean more resources to help more Very affordable but too focused on students?
Inclusivity	social inclusion	See as open and inclusive, but no formal mechanisms to safeguard	Considers inclusive space (38/44 agree) Not always effective in promoting opps to participate	Inclusive in bringing people to the physical space Opportunity to be more inclusive outside of student/international bubble?
	social cohesion	Strong social cohesion for leadership and forming relationships and community	Less strong evidence of forming relationships and building community (19 haven't formed new relationships through CC, 10 are neutral)	Space for international community Seen strong community created
	social capital	Invested personal effort and time Improved personal outcomes	Some improved outcomes but not as strong Less time invested (26 haven't invested a lot of time, 11 are neutral out of 45 respondees)	Improves access to resources

5.1.1 Social Impact - Trust

Overall, CC was perceived as trustworthy, with 44/45 members agreeing or strongly agreeing that they are satisfied with loans and events provided by CC and 42/45 members agreed or strongly agreed that CC is transparent (CC Member Survey). When considering trust from the leadership perspective, CC leadership considers users' satisfaction, but does not implement formal mechanisms to measure, instead relying on face-to-face interactions when members pick up or return loans or concerns brought to them by email (CC Leadership Interview). On the other hand, CC leadership views members trustworthy as well, reporting most members follow rules and expectations (CC Leadership Interview). From a societal perspective, issues can arise with contacting CC due to the more-frequent turnover and distillation of responsibilities among different leadership teams (Societal Interview 1). Societal actors report that they are able to access what data or information is available, viewing CC's transparency through the annual report and what was available through CC's website (Societal Interview 1 and 2).

5.1.2 Social Impact - Empowerment

Empowerment was felt very strongly by CC leadership with many reporting that they felt the ability to influence the organization as a leader and have felt empowered through their work (CC Leadership Interview). However, members felt this less strongly, with 34/45 members feeling "neutral" about their ability to influence CC (CC Member Survey). Leadership reported high levels of personal growth, but also acknowledged the struggle of empowering general members who are not a part of the leadership team (CC Leadership Interview). Only 14/45 members taking the survey reported that they have learned new skills at CC (CC Member Survey). Leadership does not receive volunteer support from many general members, due to a lack of formal mechanisms to recruit, train, and continuously engage members who want to volunteer (CC Leadership Interview). Additionally, leadership piloted an annual meeting last year where they tried to encourage member sign-ups, but no general members attended the meeting (CC Leadership Interview). Members overall did not respond strongly to feelings of engagement, or ability to influence the organization, aligning with the struggles leadership mentioned (CC Member Survey). However, members did report financial empowerment through saving money (43 agreed or strongly agreed) and access to new resources (41 agreed or strongly agreed) (CC Member Survey). Societal actors felt differently, with one responding that stakeholder collaboration was very strong, bringing up examples of previous events and collaborations (Societal Interview 2). On the other hand, a societal actor expressed that they have reached out about potential collaboration and opportunities before but that leadership

has not always been able to implement them, which potentially discourages providing new ideas (Societal Interview 1).

Struggle of Engagement from Circle Centre Members

A key result that ties into the empowerment aspect of social impact of CC and other LoTs was the struggle to engage members. Despite members being a central part of CC's mission, there was low engagement from CC members who are not a part of the leadership team. Despite attempts to reach as many members as possible, only 45 members responded to the survey and 2 members with no current or former leadership attended the workshop. Many of the results point to the importance of engaging members and giving members who are not a part of the CC leadership team a voice to be able to shape CC and feel welcomed. This is difficult to do if members are not engaging or hard to reach. Of the 45 members who responded, 25 (or about 55.6%) of them have **not** been to any events hosted or co-hosted by CC. This also aligns with the CC leadership interview who mentioned they struggled getting feedback about members' experiences with loans for their annual report and the lack of members at the annual meeting (CC Leadership Interview).

5.1.3 Social Impact - Social Justice

From the member perspective, 38/45 members responding to the survey agreed or strongly agreed that CC is fair in loan distribution (CC Member Survey). 40 members agreed or strongly agreed that there are benefits beyond saving money (CC Member Survey). Both members (44/45 agreed or strongly agreed) and leadership responded positively that CC fits into Lund's culture (CC Member Survey, CC Leadership Interview). In terms of accessibility, members viewed the opening hours as more of an issue, with 25/45 agreeing or strongly agreeing that they have trouble making it to CC's opening hours due to the times, where only 11 had issues with the location (CC Member Survey). A smaller number (5), reported that they have trouble contacting CC at times, but was brought up also by societal actors (CC Member Survey, Societal Interview 1). On the other hand, CC leadership highlighted how CC creates accessibility through affordability, and views the organization as equal but not sure about equity (CC Leadership Interview). Similarly, societal actors considered the price to also be accessible (Societal Interview 1 and 2), but one interviewee considered if there could be alternative pricing schemes or higher prices to invest more resources into the organization which could allow for more distributive justice (Societal Interview 1). Leadership also brought up struggling with participation pathways and attempts of engagement or formal mechanisms (CC Leadership Interview). They also discussed the risk of burnout of volunteers, as a

completely volunteer-run organization (CC Leadership Interview). Societal actors also mentioned the risk of having an entirely volunteer-run organization and being dependent on a few very active volunteers (Societal Interview 1).

5.1.4 Social Impact - Inclusivity

Bringing people together to a physical space was seen more strongly by societal actors and leadership than members (Societal Interviews 1 and 2, CC Leadership Interview). This was valued by societal actors and leadership as a way to create social connections and community. When asked in the survey, 21 respondents were neutral and 12 disagreed out of 45 responses that CC has helped them create stronger ties in the Lund community (CC Member Survey). CC leadership viewed themselves as investing a lot of personal effort towards CC (CC Leadership Interview) while this was not reported strongly by CC members. Out of 45 responses, 26 reported not investing a lot of time, and 11 reported as neutral (CC Member Survey). However, both members (38/44) and leadership considered CC to be inclusive as a space (CC Member Survey). Societal actors reflected on the inclusivity CC provides as an international space in Lund and the organization's ability to bring people to a physical space to connect (Societal Interview 1), but also reflected on opportunities to be more inclusive beyond students, through a wider variety of inventory (Societal Interview 1) or outreach (Societal Interviews 2).

5.2 RQ2 - Scaling of LoTs' Future Impacts

Now that social impacts have been identified, the next step is considering how LoTs can scale to maintain the positive impacts they already provide while increasing impacts. Scaling for greater social impact is a key step in the life cycle of social innovations (Santos et al., 2013). Building off of RQ1, I identified themes from the workshop that highlight how CC can cultivate social impact. Impacts mentioned in RQ1 were discussed and drawn by participants as they explored future impacts of CC. Through the workshop, I identify how participants view CC as scaling based on the different scaling types in social innovation literature. I then identify their future impact as they scale, establishing how these impacts build off the present-day findings.

5.2.1 Scaling Types Identified

Aligning with social innovation literature, scaling out was commonly seen in the visions and participants' reflections in the workshop, with a focus on increasing the CC through creating new libraries in different neighborhoods, and then creating a network of LoTs (Workshop Participants 1, 2, 3, 4, 5, 9). Scaling out

to impact more people also came up through creating longer opening hours, allowing more people to attend (Workshop Participants 3, 9), and creating more events to attract a wider audience (Workshop Participants 1, 4, 5, 9). Scaling out also includes expanding beyond students, a common theme during the workshop, including a wider audience such as families (Workshop Participants 1, 2, 3, 9). Scaling up was not as apparent in the workshop, but did come up during discussions of collaborating with politicians or on an institutional-level, including spreading the idea of CC to institutions such as schools through presentations (Workshop Participants 1, 6, 9). Scaling deep was identified through discussions and drawings that focused on mindset shifts for people who may not *need* to participate in loaning, asking questions such as “how do we get them [the most affluent] interested in sharing?” (Workshop Participant 5). There were examples of cross-cutting as well (Moore et al., 2015), where different strategies for scaling are combined, such as partnerships and collaborations with other LoT networks which would increase sharing, scaling out and scaling up to embed LoTs in society (Workshop Participant 9). Furthermore, another cross-cutting example would be to seek alternative resources or broaden the problem frame (Moore et al., 2015). This could be seen in suggestions such as to make CC into a resource hub, which expands its operations beyond loans (Workshop Participant 5).

5.2.2 How the Future Circle Centre Can Cultivate Social Impact

Building off reported social impacts from CC from RQ1, empowerment and inclusivity were brought up frequently with tangible examples, while discussions of social justice were also present. Only two participants explicitly drew and reflected on aspects of trust in social impact (Workshop Participants 5, 9). Several themes emerged as key characteristics CC needs to consider, when discussing future impacts that also connect with the types of scaling. These include the physical space, connections, collaborations, and prioritization of local needs.

Maintaining the Physical Space of LoTs

When drawing and discussing the future of CC and its future impacts, the physical space of LoTs was a recurring focus among participants, brought up multiple times as participants considered the future CC and how CC can maintain its impact. The space was emphasized throughout discussions and the drawings. The space was not just talked about in terms of borrowing, but also in terms of meeting, organizing events, and participating in other activities such as repairing (Workshop Participants 3,4,6,9). The physical space CC occupies was viewed as a way for people to meet and build community. For example, one participant talked about the space in their drawing as, “here is more like a LoT part and here is more like a place to

hang out and chill and have fika together” (Workshop Participant 1). The space was also suggested as a way to provide direct feedback when people returned items (Workshop Participant 9). The discussions of space focused less on the inventory space, but the space that people are connecting and creating, as seen in Figure 6. Another example of the focus on space is when Workshop Participant 1 and Workshop Participant 9 identified different places in CC such as mending and repair, in addition to a desk where items are checked out.

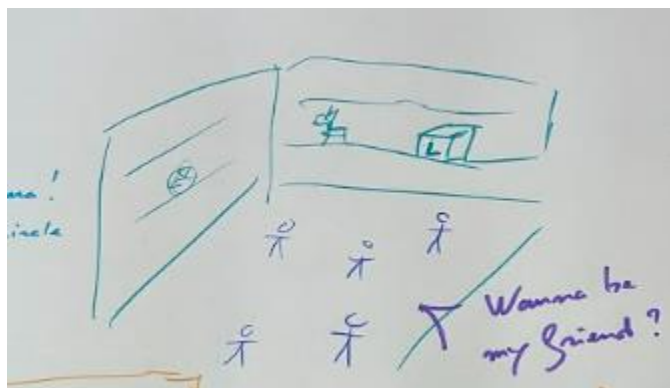


Figure 6. Part of Drawing E1 Depicting Kids Playing Together With Loaned Toys. (Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024).

Space was also discussed in terms of accessibility. Drawing B from Workshop Participants 3 and 4 emphasized extended opening hours (Figure 7), having materials in multiple languages where Workshop Participants 1 and 6 discussed the location of future CC, with ideas for it to be closer to the members and accessible by different modes of transportation.



Figure 7. Part of Drawing B Showing Longer Opening Hours. (Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024).

Prioritizing Connections and Community-Building

Building community and connecting among members was also brought up frequently. Participants talked about people meeting and talking to one another, but also about skill-sharing and “producing together” (Workshop Participant 6). Visions depicted people interacting, not just with the space, but with each other. This included people repairing or learning together (Drawings B, D, E), as well as references to strengthening the neighborhoods through the connections people made at CC (Drawing A). For example, one participant noted that the future CC would “be a place for people to like hang out as well and build the community and get to know their neighbors” (Workshop Participant 1) and “a place for them to gather” (Workshop Participant 2). This was also seen and depicted in drawings as people coming together to garden or eat dinner (Drawing D) or kids playing together in a toy library space (Drawing E). Some workshop participants described community building through different events and learning new skills, seen in Figure 8 (Drawing B), while others talked about sharing feelings (Workshop Participant 6) and others talked about people just hanging out (Workshop Participant 1).



Figure 8. Part of Drawing B Depicting People Learning Together at CC. (Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024).

Building community tied into the physical space of LoTs during the workshop, as participants mentioned the use of space to create relationships in the local community, one building off of the future space saying, “It’s a one-stop shop, and a place for them to gather” (Workshop Participant 2) or another specifically detailing that the space is not just for loans but, “it would be a place for people to like hang out as well and build the community and get to know their neighbors” (Workshop Participant 1). Even though lockers were mentioned as an idea of ways to pick up items outside of opening hours (Drawing B, Workshop Participant 3), the participants who brainstormed this also thought about the benefits the space of a LoT provides, such as a place to learn new skills (Workshop Participants 3 and 4).

Collaboration With External Stakeholders and Organizations

Collaborations were also brought up, including collaborating with other LoTs to create a network (Workshop Participants 1, 9). This idea included loaning items between LoTs depending on need (Drawing A) and creating collaborations within the sharing space of LoTs (Workshop Participants 1, 5, 6, 7, 9). Collaborations with other LoTs were also discussed in terms of exchanging ideas and networking (Workshop Participant 9). Additionally, collaborations among other community organizations and businesses were also discussed, such as collaborating with the municipality, universities (Figure 9), and other local businesses or organizations (Workshop Participants 5,6,7,9). These imagined collaborations included sharing resources and organizing events. Collaborations could also become an opportunity to include more community members (Workshop Participant 3). Current collaborations were also referenced that participants imagined strengthening in the future (Workshop Participant 7).

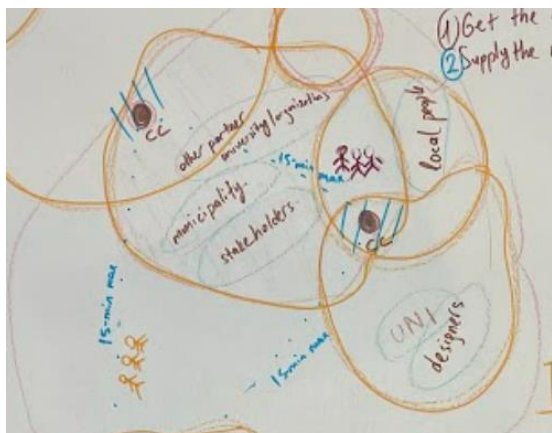


Figure 9. Part of Drawing D Depicting Collaborations. (Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024).

Prioritizing Pluralism and Local Needs to Maintain Impact

Many participants focused on aspects of the future vision that dealt with pluralism, basing what was right for each CC on the local needs of the organization, with one participant saying “It’s supposed to be bottom-up, not top-down” (Workshop Participant 6). For example, participants color-coded their drawings depending on the type of LoT, such as whether the LoT is for students, or families, (Drawing A). Additionally, participants suggested that member-led initiatives as well as having members co-create the space is a way to allow LoTs to scale while considering local needs (Workshop Participant 1). This also ties into social justice aspects, as two participants mentioned cultural inclusivity and how to provide items

that people value differently (Workshop Participants 3 and 4). CC was drawn in one future vision as a central location that connected to other organizations and community structures, as seen in Figure 10 (Drawing A).



Figure 10. Part of Drawing A Depicting Location of CC in Relation to Other Community Structures (Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024).

Finding Circle Centre's Impact Beyond Loans and Inventory

When discussing the LoTs, items curated to local needs, or emphasizing cultural inclusion was brought up (Workshop Participant 4). However, many more ideas were provided for ways in which LoTs acted beyond loans, for example by providing a place for people to share ideas (Workshop Participant 9), holding repairing sessions (Workshop Participant 4), and holding events for people to gather, to, as one participant said, “So it’s about like togetherness and growing and sharing together. Also sharing feelings, not just skills” (Workshop Participant 6).

6 Discussion

This section explores how the results answer the research questions, and how this research ties back to the social impact framework as well as social innovation scaling and complexity theory. Situated in social innovation and complexity theory, I revisit some guiding principles and key tenets of complexity theory in relation to social innovation (Mulgan, 2012; Westley et al., 2007). In the last part of this section, I reflect on the implications of the research and next steps for future research.

6.1 RQ1 - What Social Impacts Can LoTs Provide to Their Communities?

Answering RQ1 revealed that the social impact of LoTs is not a straightforward number, with positive impacts seen more clearly for leadership such as empowerment and inclusivity, while members do not engage as strongly. However, there was broad agreement based on the surveys and interviews of CC as LoTs being inclusive, and the organization is accessible through affordability. Differences emerged when considering the responder's ability to influence CC (empowerment), personal growth CC provided (empowerment), and ability to make connections (inclusivity). There was also overlap between member surveys and leadership interviews of membership engagement as an issue, also found in issues with engaging members for this research process. Through answering RQ1, I found that stakeholders viewed CC's impact differently, and had diverse ideas of how CC impacted them and others. These results align with the previous research that concluded non-profit organizations in the SE can still create social impact, as compared to for-profit businesses (Lazzari et al., 2021). These results build off previous research that focuses on the environmental sustainability aspect of LoTs (Ameli, 2017; Claudelin et al., 2022; Hiteva & Foxon, 2021; Lynch, 2023) but still identifies key struggles such as reliance on volunteers and emphasis on space (Ameli, 2017; Baden et al., 2020; Deflorian, 2023; Hiteva & Foxon, 2021; Lynch, 2023).

The tool provided by Curtis et al. (2020) was flexible enough that I could adapt it to the case study and the offline nature of CC. This is crucial in complexity theory, as evolution and adaptation to local conditions are prioritized rather than top-down approaches (Mulgan, 2012). When answering RQ1, however, even from societal actors' perspective, the view of social impact was focused on members, and neighboring community such as collaborating organizations. Tying this framework into the broader theories of social innovation and complexity theory, assessing the social impact from multiple perspectives (Westley et al., 2007) allowed me to look at relationships between stakeholders and those affected, not only comparing but trying to understand why different stakeholders may be affected differently. Furthermore, social innovation focus on who is being impacted (Perikangas et al., 2023), but it was highlighted in these results that those impacted (members) are not always engaged nor do they agree that they feel more empowered through CC (CC Member Survey).

6.1.1 Social Impact Connections to Scaling

In revisiting the 4 aspects of social impact provided by Curtis et al. (2020), I look at how these current and future impacts relate (Figure 11), with a focus on relationships as emphasized in complexity theory (Westley et al., 2007).

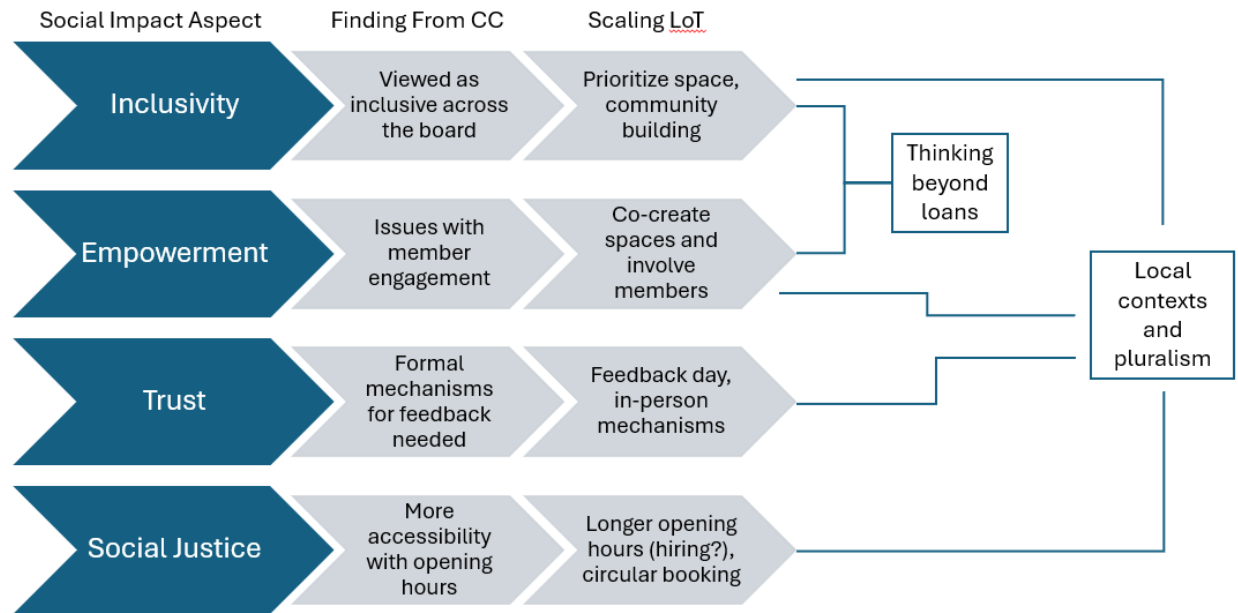


Figure 11. Connecting Scaling Back to Social Impacts (Author’s own figure, referencing the 4 aspects of social impact from Curtis et al., 2020).

Empowerment

Workshop participants included ideas and thoughts on how empowerment can be strengthened in the future CC, building off of RQ1s findings of the difference of empowerment between leadership and members. Physical space to organize events and participate in other activities ties into the social impact of empowerment (Curtis et al., 2020), where members can learn new skills through LoTs. Member engagement was seen as a struggle (CC Leadership Interview, CC Member Survey). Through co-creating the spaces and involving members to lead initiatives, members can become more engaged and empowered. The need for more membership engagement and empowerment also aligns with previous research of LoT users asking for more workshops and social interactions (Ameli, 2017). Community building and creating social connections also ties into empowerment, as members could contribute to shaping CC through the community they build.

Inclusivity

Inclusivity was emphasized within the workshop discussions to build off the existing inclusivity of CC and how to broaden this impact even more. The physical space of CC ties into inclusivity, where members can connect with others through meeting in-person. Having a physical space to meet and hold events and build connections matches with previous LoT research of the importance of local space (Baden et al.,

2020). Building connections also addresses the RQ1 findings regarding social impact aspects of inclusivity, as members reported less experiences of forming new connections compared to leadership's responses in the interviews. Furthermore, the strengths of inclusivity mentioned in social impact, where CC is seen as inclusive by leadership, members, and societal actors, can continue to be built through prioritizing the space and community-building.

Social Justice

Social justice was discussed through a variety of indicators such as associational justice, distributive justice, and avoiding exploitation of volunteers (Curtis et al., 2020), building off of the RQ1 findings of social impact for LoTs. The need for physical space also ties into social impact variables from Curtis et al. (2020) of accessibility, ensuring that people are able to access the space, not only in regards to physical accessibility but also in terms of location and opening hours. As a part of physical space, accessibility was also brought up frequently, and in different ways, which is a part of the social impact aspects of social justice through associational justice (Curtis et al., 2020). Accessibility through multiple languages (Drawing B) promotes cultural inclusion, a facet of social justice impact (Curtis et al., 2020). Longer opening hours (Drawing B) allows more accessibility of the location (Curtis et al., 2020).

Local contexts also ties into the social justice aspect, where items can be distributed fairly in a bottom-up approach, and inclusivity and empowerment by engaging the local community and letting the local community and members determine their needs (Curtis et al., 2020). Furthermore, social justice aspects were discussed during ideas of collaborations, with ideas of including organizations that could help bring a wider membership to CC (Workshop Participant 3).

Relationship Between Social Justice Aspects and Hiring for the Local Economy

Part of complexity theory guiding social innovation requires examining relationships, and causality between them (Westley et al., 2007). Discussion of the challenges of being all-volunteer came up during the assessment of social impact from leadership, as a part of social justice considers avoiding exploitation (Curtis et al., 2020), which can include burn-out of volunteers, and was also discussed during the workshop. A societal actor mentioned the risks of being all-volunteer, and subsequently relying on volunteers who may turnover (Societal Actor Interview 1). Furthermore, CC members mentioned issues making it to opening hours because of the time. In the workshop, participants discussed potential for hiring people in order to have extended opening hours (Workshop Participant 9) and other participants

mentioned supporting job creation for local communities (Workshop Participant 6). Hiring employees for CC could mean reducing some of the risks of being all-volunteer while also creating more positive social impact by extending opening hours. This also could provide a better impact in the social justice sphere of social impact, to better avoid burnout and exploitation of volunteer labor and increase accessibility through longer opening hours (Curtis et al., 2020) These struggles align with LoT research that showed better access such as longer opening hours and a more central location are key to increase trustworthiness and user-friendliness of LoTS (Ameli, 2017).

Trust

The aspect of trust was addressed in future visions of CC through expanding opportunities for feedback and co-creation. A societal actor also mentioned the desire to provide feedback and ideas to CC (Societal Actor Interview 1). At the same time, CC members reported low feelings of ability to influence the operations of CC. To better this in the future, workshop participants discussed different ways to provide feedback such as an annual day instead of annual meeting where feedback can be provided during the day, the opportunity to give feedback in-person through interacting with people at the checkout desk or writing in a physical book (Workshop Participant 9). Also, by co-creating the space (Workshop Participant 1), users can create and respond to the services that work for them.

6.2 RQ2 - How Can LoTs Work Towards Maintaining Social Impact As They Scale?

Through the workshop, participants identified a variety of methods CC can employ to cultivate its social impact while scaling, answering RQ2. Through the discussions and drawings, themes emerged of priorities and focuses LoTs can take to maintain social impact while scaling, such as the prioritization of physical space, focus on connections, thinking beyond loans, and adapting to local needs.

The scaling of social impacts and ability to see CC as a system was enabled through the drawings that participants created. Many participants drew the future of CC while including the wider system and its parts, situating CC in a town, connecting CC with other organizations, depicting multiple variations of CC as different LoTs, and including multiple aspects of the future of CC from what kind of building the organization will be in to what kinds of events are happening. This helped view the scaling from social innovation and complexity theory, as the drawings enabled participants to look at the relationships and connections instead of siloing the LoT as a part of a system (Mulgan, 2012; Westley et al., 2007), and discussion focused on the relationship between results of RQ1 and how they inform the scaling of LoTs.

Furthermore, complexity theory focuses on how solutions should be able to adapt to local contexts (Mulgan, 2012), which became a key finding of RQ2, of the need to adapt to local conditions such as a toy library for family neighborhoods (Workshop Participant 9), creating neighborhood-based networks (Workshop Participant 5) and being one part of a larger community network in a central location (Drawing A). Furthermore, with complexity theory embracing multiple perspectives and inquiry instead of being certain (Westley et al., 2007), the wide variety of perspectives and discussion provided in the workshop allowed for the ability to consider different perspectives and also consider more questions and opportunities than one direct path of scaling for LoTs. Social innovation literature also focuses on ensuring that local experiences are heard (Westley et al., 2007; Westley & Antadze, 2010). This can be seen in the workshop discussions focusing on putting people first through co-creating and adapting to local communities.

6.2.1 Scaling Social Impacts

This section discusses how the three types of scaling according to social innovation ties to the future social impacts that workshop participants discussed and drew.

Scaling Out Social Impacts

The focus on local needs and pluralism to have local LoTs ties into scaling out, where a LoT is not simply growing, but replicating so the LoTs remain community-focused (Moore et al., 2015). The pluralism of the different ways CC was adjusted in future visions to adapt to local needs and local impacts of community depict how the scaling out cannot be a top-down approach. Instead, local LoTs can occur that are based on the community's needs. This is tied into one strategy of Moore et al.'s (2015) approach to scaling out, which is to spread principles, so that the local community can adapt the social innovation to its needs and contexts. By putting the members at the center and empowering them to co-create the space, LoTs provide the social impact of empowerment and inclusivity. At the same time, the struggle of member engagement also provides contradiction of the bottom-up approach that was mentioned in the workshop and emphasized through local needs and member co-creation. CC needs more membership engagement to truly co-create for future visioning and plans. Additionally, leadership brought up a need for more formal mechanisms to measure user satisfaction or track dispute resolution (CC Leadership Interview). These formal mechanisms need to still consider the local context when scaling, so that they do not create top-down approaches to social impact. Furthermore, scaling beyond loans indicates the need to think of scaling beyond the library aspect, but the additional elements of CC and the SE that build community and

provide empowerment to members. Scaling out through these non-loan aspects such as through events, or creating community which is not always about loans but could impact more people, which also ties to avoiding mission drift to maintain a community base (Acquier et al., 2017; Acquier & Carbone, 2018) instead of viewing LoTs as just a rental agency.

Scaling Up Social Impacts

Collaboration and support from organizations, municipalities, and businesses highlights the scaling-up of LoTs, where practices can become codified in institutions (Moore et al., 2015). While no participants talked directly about changing laws or policies, the discussion of affecting other institutions tied to partnerships and collaborations. This aligns with previous research that mentions how social innovation tend to focus on scaling out instead of up, despite institutional obstacles they face (Westley et al., 2014). However, scaling up could be a way to engage broader societal impact, and allow for feedback loops from actors outside of CC as scaling up means creating legal, political, and institutional impacts (Moore et al., 2015). Through continued collaboration with municipal actors, as depicted in the workshop, LoTs would be able to influence policies or municipal approaches to sustainable consumption, leading to more institutional support.

Scaling Deep Social Impacts

Space can also be tied to the scaling strategy of scaling deep, where Moore (2015) identifies main strategies of sharing new knowledge and distributed learning platforms. Participants talked frequently about aspects of scaling deep, such as changing the mindset (Workshop Participant 5) or sharing not just knowledge but feelings (Workshop Participant 6), aligning with CC's mission of creating a sharing culture (ABOUT, n.d.). Scaling deep can be seen in the workshop through the emphasis of physical space providing a place for events, knowledge sharing, and ways to learn. The connections and community-building align with the scaling deep concept of changing relationships and values (Moore et al., 2015). The connections and community-building create the relationships and culture that align with CC's mission.

Scaling deep requires considerations of how to scale with impacting cultural roots (Moore et al., 2015), making difficult to depict inner transformations needed in the workshop where participants are drawing tangible spaces and people. However, participants still were able to discuss and draw some of these depictions. Moore et al. (2015) suggests strategies that include sharing knowledge and participatory approaches for this type of scaling, which ties back to member empowerment in social impact and the

need to co-create the space, as discussed (Workshop Participant 1). Scaling deep could impact membership engagement then to create the connections needed to empower members and create more inclusivity.

6.3 Reflections - Implications and Future Research

A key component of complexity theory which underpins social innovation is iterative processes (Mulgan, 2012). LoT leadership can continue to have this visioning session in the future and get feedback for when LoTs such as CC revisit visions and plan for the future. Furthermore, understanding how social impacts change and what to prioritize could provide opportunities as LoTs scale to avoid mission drift (Cossey et al., 2023; Murillo et al., 2017), which aligns with previous research showing that organizations can take steps to avoid mission drift in the SE, such as through collaborations that provide mutual accountability to missions and values of the organizations (Cossey et al., 2023). This thesis then also contributes to research in the larger SE space, demonstrating how social impacts are realized for organizations that operate offline and are not-for-profit. Through this research, stakeholders can better understand aspects of scaling for LoTs through the lens of social innovation to scale and take steps that lead towards system-wide changes (Lam et al., 2020; Westley & Antadze, 2010). Understanding what is needed when scaling to maintain social impacts will help leadership teams in LoTs create priorities in strategies for future scaling and funders can better understand what is needed for impact to be cultivated. This thesis explored the social impacts of LoTs, which was not researched or analyzed in literature before despite the focus LoTs have on community (Baden et al., 2020; Claudelin et al., 2022).

As discussed previously, future research on how LoTs can better engage members would be beneficial to explore as LoTs consider scaling. Understanding how members can continue to view LoTs as community organizations and not just a place to rent items is crucial in keeping members engaged and further empowering members for positive impact. Additionally, future research could focus on co-designing research questions and projects, furthering a participatory approach. This would mean involving members, leadership, and community stakeholders to become further involved in the research process, which enhances social innovation approach (Perikangas et al., 2023). Furthermore, as LoTs scale, further research could look at examining the social impact beyond the direct communities that LoTs operate, including how LoTs impact community members that do not have connections to the LoT.

7 Conclusion

This thesis aimed to understand the social impact of LoTs while also exploring how LoTs can consider social impact in their future scaling plans. LoTs such as CC do provide impacts to the community, empowering leadership and providing an inclusive and affordable space. However, more can be done to engage members and empower them while building community connections for all involved. In order to continue creating and expanding their social impact as they scale, LoTs need to prioritize providing a physical space for members to build community and connections. This requires thinking beyond normal loan operations. Furthermore, this thesis explored how LoTs need to operate based on their local context, including collaborations, and that there is no “one-size-fits-all” approach. The scaling visions of LoTs can provide opportunities to expand and maintain positive impacts for the community, as realized in the workshop.

LoTs are places that not only provide alternative resources to overconsumption but also provide social impacts to its communities. By exploring the social impacts of LoTs and how these impacts can be maintained as LoTs scale, this research contributes to broader understandings of how LoTs as a part of the SE can contribute to positive social impacts, keeping a community focus.

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9 Appendices

9.1 Appendix 1: Member Survey

(note, survey is printed out below as a physical form, but was distributed only electronically in data collection).

5/8/24, 3:07 PM

Circle Centre Member Survey

Circle Centre Member Survey

Thank you for taking the time to answer questions about your experiences with Circle Centre! We want to hear how Circle Centre has impacted you. This survey should take less than 10 minutes to answer.

Your answers are anonymous so please respond honestly. These results will be used in a Master's thesis and will be presented anonymously. All questions in this survey are optional and you can stop taking the survey at any time.

The last section will provide more information on an **optional** opportunity for you to become more involved in what Circle Centre does with these answers, with a workshop based on these survey results in mid-March.

Please contact Sophie Lahey at so1675la-s@student.lu.se with any questions or concerns.

General Information

1. Are you a full-time student?

Full-time student means student is your main occupation, at any education level

Mark only one oval.

Yes

No

2. How many times have you checked out items from Circle Centre?

Please count based on the number of times you've showed up to opening hours (or Arrival Day) to check out items.

Mark only one oval.

None (0)

1-2 times

3-4 times

more than 5 times

https://docs.google.com/forms/d/1r71MvdfpN0cqzdXhBxIGCC0_ZwWaSB_6-XNGSctaiPs/edit

1/13

3. Have you been to an event hosted or co-hosted by Circle Centre?

An example of this would be a craft cafe, repair workshop, open house, clothing swap, educational event, etc.

Mark only one oval.

- Yes
 No
 Unsure

Questions

Please respond based on a scale of "strongly agree" to "strongly disagree". Please note that some questions refer to positive opinions and some refer to negative opinions. You are free to skip survey questions and/or leave the survey at any time.

4. I am satisfied with the services provided by Circle Centre

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

5. I am satisfied with the items I have checked out from Circle Centre

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

6. Circle Centre is transparent in how they operate

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

7. I often encounter problems with loans at Circle Centre

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

8. I often encounter problems with events at Circle Centre

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

9. Circle Centre has been helpful in solving any problems I have had

Mark only one oval.

- Strongly agree
 Agree
 Neutral (or have not had problems)
 Disagree
 Strongly disagree

10. As a member, I have the ability to influence how Circle Centre is run

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

11. I contribute to Circle Centre's mission

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

12. Circle Centre provides opportunities for me to learn new skills

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

13. I have learned new skills through Circle Centre

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

14. Circle Centre provides opportunities to interact with other people

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

15. I have saved money through being a Circle Centre member

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

16. Circle Centre has helped me become more financially secure

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

17. I have access to new resources (such as items or events) through Circle Centre

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

18. Circle Centre is open to collaborate with other community members

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

19. I feel empowered to take action to reduce my consumption after participating in events, workshops, or other activities hosted by Circle Centre

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

20. I believe there are other benefits beyond saving money as a Circle Centre member

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

21. Circle Centre loan items are distributed in a fair manner

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

22. Circle Centre is an inclusive space

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

23. Circle Centre fits into Lund's culture

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

24. I have trouble making it to Circle Centre's opening hours because of the opening hours times

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

25. I have trouble making it to Circle Centre's opening hours because of the location

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

26. I can easily contact Circle Centre

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

27. Circle Centre ineffectively promotes opportunities to participate in sharing activities

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

28. Circle Centre is a place where people from all backgrounds are included

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

29. Circle Centre is focused on students

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

30. Circle Centre has helped me to create stronger social ties with the Lund community

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

31. Circle Centre provides a way to interact with others through the lending process

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

32. I have formed new relationships with others through Circle Centre

Mark only one oval.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

33. I have had negative interactions with other people through Circle Centre

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

34. I have invested a lot of my own time or effort to participate in Circle Centre

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

35. My personal outcomes (such as health, happiness, and and/or well-being) have been improved through Circle Centre

Mark only one oval.

- Strongly agree
 Agree
 Neutral
 Disagree
 Strongly disagree

Other Comments

- 36. Please use the space below if you would like to elaborate on any of your answers or add more thoughts to how Circle Centre has impacted you

OPTIONAL - Opportunity to participate further

If you would like to see the overall survey results and participate further in shaping the future of Circle Centre, please provide your email below. You will be contacted regarding a workshop happening on the 23rd of March where you can bring more feedback and ideas! This will be an opportunity for you to help shape the future of Circle Centre even further! Otherwise, please just click "submit" leaving the next question blank.

- 37. **OPTIONAL:** add your email below if you'd like to be contacted about a future workshop opportunity

Note: your answers will still remain anonymous

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Google Forms

9.2 Appendix 2: CC Leadership Interview Guide

Info:

- Measuring social impact - important to understand on the supply side as well (aka not just members)
 - First part of research - scaling in social innovation theory but need to FIRST understand what impact Circle Centre has to scale it
 - Later a workshop will take place building on TOTAL results... happening 23rd March
 - Based off of Curtis et al. (2020) framework focused on 4 aspects: trust, empowerment, social justice, and inclusivity
- Asking questions based on your expertise / areas / experiences with helping to run Circle Centre
 - Talk about what you're doing, what you'd like to see, what's been done
 - Some questions may be yes or no but feel free to elaborate
- All responses are anonymous
 - Can choose to not answer questions
 - Can choose to end interview at any time.
 - Make sure people sign consent forms!!

Norms for Space:

- Please do not interrupt others
- Give everyone the opportunity to contribute
- We will be discussing a lot of topics, so I might try to guide us back to questions if we get too far away from topic

Beforehand:

- People say their role.... To understand who is being represented here
- How long they have been a part of CC

Member-Focused

- 1) Do you have any processes to measure member satisfaction with Circle Centre?
 - a) If so, what are they?
- 2) Have you had to respond to concerns or issues brought up by members?
 - a) How do you deal with these concerns?
- 3) From your experiences, do Circle Centre members follow the organization's rules (such as the membership agreement)?
- 4) How do you feel CC has impacted social ties between members?
 - a) Do you have stories or experiences of this?
 - b) *Can also ask about contributions with interactions*
- 5) How do you involve other members outside of the leadership team in Circle Centre's operations?
- 6) How do you consider accessibility in Circle Centre's operations?
 - a) Can follow-up ask if they consider language, ease of contacting, flexible opening hours

Beyond Members

- 7) How have concerns brought by non-members been addressed?
- 8) Could you tell me about some of the economic benefits that Circle Centre provides?
 - a) Are they distributed fairly?
 - i) If not, what can be done to distribute these fairly?
 - b) Do these benefits extend beyond members?
- 9) Could you tell me about some of the non- economic benefits that Circle Centre provides?
 - a) Are they distributed fairly?
 - i) If not, what can be done to distribute these fairly?
 - b) Do these benefits extend beyond members?
- 10) How does Circle Centre promote opportunities to participate?
 - a) Do you consider these efforts effective?
 - b) What areas of improvement do you see?
- 11) Does Circle Centre consider how community members from different groups and backgrounds are able to participate?
- 12) Has Circle Centre made efforts to reduce any of the following in its practices?
 - a) Bias
 - b) Discrimination
 - c) Inequity
 - d) Exploitation
 - e) Marginalization
 - f) Deprivation
 - g) Exclusion
 - i) If so, how effective have the efforts been?
- 13) Does Circle Centre fit into Lunds' culture and the sharing community here?

Personal

- 14) Do you have control to influence operations at Circle Centre?
- 15) Have you learned new skills?
 - a) For example, through trainings, experiences, and/or social interactions?
 - b) What kinds of skills?
 - c) Are there other skills you'd like to learn?
- 16) Have you formed new relationships through participating in Circle Centre?
- 17) How have you invested your own effort or time in Circle Centre?
- 18) How have your quality of interactions been with others through Circle Centre?
- 19) What are your contributions to Circle Centre?
- 20) How does Circle Centre foster personal growth for participants (members AND leadership)? (existing initiatives?)
- 21) How have your personal outcomes changed since becoming involved in Circle Centre?
 - a) Example of this would be: (such as health, happiness, or well-being)

9.3 Appendix 3: Questions - Societal Interviews Guide

Interview	Organization	Relationship to CC	Date of Interview
Societal Interview 1	Local municipality	Local municipality provides funding and space to CC	14 March 2024
Societal Interview 2	ABC	Common co-host and co-organizer of events	19 March 2024

Beforehand:

- Measuring social impact - important to understand on the impact on society, not just members but also tricky to “measure”.
 - Want your insights, will go into the larger picture of social impact
- Later a workshop will take place building on TOTAL results...
 - INVITED TO THIS - **23rd March, 2024**
- Asking questions based on your expertise / areas / experiences with Circle Centre
- You do not have to answer questions and can end the interview at any time.
 - Also feel free to say if you don’t feel like you have the insight to answer questions based on your relationship with Circle Centre
- Based off of Curtis et al. (2020) framework focused on 4 aspects: trust, empowerment, social justice, and inclusivity
- Your responses will be anonymous, but will say organization
- Recording? Will take notes
 - Make sure consent form is signed!

Introduction Questions:

- **Role**
- **Years you’ve worked with Circle Centre**
- **Capacity in working with Circle Centre**

CC Questions:

1. Does Circle Centre provide enough information about their impacts (environmental, economic, social)?
 - a. Are you able to find this information if needed?
2. Has Circle Centre been responsive to concerns or recommendations that you have?
 - a. Could you provide examples?
3. Based on your experiences working with Circle Centre, has the organization been responsive to concerns or recommendations that other community members have?
4. Is Circle Centre open to collaborate?
 - a. Why/why not?
5. Does Circle Centre provide opportunities for community members to participate in the organization?
6. How fair is Circle Centre when considering who participates and benefits from the activities?
 - a. What could they improve about this?

7. Has Circle Centre's operations impacted the sense of community for Lund?
 - a. If yes, how? If not, how could they?
8. How effective is Circle Centre in promoting opportunities to lend items?
9. How effective is Circle Centre in promoting opportunities to participate in its events? why/why not?
10. Does Circle Centre impact engagement by community members, economic prosperity, or other societal institutions in Lund?
 - a. if not, what can CC do to create these impacts?
11. Have you seen any other impact that Circle Centre has made in Lund or Skåne beyond the organization?

ADDITIONAL QUESTIONS:

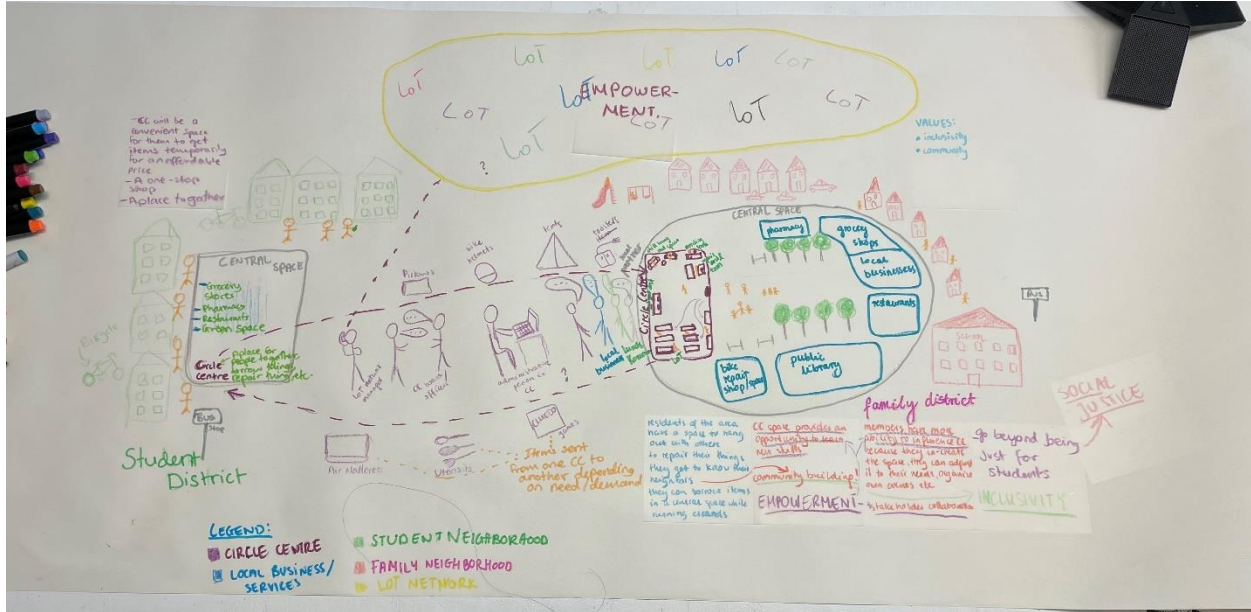
12. Do you have ideas or suggestions on what can be improved about Circle Centre's impact?
 1. Also, What is going right?
13. Any other thoughts or questions?

9.4 Appendix 4: Workshop Participants

Participant	Relation to CC	Drawing
P1	current board member, former officer	A
P2	current member	A
P3	current member	B
P4	current board member, former officer	B
P5	current officer (recruited mid-year)	C1 / C2
P6	former officer, current member	D
P7	current officer	C1 / C2
P8	current officer (recruited mid-year)	D *NOTE: Left before group discussions started
P9	former officer, current member	E1 / E2

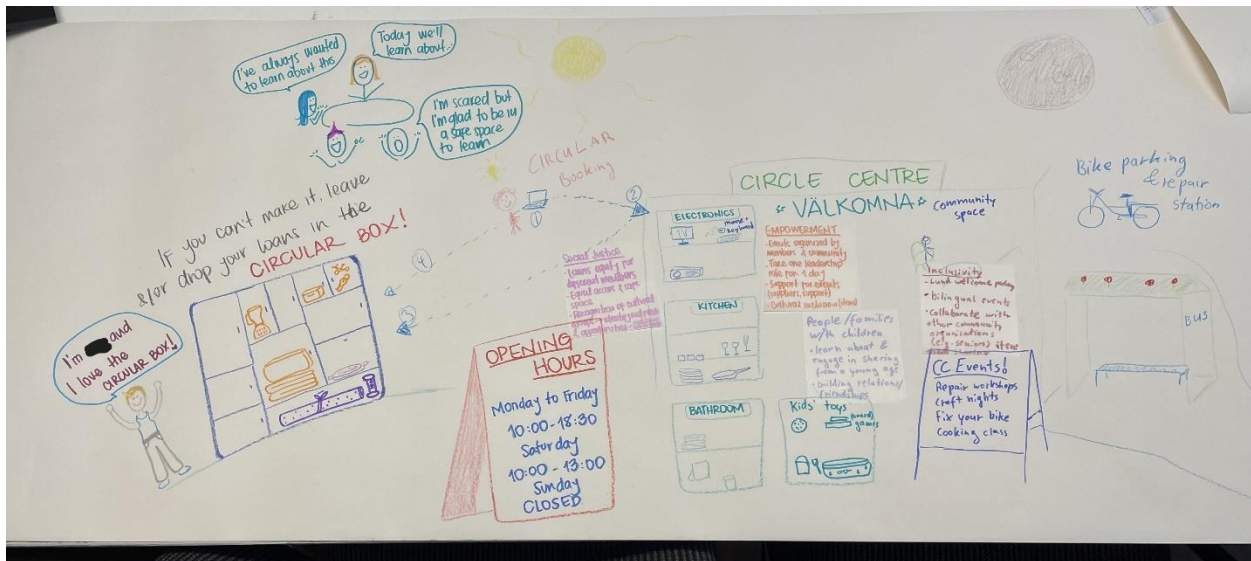
9.5 Appendix 5: Workshop Drawings

Drawing A:



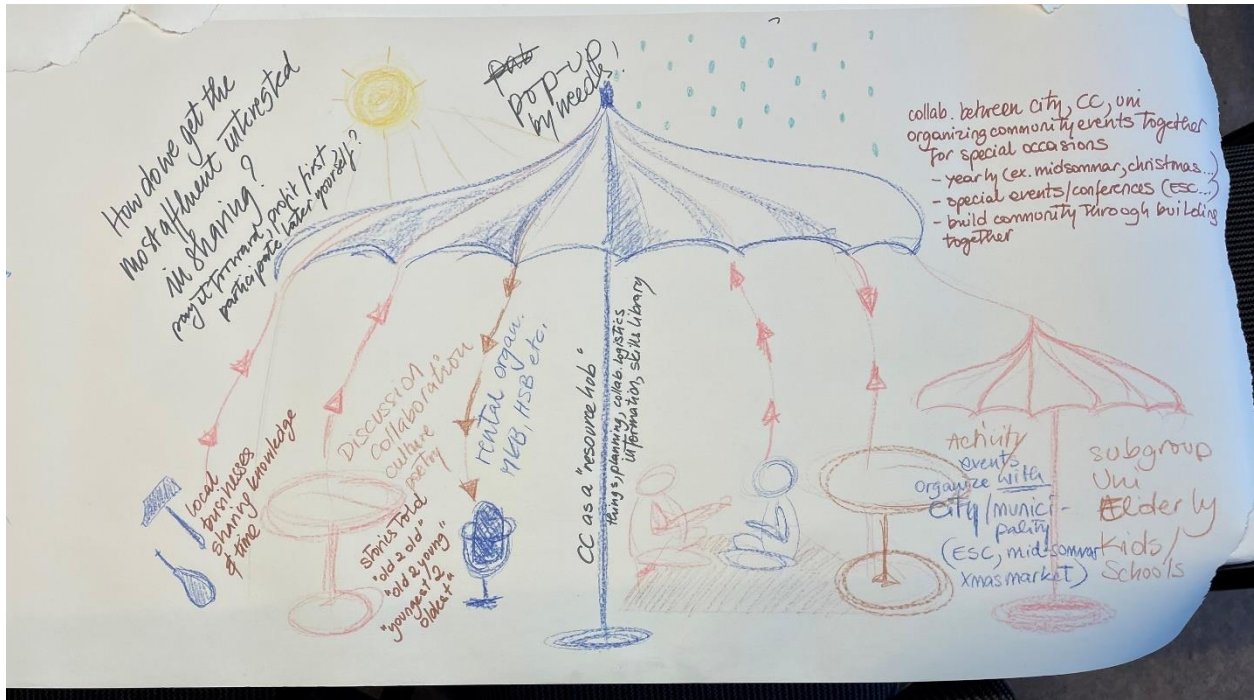
(Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024)

Drawing B:



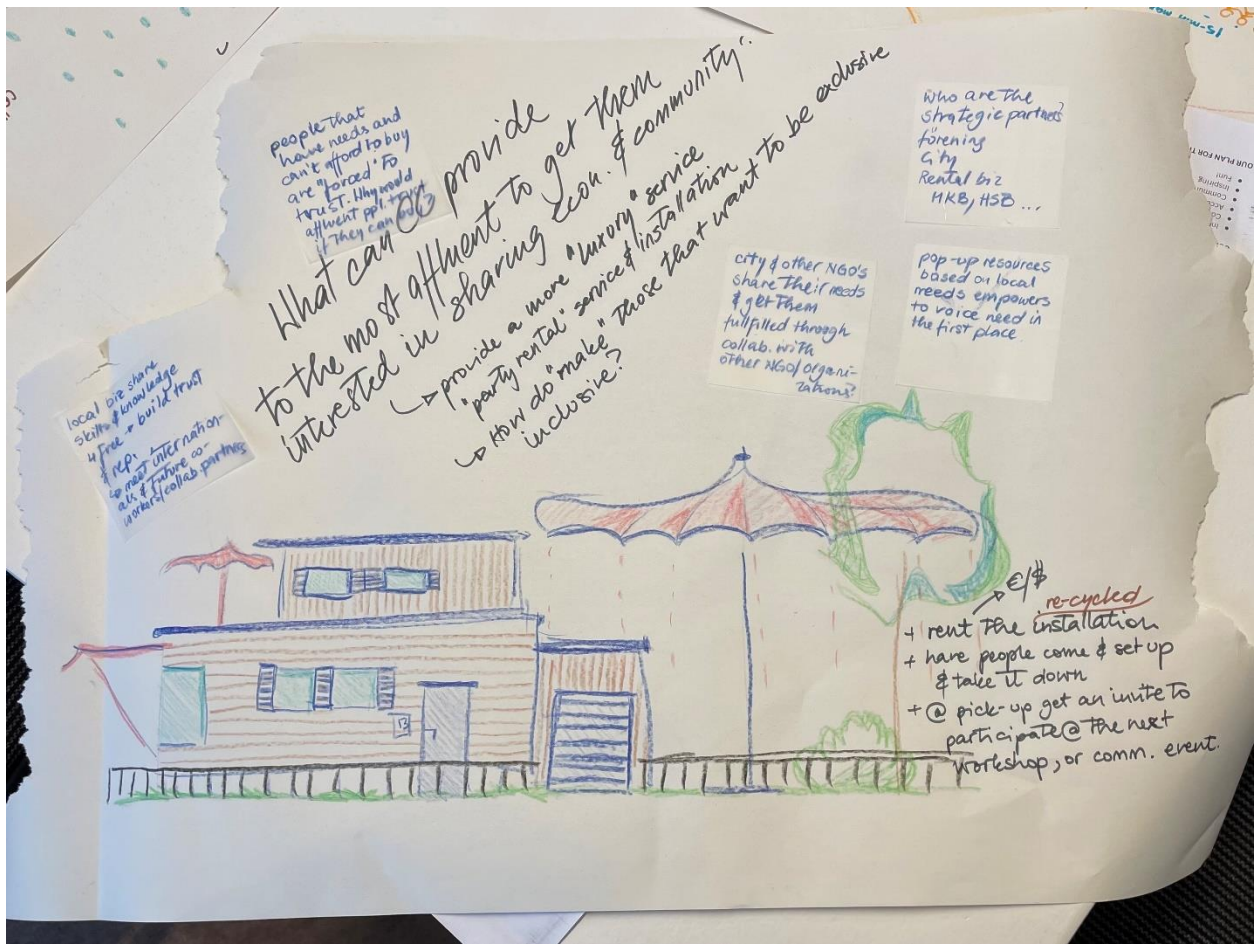
(Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024)

Drawing C1:



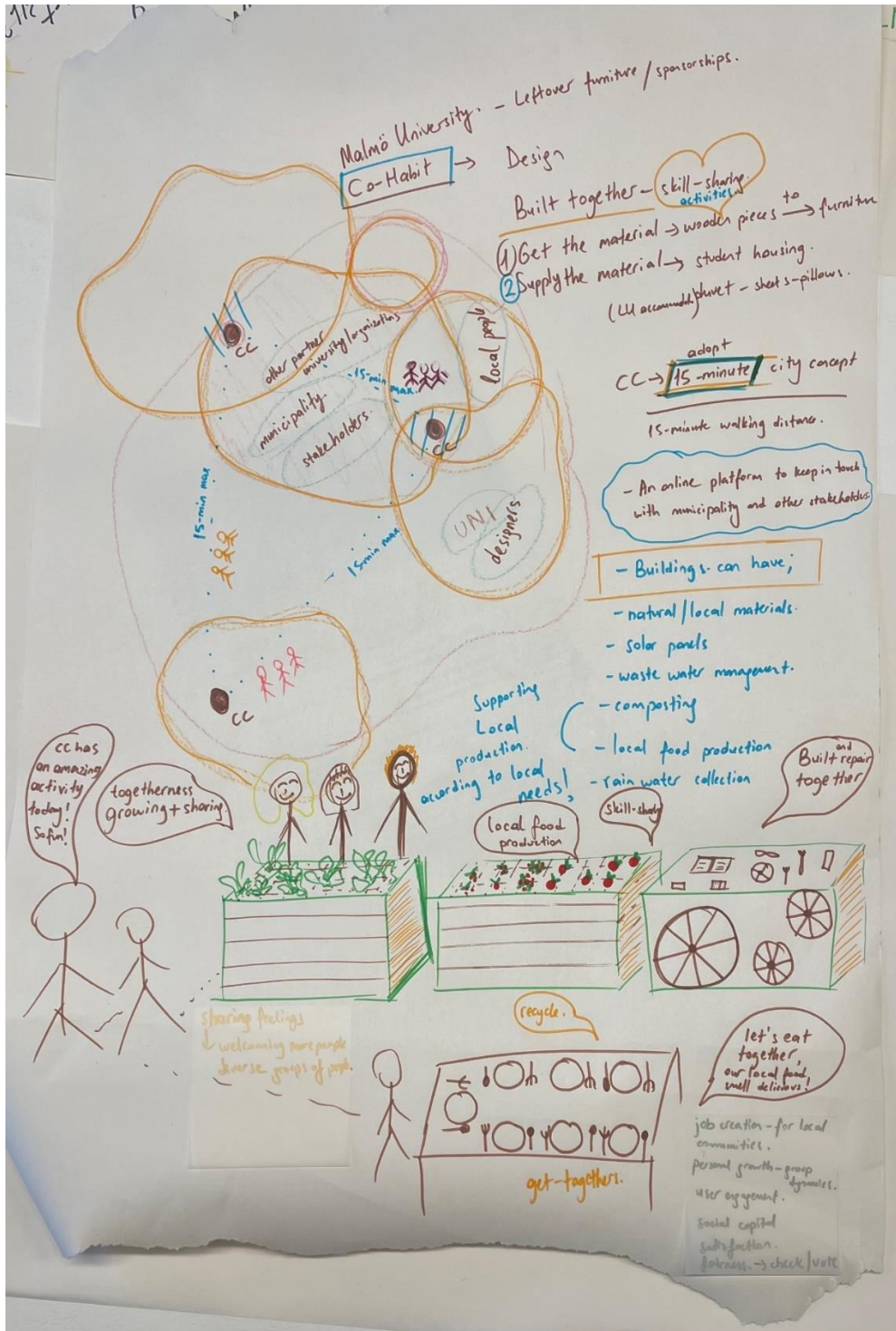
(Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024)

Drawing C2:



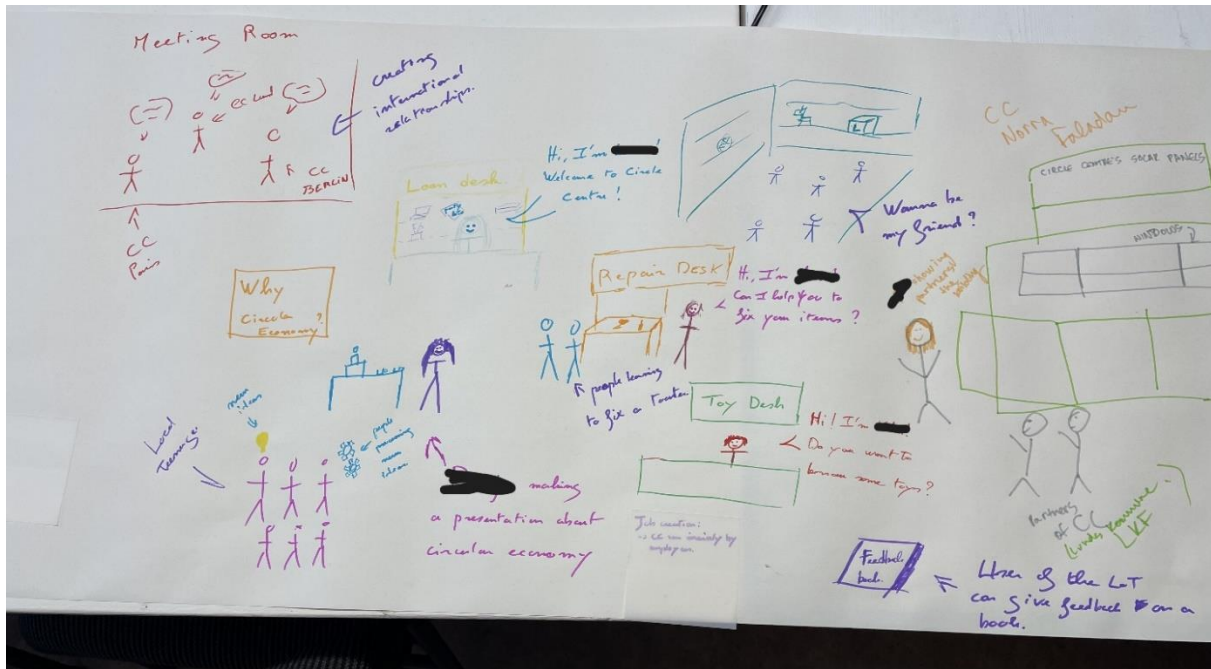
(Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024)

Drawing D:



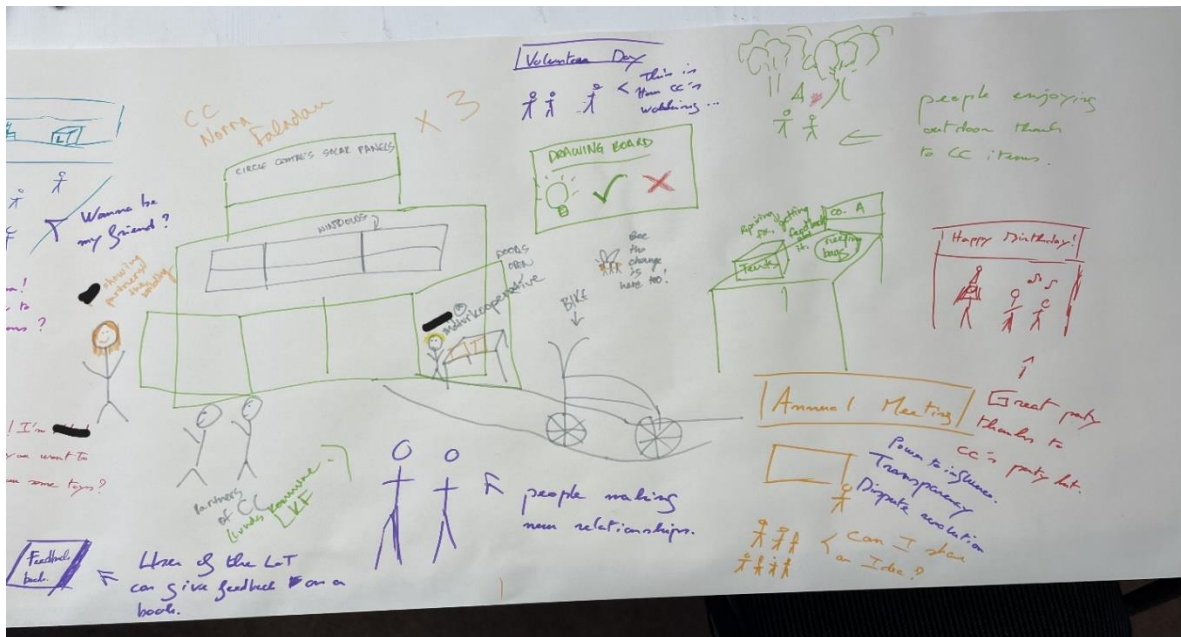
(Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024)

Drawing E1:



(Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024)

Drawing E2:



(Workshop Participant Drawing, photo taken by notetaker Alice Lupano on 23 March 2024)