

Assessing the Potential of Digital Collaborative Sharing Platforms in Fostering Neighbourhood Participation through Volunteerism*

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Abstract.

This paper seeks to discuss whether and how digital collaborative platforms can foster citizen participation by addressing various challenges experienced by local initiatives. To that aim, we conducted a case study in the Saupstad neighbourhood of Trondheim in Norway.

Our case study includes qualitative interviews conducted with volunteers and general managers of a selection of central volunteering initiatives in Saupstad where we aimed to map the current state of neighbourhood volunteerism, and identify the challenges experienced both at the individual and organizational level. We also involved stakeholders in a co-creative dialogue meeting to discuss and develop scenarios to overcome the identified challenges and foster citizen engagement in volunteering activities.

Based on the empirical data we collected, we have identified challenges centralized around the interrelated themes such as ‘volunteer motivation’, ‘volunteer recruitment’, ‘effective dissemination of information’ and ‘collaboration and communication with local actors’. In this paper we discuss to what extent collaborative platforms can address these challenges and be utilized to foster citizen participation.

Keywords: volunteering, community, case study, citizen engagement, collaborative platforms, community informatics.

1 Introduction

This paper investigates how digital collaborative sharing platforms can address challenges encountered by neighbourhood volunteering organizations by conducting a

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case study in the Saupstad neighbourhood of Trondheim in Norway. First, we map the current state of neighbourhood volunteerism in Saupstad and identify various challenges experienced both at the individual and organizational level. Secondly, we discuss to what extent collaborative sharing platforms can address these challenges and be utilized to foster citizen participation in neighbourhoods through volunteerism. We consider both well-established global social platforms, as well as new platforms tailored to the neighbourhood level.

The research is novel in the dual open approach that is employed. Rather than studying the introduction of a given platform, we employ qualitative interviews and community workshops to identify the needs of local non-profit organizations who depend on volunteerism. We are open to the choice of platform to adopt, and to which organization or group that it will be employed to. By providing examples of services that digital sharing platforms can offer, our interaction with prospective users helps them to identify needs that they did not realize beforehand, and we get rapid response on potential unintended consequences that the use of the platforms may entail.

The results are intended for social planners, such as local government officials and managers of non-profit organizations, who are considering adopting a digital collaborative sharing platform to foster citizen participation in a geographically defined neighbourhood. The findings are also relevant for programmers and designers of these platforms because we identify user needs that are not sufficiently covered by existing platforms, as well as social, organizational and technological barriers to adoption. Finally, we aim to add to the limited volume of research addressing the interaction between sharing economy and volunteerism at the local level.

The empirical data we collected indicates that neighbourhood volunteering initiatives in Saupstad encounter challenges centralized around the interrelated themes such as ‘volunteer motivation’, ‘volunteer recruitment’, ‘effective dissemination of information’ and ‘collaboration and communication with local actors’. In what follows, we discuss to what extent collaborative platforms can address these challenges and be utilized to foster citizen participation.

2 Background

Social relations in urban neighbourhoods, and urban neighbourhood communities have largely been described as having undergone a massive transformation following modernization, industrialization, and urbanization. In respect to the effects of urbanization on social relations, Ferdinand Tonnies had famously formulated the concepts “Gemeinschaft” (communities built on personal relations) to “Gesellschaft” (communities built on instrumental relations) (Tjora 2018). Accordingly, societies go through a transformation from Gemeinschaft to Gesellschaft. Communities that were once defined by a dense face-to-face interaction and interdependence of people with shared rituals and values, had vanished and gave its space to social relations based on impersonal ties defined by individual self-interest rather than a common good (Henning and Lieberg 1996, Bell 2001, Tjora 2018). In respect to these conceptualizations, studies of urban neighbourhoods have been focusing on the extent social relations between the neighbours have been altered.

Keen on revitalizing social interaction and boost citizen participation in urban neighbourhood communities, there are several activities organized by a variety of actors ranging from local policy makers, non-governmental organizations and volunteer-driven initiatives. Citizen participation in neighbourhoods are specifically considered as a vital means of increasing the individual and collective capacities, as well as connections to the neighbourhoods, and therefore improving both the physical environment and the social conditions for the residents (Chavis and Wandersman 1990, Ohmer 2007). Boosting citizen participation in urban neighbourhoods, undoubtedly, relies on volunteers who directly or indirectly willing to take part in neighbourhood activities, as an organizer or sole participant, generating social benefit for the other fellow residents. However, as previous research has demonstrated, volunteerism in contemporary times entails attentiveness to various, divergent and individual needs of the volunteers, and therefore has its own complexities in achieving long-term, sustainable participation (Hustinx and Lammertyn 2003).

The last couple of decades, a growing scholarly interest has also been centred around the impact of the use of information and communication technologies (ICTs) in social and civic life (Bell 2001, Stoecker 2002, Mandarano, Meenar et al. 2010). Some of these studies express concerns over the replacement of face-to-face interaction by cyber communication in virtual space, emphasizing on how increasing use of internet for communication results in isolation, lack of communicative skills in actual life, and a declining community engagement (Turkle 1996). In contrast to this, other studies emphasize the promises of ICTs, claiming that ICTs can facilitate broader social networks in 'real life', and therefore can be a solution to the modern times marked by a decline of traditional communities (Hampton 2007).

The dichotomic positioning of ICTs and real-world connectivity has been criticized broadly due to forcing a separation between online life and the off-line 'real life' (Bell 2001). It is easy to find examples of both the promises and limitations of ICTs, as these technologies can be conceived as both the cause of, and the solution to, the loss of communities in the traditional sense (ibid). With many different ICTs to choose from, it's crucial to also consider which technologies are used, and how they are being used.

In this article our aim is not to blindly vouch for an increasing use of ICTs to foster social inclusion and citizen participation in Saupstad in Norway. Instead, we aim to map the limitations and challenges experienced by the current organization of citizen activities and discuss whether these difficulties might be overcome by incorporation of digital collaborative sharing platforms.

3 Methodology

The research was organized as a case study centred on the Saupstad neighbourhood in the city of Trondheim, Norway. This specific neighbourhood receives considerable attention and funding from the municipal government with efforts to promote neighbourhood participation and reduce social isolation in target groups. The municipal program focuses on improvements to the physical infrastructure, as well as financial and other support to local ideal organizations, and we saw a potential to investigate whether digital collaborative sharing platforms are suitable tools to

support the municipal efforts to foster volunteerism in this area. We adopt John Wilson's definition of volunteering as "any activity in which time is given freely to benefit another person, group, or organization. This definition does not preclude volunteers from benefiting from their work." (Wilson, 2000: 215).

We aimed to collect as much nuanced knowledge as possible to map the various challenges, as well opportunities, experienced by the volunteering organizations environment in Saupstad, and how the residents participate in their neighbourhood, and whether and how this participation can be boosted through use of digital collaborative sharing platforms. Neighbourhood participation through volunteerism is a broad field that cannot be restricted to one observational site. This is why our study has focused on a selection of local organizations, fully or partially run by volunteers, that aim to generate a social benefit to the residents of Saupstad through the activities they offer.

3.1 The case context

Saupstad is a suburb located in the south of Trondheim, Norway's third biggest city. The district is a part of the larger Saupstad-Kolstad region which is approximately 45 years old. Built in 1970s, Saupstad is the largest suburb in Trondheim. Having a relatively low record in respect to the indicators such as, income, education and disability benefits, Saupstad has captured the attention of politicians, architects, urban planners among other experts (Rørtveit 2015). To address these challenges an 'area lift'¹ (in Norwegian: områdeløft) was initiated in the region (Trondheim Kommune 2013). Between 2012-2016 several measures were implemented in the area and there are new measurements that are planned to be completed in the region between 2017-2020.

The overall objectives of 'area lifting' are: to promote quality of life and health; building competence to the children and youth which prepares them to the challenges of the future; building a sustainable region with a variety of building structures and good quality of infrastructure and public space; to build a district with meeting areas and opportunities of citizen participation (Trondheim Kommune 2017). The area lift project is designed in a way that aims to mobilize the region's own resources which entails the inclusion of local community and incorporation of their needs and demands. In this respect a set of networks are established between housing cooperatives, residents, associations, unions, volunteer organizations (see also Trondheim Kommune 2017:9).

Despite being conceptualized as a so-called "problem district" where special measures to be taken to improve the residential and the living conditions in the neighbourhood, the residents of Saupstad are documented to be content living in the district (Rambøll 2014, Rørtveit 2015).

¹ *Area lift* is a national social program that aims to improve the attractiveness of selected urban areas in the largest cities in Norway. Social inclusion and citizen participation are central aims of area lift projects.

3.2 Data collection and analysis

The data collection followed a two-stage process. During the fall of 2018 we performed exploratory activities with local volunteer and non-profit organizations as well as individual inhabitants in order to identify the core needs of the organizations in the area. In the second stage (spring 2019), we narrowed down the number of organizations that we engaged with and began more targeted discussions about the potential of various sharing platforms.

This approach had several advantages. First, we wanted to avoid a situation where we ended up working with an organization that was not prepared to try out a new technology. Second, we wanted to identify the challenges where collaborative sharing platforms could make as large impact as possible. Third, it gave us time to establish a closer relationship with the managers of the organizations. Consecutive meetings gave us the opportunity to confirm or modify our impressions about the challenges. Fourth, we were able to follow the developments in the area over time to better understand the social and physical context that the technological solution should work in. Fifth, we had time to explore relevant emerging technologies that were brought to market in the same period.

The methods we employed were:

- **Qualitative semi-structured interviews with the organizations' general managers:** We have interviewed the general managers of VCS and KFC. Interviews focused on current state of volunteerism (activities offered, level of participation of residents and their motivations), recruitment strategies, and dissemination channels within each organization. We also asked questions about challenges and opportunities in respect to the usage of ICT for issues such as, planning, coordination and following of organized activities.
- **Qualitative semi-structured interviews with the volunteers:** We have interviewed 4 volunteers from VCS. These interviews followed the same thematic as the ones with the organizations' leaders but with a volunteer and citizen perspective. Interviews focused on the informants' motivation to engage in volunteerism, their communication with the organization and the other volunteers, as well as various challenges and opportunities attached to their engagement as a volunteer.
- **Street interviews:** We have conducted 22 interviews with people on the street. We have reached out a variety of residents in respect to age, gender, race, occupation. In these interviews we have asked people whether and how they follow social activities in Saupstad, either as a volunteer or as a participant. Additionally, we have also asked people to describe the kind of relation they have with their neighbours to understand whether they socialize with their neighbours and whether they would ask for help or other kind of assistance from them if they need it. We have also collected information on people's everyday use of ICTs and their attitude regarding using ICT to interact with their neighbours.
- **Exploratory Design Meeting (Dialogue Meeting):** We arranged an exploratory design meeting in Saupstad. The design meeting was organized according to scenario-based approach which is quite common in the field of interaction design

and development of ICT tools. Scenario-based approach is agreed to be a useful way to engage different stakeholders to elaborate on the design concept by enacting particular scenarios (Brandt and Messeter 2004). For the exploratory design meeting arranged in Saupstad, we have prepared particular scenarios based on the challenges of volunteerism we had identified in our research data material. We then, involved stakeholders to discuss these challenges through a game called “what if”. In this game the stakeholders engaged in creation and discussion of possible scenarios to overcome the challenges. Although the meeting was open to the all residents of Saupstad, those who participated in the meeting were all active participants of the local community: volunteers of the Saupstad Youth Council, volunteers of the VSC, leader of the neighbourhood school. Through different scenario-based games, volunteers explored a variety of problems and possibilities in respect to the volunteering activities they have been engaging.

The semi-structured interviews, the audios from the Exploratory Design Meeting and the answers from the street interviews were analysed in an inductive way following the principles of Klein and Myers (Klein and Myers, 1999). Two researchers listened to the material and did a first independent round of thematic analysis resulting in a set of codes (Braun and Clarke, 2006). The researchers discussed and analysed together the different codes and parts of the coded data for establishing a set of overarching themes linked to our research questions.

3.3 Choice of target organizations

Among different local initiatives and organizations in Saupstad, we chose to focus on the Volunteering Centre of Saupstad (hereafter abbreviated as VCS), Kolstad Football Club (hereafter abbreviated as KFC) and Midtegggen Housing Cooperative (hereafter abbreviated as MHC) due to their active status as an arranger of social activities driven by volunteers². In addition to that these initiatives have different user groups and therefore offer a diverse view on the aspects of volunteering and social interactions in the neighbourhood.

The Volunteering Centre of Saupstad (VCS) was established in 2004, and forms one of the eleven “volunteering centres” in Trondheim³. The centre is own by Trondheim Red Cross and supported financially by the Municipality of Trondheim. It has one full-time employer who is the general manager of VCS. Currently, there are around 80 people volunteering for the centre that arranges various activities following local needs and demands. The need for an activity can be identified and suggested by a local neighbourhood partner, a volunteer or the general manager, which can further be discussed with other volunteers. The provision of activities relies on the willingness of volunteers to support and carry out the activities. Therefore, the range

² In addition to these organizations listed, Saupstad is also home for other sport teams, Mevlana Cultural Association, The Retirees Association and Youth Council [ungdomsråd] which represents the youth in Saupstad in the municipality.

³ The centres belong to the nationwide interest organization “Frivilligsentral”. All centres have a common mandate.

of the activities tend to focus on the user groups that engage in volunteering at the volunteering central. The major user-group of the VCS is retirees, and unemployed residents. VCS offers activities, run by volunteers, such as tour-group, dancing group (Friskusdans), choir, accompaniment activity (følgetjeneste-for those who need accompany to go to shopping or hairdresser etc).

Kolstad Football Club (KFC) was founded in 1972. The club is administrated by a board and the two full-time employers who are responsible for the club operations and day-to-day management. A great deal of people who engage with other tasks for the club are volunteers such as, trainers, people who stand in the food-counter during games and those who sell lottery tickets to raise money for the club. There are also volunteers called upon when the football field is to be cleaned from snow or other kind of tasks that requires collective action (in Norwegian 'dugnad'). The main user groups of KFC are children, youngsters and families who have children. KFC also appears to be a local actor that provides service and activities to everyone, not only children and youngsters. In cooperation with Trondheim Municipality, the club runs 'Utlånsentral' which lends out outdoor and sport equipments to anyone free of charge. In addition to that, the club organizes 17. May celebration in Husebyhallen, which intends to gather all the residents, and Blokk Rock Festival in the neighbourhood.

Midtegggen is a housing cooperative [in Norwegian 'borettslag'] built in 1973. MHC is composed with 24 building comprising 472 apartments. The residents of the housing complex composed of families with and without children, retirees, people with a minority background. The management board of MHC, represented by volunteering residents, arrange a variety of activities for this mosaic of residents with different backgrounds.

As a site of analysis, we focused on VCS, KFC and MHC due to the active role they plan in arranging volunteering opportunities in Saupstad.

3.4 Identification and assessment of relevant collaborative sharing platforms

Digital sharing platforms are internet-based applications for computers or handheld devices that allow users to share privately owned resources and information. Platforms for the sharing economy has had an exceptional impact on society over the past decade, but many of them are focusing on consumption of services in a strictly professional way, with only minimum of social contact between buyers and sellers. With the term collaborative sharing platforms, we refer to applications that have design features that directs it's use to the users' own local area. Typically, they will make an explicit statement in their marketing that they aim to strengthen communal work and inclusiveness.

Through online searches, and engagement with colleagues and app developers, we identified the following platforms that we assessed in more detail:

- Facebook: An American social media platform with a high penetration in Norway. Several ideal organisations establish so called Facebook groups for coordinating activities among members in a local area.
- Give and Take: A platform for social workers and volunteers developed in a Horizon 2020 research project (2014-2017). We arranged a meeting in Trondheim with associate professor Lone Malmberg from IT University of Copenhagen who coordinated the Give&Take project to discuss various aspects of the platform.
- Comoodle: A platform for helping inhabitants share the resources (classified as either stuff, space or skills) within a given community. Based on Kirklees, England, and funded by the Bloomberg Philanthropies organisation. We arranged a meeting in Trondheim with Duggs Carre from the Kirklees city council to hear about their experiences with Comoodle.
- Friskus: A Norwegian platform for disseminating information about local activities, such as walking tours, common breakfasts, ball games, etc. We engaged in dialogue with the developers to assess its relevancy for Saupstad.
- Bobleberg: Danish application that allows users to create interest groups, called bubbles, to find and meet others with similar interests. They have established a collaboration with the Danish Red Cross to combat loneliness.
- Nabohjelp: Nabohjelp allows users to post requests for services or items that they need or wish to offer. Developed by Obos BBL, the largest housing developer and homeowner association in Norway. It was launched in May 2017 and usage frequency is highest in Oslo.

The platforms were assessed by downloading them to our smart phones where we explored their user interface. We then proceeded to present the main features to volunteer organisations in the interviews and dialogue meeting. Dialogue with developers and users also provided useful insights.

4 Current State of Volunteerism in Saupstad: Opportunities and Challenges Identified

In what follows we discuss the challenges and opportunities central to the organization of volunteering in VCS and KFC by emphasizing on key interrelated themes namely: 'volunteer motivation', 'volunteer recruitment', 'dissemination of volunteering activities' and 'collaboration and communication with local actors'.

4.1 Volunteering Motivation

Based on the data we collected, we observed that various personal interests are a major motivator for the volunteers in the neighbourhood to engage. When it comes to VCS, we have found that volunteering retirees are generally motivated by the need of developing further social ties and occupy their free time. As one of the informants states *“After you become a retiree, life gets boring”*. In this sense, volunteering plays a role in fulfilling the activity and social contact gap that many experience after retiring. In a similar vein, one informant who was unemployed during the interview stated: *“I could not find a job, but I could not think of just sitting at home. That was the reason why I became a volunteer”*. In addition to using volunteering as a means of utilizing free time, two other informants mentioned that they have been engaging in volunteering activity with the elderly because they had been working with the similar age group as a part of their profession. Apart from the elderly and the unemployed, VCS seems so attract families with young children to the community activities where participants do, such as, gardening, cleaning outside space or painting. Such activities, according to the interviewees, provide an opportunity for children meet and play together when their parents work.

Similarly, KFC has a profile of volunteers that is largely composed of people with young children. This is, in fact, a common tendency in Norway where many volunteers within sports are adults with younger children. That is, families who have a child playing football in the club are likely to be involved in volunteering activities arranged by Kolstad Football. According to our data material, the club is also actively working with remaking the image of Saupstad district which is often designated as a problem district by policy makers. In this sense, an additional factor that motivates people to volunteer for the club could be a sense of belonging to the neighbourhood and willingness to contribute to a better image.

Based on the data we collected, one can say that, similar to the results from various research on the motivations for volunteering in contemporary times, people engage in volunteering activities that responds their individual interest (Hustinx and Lammertyn 2003).

4.2 Dissemination and recruitment

Both VCS and KFC utilize social media, their websites, the local newspaper and posters placed along the neighbourhood as a general means of disseminating information about the organizations and their activities. Although the general leader of VCS and KFC regard these communication tools important, they both expressed a need for improving their ways of spreading information. General manager of VCS states: *“There is a lot that happens in Saupstad, everyone agrees. But all agree that nobody knows what happens and when. People can have the posters in front of them and not read them.”* According to the organizations, one of the reasons that people are not attentive to the information that is being disseminated in Saupstad might be that they find it too impersonal. Supporting this argument, two participants at the dialogue meeting stated that it is not easy for the residents to feel personally welcomed to any

arrangement when the entire neighbourhood is invited at the same time. During the scenario-based games, the participants at the dialogue meeting came up with the idea of personalizing the invitations by adding the names of the residents on the announcements and sending it out individually as electronic post, or regular mail.

Barriers related to technology is also mentioned as a problem in respect to sending out information. Our data shows that while some elderly feels comfortable with having a smart phone and surfing on the internet, others prefer printed media where they can cut out the announcement and place it on their fridge with a magnet.

Keen on being inclusive and reaching out to those who does not use internet, as well as to those who prefers face-to-face invitation, both organizations seek means to do so. For example, VCS prefers to meet the retiree's association in order to invite the elderly to the ongoing activities personally. Furthermore, many come to VCS via advices of friends who participate on the activities or volunteers. Most of the activities of the VCS target the retiree user group, as the activities are driven by the volunteers and most VCS volunteers are retirees. Consequently, the dissemination via word of mouth and the participation on activities reaches out retirees more than other user groups.

When it comes to the recruitment of volunteers, KFC usually reaches out to children through the schools. Adults, usually the parents of the children who play football, engage in KFC as they are willing to support the team and their children. For VCS, volunteers are often recruited subsequent to their participation on an activity arranged by VCS. If they enjoy the activity that is being organized, it is likely that they develop further interest to be involved and help the general manager for the upcoming arrangements.

We observe that despite having activities that target the whole neighbourhood and a willingness to involve multiple user groups, both organizations are quite homogeneous concerning their core user group (Parents and children at KFC and seniors at VCS). Consequently, that core-user group becomes somewhat associated with the organizations which provides advantages and disadvantages. It facilitates the word of mouth dissemination through their core user group, but it makes it more difficult for people outside of the core user group to feel belonging or for the organizations to consider ways of including other user groups. It hinders its potential to tap on the heterogeneity of the neighbourhood and spread social capital along different user groups. A volunteer from VCS tells about her friends with kids, who would not find a fitting activity in VCS despite activities for kids at VCS such as the Family Day. Similarly, when KFC leader was asked about how to include elderly residents into KFC volunteering, he understood that the elderly is more interested in activities where they are more direct beneficiaries: *"they (the elderly of the neighbourhood), unfortunately, are somewhat too busy with their own activities and personal development. That is very good. But, that means that those, who have wider time availability, look for possibilities within the VCS, which does a very good job."*

They engage into the retirees' association, as to some extent look for activities for themselves."

4.3 Collaboration and communication among local actors

In addition to VCS and KFC, Saupstad is home to many initiatives of different sizes that are run by partly or totally by volunteers, targeting different groups of people in the neighbourhood. Our material shows that both VCS and the Kolstad Football collaborate and communicate with other local actors in organizing a few common activities or tasks. For instance, KFC sometimes reach out to volunteers via the mosque located in the neighbourhood for activities, such as shoving the snow from the football pitch. Similarly, VCS collaborates with Associate for Retirees for many common arrangements and for reaching out to retirees. However, there is no common forum where the local actors periodically meet, develop collaborations and synchronize their activities.

It is hard to deny the fact that these organizations also compete to a certain degree due to targeting the residents of the same neighbourhood. Problems mostly arise, when their regular activities collide with each other. As mentioned before, each organization experience challenges in recruiting new volunteers. One reason seems to be that there are many activities arranged simultaneously and are forced to compete by being most interesting.

4.4 Internal Communication and assignment of volunteering tasks

Internal communication is not much of an issue at KFC. There, most of the volunteering assignments are pre-defined and announced well in advance. There is no need of deliberation of volunteers to define the assignment and it only requires a bit of communication at the beginning of the season to get them sorted out. On the other hand, at the VCS, the activities depend on the interest of volunteers on performing them and the local needs. This mean that the VCS general manager facilitates the communication with volunteers for starting and developing activities and for connecting interested members.

In our interviews with the VCS, we talked with both the VCS leader and VCS volunteers, being some of them also leaders of activity groups within the VCS. Through those interviewees we managed to understand their communication practices and theirs challenges and limitations.

The general manager works as the main facilitator of the volunteering activities of the VCS, while the volunteers would be the ones who drive the activities. Those roles apply specially in activities such as the "following service" where the VCS general manager connects a volunteer with a person that needs a companion for running an errand and in activity groups such as the walking group. In those activity groups, the general manager supports them by arranging the infrastructure needed for the activity (room, coffee, etc), help recruiting members and promoting the activities. While the participants, normally led by one or more activity group leaders, organize the walks.

However, most of the communication goes via the general managers. The centralization of communication puts a heavy burden on the general manager who uses a lot of time in communicating with the different members. Facilitating an internal activity group communication and arrangement could relieve the activity leader. When asked about that possibility of having a message group or a telephone list, the interviewed VCS members thought that indeed that could be helpful. One of them suggested that the regular organization of the activity groups could be done by the group itself: *"I think that it can be fine if a group works alone without the general manager, but if there is something (out of the normal) it is natural that we involve her"*.

The communication at the VCS is done both via direct messages between the general manager and individuals or via broadcast messages to several members. Those are used for all purposes, inclusively to recruit members to engage into existing volunteering assignments. As one interviewee describes, the engagement of the leader in asking for help is crucial for them to volunteer in the assignments: *"She (the leader) is very good at sending messages and asking us (to engage in specific activities) and, I would not have worked as a volunteer without her"*. However, as another volunteer points, there are times when they feel like they could participate even more, but do not do it for feeling like there is nothing to do, while the reality is that the general manager says that she often has more assignments than volunteers and ends up taking care of many of those herself. The general manager asks members to inform her if they are available to engage in coming assignments, but the interviews with the VCS members suggest that this does not happen very often.

However, the interviews show that several considerations must be taken when considering a different communication channel, in special when engaging with an elderly audience. Although there is a perception (from the VCS general manager and the interviews on the streets) that few people read the posters placed along the neighbourhoods, the elderly volunteers we talked to said that they use those. Moreover, they mentioned that they occasionally delete or forget about old SMS messages or e-mails and, therefore, communication in paper works best: *"I brought (the leaflet of an activity) home with me. It is on my table. It is easier to remember. I do not seat in front of the computer all the time"*. Furthermore, some do not necessarily use computers, smart phones or messaging apps.

4.5 Responsibility Sharing

As discussed under the theme of internal communications, the communication channels used do not fully support the sharing of responsibilities, especially as the organization leaders get busy and volunteers tend not to proactively ask if there are available assignments. On top of that, volunteers seem not keen on taking up assignments of a more administrative nature. One major challenge expressed by the general managers of the organizations is uneven distribution of responsibility in respect to recruitment, dissemination of information, and other practicalities related to the organization and coordination of activities. Although the general managers try to encourage volunteers to take more organizational responsibility, people who volunteer prefer not to get involved in administrative tasks, as we are told.

It is possible to argue that this is related to the changing nature of volunteerism in contemporary times, where individuals tend to engage in more sporadic, temporary forms of volunteering rather than traditional volunteering based on lifelong commitment and attachment to an organization (Hustinx and Lammertyn 2003, Rehberg 2005). Our data material shows that volunteers have very little, if not any, attachment to the organization they volunteer for, and they appreciate being flexible in the volunteering effort they do. It is the activities they are engaged in and the social environment that the organization offers them, which attract them. One of our informants who volunteer for VCS mentioned that she appreciates the freedom she has to say 'no' when being asked to attend a particular activity. This can partly explain the lack of willingness volunteers have in taking organizational responsibility which would restrict their flexibility.

5 Discussion

In this paper, we seek to speculate about to what extent the challenges described above can be overcome by the use of digital collaborative sharing platforms. Drawing upon the data material we collected and analysed, one can say that neighbourhood participation through volunteerism in Saupstad has a set of interrelated challenges, as well as untapped opportunities that could have been used to foster residents' engagement in the local organizations. In this regard, the main issues seem to be centralized around themes such as 'volunteer motivation', 'volunteer recruitment', 'effective dissemination of information' and 'collaboration and communication with local actors'.

Our analysis shows that the ways in which local organizations disseminate their activities has an impact on recruitment of volunteers and participants. In this sense a major concern seems to be whether the information spread reaches out everyone, as well as whether it is attractive to encourage participation. As mentioned before, general invitations run the risk of going unnoticed and being neglected. In contrast, personalized invitations and word of mouth appears to have a bigger potential to mobilize engagement and recruiting new people. Given that preparing personalized

invitations in printed form would be costly as well time inefficient, utilization of ICTs which offer personalized invitations could support and strengthen engagement. Social network sites, that supports mainly messaging and discussions, can potentially support the effective personalized dissemination. Needless to say, based on its enormous popularity, Facebook appears to be the solution many organizations seek to try out first. Facebook, however, has multiple purposes that might preclude the main intention of organizations. The intense flow of information on the application might also re-generate the issue of being indifferent to the announcements, a problem that the residents of Saupstad already experience.

In this sense, we argue that platforms that are local and specific in terms of their scope of use could be of more use. What we mean by aim-specific is that the application should have mainly the aim of connecting a local community, and lowering down the threshold for those who are willing to be more active in their neighbourhood. Platforms such as Bobleberg allows individual users to form groups for people with similar interest, such as a knitting or fishing group. Nabohjelp and Comoodle can be designated as classic platform of sharing economy where skills and assets are shared. Through Nabohjelp one can narrow down the area where a particular help/service offer is being disseminated. None of these applications requires the so-called surveillance of an organization, but rather allow individuals to reach out others in an independent manner. In giving individuals more freedom to post and disseminate, these platforms suits for those who wish to engage in volunteering but do not want to belong to an organization. As we discussed under section 4.5, it is quite common that people appreciate the flexibility as a character in the volunteering they do. That is, they would like to decide the time and the kind of activity they wish to be a part of. Lack of admin status, however, leaving these platforms in a precarious situation concerning one-to-one matching services. For instance, an elderly person might not feel comfortable to ask a total stranger to come over her apartment and change the light bulb. When it comes to this kind of one-to-one services, VCS, for example, runs a sort of background check of the volunteers and provide assurance. When it comes to the generation of social capital through these platforms, as the literature on sharing economy has shown, there are promises of an increasing trust among user groups who share skills and assets (Bucher, Fieseler et al. 2016). Yet, it is hard to predict as well as measure whether these applications do result in meaningful, long-term social relations among the users which can be translated into long-term local engagement in the area one resides in.

In respect to our research question, FRISKUS appears to be the most useful platform designed in a way to offer digital solutions to coordination and arrangement of volunteering activities locally. FRISKUS offers a local common activity calendar where the ongoing arrangements in a certain region or neighbourhood are gathered. The organizations, that purchase the license, can use the main features of FRISKUS which can be listed as, posting activities to the common calendar, sending personalized invitations to the members in a local area, as well as generating and

sending certificates and other documents digitally to the participants. The activity calendar is available to everyone regardless of the fact that one has a user-profile. In order to register attendance and send private messages, however, one needs to sign up free of charge. Given that FRISKUS specifically working with local organizations, one receives information that is solely related to the activities in their neighbourhood. In that sense, users could both feel personally welcomed, and that they would not get lost in a pool of out-of-context information. Furthermore, one chooses the region, municipality or neighbourhood they would like to follow, to narrow down the announced activities. Needless to say, the common activity calendar makes it easier for the general managers of the organizations to schedule their activities in order to avoid overlaps. Also, the platform offers a database of voluntary registry, which makes it easier for the general managers to search through and get in touch with volunteers. It is important to underline that one without an admin or coordinator status is not allowed to post an announcement on FRISKUS. In that sense, peer-to-peer activities are somewhat limited on this platform. As mentioned before, general managers carry the heavy burden of practical tasks, and often fail to engage the volunteers to take over some organizational task. In this sense, using FRISKUS might add to the burden of the general managers if they fail to recruit volunteers who would like to take on admin/coordinator title on the app and post announcement on behalf of the organization. Another challenge that remains with FRISKUS, as well as any digital platform, is that **they cannot be utilized to** reach out people out of the cyberspace. That is, anyone who does not have access to digital tools or lack willingness of literacy to use technology, would be excluded. It is, on the other hand, possible to transfer the common calendar of FRISKUS to any public digital screen, which could have increased the visibility of ongoing activities.

Our research has shown that neighbourhoods, and the local communities are composed of residents of different needs and demands. In this socially, culturally and demographically complex setting, fostering neighbourhood participation through volunteerism remains a hard task carried by various local organizations. Mapping the current state of volunteerism in Saupstad, Trondheim in Norway, and identifying the challenges experienced by the local organizations, we discussed whether and how collaborative sharing platforms can be utilized. We argued for potential use of platforms that are local and specific in respect to their scope of use. Needless to say, social life is far more complicated to be envisaged by the design of technological tools. However, digital platforms such as FRISKUS seems to bear a great potential in having features that would respond many, if not all, of the challenges connected to neighbourhood participation.

References

1. Bell, D. (2001). *An introduction to cybercultures*. London, Routledge.

2. Brandt, E. and J. Messeter (2004). Facilitating collaboration through design games. Proceedings of the eighth conference on Participatory design: Artful integration: interweaving media, materials and practices-Volume 1, ACM.
3. Braun, V. and V. Clarke (2006). "Using thematic analysis in psychology. Qualitative research in psychology." Qualitative Research in Psychology 3(2): 77-101.
4. Bucher, E., C. Fieseler and C. Lutz (2016). "What's mine is yours (for a nominal fee)–Exploring the spectrum of utilitarian to altruistic motives for Internet-mediated sharing." Computers in Human Behavior 62: 316-326.
5. Cabitza, F., et al. (2016). "When the web supports communities of place: the Social Street'case in Italy." International Journal of Web Based Communities 12(3): 216-237.
6. Chavis, D. M. and A. Wandersman (2002). Sense of community in the urban environment: A catalyst for participation and community development. A Quarter Century of Community Psychology, Springer: 265-292.
7. Henning, C. and M. Lieberg (1996). "Strong ties or weak ties? Neighbourhood networks in a new perspective." Scandinavian Housing and Planning Research 13(1): 3-26.
8. Hustinx, L. and F. Lammertyn (2003). "Collective and reflexive styles of volunteering: A sociological modernization perspective." Voluntas: International Journal of Voluntary and Nonprofit Organizations 14(2): 167-187.
9. Klein, H. K. and M. D. Myers (1999). "A set of principles for conducting and evaluating interpretive field studies in information systems." MIS quarterly 23(1): 67-94.
10. Mandarano, L., M. Meenar and C. Steins (2010). "Building social capital in the digital age of civic engagement." Journal of planning literature 25(2): 123-135.
11. Ohmer, M. L. (2007). "Citizen participation in neighborhood organizations and its relationship to volunteers' self-and collective efficacy and sense of community." Social Work Research 31(2): 109-120.
12. Rambøll (2014). Kvantitativ undersøkelse for områdeløft Saupstad-Kolstad
13. Rørtveit, H. N. (2015). "«Genialt planlagt?» Drabantbyen som hjem i spennet mellom boligfaglige idealer og levde landskap."
14. Stoecker, R. (2002). "Cyberspace vs. face-to-face: Community organizing in the new millennium." Perspectives on Global Development and Technology 1(2): 143-164.
15. Tjora, A. H. (2018). Hva er fellesskap. Oslo, Universitetsforl.
16. Trondheim Kommune (2013). Områdeprogram for Saupstad-Kolstad 2013-2020.
17. Wilson, J. (2000). "Volunteering." Annual review of sociology 26(1): 215-240