

# Social impacts of citizen participation in service development. A case study from a Finnish urban neighbourhood



Hannele Ahvenniemi  
Research Scientist  
VTT Technical Research  
Centre of Finland  
Finland  
*hannele.ahvenniemi@vtt.fi*

Tarja Mäkeläinen, VTT Technical Research Centre of Finland, Finland, [tarja.makelainen@vtt.fi](mailto:tarja.makelainen@vtt.fi).  
Veijo Nykänen, VTT Technical Research Centre of Finland, Finland, [veijo.nykanen@vtt.fi](mailto:veijo.nykanen@vtt.fi).

## Summary

This study aims at further strengthening the statements about a positive correlation between citizen participation and well-being of the neighbourhood. Service co-creation, social impacts and the sense of community of a neighbourhood are key focus areas of the study. By examining our case neighbourhood – a Finnish urban suburb from the 1970s – we found evidence to claim that it can be highly important to, by different means, support services which increase social activities and interactions, and thereby decrease social risks. The other strong observation made is that, although challenging, collaboration between different local actors can be highly valuable and it can create synergy solutions. Local features set the focus and goals for the collaboration and co-creation of value between different units of city governance and neighbourhood level actors. With the support of our case study we argue that three key elements are necessary for the co-operation and service co-creation to evolve: first, availability of facilities and open places where people can meet and change ideas, second, collaboration and informal meetings and third, a key person who is eager to bring individuals and groups together, implement actions and take risks.

**Keywords:** Social impacts, neighbourhood well-being, service design, citizen participation, value creation, sense of community

## 1. Introduction

Service science is an interdisciplinary field that focuses on fundamental science, models, theories and applications to drive service innovation, competition and well-being through co-creation of value. As Ostrom et al. [1] present, service innovation creates value for customers, employees, business owners, alliance partners and communities through improved service offerings, improved service processes and service business models. Value co-creation has been a basic idea of many researchers in the field [2][3]. Vargo & Lusch [3] highlight in their theory about Service-dominant logic (SDL) the importance of co-creation by stating that a customer is always a co-creator of value and by highlighting the importance of value networks (service ecosystems). Experience and thereby perceived value is created in a service process.

This study examines the services at a neighbourhood level. The importance of services for a neighbourhood well-being has been proven by several sustainability assessment systems. For example in the ISO 21929 (Sustainability in building construction) standard [4] one of the 14

indicators is availability of services and it is measured as distance to public and personal modes of transportation, green and open areas and to user-relevant basic services. Also the eco-efficiency assessment tool for city planning, HEKO, encompasses five entities, one of which is transportation and services, including the indicator: distance to basic services (day care, primary school, store) and broader services (library, postal office, health centre, secondary school and more diverse commercial services) [5].

The premises of our study are also related to *shared value* theory presented by Porter and Kramer [6], which suggests that companies and society should co-operate in order to create not only economic value for the company but also social benefits for the citizens. The principle of shared value creation goes beyond the corporate social responsibility (CSR) thinking, and it discards the traditional division between the responsibilities of businesses, governments and the civil society. According to the shared value theory it does not matter, from society's perspective, what types of organisations created the value. More important is that benefits are delivered by those organisations – or combinations of organisations – that are best positioned to achieve the most impact for the least cost.

## **1.1 Citizen participation and social impacts**

The underlying assumption of this study is that in order to develop a sustainable, wealthy and valuable neighbourhood, new collaborative means and services are required. Several studies have proven the importance of citizen participation, level of interactions and the sense of community, describing them as contributors for human wellbeing and for a vital neighbourhood [7][8]. The ISO 21929 standard [4] has an indicator about participation, describing the level of stakeholder involvement which does supposedly contribute to social equity. Also the TISSUE-project highlights the importance of indicators related to citizen participation; TISSUE presents an indicator for citizen participation in planning and the satisfaction with the state of the urban environment but in addition to this, another indicator for measuring how local firms and organisations endorse their responsibility towards the environment and the local community [9].

Urban planning is often criticised because it does not sufficiently enable the participation of citizens and different actors for whom the suburbs are meant for [10]. According to a survey carried out by Halme et al. [11] the majority of the respondents shared the opinion that the residents should have a possibility to participate in the service development of the neighbourhood. Heinonen and Ruotsalainen [12] present that future suburbs should include 1) experimental and meaningful environment and life, 2) Local democracy, activities from the grass root level upwards and 3) hybrid spaces to connect new ways of utilisation and different activities of the neighbourhood. Needs to improve the sustainability of Finnish neighbourhoods is a current and increasingly important question, and there exists a growing level of knowledge and technologies for carrying out the improvements [13]. During recent infill development projects (Peltosaari and Tammela) a conclusion is that it is important to survey social dynamics simultaneously with examining the building stock and infill potential [14]. In greenfield urban development areas participation of inhabitants into planning is low due to small amount of inhabitants in the beginning. In the old neighbourhoods all residents are potential participants in planning and giving feedback. Different means and participating methods are therefore necessary in order to involve all inhabitant groups to service development.

Social impacts of sustainable built environment constitute a main area we are focusing on. For example the Finnish Ministry of Justice [15] defines social and health impacts as factors influencing a human, a group of people, a community or a society. The impacts might influence mental or physical health, well-being or living conditions of people, or the way how well-being is divided between people (for example between different socio-economic groups). According to the ISO 21929 standard [4] buildings and construction sector is an important industry which has remarkable economic and environmental impacts but it also affects social conditions significantly.

Sustainable buildings and infrastructure can be seen as a platform for services and living. According to Tapaninen et al. [16] the environment is related to the sense of community and to well-being as it is the scene for human activities. A good environment is created by social interaction of planning, development and doing. By creating good environments it is possible to ease the belonging to a group and develop sense of community.

Social impacts and well-being is also linked to the concept of social capital which is according to many studies associated with civic engagement [17]. For example a study by Mellor et al. [18] examining personal and neighbourhood well-being indicates a strong relationship between volunteering and personal and neighbourhood well-being. Several efforts have been made in order to increase the well-being and the sense of community of neighbourhoods but the projects cannot take off without engaged people. Therefore socio-cultural inspiration has a strong role in social growth and community development, as it motivates people to commit themselves to different activities [19].

## **1.2 Research questions**

The main research questions that this study aims at answering are: What are the new approaches or roles of stakeholders in service development? How can the user value be created in such a way that it will have strong social impacts and it can contribute to the social well-being of the neighbourhood? Which measures or boundary objects can be implemented for supporting collaborative service development? And what is the level of capability of local actors to contribute to co-creation of value?

The expected outcome is to find support for further strengthening the statement about positive social impact of citizen participation in service development, also enabling value creation for the whole neighbourhood. With the support of our case study we aim at giving suggestions on which elements are necessary for the service co-creation ecosystem. We also seek new approaches to present problems in development of existing urban district by means of city planning added by means of service ecosystem development.

## **2. Methodology**

An urban suburb from 1970s in the capital region of Finland was chosen as the case study. The aim of the case study was two-fold: The first objective was to identify service-related preferences, demands and thoughts by the residents and different actors of the neighbourhood. Second, a method for incorporating citizens into service planning and designing was tested. Main research methods were a survey and interviews, for identifying the resident perceptions, and a living lab for testing the user engagement method.

### **2.1 The Case study – the urban suburb of Hakunila**

Hakunila is an urban suburb of 11 000 residents, located in the city of Vantaa, in the capital region of Finland, and it is part of the greater Hakunila, with close to 30 000 inhabitants. Hakunila can be characterised as a typical Finnish suburb from the 1970s. There are approximately 300 suburbs in Finland – half of which were built in the 1970s – accommodating about one million people. Since the 1990s there has been a growing demand for renovation of the buildings and the built environment in the suburbs. Also the social problems of the suburbs became a matter of concern in the 1990s [20].

Some of the numbers characterising Hakunila do not indicate particularly high social and economic performance of the neighbourhood: Hakunila has a considerably high unemployment rate (14,8 %; 9,1% in Vantaa) and a large non-Finnish speaking population (18,8%; 9,1% in Vantaa) and half of the apartments in the neighbourhood are rented flats [21]. Main services in the neighbourhood consist of two supermarkets, a kiosk, a library, a health centre, a pharmacy, a church, a hair

dresser, a few specialized shops, a video rental, a flea market and several pizzerias and pubs, most of which are located at the commercial centre built in the 1970s and 1980s. The distance to the largest centre of Vantaa is about 5 km and the distance to the Helsinki city centre 17 km. Public transportation is good with dense bus connections to Helsinki and other parts of Vantaa.

Hakunila is the third largest population centre in Vantaa and as a result of strong construction boom there are several flat roof apartment buildings from the 1970s which dominate the scenery in the centre. However, Hakunila also has a large amount of cultural-historically important landscape with old mansions and diverse nature as well as great terrain for sports and other outdoor activities. Built environment is considered as scenery for life and well-being. Services that are targeted to maintain and upgrade its qualities are part of the observation focus of the study.

## **2.2 Interviews and questionnaire**

To identify perceptions by the residents and actors of Hakunila, an interview and a questionnaire was carried out. The interview was a semi-structured interview with strict questions, but including also unplanned questions and conversation, depending on the interviewed person. The questions were related to describing the suburb with suitable adjectives, importance of different services in the suburb, good and bad things of the suburb, future scenarios for the suburb and news which would improve the image of the suburb. The questions were multiple choice questions, with the possibility for the respondent to add their own comments and descriptions with free words in many questions. The interviewed persons were people who have an important or active role in Hakunila (e.g. head of the school, CEO of the maintenance service company, members of the city council, head of the library) and have a special understanding about the problems, the current situation and the development of the suburb. Altogether 10 interviews were carried out between spring and autumn of 2012.

The questionnaire was launched in internet and answers were also collected on a paper form. The questions were similar to the questions used in the interviews but with less possibilities to write the answers in own words. The target group for the questionnaire was all residents of Hakunila and the questionnaire was disseminated through different channels, e.g. emailing lists, paper advertisements and by spreading information at the commercial centre. Replies are still being collected at the time of writing this paper but preliminary results can already be discovered.

## **2.3 Workshops and living lab**

Another major method of the research was organising two participative workshops for residents and actors of Hakunila. The first one was organised in September, on the Hakunila-day, when different people were gathered at the square of the commercial centre of Hakunila. The workshop was arranged at the youth centre, located at the commercial centre, and people were encouraged to share their ideas about what - especially service-related - improvements could be made in order to upgrade the well-being and the image of the neighbourhood. People were encouraged to take one step further and also give suggestions on how to bring the ideas to a practical level. The workshop served as a living lab in which the interest and potential of the citizen participation was tested. Facilitation method used was based on supportive and responsive leadership styles during the face to face dialogue sessions and participants were helped by open ended question to describe their ideas and opinions.

The second workshop was organised in December at Hakunila church. Again, different actors of the neighbourhood were encouraged to participate and discuss about methods to improve the well-being of people in the suburb. The main objective was to provide the different actors an opportunity to find ways to collaborate and to change ideas and information and to observe how the citizen collaboration and co-creation would start to evolve.

### 3. Results

This paper presents the preliminary results of the case study. The interviews and the questionnaire presented interesting insight into the Hakunila residents' and actors' thoughts about their surrounding region. Similarities among the respondents could be identified very easily as some issues were highlighted far more than others. According to the interviews and the questionnaire the residents of Hakunila mostly appreciate their neighbourhood because of the existence of nature, cosiness and the high sense of community. The most important services of the suburb are the supermarkets, the library, health centre and the pharmacy. Residents would like to have more social activities, better commercial services and meeting places and less social problems and disorders in the neighbourhood. The respondents were highly unanimous that the bad image of the suburb is a highly important issue which should be improved. The perception of the future looks considerably good as most of the respondents agreed on the statement that "Hakunila will be a vivid, cosy, multi-cultural suburb, attracting different people with its extensive services and diverse activities". However, differences between the interviewed people and people responding to the questionnaire can be pointed out here as interviewed persons, who are having an active role in the neighbourhood, gave more optimistic responses compared to the people responding to the survey.

These results are fairly identical to a study carried out by Halme et al. [11] according to which the residents of the examined suburbs found the supermarket, post office and pharmacy as the most necessary services. Even if the natural environment was not considered as a service as such in Halme's research, the residents did think that the nature and spaciousness improved the attractiveness of the living environment. An interesting finding was that almost all respondents thought that Hakunila is a better neighbourhood than its reputation implies. Another rather surprising finding was that people in the region are considerably active and there are several associations and clubs in the neighbourhood. This suggests that the residents of Hakunila share a considerably high sense of community which further supports the idea about possibilities for service co-development.

With the help of interviews and questionnaires we identified eight key features of the neighbourhood. We argue that these key features should strongly be considered when developing the region and its services. The features are as follows:

- 1) Availability of nature: Sufficient existence of nature in the vicinity of the built environment. The nature is in good condition and outdoor activities are alleviated by trails and illumination.
- 2) Prevention of social displacement: Activities which prevent the lack of economic resources, social isolation and the limitation of social and political rights.
- 3) Multiculturalism as strength: The opportunity for a person with different cultural background to adapt to Finnish culture and simultaneously follow his/her own cultural traditions.
- 4) Child friendliness: An environment which is safe and provides stimulations for children and is good for families with children.
- 5) Sense of community: Local communality, in which it is essential that people know each other and have common activities. Is related to social safety.
- 6) Ecological life: Residents can organise their life in a way that it consumes considerably little natural resources and that the carbon footprint remains low.
- 7) Attractive living environment: Aesthetically attractive living environment providing also feeling of comfort for the residents.
- 8) Safety: An environment which is experienced as safe and where the safety risks are minimised.

Also both workshops provided interesting results. The most important observation was that residents of Hakunila are highly interested in participating in developing the neighbourhood. The residents also seem to have a strong ability to take one step further from not only creating ideas but also to provide suggestions for how to bring the ideas into the level of realization. The sense of

value and valuable service was clear and the importance of seeking synergies in setting up service. However only a few actors were able to formulate the co-created value factors: mostly those actors who were involved in assessment or evaluation processes as part of their work or profession.

When it comes to further creating the ideas and service co-design, one significant problem seems to exist: even though there are several active associations and active individuals in Hakunila, the collaboration among different groups remains considerably low. This is partly related to another issue: the lack of available spaces. Providing a convenient space for different groups and associations to organise activities and form tighter networks could strengthen the possibilities for collaboration between both different groups and individuals.

#### 4. Discussion, Conclusions and Acknowledgements

The study confirms that it can be highly important to, by different means, support services which increase social activities and interactions and which thereby decrease social risks. User engagement in service development can be beneficial as shared value will be created for several stakeholders, enabling upgrading of the image, identity, wealth and well-being of a neighbourhood. Participation in workshops for service development can improve the neighbourhood's identity and increase the sense of community. During a longer period of time this perspective contributes to the identity of the neighbourhood. The other strong observation made was that collaboration between different local actors can be very valuable and it might create synergy solutions. The study confirms that the collaboration between units of city governance is challenging and an effective dialogue between local actors and city actors remains unsatisfied, even though specific area level network development programs were running.

To overcome these challenges eight key features were developed for the Hakunila neighbourhood. We introduce the approach of developing a set of key features for guiding and supporting strong, target oriented collaboration between all actors, for the interest of the local neighbourhood and community. We argue that local features set the focus from inside-out for the collaboration and co-creation of value between different units of city governance and neighbourhood level actors (as shown in figure 1). Goals and city level strategies remain to be implemented outside-in, but they are also linked to local features.

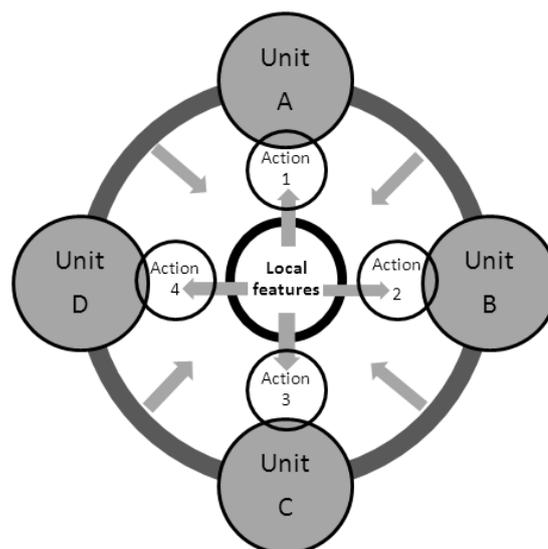


Fig. 1 Collaboration between units of city governance and neighbourhood level actors guided by local features.

Figure 2 illustrates the role of different actors affecting the neighbourhood well-being and use value. We argue that the use value of the neighbourhood consists of quality of spaces and social interactions. Neighbourhood is characterised by its reputation, image, identity and brand. Three main actors can be identified: 1) Units of city governance 2) Citizens, interest groups and persons and 3) Entrepreneurs, third sector and associations. Units of city governance act in the scope of strategies but a more district level service focus and value assessment is desired. A significant problem is that the city units are continuously bound to a number of districts, and the services are related to daily and weekly needs. Collaboration of different city units can vary to a large extent depending on the service units and the city. The development needs of a district are considered only when this kind of a project has been initiated and budgeted, and also in this case, the different service units need to be included into the development teams.

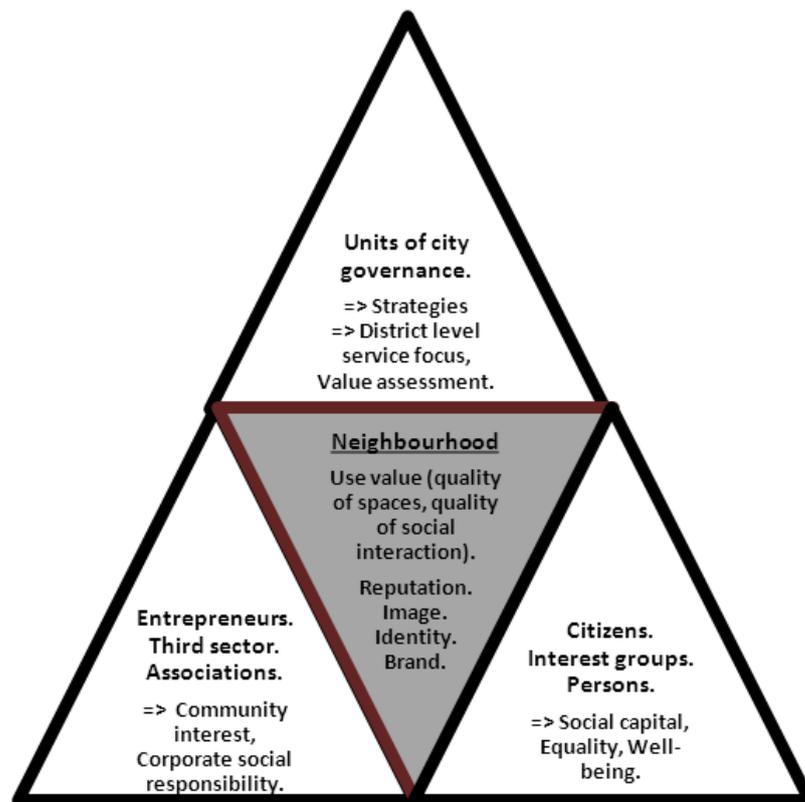


Fig. 2 Actors around the neighbourhood level well-being and use value.

Different groups and active key persons increase social capital, and they support well-being of the local inhabitants. Citizens, in general, value neighbourhood by its reputation and brand. High community interest and corporate social responsibility of entrepreneurs, third sector actors and associations contribute to neighbourhood level use value. The idea of three main group of actors affecting neighbourhood well-being is related to the shared value theory by Porter and Kramer [6] which suggests that companies and society should co-operate in order to create not only economic value for the company but also social benefits for the citizens.

With the support of our case study we argue that three key elements are necessary for the co-operation and service co-creation to evolve. First, availability of facilities and open places where people can meet and change ideas is highly important. This is related to the second element, collaboration and informal meetings, which is essential for taking the ideas to the next, the implementation level. Collaboration can take place between different people but the collaboration of different associations might be even more important as the associations are already active but

normally on a rather limited area. This leads to the third key element, the importance of a key person. Without an active key person, who is eager to bring individuals and groups together, implement actions and take risks, and who holds a personal interest in the wellbeing of the neighbourhood, successful forms of service co-creation are unlikely to evolve.

It is also important to note that before starting collaboration with residents related to services and social issues, it is useful to analyse the current service supply in the neighbourhood. Responsibilities to manage services are divided into several communal service and governance units whereas private services are independent. The analyses should provide a framework for collaboration with inhabitants as without this it is difficult to detect the aggregate service picture.

Heinonen and Ruotsalainen [12] point out three important questions/concerns considering the sense of community. First, how to avoid the uniformity often related to community feeling. The other question is, how to get citizens truly participate in forming groups and developing the region. And the third concern relates to the forms of activities. We like to argue that the same questions will arise in service innovations on community level. However, a successful participative process will lead to strong social impacts on different forms of well-being and equality, as well as strengthening the community feeling.

Acknowledgements: This research was carried out as part of the SUSECON - Adoption of sustainable services concepts for the reinforcement of neighbourhoods - project.

## References

- [1] OSTROM A., BITNER M., BROWN S., BURKHARD K., GOUL M., SMITH-DANIELS V., DEMIRKAN H. and RABINOVICH E., "Moving Forward and Making a Difference: Research Priorities for the Science of Service", *Journal of Service Research*, Vol. 13, No. 1, 2010, pp. 4-36.
- [2] SPOHRER J, MAGLIO P., BAILEY J. and GRUHL D., "Steps Towards a Science of Service Systems", IEEE Computer Society, 2007, pp. 71-77.
- [3] VARGO S. and LUSCH R., "Evolving to a New Dominant Logic for Marketing", *Journal of marketing*, Vol. 68, No. 1, 2004, pp. 1-17.
- [4] ISO/FDIS 21929-1:2011. Sustainability in building construction. Sustainability indicators. 2011.
- [5] LAHTI P., NIEMINEN J., NIKKANEN A. and PUURUNEN E., "Helsingin kaavoituksen ekotehokkuustyökalu (HEKO)", VTT Tutkimusraportti, Espoo, 2010, pp. 95.
- [6] PORTER M. E. and KRAMER M.R., "The Big Idea. Creating Shared Value", *Harvard Business Review*, 2011, pp. 1-17.
- [7] FLORIN P. and WANDERSMAN A., "Introduction to Citizen Participation, Voluntary Organizations, and Community Development: Insights for Empowerment Through Research", *American Journal of Community Psychology*, Vol. 18, No. 1, 1990, pp. 41-54.
- [8] MANZO L. and PERKINS D., "Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning", *Journal of Planning Literature*, Vol. 20, No. 4, 2006, pp. 335-350.
- [9] HÄKKINEN T. (ed.), "Trends and Indicators for Monitoring the EU Thematic Strategy on Sustainable Development of Urban Environment Final report. Summary and recommendations", VTT Publications 643, Espoo 2007, pp. 290.
- [10] KATHLENE L. and MARTIN J., "Enhancing Citizen Participation: Panel Design, Perspectives, and Policy Formation", *Journal of Policy Analysis and Management*, Vol. 10, No. 1, 1991, pp. 46-63.
- [11] HALME T., KOSKI K., NISKANEN, S. and KURKI H. "Lähiöiden palvelut – kysyntä, tarjonta ja kehittämiskeinot", Ministry of the Environment, Helsinki, 2001
- [12] HEINONEN S. and RUOTSALAINEN J., "Ihmisten kaupunki 2030. Elävä esikaupunki – hankkeen 2. Tulevaisuuslinikka "Opportunity", Tulevaisuuden tutkimuskeskus & Turun yliopisto, Turku, 2012, pp. 65.

- [13] LAHTI P., NIEMINEN J., NIKKANEN A., NUMMELIN, J., LYLYKANGAS K., VAATTOVAARA M., KORTTEINEN M., RATVIO R. & YOUSFI S. "Riihimäen Peltosaari, Lähiön ekotehokas uudistaminen", VTT Tiedotteita 2526, Espoo, 2010, pp.120.
- [14] APARTMENT HOUSE REMODELLING - project, VTT Publications, will be published in spring 2013.
- [15] THE FINNISH MINISTRY OF JUSTICE. "Säätöehdotusten vaikutusten arviointi. Ohjeet", Publication 2007:6.
- [16] TAPANINEN A., KAUPPINEN T., KIVINEN K., KOTILAINEN H., KURENNIEMI M. and PAJUKOSKI M., "Ympäristö ja hyvinvointi", Porvoo, 2002.
- [17] ANDREWS R., "Civic Engagement, Ethnic Heterogeneity, and Social Capital in Urban Areas Evidence from England", *Urban Affairs Review*, Vol. 44, No. 3, 2009, pp. 428-440.
- [18] MELLOR D., HAYASHI Y., STOKES M., FIRTH L., LAKE L., STAPLES M., CHAMBERS, S. and CUMMINS R. "Volunteering and its Relationship With Personal and Neighbourhood Well-being", *Non-profit and Voluntary Sector*, Vol. 38, No. 1, 2009, pp. 144-159.
- [19] BÄCKLUND P., and SCHULMAN H., "Lähiöprojekti lähikuvassa. Lähiöprojektikauden 2000-2003 arviointi", Research by Helsingin kaupungin tietokeskus, 2003:4.
- [20] KARJALAINEN P., "Uudenlaisia otteita ja kertaustyylejä. Lähiöuudistus 2000 –ohjelman arvioinnin loppuraportti" Ministry of the Environment, Helsinki, 2004, pp.83.
- [21] CITY OF VANTAA, "Vantaa alueittain 2010. Hakunilan suuralue", 2010, pp. 242-277.