

# Exploring ways to successful resident-driven infill development: Lessons learned from two cases in Helsinki area



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## Summary

The current study aims at understanding the factors which promote or hinder infill development project from residents' perspective. To reach the aim, altogether 10 theme interviews were held in two case commonholds located in Helsinki area, Finland. The findings of the study revealed four important factors related to infill development from residents' perspective: 1) project management, 2) third party information, 3) communication and 4) costs and benefits of infill development project. The study findings indicate that infill development is a complex phenomenon from resident's perspective requiring support from different actors. It also became evident that residents' decision making is not just rational calculation of financial gains and losses but it also involves emotional features (experiential and symbolic in nature).

**Keywords:** infill development, resident, commonhold, Finland

## 1. Introduction

The way of living is experiencing drastic changes. Number of people living in urban areas is growing which generates more demand for living space and denser cities. On the other hand, the trend demanding more eco-efficient way of living is growing (e.g. [1]; [2]). Together, these issues generate a need to develop more compact urban infrastructure.

One approach to tackle the need is infill development. Several benefits of infill development have been identified in literature. For instance, [3] state that infill development increases the population and generates more investments in the area. Also [4] identify several benefits of infill development. They notice that as the population increases, also companies are more interested in the area contributing to maintaining the already existing services and to offering new ones. Moreover, literature reveals that infill development has positive influence on reducing poverty and providing security to the residents living in the area [5], [3].

In addition to the several benefits attached to infill development, there also exist barriers hindering it. Some of the barriers are related to the society while others to the residents' disagreement with the infill development plans. As an example to the previous, [4] mention the pressure caused by infill development to provide more public services leading to a heavier taxation. It is also possible that the suitable land for infill development in the area is owned by several landowners making the process more difficult [6] or social segregation will increase due to the high price of infill development [7].

Anyway, among the most important barriers to infill development is mentioned to be the opposition of current residents in the area [4]. Some reasons for the residents' opposition have been recognised. For instance, [8] reported that residents are worried about losing their parking plots

due to the infill development and [9] stressed residents' concerns related to recreation areas such as parks. Also increased traffic caused by infill development has seen to worry residents [6]. These resident related barriers attached to infill development (and many other reported in the literature) show the importance of understanding residents and their wishes and fears to enable successful infill development projects. However, as typical in all housing consumption related literature, also studies regarding infill development are mainly focusing on monetary, neighbourhood or apartment issues (e.g. [10]). As [11, p. 1610] emphasises, housing studies: "typically preserve the central neo-classical assumption of a utility maximizing individual, while allowing the world in which the individual acts to be characterized by 'imperfections' such as non-market clearing, disequilibrium, uncertainty and government 'intervention'". The previous statement is in line with [12, p. 239] observation that "the (housing) purchase decisions were based on a few, very crude decision criteria working as guidelines for judging whether or not the alternatives considered were acceptable, while the final choice seemingly was made according to an affect-referral decision rule". This means, that it is important to notice that residents probably do not make solely calculative and money-related decisions but also emotional issues have effect on housing consumption. This point should be addressed in a context of infill development as well to understand residents more thoroughly. Thus, *the aim of the study is to understand the factors which promote or hinder infill development projects from residents' perspective*. To reach the aim, resident interviews were conducted in two commonhold cases in Helsinki area, Finland. The findings of the study are intended to contribute to management, planning and execution of future infill development projects.

## **2. Method, data collection and analytical approach**

To identify the case commonholds, the City of Helsinki officials were met and requested to describe infill development projects conducted during recent years. Based on these discussions, two cases located in Helsinki were selected. In both cases, the main driver for the project was forthcoming water pipe renovation leading to a need for significant financial resources. The main idea behind the case selection was that the two cases should be different allowing as rich data as possible regarding the studied phenomenon and to lead to a detailed understanding of the success factors and drawbacks of infill development projects from residents' perspective.

In the first case, the infill development project was straightforward and finished in approximately three years (2004-2007). The case commonhold includes six separate 3–6 floors buildings (built in between 1951-1953) with altogether 116 apartments. All the buildings are located on a plot which is owned by the commonhold. During the infill development process, a separate plot was parcelled out for the new, infilled commonhold. The new building includes 18 apartments in four floors.

The other case was more difficult. The decision making within commonhold took several years (2005-2012) before the construction was initiated. The case commonhold includes two six floor buildings (built in 1959) with altogether 148 apartments. Both buildings are located on a plot which is owned by the commonhold. As in the first case, a plot was parcelled out and sold for the new established commonhold. The new building with five floors and 25 apartments is currently under construction and it is expected to be completed in 2013.

To achieve the aim of the study, semi-structured theme interview was selected as data collection method. In semi-structured theme interviews, the themes and questions are prepared beforehand but the interviewee has a freedom to answer meaning that no readymade answers are given to the interviewee [13]. This kind of procedure releases interviewee from researcher's perspective and gives room for interviewee's own perception, but at the same time limits the interview to the given topic. Semi-structured theme interview is also seen as suitable method especially when the study topic deals with issues the interviewee does not discuss or consider on daily basis (such as infill development) [14].

The themes selected to the interviews were based on the previous literature in infill development and housing. Also several brainstorming sessions were held among the research group to challenge the selected themes and revise the interview guide. As a result, the following three main themes were included:

- 1) **General description of commonhold and shareholders' meeting.** The main reason for this theme was to discuss about the commonhold and shareholders' meeting (e.g. what type of people live there, what is the condition of commonhold, what is a normal shareholders' meeting like) in general level to get background information on the case commonhold. The choice was made as in Finnish system, commonholds are considered as corporates in which each apartment entitles its owner to a certain amount of shares and right to vote in a shareholders' meeting. Shareholders' meeting is the deciding body of commonhold in which all the major decisions (such as infill development) are made.
- 2) **Description of infill development project.** Under this theme, the interviewees were asked about their perceptions on the commonhold's motives for the infill development project, current status of the project, management of the project, communication related to the project and their general perception on whether the project was conducted successfully or not. The idea of this theme was to capture the interviewees' general considerations regarding the project and activate their memory before going into more detail to the success factors and drawbacks of the project.
- 3) **Information processing.** This theme was about the interviewees' decision making related to infill development project. The idea was to capture the issues which interviewees considered important while making the decision on whether to support or oppose infill development project. Thus, interviewees were asked about the source of information as well as the detailed reasons why they decided to either favour or oppose the project. To get into more details about the reasons, a theory of perceived value was adopted from marketing literature [15], [16], [17]. This theory proposes that individuals base their decision on calculations related to the perceived benefits and costs of decisions [18]. However, in addition to monetary benefits and costs, the theory also acknowledges emotional costs and benefits such as stress caused by the decision making or hedonic and symbolic value of the decision. Thus, this approach was deemed as suitable to go beyond the rational and monetary reasons for housing, or in this case infill development decisions.

The data was collected during 2012 (and is still ongoing). Altogether five interviews were held among the residents of both case commonholds. All interviewees had been living in the commonhold during the infill development project and were the owners of their apartments meaning they had right to participate in decision making in shareholders' meetings. Major part of the interviews concentrated on residents' perceived benefits and costs towards the project and the underlying reasons for those. The interviews lasted between 45 min to 90 min and were held in the interviewees' homes or in public places such as cafeterias. To ensure the completeness of the data and analysis, the interviews were tape-recorded and transcribed. Each interviewee was given a token worth of 30 euros for participating the study.

The data was analysed in a following manner: The transcribed interviews were read several times with emphasis on iteration. In this case, the iteration means a continuous movement between the individual case descriptions and the emerging understanding of the entire set of textual data. The reasoning behind this type of analysis is to develop provisional understanding, challenge it and further develop it through an on-going iterative process [19], [20]. The boundaries for the iteration were generated by the themes of the study. The analysis strived for developing more detailed and abstract categories which the residents considered important in terms of infill development.

### 3. Findings

This section reports the findings of the study. In general, the analysis revealed four main categories which emerged from the interviews and which the interviewees considered important from infill development perspective. These are:

- 1) Project management;
- 2) Third party information;
  - a. professional information
  - b. layman information
- 3) Communication;

- 4) Costs and benefits of infill development project;
  - a. monetary costs and personal sacrifices
  - b. functional benefits
  - c. experiential benefits
  - d. symbolic benefits

The content of the categories varied between the two cases. Thus, in the next sections the findings from both cases are reported separately. In conclusions, the findings from the two cases are contrasted in order to reveal the differences and generate additional understanding on reasons which, on the one hand, promote infill development process and on the other hand complicate the project from the residents' perspective.

### 3.1 Case area 1

The motive for the infill development project in case 1 was the need for monetary resources to conduct water pipe renovation. According to the interviewees, approximately one third of the expenses were covered by parcelling out and selling the plot for the new infilled commonhold. This naturally served as one reason for the successful project. What also became evident from the interviews was that the residents considered the project understandable and clear from their perspective. The reason for this was the *management of the project*.

According to the interviewees, both the chairman of the commonhold and the deputy landlord were active on the project. The interviewed residents described their work as focused and determined but also honest. What seemed to be important was that the interviewees considered that all issues brought up in shareholders meetings were well prepared and easy to understand which contributed to their positive expression on management. Basically, the only negative comments on management were that one interviewee considered that the managing persons had lack on both technical and financial knowledge and other interviewee was disappointed that the managers did not give the residents opportunity to influence on the design of the new building. Despite these lacks in management, it became evident from the data that the management of the project in general was successful from the residents' perspective.

*"The then chairman of the board was very excited about infill development... He even planned some additional parts to the high buildings which would have been quite massive... And he planned the infill development and when the process moved on then nothing could have stopped it..."* Male/case 1

The second main category identified in the interview material was related to *third party information*. From the residents' perspective, the use of professional third parties in the project was minimal or at least the interviewees did not remember well the parties which might have been involved. This indicates that the need of such actors was not considered relevant during the project. Anyway, one resident remembered that the construction company participated some shareholder meetings and presented its plans related to the new building, the easements allocated to commonhold's remaining property and what kind of shared functions the new and old commonhold will have. One resident also pointed that the city of Helsinki gave the permission for the project rapidly. On the other hand, one resident was of the opinion that the information given by the third parties was somewhat contradictory and was not helpful in decision making.

*"I think some third parties were involved... but I wasn't in board at that time... I can't remember those who were involved, but I think there was some..."* Male/Case 1

The other type of third party information was also identified in data. This information origin from *layman parties* such as friends, family and neighbours. Some interviewees told that they had had discussions about the infill development project with these parties. The main idea of these discussions was to interact with some unofficial party to reduce stress related to the project and also to monitor how the project is going on from other laymans' perspective. However, those interviewees who discussed about such behaviour mentioned that they did not want to have these discussions to support decision making but more like to "release steam".

*"Well, we wondered the construction... you know what they are doing here and what will they do there. How you can drive to the garage via that hill when the road comes so high and you should drive down there. And how our garbage bins used to be down there and how they try to fit those in that corner..."* Male/Case 1

The third category, *communication*, includes communication from different parties related to infill development project. In the case 1 commonhold, the interviewees did not remember well what type of communication they received during the project. Some interviewees remembered that leaflets were offered in bulletin boards and drawings of the new building were available on some website (the interviewee did not remember who was offering this information). In general, the interviewees did not consider that communication failed in any stage of the project and did not express need for more communication.

In terms of the *costs and benefits*, some monetary costs of the project were perceived by the interviewees. One interviewee stated that the commonhold lost some money as she considered that the price of the plot which was sold was relatively low. Also one of the residents who opposed the project, perceived stress and frustration during the project because he thought that the minority of residents who opposed the project were ran over by the majority and their concerns were not considered sufficiently. This reflects other type of cost, that is, personal sacrifices. Anyway, these costs were not considered as critical in terms of accepting the project which indicates that the costs in general were, at maximum tolerable, for the residents.

*"A: One thing which came in to my mind was that the commonhold was not the only one which benefitted... Of course the constructor benefitted definitely and got a good business, but that how it goes.."*

*Q: Do you think commonhold should have been paid better? When you saw the prices...?*

*A: Well, lets say that the prices of the new apartments could have been moderate..."* Female/Case 1

*"Of course then the decision making was stressing when we waited the voting and the results... even though it began to look like the others will run over us anyway..."* Male/Case 1

Several *benefits* of infill development project emerged from the interviews. Some benefits were associated with the improved living surroundings and technical performance of the commonhold, that is, *functional benefits*. For instance, the monetary resources received by selling the plot covered almost one third of the water pipe renovation which contributed significantly to the technical functionality of the commonhold. The interviewees also mentioned that a right of first refusal on the new parking plots which were located in a parking hall under the new building was offered to those residents who suffered most harm related to the project (however, this right was not used by the interviewees and they did not know if some other resident had used it). All residents had also a right of first refusal on the new apartments, but the interviewees considered the prices relatively high leading them to refuse the opportunity. In addition to the previous, other functional benefits emerged as well. Some interviewees considered that the services in the area could be maintained due to the new building and increased population. At the moment, the services are adequate, but the interviewees considered that those are diminishing all the time and were afraid that at some point important services are no longer available (e.g. grocery stores, postal services).

*"Of course, without the project there would be all renovations and their costs so if there wouldn't been the project the pipe renovation would still be pressuring... So in that sense you can say it was worth of it."* Male/Case 1

Instead of only functional benefits, also other types of benefits were associated with the project. The interviewees mentioned that the living surrounding improved as the new building was located

on an area which used to be untidy and without any real use because of the sharp cliff. The interviewees also considered that the townscape and the overall impression of their living area improved due to the new building. What was also considered important among some interviewees was that the new building did not diminish green areas or other recreational areas such as playgrounds. All these benefits refer to *experiential* benefits meaning that some aspect of infill development is related to more emotional than functional or monetary issues.

*"The area is now a bit more tidy what it was earlier when there was no building... It was quite a sharp cliff..."* Female/Case 1

### 3.2 Case area 2

The motive for the infill development project in case 2 was the same as in case 1; to gain financial resources for water pipe renovation. However, the potential monetary resources were significant compared to case 1. In the end, the entire water pipe renovation was financed by selling the plot for the new commonhold (and some were left over for future renovations). However, unlike in case 1, the infill development project was more difficult leading to a division of residents into groups either favouring or opposing the project. Also several official complaints and even disturbance and quarrelling between residents emerged. This indicates that the potential financial incentive (even significant one) available for commonhold planning infill development is not enough to enable straightforward process. The following paragraphs tackle the main issues the residents brought up which might shed light on why this particular project was a difficult one.

In terms of the *project management*, some residents perceived the management as determined and sufficient. The interviewees who favoured the infill development project considered that the chairman of the commonhold and the deputy landlord were the main actors who managed the project and their activities were considered as firm and determined. On the other hand, those who were on the opposing side gave strong criticism towards the project management. They considered that the project was forced and some decisions were made behind the commonhold administrative board's back (esp. by the deputy landlord) leading to a lack of trust in project management. This was also one of the reasons the opposing residents considered to be a source of quarrelling between the residents and the negative atmosphere in the commonhold. In addition to that, the opposing interviewees considered the planning of the project insufficient and they felt they did not have enough information to make decisions regarding the project.

*"The chairman of the board has been deeply involved with this... I know her... And I gave her a right to represent me by proxy when I wasn't able to participate the shareholders' meetings... And she has always informed me in very details what has been decided and what has happened... I have never considered that I need something more..."* Female/Case2

*"The whole process and management was forced, but now the new building is there as majority of the residents wanted."* Female/Case 2

*"We didn't get much information... And perhaps the worst thing was that the deputy landlord had made some agreements about the road to the new building with the constructor behind the chairman's back... It decreased the trust."* Female/Case 2

Case 2 included some *professional third parties* which assisted in decision making. The residents' opinions on these parties and their importance in infill development project varied. Some interviewees found the third party involvement as positive while some as negative and confusing. In comparison to case 1, the interviewees also remembered very well which third parties were involved (indicating that the project was more intense than in case 1). The third parties mentioned in the interviews were 1) lawyer from the Finnish Real Estate Federation (chaired one shareholders' meeting to control the decision making), 2) real estate agent who had evaluated the impact of the new building on the price of old building's apartment price and served as advisor in negotiations between the commonhold, city of Helsinki and constructor, 3) lawyers who reviewed all contracts between the commonhold and some other party (the reason was to avoid conflicts), 4) Helsinki city architect who presented the plans for the new building and 5) constructor which

informed residents about the building project and its effect on residents' everyday life.

As mentioned, some interviewees considered the professional third parties' information positive. The main reason for this was that they found the third party involvement increasing trustworthiness of the project and made their decision making easier. They also found that as the decision making process within commonhold became more and more difficult, the third parties' involvement was necessary to avoid possibility of complaints related to formal errors which might lengthen the project (esp. the lawyers who reviewed the contracts were perceived very important from that perspective). On the other hand, third party involvement was perceived negative as well. Especially the city of Helsinki activities were perceived problematic by some interviewees. This was related to the traffic arrangements to the new building via the old commonholds' plot which did not please all residents (some interviewees even stated that the traffic arrangements were the main reason for opposing the project). The interviewees were slightly confused as they felt that the city of Helsinki did not have any reasonable justification for such traffic arrangements, but the officials did not want to listen residents' views and consider any other option. Another negative aspect of the third party involvement was the language and terminology the professionals used. It was not fully understood by some interviewees which caused confusion and frustration, thus the interviewees would have preferred written information which was rarely delivered.

*"We had real estate agent who was some kind of an expert. And then we needed, mainly due to the internal disputes, ask assistance from lawyers just to make opposition happy, so that all legal aspects have been noticed. And I think it was a good thing so that no one needed to question those anymore..."* Male/Case 2

*"A: It was just like that. Mainly I remember how those issues were handled.... There was always someone to give presentation and explaining things... But as I said, I didn't learn much in those meetings. At first, I tried to write everything down but then I always had difficulties to follow and in the next step I didn't understand anymore..."*

*"Q: Did you wish that the information would have been clearer?"*

*"A: Yes, as I said in some point, they could have delivered the information in written... or via Internet... just so that I would have been able to understand and not try to learn the terminology in the meetings..."* Female/Case 2

The interviewees also had discussions with *layman third parties*. Some of them had discussed about the project with their relatives and also with other residents. These discussions were considered positive. For instance, one interviewee had discussed about the project and the stress it caused with relatives. The interviewee felt that this had positive effect on his personal well-being as it relieved stress and contributed on his capability to continue with the project. The discussions with other residents served different purposes. In one case, the interviewee had discussed with her neighbours to understand what the professionals had presented in shareholder meeting. In other case, the interviewee told that he had discussions with other (favouring) residents regarding the opposing resident group. According to him, these discussions infused his belief into the project and that in one day the project will be finished.

*Communication* related matters emerged from the interviews. Some interviewees considered that the communication was sufficient and enabled decision making. According to them, the communication was handled via bulletin boards and also via direct interaction between chairman of commonhold and residents. Despite some positive evaluations regarding the communication, also negative ones emerged. Perhaps the main reason for negative evaluations was the lost trust in communication. Some interviewees mentioned that the communication failed as the content did not match the reality (e.g. dates changed, disturbance caused by the construction work was underestimated). Some interviewees were also confused as they did not have knowledge on who is responsible for communication and who they should address if they had questions. In terms of failed communication, especially the constructor was mentioned frequently. One interviewee stressed that the constructor had promised to communicate about the schedule of construction but never did so. Also the channel of communication did not please some interviewees. They

considered that nowadays it would be feasible to use Internet for communication and gather all relevant information electronically, especially because the commonhold had its own web pages. This would have helped them to keep track on the project and found relevant information easier when the amount of different documents grew.

*"Q. How was the communication regarding the project?"*

*"A: Well, not very well. I didn't always know what is going on."*

*"Q: Why so?"*

*"A: Well, they didn't communicate at all... First they announced that it begins on that day... Well it didn't." Female/Case 2*

Interviewees discussed about the *costs and benefits* of infill development project. Due to the significance of financial resources received from selling the plot, no money related costs emerged from the material. However, the interviewees (both those who favoured and those who opposed) perceived several costs which were more psychological in nature including stress and anxiety. The reasons for psychological costs varied. One interviewee considered that the spirit within the commonhold was negative due to the constant quarrels between the residents. On the other hand, another interviewee perceived the uncertainty regarding the process outcome very stressful as she would not have had resources to finance the water pipe renovation and thus she would have had to move away from the commonhold in which she had lived for a long time. Other reasons for stress and anxiety included the difficulty to participate the decision making due to the lack of own competence (caused by the difficult terminology and insufficient communication) and the potential that the new building might include solely rental apartments (the interviewee was afraid of disturbance).

*"Well, yes it was somewhat stressful when such a small commonhold has two groups with such a different views... Of course you can have your opinions, but when it went so far that you didn't even say hello in the yard... That was somewhat stressful." Female/Case2*

In addition to psychological and personal costs, the interviewees were concerned that the infill development project will have negative effect on the functionality of their commonhold and the near area. Especially, the traffic arrangements via commonhold's front yard concerned several interviewees (both favouring and opposing ones) as they considered the increased traffic might cause danger to people and also the car lights might disturb those residents living in ground floor. The new building also generates difficulties for daily routines as the shortest (unofficial) road to a local mall goes through the new plot making the trip longer. Also the current location of garbage bins will be changed which caused concerns how the garbage truck can move on the yard during winters (there is a sharp and slippery road to the new garbage bins). Finally, one interviewee was not satisfied that the forest disappeared due to the project as she was concerned about the birds and their well-being.

*"The problem which we will have... you should have own road to the new building, not via our yard. Well, city was against it because it would have gone through a park. And now the road goes via our commonhold front yard... It stays as an easement to us. I don't think it's a good thing, because we have a big commonhold and already parking plots in the yard so the road increases traffic... It doesn't bother me that much because my windows aren't to the yard but those who have... It completely changes it... I think that caused the quarrelling..." Female/Case 2*

In addition to costs, also *benefits* of infill development project were perceived among the interviewees. One major benefit was the financial support gained for water pipe renovation which was considered to improve significantly commonhold's technical functionality. Other functional benefit emerged as well. This was related to the increasing number of people in the area which was considered to contribute to maintaining the services in the area and also improving the public transportation. Some benefits which were more emotional in nature were identified in the material as well. Some interviewees considered that the living area will become more comfortable and



attractive when the untidy forest with drinkers will be log. Also the new building was welcomed by some interviewees as they considered that they live in an urban area and the building will change the area more urban like. In addition to the previous experiential benefits, also some symbolic ones appeared. More specifically, the status of the area might be elevated due to the new building and the area will become more attractive in the eyes of the outsiders. Some interviewees also considered that the value of commonhold's apartments will rise due to the relatively high apartment prices in new building meaning that the new people moving in the area will in general be wealthier thus contributing to the status of the area.

*"Because those will be owner-occupied apartments and so expensive that there isn't many people who can afford those... So it's definitely a positive thing..." Male/Case 2*

#### **4. Discussion, Conclusions and Acknowledgements**

The current study aims at understanding the factors which promote or hinder infill development project from residents' perspective. To reach the aim, altogether 10 theme interviews were held in two case commonholds located in Helsinki area, Finland. To gain more holistic view on the issue, two opposite cases were selected with the help of Helsinki city officials. In case 1 commonhold the project took only few years without any complaints. Contrary, the other case took several years with several complaints and even quarrelling between the residents.

The analysis of the interview material revealed four main topics related to infill development which residents considered important: 1) project management, 2) third party information, 3) communication and 4) costs and benefits of infill development project. Based on the findings, it could be stated that the financial resources gained via infill development project is not in a key role to enable successful project from residents' perspective. In the straightforward case 1, the potential financial resources were minor compared to the difficult case 2. Thus, the reasons for successful project from residents' perspective probably lay somewhere else. Other explaining factor might be the geography of the area, that is, the new building simply does not fit in the townscape and residents cannot approve the plans. According to the interview material, this was not the case either as only few arguments was made for opposing the project due to lost views or recreational areas. Instead, in both cases the plot for new building was at least to some extent considered as wasteland.

Perhaps one explaining factor behind the differences in the two case areas was the project management. In case 1, the interviewed residents pointed only few minor shortcomings in management. In case 2, the situation was completely different as some interviewees considered the project management as adequate while others gave strong criticism towards it. This might have set up the flames between residents and led to the division of residents into two groups who either favoured or opposed the project. In the end, this led to quarrelling (and even harassment) between residents and continuous official complaints causing stress and anxiety and prolonging the project. Also communication regarding the project in case 2 was considered somewhat failed among some residents. What was important was that some interviewees considered that due to confusing communication their trust in the project decreased. Also the professionals who were involved in the project used difficult terminology which made some residents feel incompetent to make decisions.

Naturally, the shortcomings in communication reflect also managerial issues. As usual in Finnish system, the board of commonhold consists of regular residents whose primary profession might have nothing to do with housing, planning or construction. Even with the help of deputy landlord, preparing infill development project might be extremely difficult for layman actors. More demands for the preparation includes that infill development projects are not common in Finland meaning that the city officials or other professionals might also have difficulties to provide assistance or to estimate schedules leading to a residents' decreased trust in the project. Thus, it is imaginable that such a situation can easily lead to severe difficulties as was in the case 2. When the problems cumulate, the situation might finally go beyond residents' rational thinking and the nature of the entire project might turn into emotional one which manifests in quarrels and complaints without real justification.

Based on the study, it seems reasonable to consider the management issue more thoroughly. As the Finnish society encourages commonholds towards infill development, it means that managing such demanding project should be supported by officials. In finding the ways for successful support, it is important to understand that officials need to listen the residents carefully. In case 2, both favouring and opposing residents considered the city of Helsinki decision to plan the road to a new commonhold via old commonhold's front yard "foolish" and "stubborn". Neither the justification for the decision did convince the residents as they considered themselves more professional on their own area than city officials. As this was frequently mentioned to be the initiating factor for problems which then cumulated, it can be said afterwards that the decision should have been explained more thoroughly emphasising the need for true commitment to the project from officials as well.

The study findings revealed that infill development is a complex phenomenon from resident's perspective. It also became evident that it is not just rational calculation of financial gains and losses but the decision making also involves emotional features (experiential and symbolic in nature). Thus, it is important to understand these issues in future studies. It also seems that management of the project is in a key role. The limitation of this study is that managers and management per se were not on the focus but mainly how it was viewed by the residents. Thus, focusing on the complexity of management from managers' perspective would be valuable to understand the reasons for the problems and provide building blocks for management of future infill development projects.

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