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Cross communication among stakeholders and organisational learnings on renovation projects

A case at a housing district in Gothenburg, Sweden

Master's Thesis in the Master's Programme International Project Management

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Division of Architectural Theory and Method
CHALMERS UNIVERSITY OF TECHNOLOGY
Gothenburg, Sweden 2015

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ABSTRACT

Housing companies try to involve their tenants in the decision making in renovation processes. This requires effective communication, not only between the housing owner and the tenants, but also between the housing owner and other stakeholders. The *purpose* of this research is to analyse and evaluate the communication processes in a renovation of apartments and to identify the organisational learnings after the performed renovation. The aim is to enhance the knowledge regarding the communication among stakeholders in renovation projects and to identify aspects that tenants consider as the most important in order to be satisfied. The district Långängen in the city of Gothenburg with about 870 apartments, owned and managed by a public housing organisation, is used as a case. The *method* used to conduct this research, consists of an embedded mixed method approach, combining qualitative and quantitative data collection methods, in order to strengthen the validity of the results and to provide a multifaceted analysis. 7 interviews of different involved stakeholders have been carried out together with a questionnaire survey directed to the tenants living in the renovated apartments. The questionnaire has been sent to 111 tenants with a response rate of 39%. *Results* from the interviews show that it is important for the housing owner to use different communication methods in order to inform the tenants and to deliver concise and clear information. It is also important that the different stakeholders' expectations are met and the information is shared in a way that secures their consistent commitment. Results from the questionnaire survey show that it is very important that the housing owner takes the tenants' wishes into consideration when implementing the renovation and the tenants feel that their expectations are being fulfilled. Despite the fact that the housing owner aims to be a customer-oriented organisation and involve its customers to the decision making process, the majority of the tenants do not feel involved. The *findings* can assist the housing owner to understand what are the most important factors that affect the tenants' satisfaction and how the communication could be more effective both between the housing owner and the tenants, and between the housing owner and the other stakeholders involved in the renovation project. The *conclusions* from the research show that the housing owner needs to consider and evaluate the tenants' expectations in order to keep them satisfied and to create standardised procedures for information sharing, especially when the tenants have to move temporarily, due to a renovation. Finally, *recommendations* to the housing owner are made, with suggestions to develop a standard process for gathering customer satisfaction data and also where to focus on making the communication more effective among the stakeholders.

Keywords: *communication process, housing owner, interviews, organisational learnings, questionnaires, renovation, stakeholders, tenants.*

Kross kommunikation mellan intressenter och organisatoriska lärdomar i renoveringsprojekt

Ett fall från ett husdistrikt i Göteborg, Sverige

Examensarbete inom mastersprogrammet International Project Management

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CHALMERS TEKNISKA HÖGSKOLA

SAMMANFATTNING

Fastighetsbolag försöker att involvera sina hyresgäster i beslutsprocessen vid renoveringsprojekt. Det kräver inte minst en effektiv kommunikation, mellan husägaren och hyresgästerna, utan också emellan husägaren och andra intressenter. *Syftet* med den här undersökningen är att analysera och evaluera kommunikationsprocessen vid renovering av lägenheter och att identifiera organisatoriska lärdomar efter utförd renovering. Syftet är att förbättra kunskapen avseende kommunikationen bland intressenter i renoveringsprojekt och att identifiera aspekter som hyresgästerna anser vara viktigast för att vara tillfredsställda. Distriktet Långängen som är beläget i Göteborg är använt som ett fall med ungefär 870 lägenheter, vilket ägs och styrs av ett allmännyttigt bostadsbolag. *Metoden* för att utföra den här utredningen består av ett blandat tillvägagångssätt, vilket innebär en blandning av en kvalitativ och kvantitativ datainsamlingsmetod, för att stärka resultatens validitet och för att ge en mångsidig analys. 7 intervjuer med olika intressenter har genomförts i kombination med ett frågeformulär som riktade sig till hyresgästerna som bor i dem nyrenoverade lägenheterna. Frågeformuläret skickades ut till 111 hyresgäster med en svarsfrekvens på 39%. *Resultaten* från intervjuerna visade att det är viktigt för fastighetsägaren att använda olika kommunikationsmetoder för att informera hyresgästerna och att leverera kort och tydlig information. Det är också viktigt att de olika intressenternas förväntningar är nådda och att informationen är levererad på ett sätt som säkerhetsställer deras konsekventa engagemang. Resultatet från frågeformuläret visar att det är väldigt viktigt att fastighetsägaren tar vara på hyresgästernas önskemål vid implementationen av en renovering samt att hyresgästerna känner att deras förväntningar är uppfyllda. Trots det faktum att fastighetsägaren vill vara en kundorienterad organisation och involvera sina kunder i beslutsprocessen, känner majoriteten av hyresgästerna sig inte involverade. *Resultaten* från undersökningen kan hjälpa fastighetsägaren att förstå de viktigaste faktorerna som påverkar hyresgästernas tillfredsställelse och hur kommunikationen kan bli mer effektiv både emellan fastighetsägaren och hyresgästerna, och emellan fastighetsägaren och andra intressenter involverade i projektet. *Slutsatser* från undersökningen visar att fastighetsägaren måste beakta och värdera hyresgästernas förväntningar för att hålla dem tillfredsställda och skapa standardiserade processer för delning av information, speciellt när hyresgästerna flyttar temporärt, på grund av en renovering. Slutligen, *rekommendationer* till fastighetsägaren är att utveckla en standardiserad process för att samla in data om kundtillfredsställelse och att fokusera på att göra kommunikationen mer effektiv emellan intressenterna.

Nyckelord: *kommunikationsprocess, fastighetsägare, intervjuer, organisationslära, frågeformulär, renovering, intressenter, hyresgäster.*

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Ina Hällgren & Maria Xygkogianni

Table of contents

ABSTRACT	I
SAMMANFATTNING	II
ACKNOWLEDGEMENTS	III
TABLE OF CONTENTS	IV
LIST OF FIGURES	VI
LIST OF TABLES	VII
LIST OF ABBREVIATIONS	VIII
1 INTRODUCTION	1
1.1 Background	1
1.2 Collaboration with a housing company	2
1.3 Past Research	3
1.4 Problem description	4
1.5 Purpose	5
1.6 Limitations	6
1.7 Thesis outline	6
2 METHODOLOGY	9
2.1 Research process	9
2.2 Quantitative method	11
2.2.1 Questionnaire development	11
2.2.2 Questionnaire design	12
2.2.3 Steps for conducting the questionnaire survey	13
2.3 Kano model for analysing the results	14
2.4 Interviews	18
2.5 Quality of research	19
3 ANALYTICAL FRAMEWORK	21
3.1 The communication process	21
3.1.1 Dialogues in projects	22
3.1.2 Dialogue with tenants	23
3.1.3 Decision-making process	25
3.2 Knowledge management	26
3.2.1 Organisational learnings	27
3.2.2 Informal learning	29

3.2.3	Tenant informal learning	30
3.3	Stakeholder analysis and management	30
3.4	Satisfaction	32
3.4.1	Customer satisfaction	32
3.4.2	Tenant satisfaction	33
4	CASE: RENOVATION PROJECT LÅNGÄNGEN	34
4.1	Långängen	34
4.2	The renovation project	34
4.3	The Project Organisation	36
5	EMPIRICAL FINDINGS	37
5.1	Stakeholder mapping	37
5.2	Questionnaire	38
5.2.1	Background (part A)	38
5.2.2	Information (part B)	40
5.2.3	Influence (part C)	43
5.2.4	Results from the renovation (part D)	44
5.2.5	Trust (part E)	46
5.2.6	Satisfaction (part F)	49
5.2.7	Tenants' comments	51
5.3	Interviews with stakeholders	51
5.3.1	Background	51
5.3.2	Communication with tenants	52
5.3.3	Communication among stakeholders	57
5.3.4	Other findings during interviews	61
5.3.5	Summary of interviews	65
6	DISCUSSION	66
7	CONCLUSIONS	76
7.1	Recommendations	77
7.2	Future research	79
	REFERENCES	80
	APPENDIX	

List of Figures

Figure 1	Steps for conducting the quantitative research	14
Figure 2	Overview of the theory of attractive quality	15
Figure 3	A theoretical framework for analysing organisational learnings	28
Figure 4	Stakeholder power/interest map	32
Figure 5	Långängen	34
Figure 6	The renovation process divided into 5 different phases	35
Figure 7	The project organisation	36
Figure 8	Stakeholder matrix	37
Figure 9	Gender	38
Figure 10	Age	38
Figure 11	Number of adults living in the household	38
Figure 12	Number of children living in the household	38
Figure 13	Period of time that tenants have been living in the same apartment at Långängen	39
Figure 14	Period of time that tenants have been living in their renovated apartment	39
Figure 15	Tenants living in the same apartment before the renovation	39
Figure 16	Highest level of education	40
Figure 17	Main occupation	40
Figure 18	Main language used in the household	40
Figure 19	How the tenants received information from Familjebostäder and how they would like to receive it in the future	41
Figure 20	Tenants' satisfaction regarding the information received before and during the renovation	43
Figure 21	Tenants' answers regarding influence	44
Figure 22	Tenants' satisfaction over different aspects of the recently renovated apartment	45
Figure 23	Tenants' satisfaction over their wishes and expectations	45
Figure 24	Tenants' satisfaction over the dialogues with Familjebostäder	46
Figure 25	Comparison of tenants answers regarding Familjebostäder	46
Figure 26	Satisfaction (left) and dissatisfaction (right)	50
Figure 27	Influence of Familjebostäder's actions on tenants' satisfaction or dissatisfaction	50
Figure 28	Communication flows among stakeholders	61

List of tables

Table 1	Report's outline	7
Table 2	Combination of dysfunctional and functional questions	16
Table 3	Numbers of apartments renovated	35
Table 4	Tenants preferences of receiving information regarding their age	42
Table 5	Tenants' perception of Familjebostäder regarding their age	48
Table 6	Tenants' perception of Familjebostäder regarding how long they have been living at Långängen	49
Table 7	Summary of comments from question C4 of the questionnaire	51
Table 8	Interviewees	52
Table 9	Summary of interview findings	65
Table 10	Summary of improvement suggestions	78

List of Abbreviations

BC	Building Constructor
CEO	Chief Executive Officer
CHU	Community Housing Unit
CM	Construction Manager
CSR	Corporate social responsibility
IMRAD	Introduction, Method, Results and Discussion
ISO	International Organisation for Standardisation
OM	Operation Manager
PM	Project Manager
TCHC	Toronto Community Housing Corporation
TPS	Tenant Participation System

1 Introduction

This Chapter constitutes the introduction of this master's thesis project. In the beginning, the background of this investigation is mentioned. As this thesis intends to study the communication processes and organisational learnings, the problem formulation and the purpose of this investigation with the study's research questions are set. Finally, the limitations of this study are mentioned, followed by an outline of the entire report.

1.1 Background

The aim of communication is to share knowledge which influences individual or organisational behaviour and affects attitudes (Holm, 2006; Zaimi Abd Majid and Rashvand, 2014). Communication and knowledge sharing are two features for increasing the effectiveness and achieving project success (Chinowsky et al., 2011).

Communication plays a significant role in renovation projects as renovation processes are complex and more uncertain in terms of decision-making, planning, and execution than the process of a new construction (Thuvander et al., 2012). According to Chinowsky et al. (2011) the continuous exchange of knowledge is one of the requirements in order to achieve project effectiveness in a renovation project. Nevertheless, communication does not only concern the different stakeholders that are involved in the planning and execution of a renovation project, but also the tenants of the apartments to be renovated.

Pearce (2006) claims that tenants' opinion is sometimes more valuable than any scientific research. Taking this into consideration, the need of tenants' engagement in the decision making process in a renovation project becomes urgent. As sustainable renovation refers to ambitions to fulfill not only the dimensions of environmental and economic aspects, but also the social aspects of sustainability (Thuvander et al., 2012), it is also important to consider the social capital and activate certain dialogues with the tenants in different stages of the project. However, how can housing owners improve the dialogue process with tenants and involved stakeholders?

Results from recent studies have emphasised the importance of performing dialogues with tenants. Dialogues are not only relevant when involving tenants in the decision

making process in order to keep them satisfied. They also constitute a tool which contributes with knowledge to support the decision making in similar projects and with practical experiences, how the housing organisations could organise such dialogue processes in the future (Ottoson et al. 2014).

Gluch et al. (2013) claim that many buildings mainly built between 1965- 1975 and mostly owned by public housing organisations in Sweden, are in immediate need of extensive renovation today due to various reasons. In addition to that, by the year 2050, the buildings should be used with decreased by 50% energy consumption, according to the target set by the Swedish parliament (Gluch et al., 2013). This means that extensive renovations will take place during the coming years, in order to meet this target and many people will be affected.

1.2 Collaboration with a housing company

The current study is performed in collaboration with the housing organisation Familjebostäder in Gothenburg, Sweden, which is the main stakeholder and owner of this project. Familjebostäder carries out an extensive renovation at the housing district Långängen which is the case of this thesis work. In this renovation project, the housing company tried to involve the tenants in the decision making process concerning their apartments.

Familjebostäder is one of the four public housing companies in Gothenburg. It is a subsidiary organisation of Förvaltnings AB Framtiden, which is owned by Gothenburg's municipality (Familjebostäder, 2014). Familjebostäder owns more than 18,000 rental apartments. 60% of them are small flats, with two rooms and a kitchen or smaller. The average apartment size owned by Familjebostäder is 62m². The majority of the apartments is located central or near Gothenburg's city centre's locations, where there is a high demand for housing (Familjebostäder, 2014).

Common vision among the companies within the corporate group is to build an anthropocentric sustainable society for the future, considering social aspects. In addition, the housing company aims to increase customer satisfaction and keep low percentage of vacancies. One of the main problems Familjebostäder is currently facing is the high concentration of radon in the 20% of the buildings. Future challenges for the housing company is to perform extensive renovations in the total of

those houses, until 2017. It is challenging for the housing company to eliminate such problems and at the same time create a modern and sustainable living environment for the tenants.

1.3 Past Research

This report is a follow up on a recent research study, Rebo-project, primarily conducted in 2011 and 2012 in order to include tenants' opinions regarding a renovation project at Långängen, a housing district in Gothenburg (Andersson, 2013a). The primary goal was to develop strategies in order to support the decision-making process for sustainable renovation of apartment buildings from the so-called Folkhem era (1941-1960). Researchers at Chalmers University of Technology and the housing organisation Familjebostäder investigated the tenants' perspective regarding the external and internal living environment before the renovation. Important components to consider were the environmental performance, the energy efficiency, and the cost-effectiveness in combination with cultural historical, architectural, and social values (Thuvander and Femenias, 2014).

The Rebo-project also intended to contribute to knowledge development and to create strategies in order to enhance the collaboration among the stakeholders and to support the decision-making process with tenants' participation, when renovating apartments from this period (Thuvander and Femenias, 2014). Involving tenants in the decisions concerning their apartments, it facilitates the process of performing a renovation project that fulfills both the tenants' accommodation requirements and their expectations (Andersson, 2013a). The statement above is strengthened by findings from the research which showed that tenants appreciate to have the opportunity to influence a renovation process (Andersson, 2013b). Further results from the study showed that the tenants seemed to be satisfied with their current health, wellbeing and overall circumstances in life (Andersson, 2013b). The tenants claimed that they have very good access to public transport and other facilities, and one of the appreciated aspects in the area is the opportunity to travel by cycle or on foot (Andersson, 2013b). Furthermore, qualities related to their apartments are relatively low rents and the standard of the kitchen (Andersson, 2013a). On the contrary, they were not satisfied with the condition of the area and also they do not feel safe, especially during the

night. They were also dissatisfied with the maintenance of the properties (Andersson, 2013a).

Other findings of the same study showed that a continuous dialogue is important to keep customer satisfaction high, both before, during and after the renovation project. The tenants wanted to be involved in the renovation process and the housing manager Familjebostäder wanted to involve them at an early stage in the decision-making process (Andersson, 2013b). Familjebostäder wanted to observe and ensure that tenants' needs, ideas and knowledge have been considered in order to increase the quality and acceptance of future renovation projects (Ottosson and Walldin, 2013).

Further results showed that tenants requested to require information about the renovation process, the time schedule, the prioritisations and how the renovation project will affect the rent level (Andersson, 2013b). Additionally, tenants desired to influence the choice between the different materials inside the apartments. Learnings and recommendations from the Rebo-project to the housing owner were to inform the tenants about the renovation process in time, which would make it easier for the tenants to adapt to the change. Ottosson et al. (2014) recommended that a dialogue should be performed continuously to keep tenants satisfied.

To investigate how the dialogue and communication have been performed between the different actors in the project, a further investigation should be performed to benchmark the collaboration between the various stakeholders engaged in the project (Ottosson et al., 2014).

1.4 Problem description

The intention of the housing company Familjebostäder is to increase customer satisfaction (Familjebostäder, 2014). However, according to a recent investigation, the overall service index among Familjebostäder's tenants has been decreased as mentioned in the annual report published in 2014. This elimination can cause uncertainty towards the effectiveness of the followed processes and questions regarding the feasibility of Familjebostäder's intentions.

Familjebostäder has the strategic goal to be a customer oriented organisation and to increase its customer service level. The CEO Per Henrik Hartmann claims in the

annual report, that many of their successful projects during 2014 are based on dialogue (Familjebostäder, 2014). Familjebostäder took the tenants' feedback under consideration, in an attempt to fulfill its vision, to involve the tenants into a dialogue process and engage them in the renovation project in order to further consider the social aspects a renovation poses.

Taking into consideration the great challenges that arise during a renovation project including environmental, social, technical and economic aspects, it is of great importance to have sufficient and effective communication at all levels, among and across all stakeholders. Especially when organisations intend to integrate tenants' opinions from the very early stages of such projects, then the need of clear and definite communication is even more important.

In order to increase the customer service level furthermore, the tenants' ability to influence and the possibility to choose are of importance (Familjebostäder, 2014). Renovations of properties are going to be performed to increase both energy efficiency, improve the tenants' living environment and to accomplish tenants' expectations and demand. Familjebostäder has the intention to develop a living environment and create social interaction among people.

Housing owners in general are dependent on a low level of vacancy rates. According to Familjebostäder (2014) this is their highest risk for failure in their effort to achieve maintained revenue. During the year 2015, the amount of vacancies will still be low, due to a high demand. To decrease the potential risk for high vacancies in the future, the housing stock needs to be attractive. Strategies developed to reduce the amount of vacancies, at an organisational level to apply and practice routines to minimise failures, to increase customer service index and to maintain present housing stock.

1.5 Purpose

The *purpose* is to follow-up the management of processes after the performed renovation project at Långängen. The research *focuses* on the effectiveness of the dialogue between the housing owner and the involved stakeholders and the results of these dialogues. Furthermore, it *examines* the level of satisfaction achieved by the executed renovation.

The *aim* of the thesis is to provide an input to the followed processes regarding the communication between stakeholders and the housing owner. Furthermore it aims to inspire other housing companies to create effective communication, when performing renovations with tenants' active participation.

The following *research questions* have been formulated to accomplish the purpose of the current investigation:

Q1 – How were the communication processes and information perceived by the different stakeholders?

Q2 - What are the parameters that lead to tenants' satisfaction?

Q3- What are the organisational learnings of the overall renovation process?

1.6 Limitations

This report constitutes a follow-up of a housing renovation project where the tenants were called to be involved and actively participate in the decision making process. Since the renovation project is still in progress, this investigation is restricted to only examine the processes in the completed phases (phase one, two and three). It is limited only to investigate and evaluate the used communication methods and followed processes. Furthermore investigate how these were perceived by the different stakeholders and also the organisational learnings from the renovation project, taking different stakeholders into consideration. Therefore, the purpose of the investigation is not to benchmark architectural or construction values. Some questions asked during interviews and included in the questionnaire will not be related to this investigation, but tend to give relevant information for further studies, to effectively conduct information to the researchers at Chalmers University of Technology and the stakeholders that have an interest in the project.

1.7 Thesis outline

This report is structured according to the principles of the IMRAD-model (Olsson and Sörensen, 2011) and adapted to the needs of the current research and ensuring that is aligned with the master's thesis writing directions of Chalmers University of Technology. The following structure is currently used; introduction, methodology,

literature review, description of the case, empirical findings, discussion, conclusions, recommendations, interesting topics for future research and references. In the Table 1 below, a short description of each Chapter is presented, whereas a more detailed analysis of each Chapter's content follows.

Table 1 Report's outline

Chapter	Description
1	Introduction of the report
2	Methodology of the investigation
3	Analytical framework
4	Description of Case
5	Results from the questionnaire and interviews.
6	Discussion of the results and reflections.
7	Conclusions, Recommendations, Future research.

Chapter 1: It constitutes the introduction of this master's thesis project. In the beginning, the background of this investigation is mentioned as well as past studies, where the present research is based on. As this thesis intends to study the communication processes and to result in organisational learnings, the problem formulation and the purpose of this study with the study's research questions are set. Finally, the limitations of this study are mentioned, while an outline of the whole report follows.

Chapter 2: The methodology of the research and the strategies related to it are described in this Chapter. There is a detail description of the qualitative and quantitative methods used in order to carry out the current study.

Chapter 3: The Chapter presents the analytical framework which includes the theoretical framework for this master thesis and recent investigations made by researchers and professionals, mainly within the area of communication and stakeholder management.

Chapter 4: It describes the renovation project that is a part of the housing owner's housing stock.

Chapter 5: The results from the questionnaire directed to the tenants and the empirical findings from the performed interviews in collaboration with various stakeholders are presented in this Chapter.

Chapter 6: In this Chapter, the authors discuss the empirical findings from the performed investigation based on the literature review and combining with own reflections.

Chapter 7: The Chapter presents the overall conclusions of the whole report and recommendations from the authors.

Appendices are added at the end of this report in order to give additional information about the data used when performing this study. Samples of the questionnaire given to the tenants and the stakeholders' interview questions are also available in the appendix, both in Swedish and English.

2 Methodology

The methodology of the research and the strategies related to it are described in this Chapter. There is a detail description of the qualitative and qualitative methods used in order to carry out the present study.

In the beginning of the study, a project proposal was conducted to define the research design, describe the background of the project and look for relevant literature in order to build the theoretical framework, and to create a fundamental basis to perform the study (Sandberg and Faugert, 2012). The project proposal is mostly based on the ex-ante Rebo-study, on desires from Chalmers University of Technology and Familjebostäder's wish to perform an ex-post analysis of the renovation process. The literature study aimed to give the authors a perspective on background, purpose, research questions and limitations to the study (Bell, 2006). The theoretical framework was constructed based on literature, mainly obtained through the academic search engine provided by the Chalmers University of Technology Library. The research was performed by using databases such as Science Direct, Summon, Scopus, ProQuest, Emerald, Ebrary and Springer Link. In addition, authorities' websites were used to obtain information in order to build the analytical framework, eg. Boverket. Relevant key words when searching for literature were e.g.; housing owner, tenants, stakeholders, renovation, communication process, dialogue and organisational learnings.

This study was carried out in collaboration between Chalmers University of Technology and Familjebostäder. In addition to that, other stakeholders had been contacted and investigated in the study. The involved parties are the tenants, and organisations such White Architects, Tengbom, Sweco, The Swedish Union of Tenants, J Håkansson Byggplanering and Rotpartner.

2.1 Research process

Due to recent studies, the investigated topic, communication and stakeholder management within the construction industry is not a new area for researches. Therefore, according to Creswell (2014), only a qualitative research method is not suitable since the investigated topic is well known. The study has been carried out by an integrated approach between quantitative and qualitative research methods, so

called embedded mixed method research (Creswell, 2014). Embedded mixed method research was chosen to strengthen the analysis of and to obtain multi-faceted results. The approach gives also the opportunity to analyse patterns and to identify potential failures in communication at all levels, both between tenants and the housing company and other stakeholders involved in the project. It gives a more complete understanding of the communication between different actors. The combination of the two methodologies has been used to complement each other and to strengthen the weaknesses of the opposed approach (Creswell, 2014).

The quantitative approach was used to perform a questionnaire survey to collect more specified and statistical results among tenants to evaluate their opinions. The questionnaire was based on a literature study, which was formulated after reviewing relevant theory, as well as on recent research. The questionnaire was developed in a dialogue with Familjebostäder and researcher and supervisor of this Master's Thesis, Liane Thuvander.

It was important to limit the questionnaire to a specific defined population (Sandberg and Faugert, 2012) and to evaluate the potential tenants' language skills in order to formulate relevant and clear questions (Trost, 2012). The target group for the questionnaire was defined by critically reviews of the purposes of the investigation.

The qualitative approach was performed by carrying out semi-structured in-depth interviews with open questions. Different stakeholders involved in the renovation process, except the tenants, were interviewed. By performing interviews with stakeholders, the expected results were to get individual opinions and experiences to collect a more specific view on the main topic. Moreover, the interviews with the stakeholders created a flexible environment and the authors got impressions from the respondents, compared with the quantitative approach (Bell, 2006).

Apart from the interviews, it was also valuable to perform 5 meetings with Familjebostäder's personnel. During the meetings, the opportunity to discuss the project, problems and other organisational conditions was important in order to acquire additional information. This information helped the authors to obtain a deeper understanding of the project and to get further input to formulate the relevant framework: research questions formulation, problem definition, questionnaire design

and stakeholder interview questions. During those meetings different topics were discussed (see Appendix F).

2.2 Quantitative method

2.2.1 Questionnaire development

A questionnaire was developed in order to conduct the quantitative research in this project. By being able to analyse results from the questionnaire, data collected could show trends and attitudes among the respondents by mainly using close-ended questions.

The questionnaire addressed the following 6 themes; *background, information, influence, trust, results, and satisfaction* (see Appendix A and B). The questionnaire was distributed by mail to the tenants at Långängen and returned to the authors.

The tenants anonymously filled in their answers and returned the questionnaires back to the authors. Due to not be able to define personal details in the report or to be passed to another party, the investigation was anonymous. This in order to fulfill the purpose of anonymous investigation among tenants, to protect individuals' privacy. According to Trost (2012) and Olsson and Sörensen (2011), it is important to consider this aspect when performing investigations to protect personal data.

In order to be more convenient for the tenants, the questionnaire was developed in Swedish. The questionnaire as well as the obtained data were translated later into English and included in this report. The purpose is to comply with Chalmers requirements according to master thesis writing and also to communicate the gained knowledge to different interested people in the project, both on a national and international level.

The tenants had two options regarding the choice of handing-in the questionnaires; either by mail or by leaving them at the Familjebostäder's local office located at Långängen area. The questionnaire was sent out to 116 tenants, 5 of them were returned back to the authors, as they did not reach the potential respondent. As a result from this, 111 received the questionnaires and 43 of them answered. Therefore the response was about 39% for this research.

In order to ensure that the questions included in the questionnaire were relevant, clear and aligned to the needs of this research, the supervisor of this thesis, as well as involved employees of Familjebostäder reviewed the questionnaire before the distribution.

2.2.2 Questionnaire design

As there is not a general rule which applies to the questionnaire's length and number of the questions included (Denscombe, 2010), the questionnaire was designed to be comprehensive but yet short enough in order to obtain answers from the tenants. The questionnaire was constructed in a standardised way (Olsson and Sörensen, 2011) and consisted of 6 parts (from A to F) and included a total of 37 questions that comprises both open and closed answers (see Appendix A and B).

The questionnaire included mostly closed questions. The closed questions structure the answers by allowing only answers which fit into categories that have been established in advance by the researcher. The researcher, in this case, instructs the respondent to answer by selecting from a range of seven options supplied by the questionnaire (Denscombe, 2010).

The respondents were given questions to priorities by using a Likert scale (Joshi et al., 2015) from 1-7, "not at all" to "very much" or "not at all important" to "very important" or "not at all satisfied" to "very satisfied". The scale from 1 to 7 was selected in order to give a wider range in the answers of this study and draw more relevant conclusions. The mean value of each question was also analysed in between this scale and therefore, only answers within this scale were analysed. The rest of the answers are mentioned as e.g. "I do not know" or "Not relevant" were not taken into consideration, yet mentioned in the data tables, together with the questions that were not answered by some respondents.

Another variable used as a method to analyse the material were the questions on a nominal scale. Questions related to this one are e.g. age, gender, main occupation and highest education level. Some questions from the recent Rebo study were used to compare the current study with the recent one, connected to category questions. Some open questions were also used in order to acquire more detailed opinions from the

tenants and their perspective on the renovation process that the authors were not aware of (Bell, 2006).

The report is limited to evaluate and investigate the result from the renovation project at Långängen and the research only consider answers from tenants living in phase one, two and three, since the apartments needed to be finished at the time for the study. Boverket (2015, p.52) recommends some questions to consider when performing a follow-up of a dialogue process with tenants. *“Did everybody feel involved in the process?”*, *“Who had the chance to participate in the dialogue and who did not?”* and *“Are the tenants satisfied with their apartment?”*, are some questions to get a perception of how successful the dialogue had been.

To perform the statistical analysis of the quantitative data received through the questionnaires, the statistical analysis software SPSS was used for the analysis of the five first parts of the questionnaire (parts A, B, C, D and E). Microsoft Office Excel was also used for the calculations of the final F part of the questionnaire. The results were later used to compare with answers from the semi-structured interviews in order to draw relevant conclusions.

2.2.3 Steps for conducting the questionnaire survey

Developing the questionnaire survey was planned over a period of four months. The following steps were executed (Bell, 2006; Trost, 2012), see Figure 1:

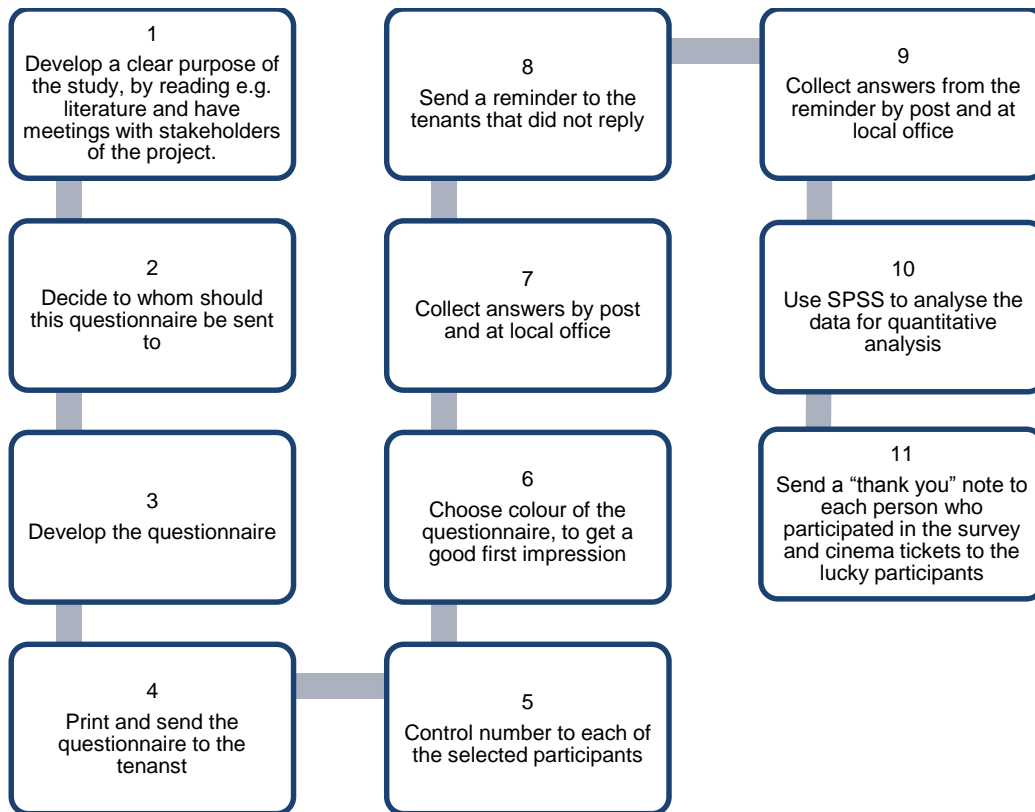


Figure 1 Steps for conducting the quantitative research

2.3 Kano model for analysing the results

Satisfaction is a part of stakeholder performance and gives a subjective and critical measurement of it (Zaimi Abd Majid and Rashvand, 2014). Based on the theory of attractive quality, Kano model (see Figure 2) distinguishes between three types of product requirement which influence customer satisfaction in different ways (Löfgren and Witell, 2005). Kano model was used in order to analyse the answers of the last part F of the questionnaire.

The theory is applicable in order to understand how customers evaluate and perceive quality attributes. The theory illustrates five categories of perceived quality i.e. *attractive quality*, *must-be quality*, *reserve quality*, *one-dimensional quality* and *indifferent quality* and explains how the degree of sufficiency and customer satisfaction with a quality attribute can be classified into those categories. The theory predicts that various quality attributes are dynamic, which means that they could change from 'satisfier' to 'dissatisfier' over the time (Löfgren and Witell, 2005).

The different attributes in order to clarify the Figure 2 are presented below (Löfgren and Witell, 2005):

- *Attractive quality*: they provide satisfaction when are fully achieved, however, they do not cause dissatisfaction when are not fulfilled.
- *One-dimensional quality*: they result to satisfaction when are fulfilled and dissatisfaction when are not.
- *Must-be quality*: they are taken for granted when are fulfilled, however they result to dissatisfaction when are not fulfilled.
- *Indifferent quality*: they do not result to either satisfaction or dissatisfaction, because the attributes are neither positive nor negative.
- *Reverse quality*: a low degree of achievement results to satisfaction, while a high degree of achievement can result to dissatisfaction.

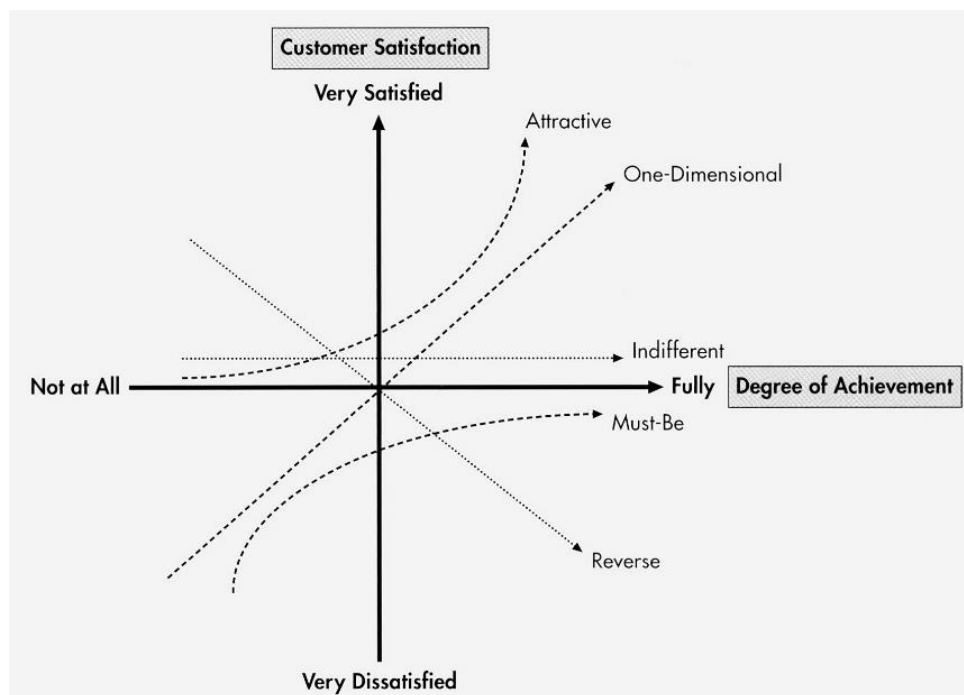


Figure 2 Overview of the theory of attractive quality (Löfgren et al., 2005)

Must-be, one-dimensional and attractive requirements as well as product requirements towards which the customer is indifferent can be classified by means of a questionnaire.

For each quality or feature of the process or product, a pair of questions is formulated and the respondent can then answer in one of the five different statements as below (Kano, 1984, p.10).

- “I like it”*
“It must be so”
“I am neutral”
“I can live with it”
“I dislike it”

The questions at the part F in the questionnaire (see Appendix A and B) are formulated in two ways; the first way concerns the reaction of the customer if the product/process has that feature/quality (functional form of the question), whereas, the second concerns the participants’ reactions if the product/process does not have that feature/quality (dysfunctional form of the question). Later, the results are combined in the answers to the functional and dysfunctional question, using the following evaluation table (Table 2):

Table 2 Combination of dysfunctional and functional questions (Löfgren et al., 2005)

	Dysfunctional (negative) question				
Functional (positive) question	(1) Like	(2) Must be	(3) Neutral	(4) Live with	(5) Dislike
(1) Like	Q	A	A	A	O
(2) Must-be	R	I	I	I	M
(3) Neutral	R	I	I	I	M
(4) Live with	R	I	I	I	M
(5) Dislike	R	R	R	R	Q
A: attractive; M: must-be; R: reverse; O: one-dimensional; Q: questionable; I: indifferent					

When formulating the questions, the “*voice of the customer*” is of high importance (Hauser and Clausing, 1988). The “*voice of the customer*” is a description of the problem to be solved from the customer’s perspective. The customers are not interested in the way that their problems will be solved, but which of them will be

solved. By combining the two answers in an evaluation table (Table 2), the product features can be classified.

Customer satisfaction coefficient (CS coefficient)

The customer satisfaction coefficient indicates whether the fulfillment of products' requirements can lead to the increase of customers' satisfaction, or whether the dissatisfaction is increased, if the customers' expectations regarding certain qualities are not fulfilled (Berger et al., 1993). The CS-coefficient is an indicator of what extent a product quality can influence customer satisfaction and dissatisfaction.

For the calculation of the average impact on satisfaction, the attractive and one-dimensional responses should be summed and then divided by the total number of attractive, one-dimensional, must-be and indifferent answers (Löfgren et al., 2005).

In order to calculate the average impact on dissatisfaction, the must-be and one-dimensional columns are summed and then divided by the same normalizing factor as calculating the impact on satisfaction, i.e. total number of attractive, one-dimensional, must-be and indifferent responses, multiplied by -1.

Equation 1 Extent of satisfaction (Löfgren et al., 2005, p.14)

Extent of satisfaction:

$$A+O$$

$$A+O+M+I$$

Equation 2 Extent of dissatisfaction (Löfgren et al., 2005, p.14)

Extent of dissatisfaction:

$$O+M$$

$$(A+O+M+I)*(-1)$$

A: Attractive
M: Must-be
O: One-dimensional
I: Indifferent

The role of minus sign for the CS-coefficient of customer dissatisfaction is to point out the negative influence that the different requirements have, in case of no fulfillment (Löfgren et al., 2005).

The positive CS-coefficient ranges from 0 to 1. When the result approaches 1, it is very important to reserve this product's feature as leads to customer satisfaction; however, a value about 0 indicates that the attribute is not very influential for the satisfaction level. On the other hand, the negative CS-coefficient ranges from -1 to 0. When the result is closer to -1, it means that the absence of the specific requirement can lead to an increase on dissatisfaction levels. However, when it approaches 0, this feature does not cause any dissatisfaction.

Evaluation and interpretation

The questionnaire is evaluated in three steps as described above. The results of the individual product criteria are presented in the table of results (see Appendix C, Table F3-F4), after combining the answers from the functional and dysfunctional questions as it is showed the evaluation Table 1. In the evaluation table is presented the overall distribution of the requirement categories. The next step consists of the analysis and interpretation of the results (see Chapter 5).

2.4 Interviews

It was very important for this study to conduct interviews with various stakeholders in order to obtain qualitative empirical information. With semi-structured interviews, the interviewer still has a clear list of issues to be addressed and questions to be answered (see Appendix A and B for interview questions). However, with the semi-structured interview the interviewer is prepared to be flexible in terms of the order in which the topics are considered, and, perhaps more significantly, to let the interviewee develop ideas and speak more widely on the issues raised by the researcher (Svensson and Starrin, 1996). The answers are open-ended, and there is more emphasis on the

interviewee elaborating points of interest. The interviews gave the authors (the interviewers) the possibility to create a dialogue and connection with the respondents (Bell, 2006).

The interview questions were created in a standardised way, with respect to the aim of the project, and the interview process followed the same structure at each interview, with open questions (Olsson and Sörensen, 2011) and additional questions adapted to each respondent. Firstly, the themes of the questionnaire were formulated and thereafter relevant questions were formulated to each theme (Bell, 2006). The questions were formulated to avoid no leading- and evaluative questions.

The authors contacted the interviewees by e-mail, clarified the purpose of the investigation and asked for an interview. The questions were sent to the interviewees beforehand, to give them time to think upon the questions delivered (Bell, 2006), and to prepare the respondents, but it also gives the respondent opportunity to decline the invitation to the interview.

In total, 7 interviews with 8 interviewees were carried out (see Appendix D and E). The interviews were performed in a comfortable and quite environment at mainly each company's office. Two of the interviews were conducted by phone due to lack of time and different geographical location. The interviews were held in English/Swedish and lasted between 45 minutes and 1.5 hours.

The respondents were given the opportunity to choose upon if they wanted to be anonymous in the investigation (Bell 2006; Olsson and Sörensen, 2011). The interviews were recorded and thereafter transcribed, which gave the opportunity to the authors to formulate the interviews in a shorter and concentrated way under the empirical findings Chapter. After narrowing down the transcripts and evaluating each of the interviewees' answers, the results were conducted in way that were comparable to the different areas of research and stakeholders' opinions.

2.5 Quality of research

Since this study is based on two different approaches, quantitative and qualitative methods, it is strengthen potential weaknesses of the opposed. By integrate these approaches; the validity of the research is higher than using only one of them

(Creswell, 2014; Sandberg and Faugert, 2012). Embedded mixed method research gives the opportunity to mix both open- and close-questions. This giving the opportunity to both analyse data from the questionnaire and statements from interviewees. To manage and control the project, a project plan was executed by using the software Project Place. A Gantt diagram (Maylor, 2010) was formulated, project milestones were identified and boards were set in order for the authors to be updated regarding time frames, deadlines and remaining tasks of the processes that consist of the qualitative and quantitative research.

The research needs to be reliable and trustworthy (Sandberg and Faugert, 2012). Low validity according to Sandberg and Faugert (2012) is when the research has not investigated and measured the purpose of the study. There is a difference between internal and external validity. Internal validity is whether the authors of this report have conducted and made relevant conclusions, and if they are trustworthy. The external validity is whether the conclusions are able to be set as in general terms, to other situations. To increase the validity of this investigation, the authors needed to clearly describe the aim and the context of the research, the limitations, describing and use a data gathering method, and perform the analysis and the conclusions in a logical way. To be able to evaluate face validity the questionnaire was designed with “I don’t know” answers to evaluate the validity (Olsson and Sörensen, 2011). Moreover, evaluating the face validity, the quality of the questionnaire was discussed with the supervisor and constructed to follow a certain process for conducting questionnaires (Trost, 2012).

The reliability has been increased since this is an investigation at Chalmers University of Technology, an external part from the housing owner (Sandberg and Faugert, 2012). The reliability is also strengthened by using relevant references in the report. The sources are trustworthy since the literature is mostly based on scholars’ articles and conducted at the library of Chalmers University of Technology. To increase the quality of the research furthermore, books were also borrowed from the City Library in Gothenburg. The supervisor of this thesis also provided literature to strengthen the report.

3 Analytical framework

The present Chapter analytical framework includes the theoretical framework for this master thesis and recent investigations made by researchers and professionals within the area of communication and stakeholder management.

3.1 The communication process

Communication is the process when information is exchanged between individuals or organisations (Holm, 2006) and is performed by writing, information sharing, speech and by using a common language (Gordon, 2015). The aim of communication is to share knowledge which also influences individual or organisational behaviour and affects individual attitudes and behaviours (Holm, 2006; Zaimi Abd Majid and Rashvand, 2014). Communication and knowledge sharing are two features for increasing the effectiveness and achieving project success (Chinowsky et al., 2011). Reproducing communication can be problematic, since individual and personal experiences affect how people interpret knowledge or communication (Holm, 2006). Successful communication is often based on motivation, common understanding and language between the communicator and the receiver. A misunderstanding due to communication is often referred to lack of clarity.

It is problematic and challenging to reach effectiveness when communicate across different hierarchies and levels in organisations, and between individuals (Holm, 2006). According to Holm (2006), there are several preconditions which support the process to achieve effective communication. Among others, common language, similar education and/or background and interpretation of the same context, are some of the basic conditions.

How individuals perceive information depends on their experiences and their ability to understand cultures and circumstances related to it (Holm, 2006). Today, communication is a strategic issue for many companies and constitutes a competitive advantage on the market. However, in order to create this competitive advantage, communication is an important tool for management and leadership issues. Strategic goals often concern to perform faster and more effective communication. Lack of

strategically thinking is according to Holm (2006) a reason behind the lack of effective communication.

Communication is also important when a change is implemented. People usually do not welcome changes. However, when a change is certain to happen it has to be managed. One of the key factors for the people to accept the change lies upon the way the implementers communicate it. The participants should be informed not only for what they will gain out of this change, but also what is going to be lost if the change will not be implemented (Cripps, 2013).

3.1.1 Dialogues in projects

In complex projects in the building industry, many actors are involved and are often temporary (Chinowsky et al., 2011). This forms a great challenge, to organise projects with different actors and to create a common outcome, and eliminate boundaries between them. Common communication and knowledge sharing tools such as various visualisation programmes or modeling programmes, makes it easier for the actors in the project to be involved to a greater extent.

A dialogue is the means to understand the meaning of communicated information (Holm, 2006). The dialogue process is very important among the different stakeholders of various projects. There is a collection of methods that have been developed to investigate the relationships that exist between the various stakeholders, both at an individual and group level, in the context of a particular phenomenon (Reed et al., 2009). A broad participation of different stakeholders is enabled by the dialogues and various platforms for collaboration, building relationships and exchange knowledge are developed (Smedby and Neij, 2013).

There are three main methods that have been used to analyse stakeholder relationships and hence investigate the dialogue processes between them: i. Actor-linkage matrices facilitates the exploration of linkages among the stakeholders, ii. Social Network Analysis provides insights into patterns of communication, trust and influence between actors in social networks, and; iii. Knowledge Mapping analyses the content of information between these actors (Reed et al., 2009). In renovation projects, such dialogues play a significant role for the outcome of the projects, as all the interested parties have the ability to influence it, have a direct impact (Ottosson et. al, 2014) and

actively learn from the whole process (Smedby and Neij, 2013). Conclusions from a study of a renovation project by Chinowsky et al. (2011) showed that continuous knowledge exchange is a requirement to achieve project effectiveness in a renovation project.

Nevertheless, such dialogue processes should treat the participants with responsibility in terms of respecting and considering their input and time, and constantly giving them feedback (Ottosson et. al, 2014). As it is a very important component, dialogue should be seen as the cornerstone of the process and not only a part of it. However, past research has shown that sometimes there is a lack of understanding the purpose of such dialogues between the stakeholders (Smedby and Neij, 2013). Therefore, there is always a risk for the processes to become inefficient and for the participants to be less committed.

To improve inefficient dialogues, Holm (2006) claims that feedback sessions are of importance to develop the organisation. Moreover, clear hierarchies in the organisation with manifested responsibilities and leadership positions, can result in superior communication. The organisation needs to motivate its employees by communicating common goals, methods and also stimulating and engaging them to work and communicate efficiently.

It is difficult to manage the organisation without routines, which tends to create trust and safety in organisations (Holm, 2006). A paradox according to this is that strict routines can be a bottleneck for creativity and confidence among individuals.

3.1.2 Dialogue with tenants

The housing owner needs to inform the tenant about the prospect renovation and the tenant also needs to approve the renovation (Boverket, 2014). If the tenant rejects the renovation for any reason, the housing owner needs to apply for taking permission to The Swedish court for regional rent and tenancies tribunal (Hyresnämnden). Citation from the code of land law (Jordabalk) (1970:994) Chapter 12, 18e§: *“18e§ If the landlord wants to execute such activities intended in 18 d§, he shall by writing inform the concerned tenants about it. If a concerned tenant does not approve the activities, the landlord needs to apply for permission to The Swedish Court for regional rent and*

tenancies tribunal. The application may be made at the earliest two months after the message to the tenant... ”¹(Boverket 2014)

In Jordabalk (2010:879) 1 § public municipal housing companies need to involve the tenants: “...3. offers the tenants the opportunity to influence both the accommodation and influence the company... ”² (Boverket, 2014). When the renovation is performed, and if the tenants are not able to use their apartment to the same extent as its purposed, according to Swedish Law, Jordabalk 1970:994 Chapter 12 , 16 §, the rent level should be reduced (Boverket, 2014).

Successful renovation projects are often based on a tenant dialogue, which tend to perform better results, delete several of mistakes among housing owners and gives valuable information to the housing owner about their residences (Boverket, 2014). Taking care of tenants opinions do not only creates better results, furthermore it creates an effective dialogue process with no time consuming on dissatisfaction among tenants. If the tenants are involved from the beginning, the housing owner often saves time later in the renovation process, but also after the executed renovation.

Resistance against higher rent levels and changes in general, can be reduced by a tenant dialogue as well. Tendencies after a tenant dialogue increase the engagement in the area, less vandalism in the area and also less vacancies.

Almost every change programme will meet resistance in the organisation at some point (Nevis, 1987). One of the main reasons for resistance is that people do not see the value of the change or they are afraid of it (Williamson and Blackburn, 2010). That is why the most important component of a change programme is to share information and to thoroughly explain it and its value to the people involved (Shani et al., 2009). If the involved people do not see the value and a positive impact from the change soon after the change effort, it is likely that they will fall back to old habits. That is why the leadership in the company plays a vital role when driving the change,

¹ ”18e § Om hyresvärden vill utföra sådana åtgärder som avses i 18 d §, skall han skriftligen meddela de berörda bostadshyresgästerna detta.

Om en berörd bostadshyresgäst inte godkänner åtgärden, får hyresvärden ansöka hos hyresnämnden om tillstånd att utföra åtgärden. Ansökan får göras tidigast två månader efter det att meddelandet lämnats till hyresgästen...”

² ”...3. erbjuder hyresgästerna möjlighet till boendeinflytande och inflytande i bolaget...”

but they have to believe in the change and be clear in their communication on the change down the line (Beer and Eisenstat, 2000).

However, resistance can be also used as feedback from the people involved to the organisation as it involves active listening of comments, complaints, and criticisms in order to adjust the pace, scope, or sequencing of change and/or its implementation. Hence, change resistance can be used as an indicator of recipient engagement and a valuable source of feedback for improving the process and conduct of change (Ford et al., 2008)

Furthermore a tenant dialogue before a renovation project increases the feeling of well-being and less concerns among tenants (Boverket, 2014). If the tenants get the opportunity to affect or influence the renovation, it will increase the feeling of participation. Moreover it increases the amount of tenants that want to stay in their apartment and increase the attractiveness of the residences. This also strengthens the relationship between the housing owner and the tenants. Boverket (2014) recommends to the housing owners to choose a responsible person for the dialogue with the tenants, to capture the tenants' opinions and answer questions. It is also of importance to inform the tenants about the renovation, both by writing and speaking to them. The information should be delivered in time and it is preferable to show a demonstration apartment and discuss the rent level, being open and transparent.

3.1.3 Decision-making process

Although the private sector has long recognised the importance of involving customers in product development and procurement, the public sector is not falling behind either (Reid, 2010). The public sector is also aware of the benefits deriving from encouraging the participation to make decisions, however is not being implemented widely enough.

Especially, in the public housing sector, it is crucial for the landlords to involve tenants in the decision-making processes (Reid, 2010). By engaging the tenants in the management and procurement of their apartments, they have ownership of the processes and will not blame ipso facto their landlord if something goes wrong. In this way, tenants gain the most of their involvement, since it directly affects the quality of their homes and the services they receive.

In general, citizens who are willing to participate in social and political life have eventually the opportunity to affect their own lives, being able to shape policies and programmes, with their own voices (Foroughi, 2013). Same in housing organisations, when the tenants have the opportunity to participate and influence decisions, *“the psychological effects of such participation might prove extremely valuable in this context”* (Pateman, 1970/1999, p.109).

In communicative action, stakeholders are held together not by the prospect of an unconditional ‘truth’ that will stand above them, nor by the prospect of reaching individual understandings, but by the debate and continuous discussions (Kemmis, 2006). Therefore, emerging agreements and disagreements, understandings and decisions can be problematized and explored openly in an action research project, as the latter can be considered as an offered place for communication.

However, dialogue and reflection processes are usually time and energy consuming and require significant coordination. In the process, the involved actors may drown in information and ineffective dialogue, and relevant actors and topics may be overlooked (Gansmo, 2012). Researchers and practitioners may also encounter disagreements about what the really interesting issues to investigate and change are, and research results may be overlooked or disregarded by the practitioners. Much of the produced knowledge may also remain tacit knowledge among the involved participants only.

3.2 Knowledge management

Knowledge, as a product of learning is seen as a resource for organisations and the primary mode to be assimilated by them is to be encoded in organisational processes (Gherardi, 1996). However, this is not always feasible or appropriate, particularly for organisations that are in a rapidly changing environment. According to Morris (2002, p. 2) knowledge management has been defined as the: *“...process of systematically and actively managing and leveraging the stores of knowledge in an organisation, as the framework for discovering, capturing, transmitting, and reusing knowledge to gain competitive advantage”*.

Various practices and activities produce knowledge. However, knowledge also constitutes an activity distributed between humans and non-humans, as objects, tools

and artifacts also incorporate knowledge which people can consciously or unconsciously use (Gherardi, 2009).

In an effort to link project-based learning to the organisational context, Arthur et al. (2001) distinguish performance and learning outcomes in projects. According to them, some projects illustrate a false success, which means that even if the performance rate is high, these projects lack learning outcomes (Swan et. al, 2010). On the contrary, some projects illustrate a hidden success which means that the focus is put on the low level of performance despite the high level of learning outcomes. The distinction between performance and learning is then crucial to take into consideration in terms of knowledge management. This constitutes also a key point when organisations can initiate the formation of strategies in order to increase the learning capacity through their project works (Swan et. al, 2010).

There are some processes within an organisation which determine to what extent learning is achieved in projects and to what extent it is transferred within the organisation. A problem of learning communication can arise when there is a distinction of team-work and project work. On the one hand, team members share common goals and are characterised by values which are critical and facilitate learning. On the other hand, this is not applicable when it comes to project work, as the members do not share common ideas and likely have different goals and perceptions. Organisational learning is also often seen as the sum of local learning or as the result derived from the transformation from tacit to explicit knowledge (Swan et. al, 2010).

3.2.1 Organisational learnings

As the experience is accumulated by organisations when they fulfil their goals, the total number of task performances is usually used as a measure of organisational experience (Argote, 2012). Apart from the organisation itself, the external environment also plays a significant role for the organisational learning to occur. The external environment includes other competitive organisations, customers, government etc., while the internal environment basically consists of members, tools and tasks, and the networks formed by the combination of these basic elements.

The main mechanisms which force the organisational learning to occur and create,

retain and transfer knowledge are the above mentioned elements and their networks (Argote, 2012). An important part of organisation's knowledge is found in its products or services, which are transferred from the organisation into the environment. It is also found in the organisation's context and influences future learning. The Figure 3 below, shows how the organisational learning processes affect organisations and create knowledge.

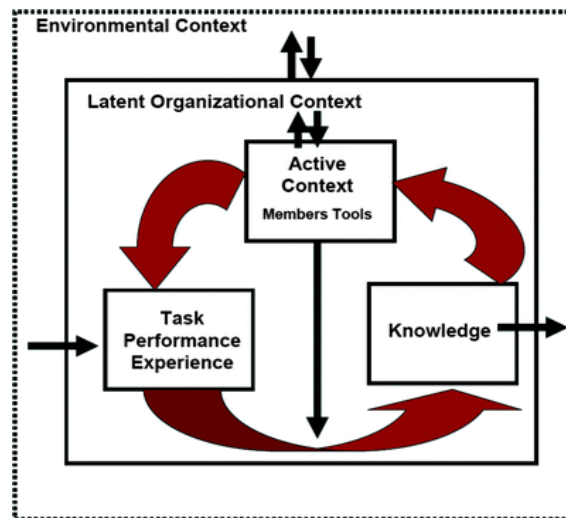


Figure 3 A theoretical framework for analysing organisational learnings (Argote, 2012)

Organisational learning also occurs through individual learning (Argote, 2012). Organisations have people who act as knowledge repositories (Kirwan, 2013). However, the individuals should share this obtained knowledge through various mechanisms, in a way that others can have access to it, e.g. the knowledge could be integrated in a routine that the organisation has (Argote, 2012). Routines refer to this type of activities which are repeated and dependent to each other, and which an organisation undertakes to perform its operations (Kirwan, 2013). Yet, a great challenge in this case appears when organisations experience social capital losses.

According to Kirwan (2013), Rao and Argote (2006) examined how an organisation can be protected from interferences, when knowledge is embedded in its structure. They discovered that the organisations which are low structured and do not have roles and routines, are the most vulnerable to be affected by members' turnovers, whereas the high structured ones are not. On the other hand, the low structured organisations

learn faster and better than the high structured ones.

As all the projects within the construction industry, renovation projects are also complex as different stakeholders are involved and various skills are required in order to execute a renovation. However, as all these people need to work together in order to meet the renovation's needs, the collaboration between them should be as effective as possible. According to a study carried out by Naaranoja and Uden in Finland (2007), the most common problems occurred in renovation projects are related to:

- Decision-making process
- Time for planning
- Construction regulations
- Awareness
- Trust
- Risk assessment
- Resistance to use of IT
- Change management

3.2.2 Informal learning

There are many definitions in scholars regarding informal learning and it has been discussed widely in the bibliography. According to Neal and Hainlen (2012) *“Informal learning is the unofficial, unscheduled, impromptu way most people learn to do their jobs or to improve current performance levels”*.

Therefore informal learning is developed outside of framed programmes or other relevant learning and development procedures. Due to the fact that it is implemented spontaneously can be diagnosed as unstructured and unprofessional (Neal and Hainlen, 2012). However, Laiken et. al (2008) argue that the most sustainable learning benefits derive from informal learning mechanisms as they come in a more natural way, as a part of day to day processes.

Forward-thinking organisations have now recognised that informal learning is of equally importance as the formal learning and blend informal learning into their development methodologies. Organisations are trying to evolve their knowledge and learning management strategies incorporating informal learning in order to enhance their competitive advantage (Neal and Hainlen, 2012). Informal learning contributes

to the individuals to enhance their knowledge, develop their social and political skills, improve their attitude towards themselves and the community and expand their social engagement and practice (Foroughi, 2013).

3.2.3 Tenant informal learning

The paradigm of tenant representatives in Toronto, Canada shows how the participants obtain informal knowledge through “The Tenant Participation System” (TPS) (Foroughi, 2013). TPS is a state-sponsored practice of participatory community housing management in Toronto which enables a cooperative management structure in which tenant representatives work with each other and with management. Among other responsibilities, tenants are involved in budget allocation and influence funding priorities.

Within each Community Housing Unit (CHU), the manager develops local business plans and allocates resources in partnership with the tenant council. Each tenant council develops an accountability framework so that tenants can keep the Toronto Community Housing Corporation (TCHC) accountable on decisions made and issues that need to be addressed. Within the framework of the TPS, tenant representatives are also involved in budget allocation at both the CHU and city-wide levels. At the CHU level, through their input into the CHU business plans, tenant representatives have the opportunity to influence funding priorities, and through an annual city-wide participatory budgeting exercise, tenant representatives allocate scarce capital dollars in areas with the highest impact on tenants’ lives (Toronto Community Housing Corporation, 2006).

3.3 Stakeholder analysis and management

Stakeholder management includes the process of identifying, categorizing and managing the stakeholders’ interest in a preferable way to maintain proper relationships and support, which reduce ineffective management strategies (Aaltonen, 2011; Olander, 2007; Zaimi Abd Majid and Rashvand, 2014). By performing stakeholder management, potential risks and insecurities are reduced (Zaimi Abd Majid and Rashvand, 2014). Stakeholder analysis is a part of stakeholder management and constitutes a conventional tool widely used by organisations to identify important stakeholders and relationships between them (Aaltonen, 2011; Reed, et al., 2009).

Policy-makers, regulators, governmental and non-governmental organisations, businesses and the media use stakeholder analysis in order to manage stakeholders. The potential conflicting stakeholders' interests may also be identified and understood by such an analysis (Reed, et al., 2009).

Stakeholder management is a process that supports less time consume and decreases project costs (Leung, et al., 2013). To succeed in projects, the project manager needs to manage defined stakeholders (Aaltonen, 2011; Olander, 2007), as the latter can influence the project management processes. The recognition and identification of the stakeholders is therefore important for the planning and execution of a considerably precise and accurate stakeholder management process (Olander, 2007). Satisfaction is a part of stakeholder performance and gives a subjective and critical measurement of project performance (Zaimi Abd Majid and Rashvand, 2014). Zaimi Abd Majid and Rashvand (2014) define four factors measuring project performance: “...*project related factors, contractual arrangement factors, interactive process factors and human related factors*”. In construction projects, it is common to evaluate project performance by measure objective and subjective aspects (Zaimi Abd Majid and Rashvand, 2014).

Interpretation processes concerns how knowledge are shared between stakeholders, and how the information is received, interpreted and applied. How organisations choose to manage the external environment and their stakeholders depends on which type of organisation it is and the management thoughts about it (Olander, 2007).

According to Maylor (2010) the stakeholders of a project can be portrayed at a stakeholder map, depending on the power and interest they have at the project (Figure 4). The stakeholder map provides a guide of how the different stakeholders can be managed.

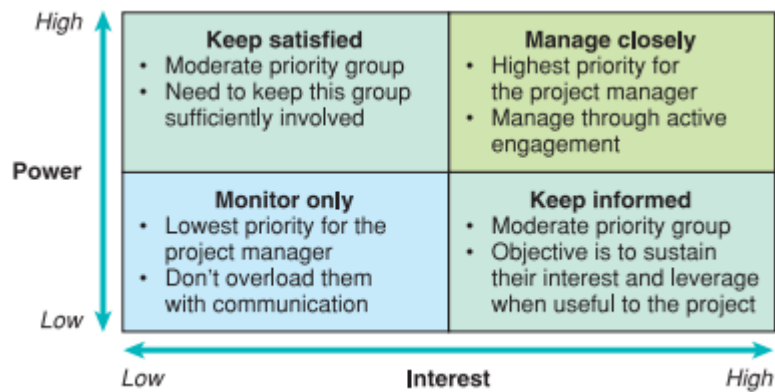


Figure 4 Stakeholder power/interest map (Maylor, 2010)

3.4 Satisfaction

3.4.1 Customer satisfaction

Customer and stakeholder satisfaction constitute a means of alternative measurement when evaluating a project execution. As traditionally, project success has been measured by objective measurement such as cost, time and quality. However several authors and researchers argue that it is not only financial Figures evaluating whether a project is successful or not (Zaimi Abd Majid and Rashvand, 2014). Satisfaction can be evaluated by measuring communication, leadership issues, response to complaints and external relationships. Zaimi Abd Majid and Rashvand (2014) claim that participants' satisfaction can be more directly affected by certain management mechanisms rather than traditional project goals.

When increasing consumer satisfaction, the loyalty towards the company also increases (Lyubova et al., 2015). Mattila (2004) introduced the concept of affective commitment, which reflects upon the customer's feeling of involvement in different processes with a service provider. Increasing affective commitment and customer satisfaction can lead to various advantages for the company, as the loyal consumers tend to advertise it, advising other consumers directly to use the services of the specific company. This strategy can bring even more new consumers in practice, than certain commercials (Lyubova et al., 2015). This is strengthened by a quotation by Zaimi Abd Majid and Rashvand (2014): *“For long-term competitiveness, a company must ensure that current stakeholders are satisfied by consistently measuring their level of satisfaction. In the construction field, satisfaction or dissatisfaction is often known only late in the project when most parts of the project have been completed”*

3.4.2 Tenant satisfaction

Tenant satisfaction is not only based on the quality of the provided and used space, but also on the location of it, the possible opportunities to effectively exploit the provided space and the infrastructure. It constitutes a summative assessment also related to the quality of service provided and interaction (Lyubova et al., 2015).

There are various factors which affect tenant satisfaction, according to Lyubova et al., (2015):

- Quality of the space for commercial use (location, area's characteristics, infrastructure)
- Quality of basic and additional services as well as interaction with the housing company
- Quality of the offer e.g. price - quality relationship, flexible contract terms, and pricing policies.

The tenants are highly satisfied when housing fulfills their daily needs. That, literally means that there are not complains since tenants aspirations are fulfilled. However, there is a strong connection between satisfaction related to the housing environment and tenants' reaction towards their living environment which consists not only of physical and environmental components, but also includes social factors and economic conditions. Therefore, the level of tenants' satisfaction depends on their different socio-economic situation, ethnic background and age (Salleh et al., 2011).

4 Case: Renovation project Långängen

Chapter 4 describes the renovation project that is a part of Familjebostäder's housing stock.

4.1 Långängen

Långängen is a housing area located in Gothenburg and the renovation cover the municipality housing company Familjebostäder's properties in the area (see Figure 5) (Ottoson et al, 2014). The area is located near the city centre of Gothenburg and is a strategic location for the company; they want to maintain the buildings to create an attractive area and to increase the safety environment.

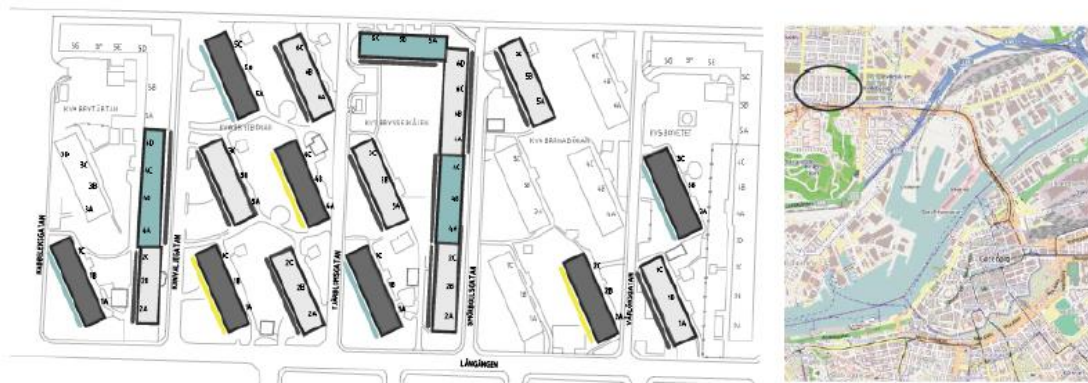


Figure 5 Långängen (Ottoson et al., 2014)

In total, the housing company owns 501 apartments in the area. The buildings in the area have not been renovated since 1985-1995, and the incentives behind a renovation were an alarming situation regarding high radon levels, which can affect the tenants' health (Familjebostäder, 2015). Another reason behind the renovation was to increase the standard of the apartments and the appearance of the facades and outside environment.

4.2 The renovation project

The renovation is spread over five phases (Ottoson and Walldin, 2013). The Figure 5 below illustrates an overview of the renovation project and when the different parts of it will be executed and finished. The phases 1 and 2 (see yellow and orange color in Figure 6) of the project were finished during autumn 2014, and the tenants have moved into their apartment. In March 2015, tenants moved into the apartments in part

3 (see red color in Figure 6). The last phase, 4 and 5, will be renovated during 2015 until 2017. The renovation covers change of pipe systems, new ventilation systems, new kitchen fans, electrical system, drainage, refurbished facades, renovation of balconies and new colouring and new entrance doors.

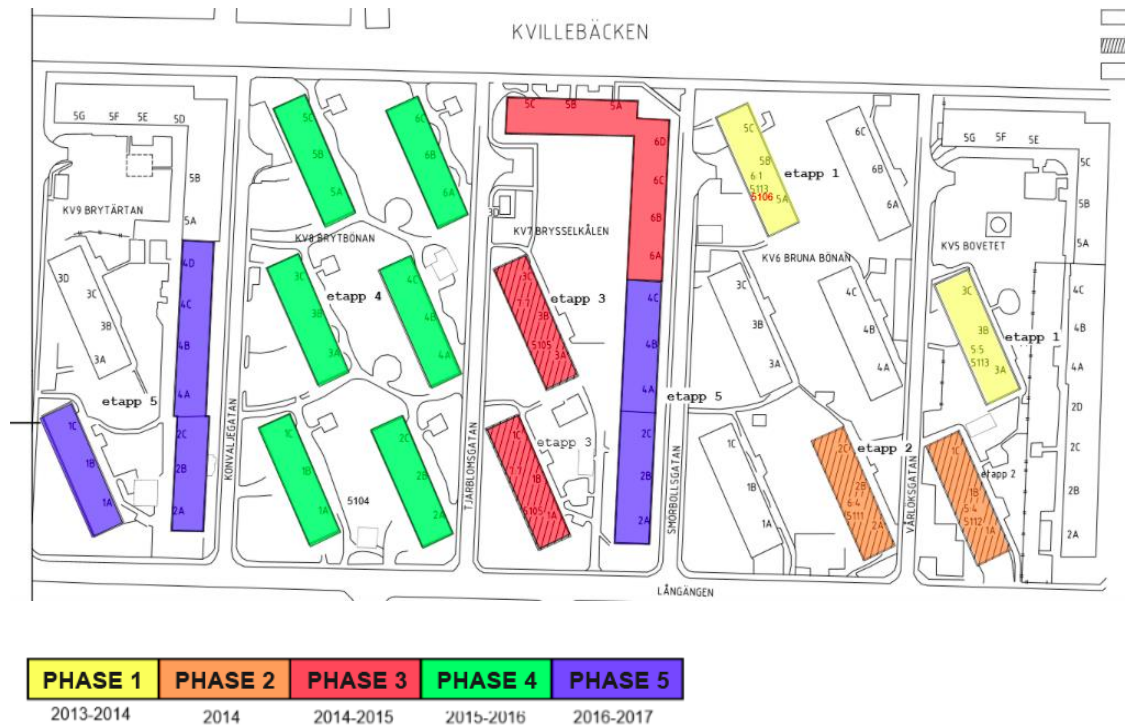


Figure 6 The renovation process, divided into 5 different phases. The picture illustrates the five different phases, depending on when the renovation will be executed (Familjebostäder, 2013-10-15, drawing by Sandholt, K.)

In Table 3 below, the amount of apartments renovated are presented (Familjebostäder, 2015).

Table 3 Numbers of apartments renovated

Phase	Performed	Number of apartments renovated
Phase 1	2013-2014	40
Phase 2	2014	40
Phase 3	2014-2015	134
Phase 4	2015-2016	137
Phase 5	2016-2017	150

4.3 The Project Organisation

The project organisation for the renovation project is illustrated in Figure 7, with the customer of the project, the housing owner Familjebostäder on top, followed by the construction manager at Rotpartner, the projection group, the entrepreneur PSAB and the inspection group. In addition to the companies presented below, external stakeholders are also involved (see Figure 28, Chapter 5). Under each group, there are technical specialists within construction, electricity, telecommunication, acoustics, fire, heating and sanitations etc. involved.

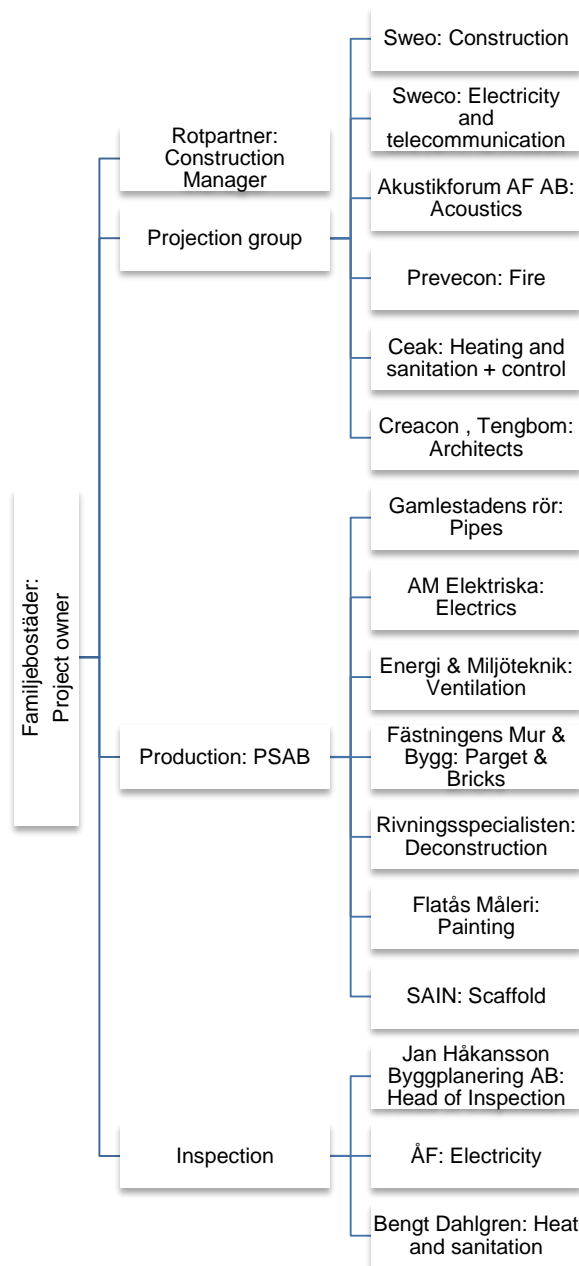


Figure 7 The project organisation

5 Empirical Findings

The results from the questionnaire directed to the tenants and the empirical findings from the performed interviews in collaboration with various stakeholders are presented in this Chapter.

5.1 Stakeholder mapping

In order to perform the stakeholder analysis (see Figure 8), the most important of the involved companies and organisations were identified. In the Figure the stakeholder matrix is presented, according to the authors' interpretation. The stakeholders have been ranked regarding the power/influence and their interest on the project. The stakeholders that are marked with blue colour indicate the ones that have participated in the interview sessions. The rest (grey colour marked) of stakeholders have not been interviewed during this study. As mentioned at the method description (see Chapter 2), the tenants are not included in the interviews.

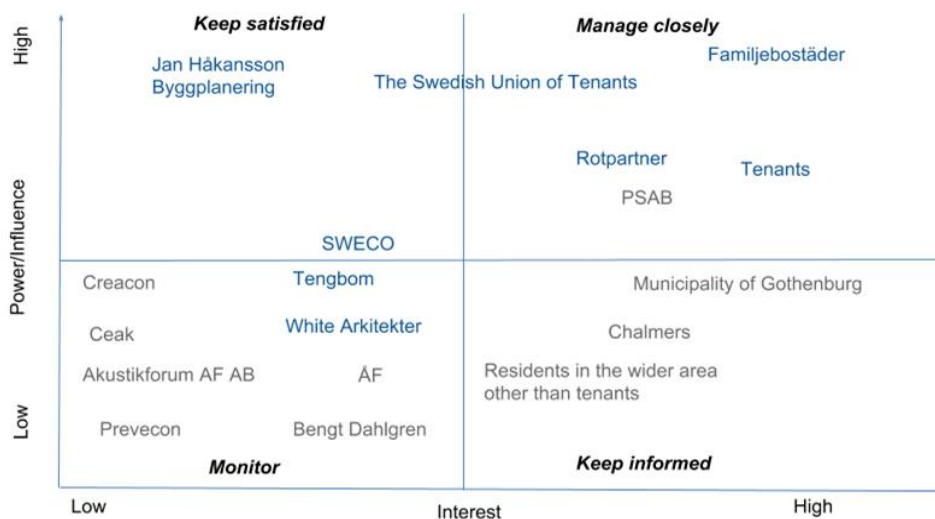


Figure 8 Stakeholder matrix

5.2 Questionnaire

Only the results that are relevant for the discussion of this study are presented at this section. For more detailed view of the tenants' answers at the questionnaire, see Appendix C.

5.2.1 Background (part A)

In Figure 9 the number of males and females are visualised, and the distribution between them is 69.8% females and 30.2% males. The average age of the respondents is 46.28 years old, while the majority of them is 34.9% belongs to 26-35 age group (Figure 10). In most of the apartments (54.8%) live 2 adults (see Figure 11), and 85.7% of the participants live without children (see Figure 12).

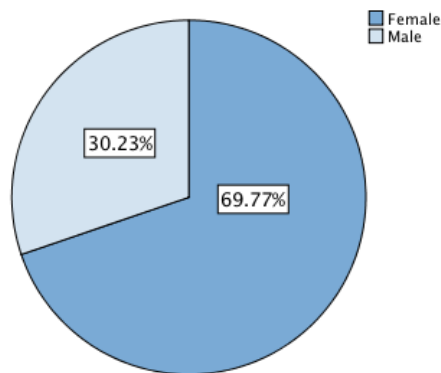


Figure 9 Gender

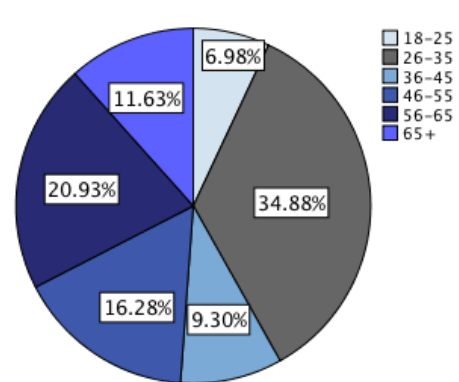


Figure 10 Age

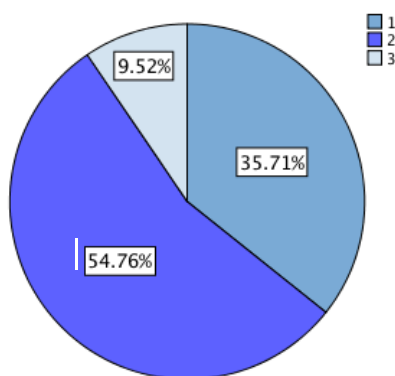


Figure 11 Number of adults living in the household

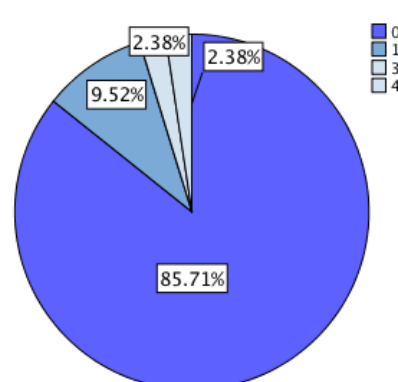


Figure 12 Number of children living in the household

A great percentage, of 39.5% of the respondents have been living at Långängen for

more than 10 years (Figure 13). Combining with the people living between 5-10 years (18.6%), then it appears that the majority 58.1% of this survey's participants live in Långängen for more than 5 years. Most of the participants, 46.5% have been living in their renovated apartment between 2-6 months (by the date of the questionnaire was sent to them), whereas 44.2% live more than 6 months (see Figure 14). The majority of the participants (67.4%) were living in the same apartment before the renovation (see Figure 15).

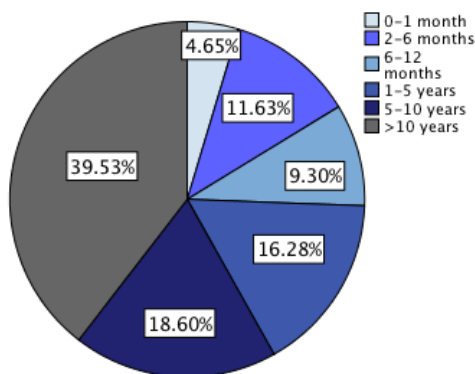


Figure 13 Period of time that tenants have been living in the same apartment at Långängen

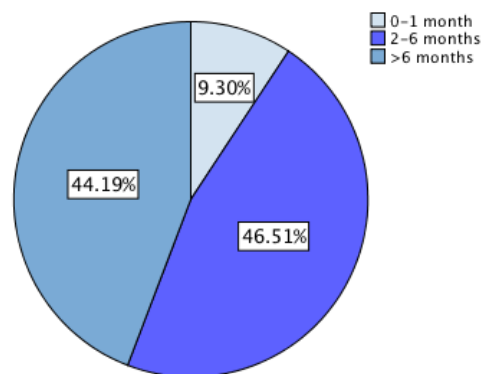


Figure 14 Period of time that tenants have been living in their renovated apartment

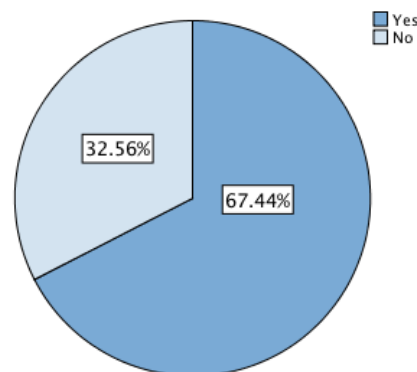


Figure 15 Tenants living in the same apartment before the renovation

Regarding the sample's main occupations, the majority of the participants are working as employees (51.2%) (Figure 16) and regarding their highest educational level, most of them (39.5%) have a University or college degree (Figure 17). Finally, the majority of the participants (83.7%) usually speak Swedish in their household (Figure 18).

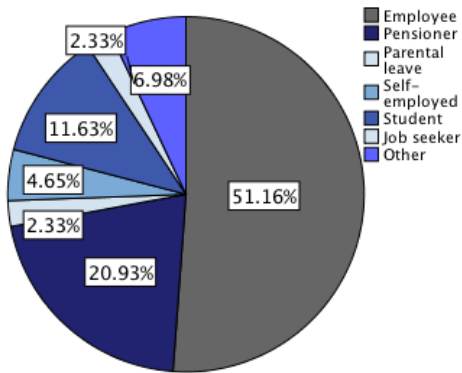


Figure 16 Highest level of education

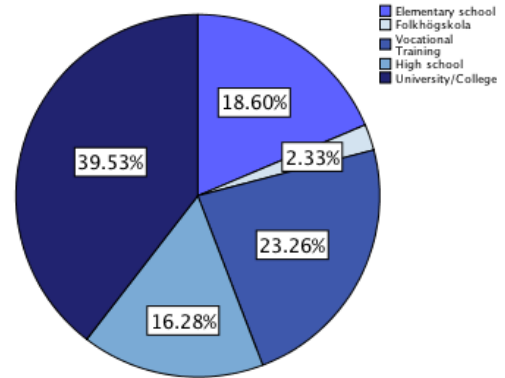


Figure 17 Main occupation

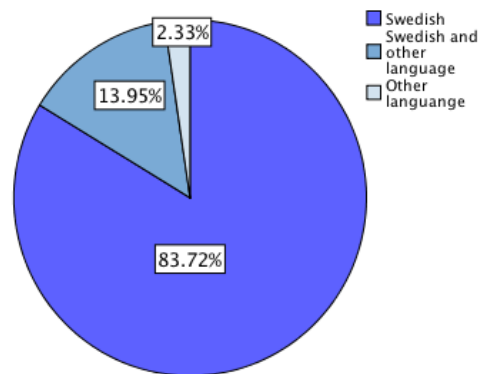


Figure 18 Main language used in the household

5.2.2 Information (part B)

Regarding the information that the tenants received before, during and after the renovation process, the results vary. The vast majority of the tenants claimed that they have received information by letter, 74.4% of the survey's participants, whereas, only a small percentage, 2.3% has received information through emails or through Familjebostäder's website (9.3%) (Figure 19). Less than half of the correspondents answered that they have received information by announcements in the entrance (39.5%), while 51.2% claim that they received information through the meetings in the area. Only some people were informed by phone-calls (4.7%). Though, there are people who have received information through other ways in a percentage of 11.6%. Those other ways mostly include information through companies within the project organisation, such as the entrepreneur.

When it comes to the tenants' preferences of receiving information from their landlord in the future, it seems that the most preferable way is by personal letters, as 79.1% chose this option, while 20.9% of the participants choose emails in order to receive

information in the future. In addition, almost half of the participants prefer to receive information by announcements in the entrance and through meetings with the landlord (48.8% of the participants respectively). Moreover, 25.6% of the tenants prefer to receive information through webpages. Receiving phone-calls is not a very popular way of communicating the relevant information in this case as only 7% of the participants prefer that way.

The Figure 19 below, shows how the tenants claimed that received information from Familjebostäder, and how they the prefere to receive information in the future.

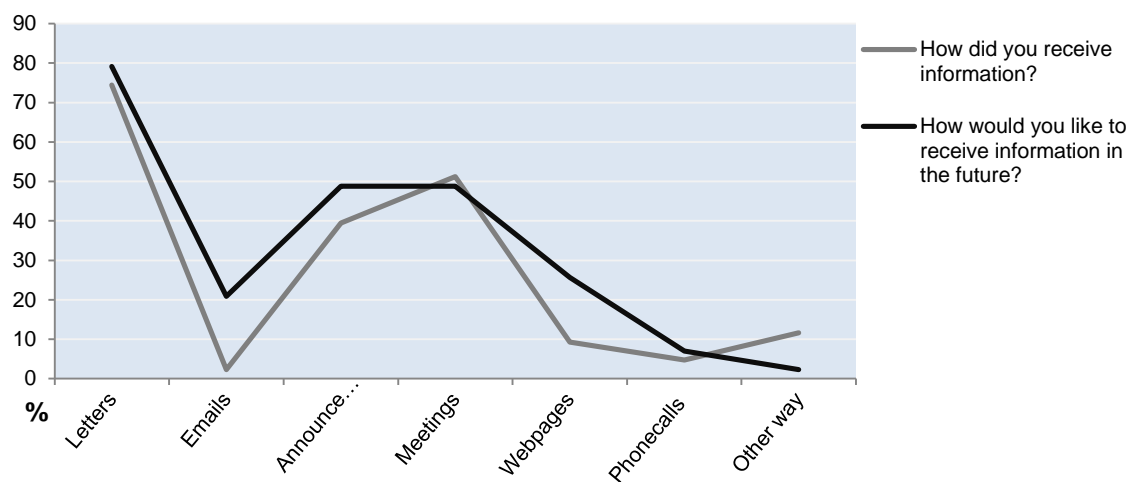


Figure 19 How the tenants received information from Familjebostäder and how they would like to receive it in the future

In an attempt to identify the tenants' preferences regarding the way they would like to receive information from Familjebostäder related to their age, the results show some differences between the age groups. The vast majority, 40% of the youngest tenants between 18-25 years old prefer to receive information through webpages (Table 4). On the contrary, the oldest tenants, over 65 years old, prefer to receive information through meetings. The tenants between 56-65 years old prefer letters as a means of communicating information from their landlord. The preferred way of all the other age groups 26-55 years old, is also letters. The least popular way of receiving information for all the age groups is the phone calls.

Table 4 Tenants preferences of receiving information regarding their age

	Letters	E-mails	Announcements at the entrance	Meetings	Webpages	Phone calls	Other ways
18-25	20.0%	20.0%	20.0%	0.0%	40.0%	0.0%	0.0%
26-35	31.8%	9.1%	20.5%	20.5%	11.4%	4.6%	2.3%
36-45	33.3%	11.1%	11.1%	22.2%	22.2%	0.0%	0.0%
46-55	35.7%	7.1%	28.6%	14.3%	14.3%	0.0%	0.0%
56-65	47.4%	5.3%	21.1%	21.1%	0.0%	5.3%	0.0%
65+	22.2%	11.1%	22.2%	44.4%	0.0%	0.0%	0.0%

Continuing with the analysis of the Information, 40.5% of the tenants mentioned that they have been contacted by more organisations/companies, other than Familjebostäder, during the renovation. Most of them mentioned the main entrepreneur PSAB, the Swedish Union of Tenants and Chalmers University of Technology.

The majority of the tenants (67.4%) participated in at least one of the information meetings, while 63.9% believe that the meetings are very important regarding a renovation. Within a scale from 1 to 7, the average response rate regarding the importance of the meetings was 6.00. On the contrary, just a few of them participated in the guided tour with the stakeholders in the area (9.5%) and 16.7% attended the focus group interview that Chalmers performed.

When it comes to the tenants' satisfaction, regarding the information received before this renovation process, the average satisfaction level within the scale from 1 to 7 was 4.06 units. Regarding the satisfaction related to the information received by the tenants during the renovation, the average score is decreased to 3.48.

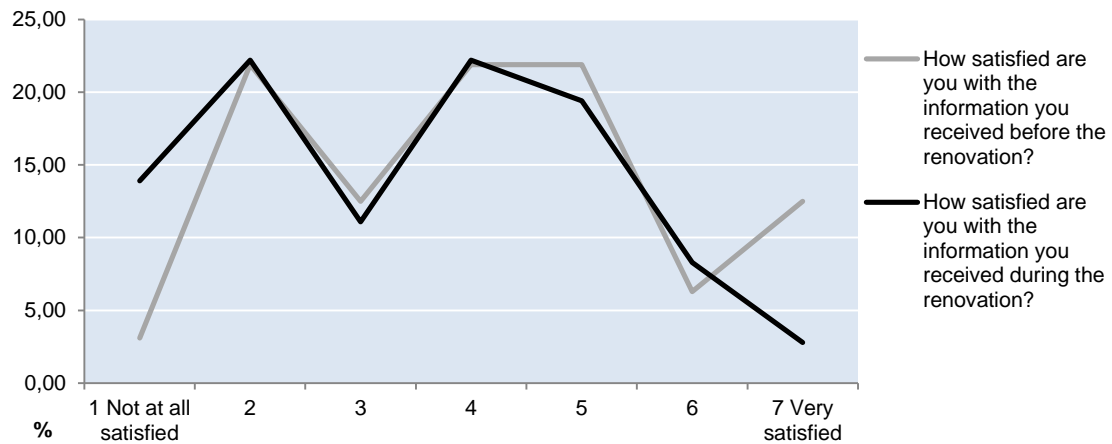


Figure 20 Tenants' satisfaction regarding the information received before and during the renovation

5.2.3 Influence (part C)

Regarding the power that the tenants have in order to be able to be involved and have influence over a renovation, several questions were asked. Most of the tenants (25.7%) do not feel at all that they are involved in the decisions concerning their apartment, while the 51.4% tend to believe that they do not feel involved (See Figure 21). The average score at a scale from 1 to 7 was 3.60.

On the other hand, the vast majority of the participants think that it is very important for the tenant to be able to influence the planning phase of the renovation. The 65.9% of the respondents answered that way. Even more participants, 73.2% think that it is also very important for the tenant to have the opportunity to influence the renovation proposals. The average score from the sum of responses at a scale from 1 to 7 was 6.38 and 6.35 respectively.

Almost all of the tenants (90.5%) agree that it is very important to receive information when a renovation is performed. The average response at the same scale from 1 to 7 was 6.86 in this case, while there are not any answers recorded between 1 and 3. Given the average score of 6.42 at the same scale, it is clear that it is extremely important for the tenants' wishes to be taken into consideration. 73.2% of them answered that this is a very important parameter (see Figure 21).

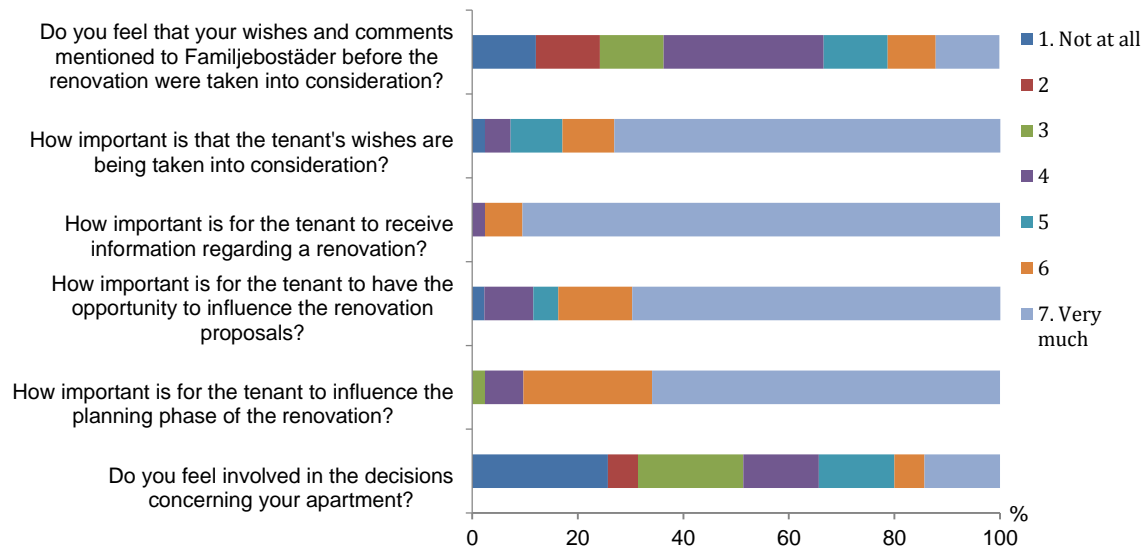


Figure 21 Tenants' answers regarding influence

5.2.4 Results from the renovation (part D)

Regarding the results from the renovation processes, most of the participants in this survey 26.9% are not at all satisfied with their evacuation apartment during the renovation (see Figure 22). Nevertheless this question was relevant to be answered to the 60.5% of the sample as the rest of the tenants did not use an evacuation apartment, but they found other temporary solutions during the renovation. The average response at the scale from 1 to 7 was 3.64. About 72.5% of the tenants are over the average satisfied with the standard of the apartments today. On an average, all the participants scored 4.64 at the same scale. Similar responses are recorded when it comes to how the tenants feel when they are living in their renovated apartment today, as 70.0% of them answered that they are over the average satisfied. The average response was 5.47. Regarding the rent conditions, the respondents tend to have different opinions, when it is related to the recent renovation. The average score was 3.79 in this question, while the 42.1% claimed that they are not satisfied and 42.2% tend to be satisfied. The rest 15.8% of the participants are neutral.

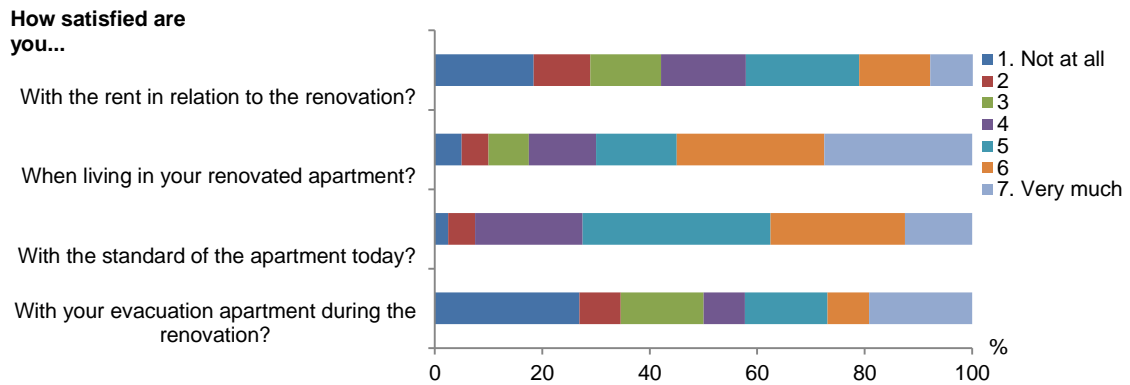


Figure 22 Tenants' satisfaction over different aspects of the recently renovated apartment

Continuing the analysis the results show that 56.4% of the respondents tend to be satisfied with the overall renovation result, while the average at a scale from 1 to 7 is 4.85 (see Figure 23). The tenants are positively thinking that their expectations are fulfilled as the average response in this question was 4.12. Nonetheless, for almost all the tenants is important for their expectations to be fulfilled.

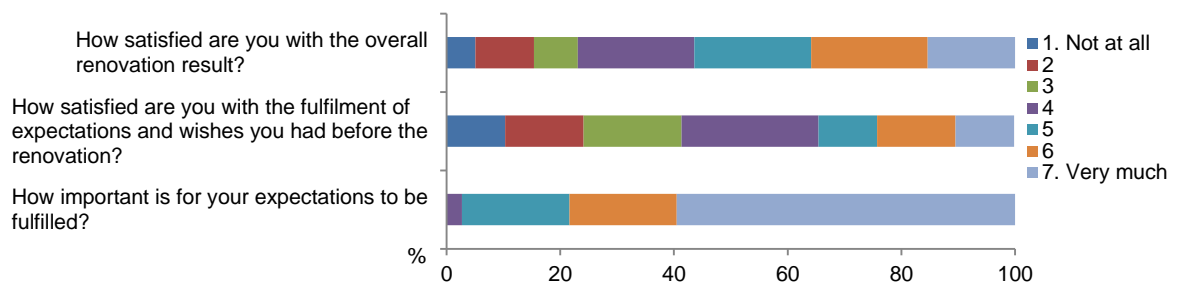


Figure 23 Tenants' satisfaction over their wishes and expectations

Regarding the dialogue processes performed before and during the renovation with Familjebostäder, the results show that the satisfaction is slightly decreasing during the renovation (see Figure 24). In both cases, the respondents tend to give neutral answers as the average score was 4.36 and 4.00 respectively. However, the tenants claim that they are not satisfied with the dialogue they performed with the Swedish Union of Tenants, with an average of 3.71.

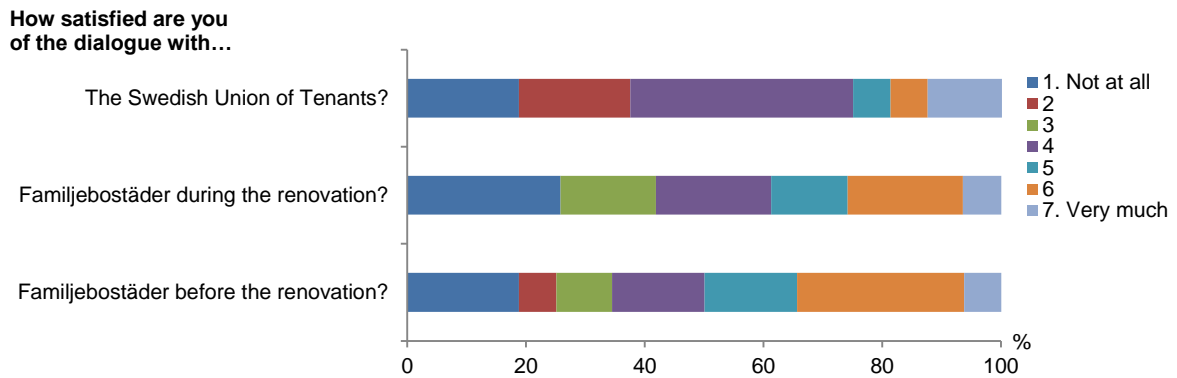


Figure 24 Tenants' satisfaction over the dialogues with Familjebostäder

5.2.5 Trust (part E)

When it comes to trust, the tenants tend to trust very much Familjebostäder, as the average score is 4.48 at the scale from 1 to 7 (see the Figure 25 below for more details) and 49.9% of the respondents answered between 5 and 7 at the same scale.

The majority of the tenants 79% also think that Familjebostäder is a good landlord as it scores 4.48 at the scale from 1 to 7 and most of them (61.9%) have selected over the average scores (5, 6 or 7) at the same scale.

Finally, the majority of the tenants 57.1%, answered positively if they would recommend Familjebostäder to other people. The average score of the respondents in this question is 4.52, at a scale from 1 to 7.

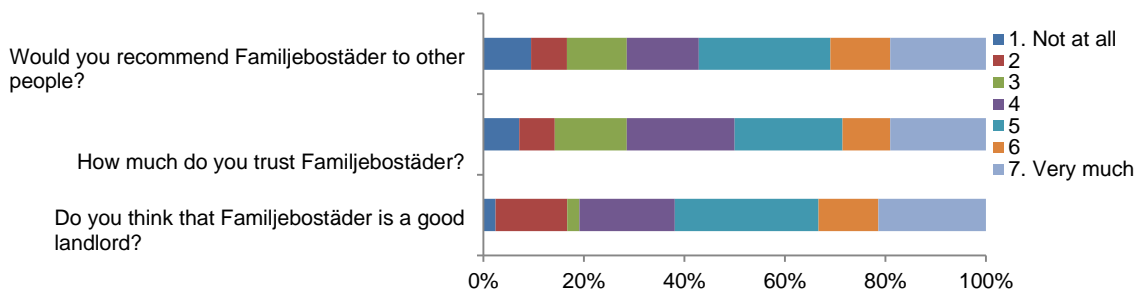


Figure 25 Comparison of tenants' answers regarding Familjebostäder

In an effort to examine later in depth the parameters of how different groups of people perceive their landlord, how much do they trust their landlord and if they would recommend Familjebostäder, the authors compare these parameters relating them to the gender, age and highest educational level of the participants, and also in relation

with the time they have been living at Långängen.

The results show that there are not many differences between male and female whether they are asked if Familjebostäder is a good landlord for them, if they trust Familjebostäder and if they are going to recommend their landlord to other people. Nevertheless, the women's average score at a scale from 1 to 7 is in all the above cases relatively higher than men's average score (see Table E.4, Appendix C).

Examining the same questions from an age perspective, the results are differentiated depending on the age of the participants in this survey. Regarding to what the participants believe for their landlord, all the results tend to be positive. The young people, between 18-25 years old think that Familjebostäder is a good landlord, scoring 5.67 in average, at a scale from 1 to 7 and higher than any of the rest of age groups. People between 56-65 years old follow (average score 5.00), while people between 26-35 years old score the lowest average (4.45).

Regarding to how much the participants trust Familjebostäder, the results are similar to the responses the previous question, as the young people, between 18-25 years old trust Familjebostäder more than any other age group scoring 5.00 in average, at a scale from 1 to 7. The oldest people who are more than 65 years old follow with an average score of 4.75. However, people between 26-35 years old seem that they do not trust their landlord as their average responses are lower than the average response rate (3.75).

When the participants of this survey asked if they would recommend Familjebostäder to other people, the tenants who are more than 65 years old tend to be the most positive of recommending it, than the other age groups (see Table 5). They score 5.00 at a scale from 1 to 7. People between 56-65 years old follow, scoring 4.78 at the same question. The results are not very different among the groups, however the people between 26-35 years old seem that they wouldn't recommend Familjebostäder to other people as they score 3.75 at the same scale.

Table 5 Tenants' perception of Familjebostäder regarding their age

Age		Do you think that Familjebostäder is a good landlord?	How much do you trust Familjebostäder?	Would you recommend Familjebostäder to other people?
18-25	Mean	5.67	5.00	4.67
	Frequency	3	3	3
26-35	Mean	4.47	4.27	4.33
	Frequency	15	15	15
36-45	Mean	4.50	3.75	3.75
	Frequency	4	4	4
46-55	Mean	5.29	4.71	4.71
	Frequency	7	7	7
56-65	Mean	5.00	4.67	4.79
	Frequency	9	9	9
65+	Mean	4.25	4.75	5.00
	Frequency	4	4	4
Total	Mean	4.79	4.48	4.52
	Frequency	42	42	42
Not answered	Frequency	1	1	1

Examining the same questions from the participants' highest level of education perspective, the results are not very different as all the responses tend to be positive, apart from the responses of the tenants who have vocational training as they tend to be neutral to the questions regarding how good is their landlord and if they would recommend it to other people with an average score of 4.00 at a scale from 1 to 7 and quite negative when they are asked how much they trust Familjebostäder (average score 3.90). (see Table E.5., Appendix C)

Regarding the period of time that tenants have been living at Långängen, the answers to the questions are not very different when the tenant is living at Långängen up to 5 years (see Table 6). The answers to almost all the questions tend to be neutral as the average response score at a scale from 1 to 7 is in all cases close to 4.00 units.

However, the tenants who have been living at Långängen between 5-10 years seem to be more negative to these aspects as their average score is less than 4 units in all the questions. On the contrary, the tenants living at Långängen for more than 10 years tend to think that Familjebostäder is a good landlord scoring more than the other groups (average score 5.44) and they would recommend it to other people (average score 5.19). They also tend to trust Familjebostäder more than the tenants who have been living there for less than 10 years, with an average score of 5.00 units at a scale

from 1 to 7.

Table 6 Tenants' perception of Familjebostäder regarding how long they have been living at Långängen

How long have you been living at Långängen?		Do you think that Familjebostäder is a good landlord?	How much do you trust Familjebostäder?	Would you recommend Familjebostäder to other people?
0-1 month	Mean	4.50	4.00	4.00
	Frequency	2	2	2
2-6 months	Mean	4.80	4.40	4.40
	Frequency	5	5	5
6-12 months	Mean	4.50	4.25	4.50
	Frequency	4	4	4
1-5 years	Mean	4.57	4.57	4.29
	Frequency	7	7	7
5-10 years	Mean	3.88	3.63	3.63
	Frequency	8	8	8
More than 10 years	Mean	5.46	5.00	5.19
	Frequency	16	16	16
Total	Mean	4.79	4.48	4.52
	Frequency	42	42	42
Not answered	Frequency	1	1	1

5.2.6 Satisfaction (part F)

The last part of the questionnaire which concerns the overall customer satisfaction was developed in a way that the authors could use Kano's model (see Methodology, Chapter 3) to analyse the results. Considering the frequencies of the tenants' answers, most of them like their wishes to be considered and their expectations to be fulfilled, while they expect to have the opportunity to influence a renovation, to have meetings with their landlord during that renovation and mostly to receive information. On the other hand, the respondents dislike most of all the parameters, when they do not get enough information and then, when they do not have the opportunity to influence a renovation and also when their wishes are not taken into consideration by their landlord. They dislike less, when their expectations are not fulfilled, while they tend to answer that they "can live" without the meetings.

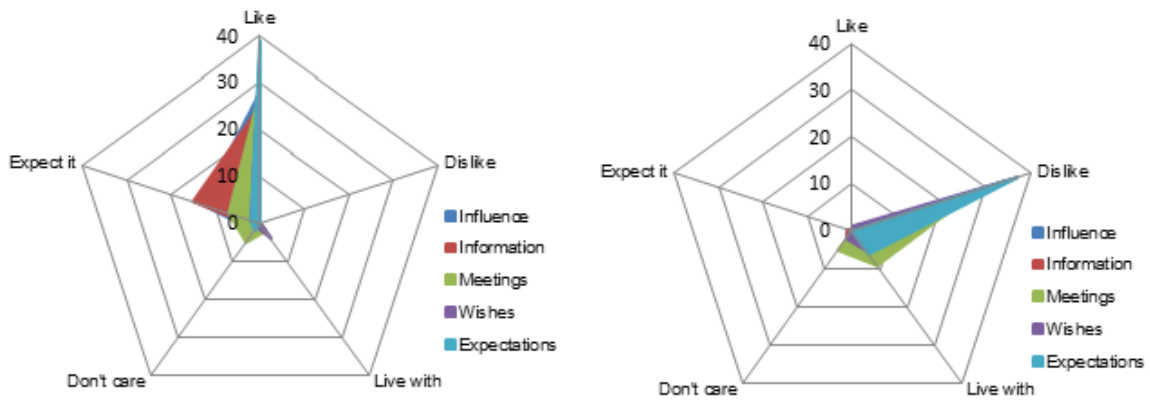


Figure 26 Satisfaction (left) and dissatisfaction (right)

The Figure 27 below illustrates the 5 qualities that have been discussed in the questionnaire and have the highest influence on customer satisfaction. As the consideration of the tenants' wishes from Familjebostäder is approaching 1.00 at the CS-coefficient scale -highest than every other quality-, this means that has the biggest impact on tenants' satisfaction. The least impact on customer's satisfaction has the reception of information regarding a renovation. However, this quality has the biggest impact on customer dissatisfaction, as it approaches -1 at the dissatisfaction scale.

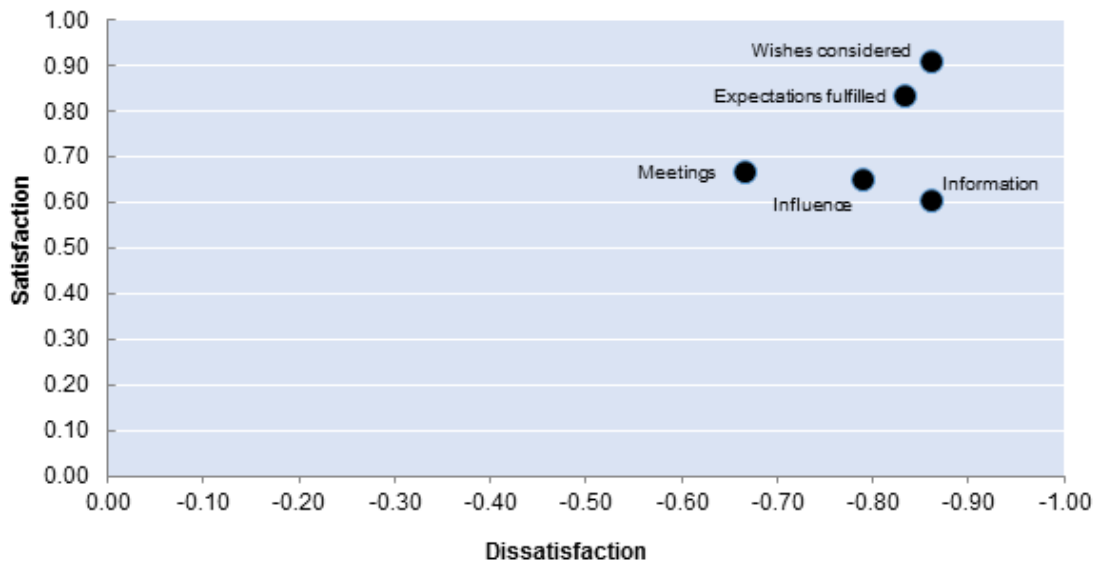


Figure 27 Influence of Familjebostäder's actions on tenants' satisfaction or dissatisfaction

5.2.7 Tenants' comments

The Table 7 below summarises the comments from question C4 regarding what the tenants want to have the opportunity to influence during a renovation.

Table 7 Summary of comments from question C4 of the questionnaire

"When it comes to your apartment, what do you think is of importance to be able to influence over a renovation?"	
Answers	<ul style="list-style-type: none"> ✓ The costs, especially when the rent level is affected and detailed explanation/ justification about the rent levels according to the costs of materials etc. ✓ The colours and wall papers inside the apartment ✓ The choices for the bathroom ✓ The choices for the kitchen, e.g. to have a dishwasher ✓ The choices of materials in general e.g. for the floor ✓ How the apartment looks like and the layout of it ✓ How the facades look like ✓ Where to place the electricity outlets ✓ To have direct contact with workers in the apartment during the execution of the renovation ✓ When to move out and back in the apartments ✓ To be present during the inspections ✓ The recycling station ✓ The quality of the executed work
Problems	<ul style="list-style-type: none"> ✓ Tenants feel that they do not have any influence over the renovation ✓ Tenants think that Familjebostäder has only the right to decide as it is the housing owner. ✓ It is challenging to reserve architectural values

For more comments from the tenants, see Appendix C.

5.3 Interviews with stakeholders

5.3.1 Background

Interviews with the project's stakeholders were carried out in order to perform the qualitative research of this study. As mentioned at the method description (see Chapter 2), the tenants are not included in the interviews. In the Table 8 below, the participants are listed whether they are representing the customer-, projection- or inspection group, or they are external stakeholders. Their roles at the project are also presented.

Table 8 Interviewees

	Company	Role
Customer	Familjebostäder	Project Manager (PM)
	Rotpartner	Construction Manager (CM)
	White Architects	Specialist in social sustainability (specialist)
Projection	Tengbom	Architect and Studio Manager
	Sweco	Building constructor (BC)
Inspection	J Håkansson Byggnadsplanering	Head of inspection
External stakeholder	The Swedish Union of Tenants	Operation Manager (OM)

The *customer's side* of the project is represented by a project manager (PM) from Familjebostäder, a construction manager (CM) from Rotpartner and a specialist in social sustainability from the White Architects. Participants from the *projection group* of the project are represented by a building constructor (BC) from Sweco and an architect and a studio manager from Tengbom. A stakeholder representative for the *inspection side* of the project is the head of inspection from J Håkansson Byggplanering. An operation manager (OM) from the *external stakeholder*, The Swedish Union of Tenants, also participated in an interview session. The PM has changed during the renovation project³. During the first two phases, another person had this role. That person left the project manager role and the organisation as well.

5.3.2 Communication with tenants

Customer's side

Familjebostäder's customer manager is the main responsible for communicating with tenants and keeping them informed, although the project manager (PM) has sometimes also contact with them. The PM⁴ from Familjebostäder pointed out the importance of sending out short and concise information, which is direct and not too complicated. Apart from other methods e.g. letters, the tenants are always being informed by announcements in the entrance of the buildings. According to PM this is the most common way that the tenants receive information. The first announcements are available for the tenants one year before the renovation starts, while the first information meeting takes place half a year earlier to the renovation start.

³ Project Manager, Familjebostäder, 2015-03-16

⁴ Project Manager, Familjebostäder, 2015-03-16

Regarding the dialogue processes, the PM claims that it is often very difficult for the tenants to understand different aspects regarding a renovation⁵. That often derives from the tenants' lack of knowledge about the building industry. This lack of knowledge is leading to various problems such as in understanding how much time is needed to perform a renovation and the correlation between the increased rent price and the cost for the housing owner to both perform the renovation and maintain the property. The PM also mentions that the tenants do not evaluate if the increased price of the rent is reasonable comparing to the performed renovation and the standard of the apartment and that often results to dissatisfaction. It is challenging to solve this problem since the tenants are used to pay a certain amount of money for the apartment and are often resistant to this change. According to PM suggestions, this can be improved if the housing owner informs the tenants earlier than the current procedures indicate and even to a greater extent. In that case they would have more time to process the information received.

In any case the PM believes that it is valuable to involve the tenants and consider their personal opinions to renovate their apartments⁶. However, the tenants' involvement should be considered to a certain extent. The PM thinks that there should be a balance between how many choices the tenants have and some restrictions should be set e.g. the choices should not be too extreme, since future potential tenants should be also considered.

For the CM at Rotpartner, it is very important that the tenants receive information in time, and to ensure that every involved tenant in the renovation has received the relevant information and has signed the contract which indicates that the renovation can be executed⁷. The CM also underlines the importance of the role of Familjebostäder's customer manager to maintain the communication with tenants. The CM also agrees with the PM from the housing owner's side, that the dialogues with the tenants often raise questions about the rent levels as some of them may not realise the extent that their apartment will change after the renovation is executed. To assist the tenants to a direction of realising what is going to happen, Rotpartner often arranges a "demonstration" apartment, so they can visualise how the appearance of

⁵ Project Manager, Familjebostäder, 2015-03-16

⁶ Project Manager, Familjebostäder, 2015-03-16

⁷ Construction Manager, Rotpartner, 2015-03-27

the apartments will be after the execution of the renovation. This is not the case for this renovation project; however the CM recommends that housing owners should integrate this process, as the tenants are able to obtain a spherical opinion and can also make decisions easily, upon materials, colours, shapes etc.

However, involving tenants in the renovation enables advantages for the housing owner; their tenants become more satisfied if they are able to affect the renovation results, as the CM claims⁸. Rotpartner also tries to prepare tenants on upcoming renovations, by pointing out the negative aspects as well, e.g. noise and dust. The CM from Rotpartner also sends out information to the tenants, informing them that it is possible to report errors after they have moved into their apartments.

The specialist from White Architects thinks that a dialogue should always be conducted with tenants⁹. However, it is a long process to go through and the involved parties should not be very optimistic regarding the time frame. Considering past experiences, the dialogue should be planned to require more time than what the stakeholders think. In retrospect the Rebo-project, which is the basis for the current study, the specialist tried to highlight some issues identified in early dialogues, that the tenants were anxious about, such as the rent levels and the fact that they wanted to be involved in the process. The overall dialogue worked well, however some problems occurred regarding the tenant's anonymity, as some of them did not seem to feel anonymous. The specialist points out that it is the tenants' right to be anonymous. Some of them wanted to be anonymous when involved in the dialogues, however Familjebostäder did not provide such opportunities, as the tenants were contacting and communicated directly with their landlord. In terms of improvements, the specialist suggests that independent external consultants could be involved and contact the tenants when performing similar projects, instead of the housing company. Finally, the need of customising e.g. the meetings, and adapting every time to the specific target group is pinpointed. An example is that during the Rebo-project, when the specialist was trying to involve many groups of people, separate meetings were arranged with older people who couldn't participate during the original meetings for several reasons.

⁸ Construction Manager, Rotpartner, 2015-03-27

⁹ Specialist in social sustainability, White Architects, 2015-03-27

Projection group

The BC from Sweco has also direct contact with tenants during the inspection of the apartments¹⁰. The BC perceives tenants as very positive concerning the renovation project, while visiting their apartments “...*They were curious about the project and let the projection team into their apartment, which might constitute a problem when previous experiences from other renovations are considered...*”. The BC argues that the reason behind the open and positive attitude among tenants, it could be that they were well-informed from the housing owner. The BC also believes that it is a good idea to perform dialogues with tenants, and perceive their aspects regarding their apartments and problems related to them. This process also creates more jobs for the people who are going to realise the tenant dialogue. The BC is not affected directly to a great extent, however it always interesting to be aware of the tenants' opinion concerning their apartments.

Although the architects at Tengbom do not have any contact with tenants regarding their preferences¹¹¹², the interviewed architect agrees that involving the tenants in the decision making process is very valuable. At Långängen's case, Tengbom received information about the tenants' preferences through Familjebostäder. However, the architect is concerned whether in the process would be more effective for the housing owner to involve the tenants. Sharing past experiences from another project, the architect mentioned an example from a housing company that decided to perform a dialogue with the tenants at a later stage and they completely opposed the suggestion.

Inspection group

On the contrary, the head of inspection from J Håkansson Byggnadsplanering preferably does not have any contact with the tenants¹³. Incentives behind the claim are that the tenants tend to have a lot of different opinions and views on the performed renovation. Furthermore, it is possible for the head of inspection to be in a situation within conflicts between the tenant and the housing owner, which is not the purpose of the inspection. It is common that tenants make different observations depending on

¹⁰ Building constructor, SWECO, 2015-04-17

¹¹ Studio Manager, Tengbom, 2015-03-20

¹² Architect, Tengbom, 2015-03-20

¹³ Head of inspection, J Håkansson Byggplanering, 2015-04-10

their requirements on the apartment. In this case, a dialogue with the entrepreneur and the housing owner to discuss what their customers' preferences are, is preferred.

External stakeholders

The OM from the Swedish Union of Tenants has direct contact with the tenants by using different communication channels¹⁴. The OM pointed out the importance of using different communication methods. The Swedish Union of Tenants considers its members' interest by supporting them with information about their rights and responsibilities according to Swedish Law. The organisation often consists of one local unit in each living area, responsible for tenants who are members in the specific area. The region office is supporting the local units with resources such as an operation manager and negotiators. Tenants frequently call the Swedish Union of Tenants to inform about upcoming renovation projects.

Normally, a negotiator from the Swedish Union of Tenants informs the OM for upcoming projects e.g. renovations and then it is the OM's task to identify if their members have enough information regarding the specific project¹⁵. The OM sends invitations to the tenants that are members of the Union to meetings to inform them about their rights and obligations. The most important, according to the OM, is to create a dialogue with the tenants and listen to their opinions about the project, learn their perspective regarding the renovation and also their needs, without the involvement of the housing owner.

According to the OM the communication with the tenants is not as good as the housing organisation claims, and stating the importance of involving the tenants in issues affecting them¹⁶. The OM mentions *"...we got information from the tenants during our meetings that the communication was of inferior quality, which actually means that there were several questions that were not answered"*¹⁷. In this renovation project at Långängen, there was not adequate information from the landlord's side regarding the evacuation process and tenant's private equipment. There were also unclear whether the tenants needed to sign an extra insurance or keep their already

¹⁴ Operation Manager, The Swedish Union of Tenants, 2015-03-19

¹⁵ Operation Manager, The Swedish Union of Tenants, 2015-03-19

¹⁶ Operation Manager, The Swedish Union of Tenants, 2015-03-19

¹⁷ Operation Manager, The Swedish Union of Tenants, 2015-03-19

contracted insurance when being evacuated. According to the OM this kind of issues are really important to be communicated in the very early stages of a project, definitely before a renovation starts. It is also believed that in this way, the tenants' satisfaction will be further increased.

5.3.3 Communication among stakeholders

Customer's side

The most important stakeholders within Familjebostäder that participate in the project are the PM, the customer manager and the CM¹⁸. The PM prefers direct communication with the other stakeholders, since it results to a dynamic conversation and gives the opportunity to negotiators to have a more effective communication. E-mail conversations are preferred when the communication is informal, less people are involved and when information is shared at a bureaucratic level. Challenges arise when sharing information through emails as the PM should ensure that everybody within the project organisation fully understands the delivered information. The CM from Rotpartner supports the PM in different issues; hence they both have continuous contact. The CM supports Familjebostäder with e.g. control documents at the City Planning Office in the Municipality of Gothenburg.

The entrepreneur PSAB has the main responsibility for the site, the work execution and the budget¹⁹. The PM mostly communicates with the site manager from PSAB, to be updated about the project status. When the project is finished, an external part decides upon whether the project is approved or not.

In general, the stakeholders involved in the project often share information through e-mails. In addition, building meetings every second week are important to share current information among stakeholders²⁰. According to the CM, at the building meetings, the participants are the site manager from the entrepreneur PSAB, the PM, the CM and the customer manager from Familjebostäder. The CM prefers to have meetings every second week in the larger projects in order to stay updated. Protocols are also kept to confirm change requests and to share information with people not

¹⁸ Project Manager, Familjebostäder, 2015-03-16

¹⁹ Project Manager, Familjebostäder, 2015-03-16

²⁰ Construction Manager, Rotpartner, 2015-03-27

participating on the building meetings, but have an interest in the information shared or discussed. However, tenants are not entitled to obtain this information. According to the CM, Rotpartner is satisfied with the overall communication in the project.

In the beginning of the project, the specialist at the White Architects performed a stakeholder analysis to manage the stakeholder dialogue²¹. White Architects use different kind of methods to gather information and also give feedback to people involved in the process. As the specialist claims *"...in the beginning, we always start to make a stakeholder analysis and create a stakeholder dialogue. We identify the parties we need to contact, what information is needed to be obtained, when is the most appropriate time during the project to speak to these people and how do we ensure that we provide them with the right feedback later..."*²².

At the project, the White Architects had contact with the tenants, The Swedish Union of Tenants, Chalmers University of Technology and employees at Familjebostäder²³. Together with the housing owner, the White Architects were involved in the process of planning according to the social issues and how to systematically work with e.g. stakeholder management; areas that were totally new for the housing owner. Integrating the social aspect and stakeholder management procedures were complicated to implement into the organisation at Familjebostäder. The specialist is not aware if the housing organisation has the expertise to understand the reasons behind the implementation of a systematic plan for the social issues as *"...they are mainly working with the technical issues instead of soft values..."*²⁴. To date, the specialist is not involved in the project anymore, and has not received any feedback from Familjebostäder. *"...I am not sure how the housing owner has handled it and how the tenants have been involved, since I left."*²⁵.

One reason behind inferior information could be the fact that some people have left Familjebostäder when the renovation process was ongoing. During the project the specialist was satisfied with the shared information. Regarding the communication in

²¹ Specialist in social sustainability, White Architects, 2015-03-27

²² Specialist in social sustainability, White Architects, 2015-03-27

²³ Specialist in social sustainability, White Architects, 2015-03-27

²⁴ Specialist in social sustainability, White Architects, 2015-03-27

²⁵ Specialist in social sustainability, White Architects, 2015-03-27

general with Familjebostäder the specialist's overall impression is that people at Familjebostäder are very occupied, with full schedules.

Projection group

Depending on the phase of the project, the communication among the involved parties differs, as mentioned by the BC from Sweco²⁶. In the dialogues among people involved in the projection group, different technical issues are discussed. Among different stakeholders and the projection group, sometimes it is difficult to communicate and explain technical issues which often lead to misunderstandings, since people have different educational or professional background. An improvement suggestion, which also sometimes is implemented, is to increase the dialogue among stakeholders. One solution to this issue is to conduct a protocol after each meeting, to confirm that involved parties had understood the communicated issues and decisions made.

Familjebostäder provides information directly to the projection group that is responsible for architecture, construction, ventilation etc. For example Tengbom Architects have obtained all the material from the Rebo-project²⁷. Information also flows from the Familjebostäder's PM to Tengbom employees at the projection meetings. The whole projection group exchanges information through project meetings and emails. The studio manager, the architect and the BC have direct communication with the projection group, including the corporate promoters within heating and sanitation, electricity and telecommunications. According to the studio manager, it is preferred to communicate and discuss issues during meetings at the site. Meetings with Familjebostäder were regular and were taking place every second week²⁸.

An improvement proposal from BC is to use a portal instead of sharing information through emails; however this can often be time consuming for the stakeholders to find documents at the portal. Sometimes it is preferable to make phone calls or send emails, especially when technical questions are delivered to the housing owner. It is

²⁶ Building constructor, SWECO, 2015-04-17

²⁷ Architect, Tengbom, 2015-03-20

²⁸ Building constructor, SWECO, 2015-04-17 Architect, Tengbom, 2015-03-20

always very important to explain clearly, so the receiver understands the issue or question²⁹.

Inspection side

J Håkansson Byggplanering accepts inquiries from Familjebostäder regarding the time to perform the inspection, preferable one and a half month before the execution³⁰. It is preferable to book inspections within a timeframe of 3 weeks, but J Håkansson Byggplanering is trying to be flexible to meet the demands of their customers. During the execution of inspections, a lot of people are involved. It is challenging to plan the inspections, since many specialists are involved especially when the project is comprehensive. Coordinating big projects can be difficult, when more than 20 people are involved, and the planning becomes even more complex. The head of inspection points out the importance of keeping and saving protocols from building meetings to explain changes in the performed work. This protocol needs to be confirmed by everybody to guarantee that all parties understand the change requests.

During inspections, the entrepreneur PSAB and the CM from Rotpartner are participating and invited by the head of inspection³¹. The entrepreneur PSAB can send invitations to subcontractors if they want them to participate, normally not executed by J Håkansson Byggplanering. Moreover, the housing owner got the possibility to invite personnel within their organisation if it is needed. When performing inspections errors are discussed directly, supported by drawings, building- and technical descriptions. The head of inspection compare what the customer and the entrepreneur have agreed upon and if it has been executed according to the contract. Since renovation and construction projects are unique and change requests are made during the project it is important to support the executed project with documents stating approved changes.

²⁹ Building constructor, SWECO, 2015-04-17

³⁰ Head of inspection, J Håkansson Byggplanering, 2015-04-10

³¹ Head of inspection, J Håkansson Byggplanering, 2015-04-10

External stakeholder

As already mentioned, the Swedish Union of Tenants has mostly contact with the housing owner Familjebostäder and the tenants³². The Swedish Union of Tenants is the main negotiator to discuss the rent levels with the housing owner, on the members' behalf. However, the OM does not have any direct communication with Familjebostäder, as this type of communication is accomplished by their negotiator.

At the Figure 28 below, the communication flows among the different stakeholders are presented.

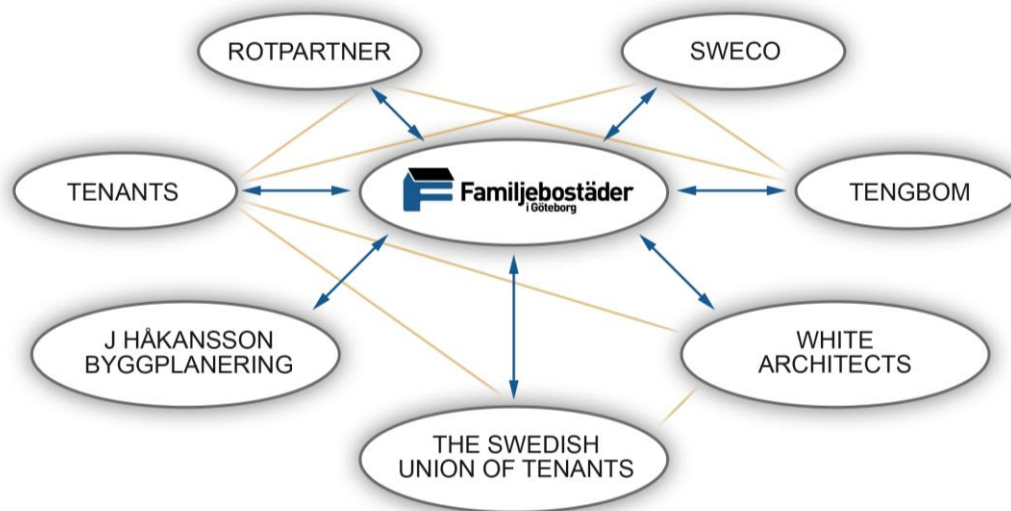


Figure 28 Communication flows among stakeholders

5.3.4 Other findings during interviews

5.3.4.1 Knowledge transfer

There are not any standardised processes within Familjebostäder for knowledge transferring, especially when employees leave the organisation³³. The PM mentions that other employees assist the person who is undertaking a position to obtain all the necessary information and be engaged. This is not a preferable situation; however everyone at the housing company seems to be committed in trying to solve the issue through informal processes. The PM expressed dissatisfaction with the delivered

³² Operation Manager, The Swedish Union of Tenants, 2015-03-19

³³ Project Manager, Familjebostäder, 2015-03-16

information when starting working on this project. However, that was an emergent situation as the previous PM left both the position and the company unexpectedly. Difficulties lied upon the prioritisations as due to the PM's lack of knowledge, it was challenging to evaluate the previous phases of the project and recognise either failures or successes³⁴.

Initially, the PM's focus was to evaluate and analyse additional costs. The current PM at Långängen's renovation project says "*...the toughest work was to make some prioritisations and then we tried to identify what did not work in the previous phases*". Normally when executing renovation projects, the evaluation and follow-up meetings are performed in the end of the project, where the participants are the entrepreneur and the CM of the project. These meetings are taking place in order to gather and summarise the learnings, and also discuss improvement proposals. At the end of all projects, a special document is filled where the total cost is mentioned and also if there were any changes in terms of costs and time planning³⁵. The PM claims that Familjebostäder does not perform any follow-ups or evaluation with the other stakeholders when closing the project. However, when larger renovation projects are executed, depending on the nature of the project, the housing owner asks for the tenants' feedback regarding, e.g. the performed renovation. This is also the case when the renovation project at Långängen will be finalised.

The CM from Rotpartner analyses failures and successes continuously³⁶. Rotpartner is certificated in ISO and is using a cloud system for saving documents, so everything can be shared between employees for knowledge transferring. The BC of Sweco is also able to find documents in an internal system, including both present and recent projects.

The specialist in social sustainability from White Architects mentions about the utility of information and discuss the fact that the information received should be analysed, and involved parties should reflect upon it³⁷. The specialist also believes that a clearer feedback mechanism should be introduced and the received information should be handled in a more effective way.

³⁴ Project Manager, Familjebostäder, 2015-03-16

³⁵ Project Manager, Familjebostäder, 2015-03-16

³⁶ Operation Manager, The Swedish Union of Tenants, 2015-03-19

³⁷ Specialist in social sustainability, White Architects, 2015-03-27

Tengbom architects also perform internal follow-ups within their own organisation, which can often result in special learnings especially from the more complex projects³⁸. Depending on the received learnings, this is shared to other departments or to the top management level if it is beneficial for them.

Both the head of inspection and the housing manager mention that do not have any special procedures for knowledge management transfer, however, information and knowledge sharing is performed at an organisational level between employees. The head of inspection, in some cases, share knowledge with the entrepreneur and the CM when inspections are performed. This can give valuable information to the direction of improving the performance of renovations or constructions³⁹.

The Swedish Union of Tenants performs conferences when the organisation is discussing renovation strategies and always performs a follow-up after a renovation project, is finished⁴⁰. In those follow-ups, the tenants have the opportunity to bring forward their thoughts and opinions about the performed renovation. This is an important process for the development of the organisation since the aim is to continuously improve their operations.

5.3.4.2 Resistance when performing a renovation

Reasons behind resistance against the renovation can result from lack of communication with the tenants. The most important in this case is to inform the tenants in good time since time gives to the tenants the space they need in order to process the received information⁴¹.

This is also confirmed by Tengbom employees, who also claim that time planning is one of the most important aspects when informing about a renovation⁴². Moreover, in order to create a feeling of transparency, one more aspect should be considered when communicating with tenants. The dialogue should start as soon as possible, when there is a decision regarding a renovation. The specialist at White Architects also confirms the statement about time and change.

³⁸ Architect, Tengbom, 2015-03-20

³⁹ Head of inspection, J Håkansson Byggplanering, 2015-04-10

⁴⁰ Operation Manager, The Swedish Union of Tenants, 2015-03-19

⁴¹ Construction Manager, Rotpartner, 2015-03-27

⁴² Architect, Tengbom, 2015-03-20

According to the architect at Tengbom, the older people were thinking that the renovation would cause several problems⁴³. Arguments behind that were that they do not want to accept people around their private area neither an increased rent. This did not influence the architect's performance of work, since this is a common perception among people and especially older people tend to be more resistance against change⁴⁴.

The studio manager at Tengbom, in an effort to motivate the reasons that tenants should not be resistant to changes, highlights the renovation's importance for a sustainable society. The studio managers explains how such a renovation can contribute to the improvement of the standard of the living environment, resulting in better sound insulation, interior and exterior environment and appearance of the apartments and houses⁴⁵. According to the studio manager, this creates attractive areas in a long-term perspective.

⁴³ Architect, Tengbom, 2015-03-20

⁴⁴ Architect, Tengbom, 2015-03-20

⁴⁵ Studio Manager, Tengbom, 2015-03-20

5.3.5 Summary of interviews

At the Table 9 below, below the main findings from the interviews are presented.

Table 9 Summary of interview findings

Key points of interviews	
<i>Communication with tenants</i>	<ul style="list-style-type: none"> ✓ It is important to use different communication methods ✓ Short and concise information, not complicated and without too many choices ✓ Tenants do not participate during inspections ✓ Tenants lack information e.g. regarding outside environment ✓ The most common way to deliver information to tenants is by announcements in the entrance ✓ Tenants often lack of knowledge about the building industry and this causes misunderstandings ✓ Tenants do not understand the correlation between the renovation costs and the rent ✓ Information meeting with housing owner and tenants half a year before the renovation starts and sending information 1 year before the renovation starts
<i>Communication among stakeholders</i>	<ul style="list-style-type: none"> ✓ Difficult to communicate and explain technical issues which often lead to misunderstandings, since people have different educational or professional background ✓ Stakeholders involved in the project often share information through e-mails ✓ Stakeholder management is totally new for the housing owner ✓ Diverse level of communication between the involved stakeholders ✓ The stakeholders are satisfied with received information ✓ No collaboration between Familjebostäder and The Swedish Union of Tenants when performing information meetings
<i>Knowledge transfer</i>	<ul style="list-style-type: none"> ✓ Familjebostäder only performs follow-ups when executing larger renovation projects

6 Discussion

In this Chapter, the authors discuss the empirical findings from the performed investigation based on the literature review combining with own reflections.

Communication and information sharing

Trost (2012) claims that it is important to ensure that the communicated information is received by the target group. The communication process is of importance, since both individuals and organisations interpret communicated information in different ways (Holm, 2006) and influence both attitudes and behaviours (Holm, 2006; Zaimi Abd Majid and Rashvand, 2014). Lack of clarity is according to Holm (2006) a usual issue when exchanging information and performing communication.

This issue has been identified in the current study, since the tenants complain and show dissatisfaction about the delivered information by their landlord. The tenants' average satisfaction level regarding the information received was decreased from 4.06 to 3.48 units on a scale from 1 to 7, when comparing it before and during the renovation. However, it is of importance to benchmark the receiver; in this case the tenants' educational, professional and cultural background, language skills and ability to interpret the context (Holm, 2006), as it seems that communication is perceived differently depending on various factors.

To further increase satisfaction within communication, interviewees suggest to deliver short and comprehensive information to the tenants, in time. Furthermore, Boverket (2015) recommends housing owners to deliver information when decisions are clarified, which is not the case in this renovation as tenants claim there are several comments from the tenants that the delivered information changed later in the process (Appendix C). In this case, the housing owner has not delivered a time schedule to the tenants' regarding e.g. the outside environment and tenants' disappointment was stated in the questionnaire. In addition, a lot of changes took place, after the information was delivered. An improvement suggestion for Familjebostäder and housing owners in general, is to adapt the communication to the tenants' level of knowledge and language skills, and deliver information when the final decisions are made and not further changes are requested. There is always a risk for unexpected changes; however this could be eliminated with detail-oriented planning since the

beginning of projects. Yet, this will increase customer satisfaction and commitment. When increasing customer satisfaction Lyubova et al. (2015) claim that the loyalty increase as well, which can give the housing owner long-term advantages. This will further contribute to avoid frustrated and dissatisfied tenants and tenants that do not trust their landlord. How to retain the tenants' trust towards their landlord is a critical parameter. As the results of the questionnaire show, in this case the tenants seem to trust Familjebostäder, however some target groups e.g. people between 36-45 years old seem to be more critical towards their landlord.

Lack of communication during the executed renovation should be considered when performing future renovation projects. Most of the tenants want information by letter, which given the housing owner incentives when choosing upon communication method. On the other hand, if the tenants are able to express their communication preferences could benefit both the housing owner and the tenants; the housing owner is aware that the tenants appreciate the communication method and probably in this way, they feel more satisfied. Recommendations could be to create a communication plan in the beginning of the project and without changing it to decrease dissatisfaction. Clear, short and continuous dialogue is preferable.

The tenants' satisfaction also depends on several parameters, e.g. the age according to Salleh et al. (2011). Hence, this was stated and confirmed by the empirical findings; the different age groups prefer diverse ways of receiving information.

In this case, younger tenants (18-25 years old) prefer to receive information through a webpage (40%), age groups ranging from 26 to 65 instead prefer to get the information by letter. Older tenants (65+) appreciate to receive information through meetings (44%). This can be considered when performing communication by choosing either the most preferable way among tenants' or choose to customise it, at an individual level. The latter option could also further increase the tenants' satisfaction.

The tenants also seem to be dissatisfied with the information during the renovation process, especially when they were evacuated. In this case, the housing owner had information only for the tenants that used the provided evacuation apartments, whereas there was lack of contact details for the tenants that did not use the provided apartments.

In order to create a more effective communication, the landlord should also ensure that the communicated information reaches each customer. One ordinary way of delivering information to the tenants by Familjebostäder is by announcements in the entrance, according to the PM. On the contrary, results from the questionnaire showed that 60% of the tenants claimed that they have not received information by announcements, although Familjebostäder always shares information in this way. It is challenging to reach every single tenant, since they prefer to receive information by different communication methods, which should be considered by Familjebostäder, in order to make the communication more effective. However, it is a fact that the announcements are distributed, but the tenants do not see them. Familjebostäder should also consider the location of the notices and how the information is formed and structured.

Another parameter to be considered for effective communication is the information meetings. The majority of the respondents (67.4%) believe that information meetings are very important regarding renovation projects, and 63.9% of them have been participating in at least one of the information meetings. The average score was 6.00 units, which gives to the housing owner a measurement of how important information meetings are. In this case, it would be beneficial to keep the information meetings since it is an appreciated way of communication and with high level of participants.

However, the majority of the tenants did not participate at the guided tour. The reasons can depend on several factors. They had the chance to participate since the majority of them lived in Långängen at the time for the guided tour. On the other hand, as the tenants do not feel involved in the decision making process, they might find it unnecessary to participate. Another reason behind low participation could be the lack of detailed information about the guided tour, so the tenants did not evaluate the importance of that tour towards their influence of the decision making process.

The Swedish Union of Tenants also pointed out some important issues to consider for the housing owner in order to increase the amount of satisfied tenants. This by informing about e.g. insurances, costs and other circumstances affecting them when an evacuation is needed. The OM pointed out some valuable aspects to inform about, when evacuating tenants, which were not answered by the housing owner when informing the tenants about the evacuation in this case. Familjebostäder and The

Swedish Union of Tenants could collaborate to achieve higher tenant satisfaction. The OM emphasized that is preferable not to have common meetings with the housing owner together with tenants, but they should consider to increase their collaboration to clarify which information the tenants inquire. One way of improvements could be to have the first meeting together with Familjebostäder and obtain all relevant information and facts.

The customer manager has the main responsibility for the communication with tenants, which is appreciated according to comments from tenants in the questionnaire. To have one person responsible for the tenant communication is also recommended by Boverket (2014), for capturing tenants' opinions. Boverket (2014) and the current project's stakeholders pointed out the importance of delivering information *in time and with transparency*. The interviewee at White Architects argues that it might be more beneficial for the housing owner to have an external consultant for the customer manager role. In this renovation project, the communication is performed directly between the landlord and the tenants, which in certain cases provokes anonymity issues to the latter. Collaborating with an external consultant, the tenants might be more open to discuss their concerns and at the same time feel anonymous.

Tenants' involvement

Despite the fact that Familjebostäder has a strategy to be customer oriented organisation and already trying to involve the tenants in the decision making process, according to this research's results, 25.7% of the tenants do not feel involved at all in the decisions concerning their apartments. 51.4% of the respondents chose 1, 2 and 3, on the scale from 1 to 7. This might be a result of lack of awareness. As commented by OM at The Swedish Union of Tenants, not all the people are fully aware of the potentials they have to influence a renovation. An improvement to this could be the involvement of the tenants in earlier stages of a project, as they would feel more engaged in the processes. This argument is also strengthened by the questionnaire's results, since 65.9% of the respondents answered that it is very important to influence the planning of the renovation with an average of 6.38. Moreover the respondents scored an average of 6.35 regarding the opportunity to influence the renovation proposals, e.g. 73.2% think it is very important.

Familjebostäder should consider these facts and integrate to its future strategy. A potential risk when involving tenants in such early stages of planning is that could create higher expectations to the tenants in relation to the landlord's potentials. In case that the housing owner is not able to fulfill these expectations, this will result to opposite outcomes with frustrated and disappointed. At this case, it is important to develop a process and detailed strategy to perform the dialogue but also an integrated plan how to manage future risks.

However, Reid (2010) argues that involving tenants in the decision making process can result in not blaming their landlord for possible errors, as they are partially feel that they also own the project (Reid, 2010). Moreover, Pateman (1970/1999) argues that when the tenants are involved in the decision making process, this can create *"...psychological effects of such participation might prove valuable in this context"* p.109. Gansmo (2012) emphasises some important reasons why to perform superior dialogue processes, which often seem to be seen as time and energy consuming processes. By performing dialogues can give the housing owners knowledge and tacit knowledge.

Swedish law states that landlords are obliged to inform tenants about a renovation and they have to apply for permission to The Swedish Court for rent tribunal. The municipality housing companies have to *"...3. offer tenants the opportunity to influence both the accommodation and the company..."*. The empirical findings from the investigation showed that tenants do not know about their right to affect both the accommodation and the housing owner. This could be seen as a challenge to the housing owner to inform all of the tenants about their rights and also to consider their opinions.

Satisfaction

Implementing the Kano model within the organisation for collecting customer satisfaction data can increase the awareness of what are these factors that could lead to satisfied or dissatisfied tenants. The Kano model is a model for analysing satisfaction (Löfgren and Witell, 2005) and is applicable when evaluating what tenants appreciate when performing a renovation due to different aspects. Since Familjebostäder according to the PM does not have any structured or standardised way of measuring tenant satisfaction. When performing a renovation project, this can

be applicable at an organisational level and further implemented in daily work by creating standardised processes for customer satisfaction awareness. This investigation showed that it is very important for the tenants' wishes to be considered (73.2%). Kano model for future renovations also showed that the most important aspect for the tenants in order to be satisfied is that their wishes are being considered and their expectations are being fulfilled.

On the other hand, the tenants are expecting to receive information and taking for granted that this expectation will be fulfilled. According to Löfgren and Witell (2005), the reception of information represents a "must-be quality" in that case. This means that the tenants will not be more satisfied if they receive information, because they expect it. However, if they do not receive information, it will result to an increase of dissatisfaction. Familjebostäder should take into consideration these qualities that are expected by their customers in order to prevent them from a potential dissatisfaction. A way to consider these qualities is to extensively use Kano model.

Communication among organisations

According to Rao and Argote (2006) the low structured organisations learn faster and better than the high structured ones, while they can be more vulnerable to be affected by members' turnovers, whereas the high structured ones are not. Considering Familjebostäder as a low structured organisation, the above statement can be confirmed by the interviews. When the previous project manager left the Familjebostäder, the company experienced an unexpected loss and problems occurred regarding the management of processes and the communication of the previous knowledge. It is critical for organisations to be flexible and able to adapt in new situations in order to survive the competition at the market and be the same effective regardless the size of the project organisation.

Within the organisation of Familjebostäder, the communication is informal and direct. This would be a result of the size of the company. Since Familjebostäder is not a high structured organisation, the employees might feel more comfortable to share information in this way, as the communication is more effective for them.

The interviews showed that there are not severe problems regarding the communication among the stakeholders in the project organisation. As mentioned in the results (see Chapter 5) the email is the most preferable way to communicate when the discussion does not involve many people. It is challenging for the PM to control that everybody in the project understands the delivered information and misunderstandings could cause several delays. According to Kirwan (2013), routines are important activities which are repeated and dependent to each other, and which an organisation undertakes to perform its operations. As identified from the interviews, apart from the communication through emails, there are building meetings every second week. This is one of the routines and it is very important for sharing current information among stakeholders.

Another routine is the protocols. Protocols are kept to confirm change requests and share information with people not participating during the building meetings, but have an interest in the information shared or discussed. In this way, the members of the project organisation make sure that they share the same information. Therefore, this makes them feel more secure and confident regarding the followed processes.

As mentioned during the interviews, stakeholder management is new for the housing owner. As stakeholder management is a process that supports less time consumption and decreases project costs (Leung, et al., 2013), it is of critical importance to be implemented in organisations with complex projects and diverse stakeholders, as Familjebostäder.

The recognition and identification of the stakeholders is important for the planning and execution of a considerably precise and accurate stakeholder management process (Olander, 2007). Hence, this lack of knowledge makes the implementation of such procedures difficult for Familjebostäder and within the project organisation. This can also affect the information sharing among the stakeholders. An example is that although the specialist from the White Architects is not involved in the project anymore, Familjebostäder has not sent any feedback neither for the executed work nor the results since when the specialist has left. One reason behind that could be that the project manager changed while the project is ongoing and that affected the continuity of the processes to a certain extent.

Another challenge to be considered is the stakeholders' different professional backgrounds. According to Holm (2006) successful communication is often based on motivation, common understanding and language between the communicator and the receiver. A misunderstanding due to communication is often referred to lack of clarity. This statement is confirmed by the interviews as well. As mentioned during the interviews, it is challenging to communicate and explain especially technical details, which often leads to misunderstandings, since people have different educational or professional background. In such cases, Familjebostäder should ensure the clarity of the shared information, confirming that the involved stakeholders understand the communicated issues and decisions made.

An improvement proposal from the BC at Sweco is to conduct a protocol after each meeting with e.g. the projection group and not only after the 'big' building meetings. This would facilitate the information sharing process and ensure the clarity and transparency of the followed processes. Another improvement suggestion from BC is to use a portal instead of sharing information through emails; however this can often be time consuming for the stakeholders to find documents at the portal.

Regarding the external stakeholder i.e. The Swedish Union of Tenants, is the main negotiator to discuss e.g. the rent levels with the housing owner, on the members' behalf. As mentioned by the OM, the tenants' questions sometimes remain with no answers. The Swedish Union of Tenants does not have all the information when communicating with the tenants, as the communication with Familjebostäder is normally scheduled later. It would be beneficial especially for the tenants if the collaboration between the Swedish Union of Tenants and Familjebostäder was earlier in the process and more extensive.

Organisational learnings

As identified through the interviews with the stakeholders, the housing owner only performs follow-ups to selected projects. After this renovation project, an evaluation phase will follow, however a standardised process regarding the follow ups could facilitate the organisation to continuously learn from the past projects.

According to Chinowsky (2011), continuous knowledge exchange is a requirement to achieve project effectiveness in a renovation project. These follow ups should not

only include the other members of the project organisation, but also the tenants as well. Especially in case that dialogues have been performed, Ottosson et. al. (2014) claim, that is also a case of respect towards the participants to consider their input and time and constantly giving them feedback.

As standardised processes involve strict routines, Holm (2006) argues that this kind of routines may inhibit the creativity and confidence among individuals in the organisations. However, standardised processes tend to create a climate of trust and safety in the organisations, which leads to more efficient communication among the members. In this way, the members of the organisation are more motivated and engaged.

Findings from the interviews indicated that involved stakeholders were overall satisfied with the communication. An improvement suggestion was to introduce a portal for knowledge sharing. This could create more effective communication among the different companies and create advantages. Knowledge sharing tools facilitate the stakeholders within construction projects to create advantages in order to achieve project effectiveness (Chinowsky et al., 2011).

By using methods for analysing the dialogue among stakeholders involved in the project, the project itself can be benefited (Reed et al., 2009). Hence, it is significance to see the dialogue as a cornerstone in the process since it is according to Smedvy and Neuj (2013) a way to prevent losing the stakeholders' commitment. Communicate more effectively among and across the organisations by using knowledge sharing tools, could also improve the relationships. By also collecting and perform stakeholder management process to maintain proper relationships, not only using a common knowledge sharing tool, it can increase the effectiveness of the management strategies (Aaltonen, 2011; Olander, 2007; Zaimi Abd Majid and Rashvand, 2014) which can lowering potential risks, reduce insecurities (Zaimi Abd Majid and Rashvand, 2014) and lower project costs (Mei-yung Leung; Jingyu Yu; and Qi Liang, 2013).

A common problem within all the organisations nowadays is that their members are constantly occupied with different tasks and there is not any time available for something out of schedule. As identified during the interviews and through meetings with the housing owner's employees, the latter seem to be occupied. In certain cases,

delays could arise due to misunderstandings or difficulties on the task prioritisation. However, ensuring a better planning process and communication flows among and across stakeholders, such phenomena would be eliminated.

Another issue discussed during the interview with the PM at Familjebostäder is the size of the project organisation. The PM suggests that it is more effective to have a smaller project organisation where less people with more responsibilities are involved in the future. Rao and Argote (2006) have discovered that when organisations are low structured and do not have roles and routines, are the most vulnerable to be affected by members' turnovers, whereas the high structured ones are not. On the other hand, the low structured organisations are more flexible and learn faster and better than the high structured ones. In this case, the project organisation is not a big organisation and most of the communication is rather informal. This makes the organisation more flexible and adaptive to changes; however the authors argue that the lack of standardised processes and routines involves more delays in this case. Although the organisation is small, when a turnover occurred, difficulties in prioritisations knowledge management appeared.

7 Conclusions

Effective communication is of critical importance, not only between people, but also among and across organisations. In large complex projects with many stakeholders involved, the communication becomes even more challenging. Renovation projects can be even more demanding than totally new constructions as housing owners try to involve tenants in the decisions making processes and perform dialogues in order to keep them satisfied.

Although Familjebostäder, a public housing company in Gothenburg city has the strategic goal to be a customer oriented organisation and involve the tenants in the decision making process, the results show that the majority of the tenants do not feel involved. The results also show that not every person perceives the information in the same way and tenants have different preferences regarding how they would like to receive information from their landlord. Familjebostäder should be flexible in order to be able to adapt to different target groups of tenants each time. To perform a superior tenant and stakeholder dialogue it seems to be of importance to study the receiver's educational and cultural background, and consider the age factor.

Familjebostäder needs to send short, concise and not too complicated information to the tenants, while it is challenging to understand whether all the different stakeholders receive the same information and are committed at the same extent. The tenants were more satisfied with the received information before the renovation started than during the execution. The tenants' satisfaction seems to be increased when their wishes are considered, their expectations are fulfilled and are able to influence the renovation.

At an organisational level, the housing owner has a weak feedback mechanism, as evaluations are not executed often in projects. There are not any evaluation meetings with the other stakeholders' either. As the procedures for obtaining information are informal within the organisation, this can lead to dissatisfaction among the employees.

7.1 Recommendations

Recommendations are based on the previous Chapters of analysing the results from the investigation. The recommendations aim to increase the customer satisfaction level, and inspire the housing owner when performing future renovation projects. The recommendations can also be implemented in the organisation in general to increase customer satisfaction.

Recommendations and improvement suggestions are the following:

- (1) Adapt the communicated information to the tenants' level of knowledge and language skills.*
- (2) Communicate more effectively among and across the organisations by using knowledge sharing tools.*
- (3) Involve the tenants more effectively in the decision making process.*
- (4) Adapt the communication to age, gender and amount of years living at Långängen to increase the trust for the housing owner.*
- (5) When evacuating tenants, gathering the tenants' new addresses to keep a continuous dialogue during the project or let them choose upon individual communication method.*
- (6) Increase dialogue with The Swedish Union of Tenants.*
- (7) Inform the tenants about their rights according to Swedish Law. In this way the resistance would be eliminated.*

Keep or develop the following strategy:

- (1) Customer Manager role for communication with tenants*
- (2) Implementing the Kano model within the organisation for collecting more specified customer satisfaction data.*

Table 10 Summary of improvement suggestions

Improvement suggestions	
<i>Communication with tenants</i>	<ul style="list-style-type: none"> ✓ Diverse communication methods to reach everybody in different stages ✓ Focus on target groups and try reach everybody in the area when performing investigations ✓ Explain in detail why a renovation is needed, the time schedule and what it will cover. Include detailed cost explanation to justify the increased rent levels ✓ Pointing out the negative aspects of the renovation as well, e.g. noise and dust ✓ It is important to analyse what is important or could be problematic during the renovation for the tenants ✓ Try to be proactive to their requests. This can be achieved with better planning and better consideration of learnings from past experiences ✓ Inform the tenants in detail about insurances, evacuation and storage of private equipment ✓ Create transparency between the tenants and the housing owner ✓ Arrange a demonstration apartment to visualise how the appearance of the apartments will be after the executed renovation ✓ Involving tenants in the project by presenting what the renovation process includes ✓ Plan the dialogue to take 3 times more than planned ✓ Not all the tenants have certain knowledge about the building industry. Use common language and educate them
<i>Communication among stakeholders</i>	<ul style="list-style-type: none"> ✓ Extensive dialogue among stakeholders to understand e.g. technical issues ✓ Continuous information flow, even if the project organisation (or members) changes during the project ✓ Reservation of the protocol routines and even expansion to more meetings ✓ Introduce stakeholder management ✓ Give feedback constantly
<i>Knowledge transferring</i>	<ul style="list-style-type: none"> ✓ Use of portal for information and knowledge sharing in the project ✓ Introduce a feedback mechanism
<i>Other</i>	<ul style="list-style-type: none"> ✓ Having the same organisation through the whole project decreases the risks for miscommunication ✓ Flexibility through effective knowledge management

7.2 Future research

Interesting topics for future research within the field of renovation projects are suggested below:

- Evaluation of the ongoing phases 4 and 5 of the renovation after the renovation is completed.
- Investigation of common problems in the Swedish construction industry with focus on renovation projects, in order to create a framework of reference and give recommendations towards the problem solving and risk prevention.
- Further research in terms of tenant participation in the decision making process, the factors depended on, the challenges for the landlord and the benefits for both landlords and tenants.
- Investigation of ways to introduce the principles of social sustainability and reserve the social capital in renovation projects.
- Evaluation of tenants active participation in the decision making process regarding the renovation projects and investigation of the ways to involve more target groups, such as teenagers and children.
- Reconsideration of the relationship between landlord and tenant and challenges that affect this relationship. Investigation in terms of equality between landlords and tenants.
- Investigation of the ways that landlords could be proactive and predict their tenants' future requirements.
- Further research with the implementation of Kano model customising to different target groups in order to identify and deeply understand the parameters that lead to tenant satisfaction and prevent from tenants that are dissatisfied.

References

- Aaltonen, K. 2011, "Project stakeholder analysis as an environmental interpretation process", *International Journal of Project Management*, vol. 29, no. 2, pp. 165-183.
- Andersson, K. 2013a, *Genskjuvsintervjuer*. Delrapport 2. Report, Chalmers University of Technology, Göteborg.
- Andersson, K. 2013b, *Enkätundersökning*. Delrapport 3. Report, Chalmers University of Technology, Göteborg.
- Argote, L. & SpringerLink (e-book collection) 2012, *Organizational learning: creating, retaining and transferring knowledge*, Springer, Heidelberg pp. 31-56
- Arthur, W., Jr., Bennett, W., Jr., and Huffcutt, A. I. 2001. *Conducting meta-analysis using SAS*. Mahwah, NJ: Erlbaum.
- Beer, M. & Eisenstat, R. 2000, "The silent killers of strategy implementation and learning", *Sloan management review*, vol. 41, no. 4, pp. 29-29.
- Bell, J. 2006, *Introduktion till forskningsmetodik*. 4:2 edition. Denmark: Studentlitteratur.
- Berger, C., Blauth, R., Boger, D., Bolster, C., Burchill, G., DuMouchel, W., Pouliot, F., Richter, R., Rubinoff, A., Shen, D., Timko, M. and Walden, D. 1993, "Kano's methods for understanding customer-defined quality", *Center for Quality Management Journal*, vol. 2, no. 4, pp. 3-35.
- Boverket. 2010, *Boinflytande I praktiken*. Karlskrona: Boverket.
- Boverket. 2015, Boendeflytande. *Vägledning om boendeflytande vid ombyggnad*. <http://www.boverket.se/sv/boende/for-dig-som-bor-i-hyresratt-eller-kooperativ-hyresratt/boendeflytande1/pdf-generering/>, accessed 2015-04-29.
- Chinowsky, P., Taylor, J., & Di Marco, M. 2011, "Project Network Interdependency Alignment: New Approach to Assessing Project Effectiveness", *Journal of Management and Engineering*, vol. 27, no.3, 170-178.
- Creswell, J. W. 2014, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. SAGE Publications, Inc. 4th Edition. United States of America.
- Cripps, P. 2013, *How to communicate change*, Reed Business Information UK.
- Denscombe, M. & ebrary (e-book collection) 2010, *The good research guide: for small-scale social research projects*, McGraw-Hill/Open University Press, Maidenhead, England, p.161.
- Familjebostäder, 2014, Årsredovisning 2014 <https://www.familjebostader.se/wp-content/uploads/Slutlig-arsredovisning-2014-justerad-sista.pdf>, accessed 2015-04-29.

Foroughi, B. 2013, "Toronto Community Housing: Tenant Participation and Informal Learning", *The Canadian Journal for the Study of Adult Education* (Online), vol. 25, no. 2, p. 35.

Gansmo, H. 2012, "Municipal planning of a sustainable neighbourhood: action research and stakeholder dialogue", *Building Research & Information*, vol. 40, no. 4, pp. 493-503.

Gherardi, S. 2009, "Knowing and learning in practice-based studies: an introduction", *The Learning Organisation*, vol. 16, no. 5, pp. 352-359.

Gluch, P., Johansson, K. & Räsänen, C. 2013, "Knowledge sharing and learning across community boundaries in an arena for energy efficient building", *Journal of Cleaner Production*, vol. 48, June 2013, pp. 232-240.

Gordon, G. N. 2015, *Communication 2015*. Encyclopedia Britannica Online. Retrieved from <http://academic.eb.com/EBchecked/topic/129024/communication>, accessed 2nd March 2015.

Hauser, J.R., & Clausing, D. 1988, "The house of quality", *Harvard Business Review* pp. 63-73.

Holm, O. 2006, "Communication processes in critical systems: dialogues concerning communications", *Marketing Intelligence & Planning*, vol. 24 Iss 5 pp. 493-504.

Joshi, A., Kale, S., Chandel, S. & Pal, D. 2015, "Likert Scale: Explored and Explained", *British Journal of Applied Science & Technology*, vol. 7, no. 4, pp. 396-403.

Kano, N. 1984, "Attractive quality and must-be quality", *Journal of Japanese Society for Quality Control*, vol. 14, no. 2, pp. 38-48.

Kemmis, S. 2006, "Participatory action research and the public sphere", *Educational Action Research*, vol. 14, no. 4, pp. 459-476.

Kirwan, C. & ebrary (e-book collection) 2013, *Making sense of organizational learning: putting theory into practice*, Gower, Burlington, Vt; Farnham, pp. 53-55.

Laiken, M., Edge, K., Friedman, S., & West, K. 2008, "Formalizing the informal: From informal to organisational learning in the post-industrial workplace", in Church, K., Bascia, N & E. Shragge (Eds.), *Learning through community: Exploring participatory practices*, pp. 187-204, New York: Springer.

Leung, M., Yu, J. & Liang, Q. 2013, "Improving public engagement in construction development projects from a stakeholder's perspective", *Journal of Construction Engineering and Management*, vol. 139, no. 11.

Lyubova, O.V., Akhmadeeva, O.A., Guzaleva, S.Y., Zubkova, S.V. & Safargaliev, E.R. 2015, "Tenant Satisfaction and Its Evaluation", *Asian Social Science*, vol. 11, no. 3, pp. 319.

Löfgren, M., Witell, L., Karlstads universitet, Centrum för tjänsteforskning, Fakulteten för ekonomi, kommunikation & IT och Avdelningen för företagsekonomi 2005, "Kano's Theory of Attractive Quality and Packaging", *The Quality Management Journal*, vol. 12, no. 3, p. 7.

Mattila, A. S, 2004, "The impact of service failures on customer loyalty", *International Journal of Service Industry Management*, vol. 15, no 2 pp. 134-149.

Maylor, H. 2010, *Project management*, Financial Times Prentice Hall, New York; Harlow, England.

Morris, P. 2002, "Managing Project Management Knowledge for Organizational Effectiveness". *University College London*.

Naaranoja, M. & Uden, L. 2007, "Major problems in renovation projects in Finland", *Building and Environment*, vol. 42, no. 2, pp. 852-859.

Neal, B., Hainlen, L., Books24x7 - BusinessPro (e-book collection) & Books24x7, I. 2012, *Designing for informal learning*, ASTD Press/American Society for Training & Development, Alexandria, Va.

Nevis, E. C. 1987, *Organizational consulting: A Gestalt approach*. Cleveland: Gestalt Institute of Cleveland Press.

Olander, S. 2007, "Stakeholder impact analysis in construction project management", *Construction Management and Economics*, vol. 25, no. 3, pp. 277-287.

Olsson, H. & Sörensen, S. 2011, *Forskningsprocessen – kvalitativa och kvantitativa perspektiv*. 3rd edition, Spain: Liber.

Ottosson, C., Thuvander, L., Andersson, K., Heintz, L., Hamon, S., Weinehammar, K., Walldin, V. & Wannerskog, A.S. 2014, "Early integration of the user's perspective in the renovation process: Experiences from an "In-depth Dialogue Process with Tenants" in rental flats from the 1950s" *Proceedings of the World Sustainable Building Congress*, 28th-30th October, Barcelona.

Ottosson, C. & Thuvander, L., 2013, *Fördjupad boendedialog Långängen*, Göteborg. Chalmers University of Technology, Chalmers tekniska högskola, Institutionen för arkitektur & Department of Architecture.

Ottosson, C. & Walldin, V. 2013, *Gå-tur*. Chalmers University of Technology, Göteborg.

Pateman, C. 1999, *Participation and democratic theory*. New York: Cambridge University Press. (Original work published 1970).

- Pearce, D. 2006, Is the construction sector sustainable? Definitions and reflections. *Building Research & Information*, vol. 34, no. 3, pp. 201-207.
- Rao, R.D., Argote, L. 2006, "Organizational learning and forgetting: The effects of turnover and structure", *European Management Review*, vol. 3, pp. 77-85.
- Reed, M.S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C.H. & Stringer, L.C. 2009, "Who's in and why? A typology of stakeholder analysis methods for natural resource management", *Journal of environmental management*, vol. 90, no. 5, pp. 1933-1949.
- Reid, M. 2010, "Customer satisfaction", *Supply Management*, [Online], vol. 15, no. 22, p. 38.
- Salleh, N.A., Yusof, N., Salleh, A.G. & Johari, N. 2011, "Tenant Satisfaction in Public Housing and its Relationship with Rent Arrears: Majlis Bandaraya Ipoh, Perak, Malaysia", *International Journal of Trade, Economics and Finance*, vol. 2, no. 1, pp. 10-18.
- Sandberg, B. & Faugert, S. 2012, *Perspektiv på utvärdering*. 2:1 edition. Poland: Studentlitteratur.
- Smedby, N., Neij, L., Lunds universitet, Internationella miljöinstitutet, Special activities (research centres, institutes etc.), The International Institute for Industrial Environmental Economics (IIIEE), Lund University & Särskilda verksamheter (institut, c.e.). 2013, "Experiences in urban governance for sustainability: The Constructive Dialogue in Swedish municipalities", *Journal of Cleaner Production*, vol. 50, pp. 148-158.
- Svensson, P. G. & Starrin, B. 1996, *Kvalitativa studier i praktiken*. Sweden: Studentlitteratur
- Swan, J., Scarbrough, H. & Newell, S. 2010, "Why don't (or do) organisations learn from projects?", *Management Learning*, vol. 41, no. 3, pp. 325-344.
- Thuvander, L., Femenias, P., Norling Mjörnell, K. & Meiling, P. 2012, "Unveiling the Process of Sustainable Renovation" *Sustainability*, vol. 4, Iss. 6, pp. 1188-1213.
- Thuvander, L & Femenias, P. 2014, *Rebo - strategier för hållbar renovering - fokus på perioden "folkhemmet"*, CMB (Centre for management of the built environment). Kortrapport om forskning. 2014, no. 1.
- Trost, J. 2012, *Enkätboken*, Studentlitteratur, Lund.
- Williamson, R., & Blackburn, B. R. 2010, "Dealing with resistance to change". *Principal Leadership*, vol. 10, no.7. pp. 73-75.

Zaimi Abd Majid, M. & Rashvand, P. 2014, "Critical Criteria on Client and Customer Satisfaction for the Issue of Performance Measurement", *Journal of Management in Engineering*, vol. 30, no. 1, pp. 10-18.

Interviews

Architect, Tengbom, 2015-03-20, Gothenburg.

Construction Manager, Rotpartner. 2015-03-27, Gothenburg.

Operation Manager, The Swedish Union of Tenants. 2015-03-19, Gothenburg.

Project Manager, Familjebostäder. 2015-03-16, Gothenburg

Building constructor, SWECO. 2015-04-17, telephone interview.

Specialist in social sustainability, White Architects. 2015-03-27, telephone interview.

Studio Manager, Tengbom. 2015-03-20, Gothenburg.

Head of inspection, J Håkansson Byggplanering. 2015-04-10, Gothenburg.

APPENDIX

Appendices	Title	Page
Appendix A	Questionnaire in Swedish	3
Appendix B	Questionnaire translated to English	11
Appendix C	Results (tables and row data)	19
Appendix D	Stakeholders' interviews questions in Swedish	40
Appendix E	Stakeholders' interviews questions in English	41
Appendix F	Meetings with the project owner	42

APPENDIX A

CHALMERS

Hej,

I ett forskningsprojekt på Chalmers tekniska högskola undersöker vi renoveringsprocessen i Långängen. Arbetet genomförs i samarbete med Familjebostäder.

Enkätundersökningen riktar sig till dig som är boende i Långängen och bor i en av de nyrenoverade lägenheterna. I studien vill fånga upp dina åsikter och din uppfattning om den genomförda renoveringen. Vi vill också undersöka din upplevelse av dialogen.

Genom att svara på enkäten hjälper du oss att utföra en så bra undersökning som möjligt. Vi vore därför tacksamma om du ville ta dig tid att fylla i enkäten och posta den till oss. Använd det medskickade svarskuvertet, porto är betalt. Det går även bra att lämna in enkäten på ditt lokala kvarterskontor, öppettiderna är vardagar 08:00 till 09:00.

De uppgifter som du lämnar är anonyma och resultaten av studien kommer du att få ta del av. Inga personliga detaljer förs vidare till annan part. För frågor om undersökningen eller om du vill ha mer information så kontakta projektledare eller forskningsledare (se kontaktuppgifter nedan).

Vi ser framemot ditt svar och kontakta oss gärna vid frågor. **Senast den 9 april vill vi ha ditt svar. Du som fyller i enkäten deltar i en utlottning och har chans att vinna två biobiljetter.**

Tack på förhand för din medverkan!

Med vänliga hälsningar,
Projektteamet

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ARKITEKTUR

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A. BAKGRUND

1. Hurgammal är du? _____ år
2. Ar du
 - Kvinna
 - Man
 - _____
3. Hur många personer bor i ditt hushåll?
_____ vuxna _____ barn
4. Hur länge har du bott i Långängen?
 - 0-1 månad
 - 2-6 månader
 - 6 till 12 månader
 - 1-5 år
 - 5-10 år
 - Längre än 10 år
5. Hur länge har du bott i den nyrenoverade lägenheten?
 - 0-1 månad
 - 2-6 månader
 - Mer än 6 månader
6. Har du bott i samma hus/lägenhet innan renoveringen?
 - Ja
 - Nej
7. Vilken är din huvudsakliga sysselsättning?
 - Anställd
 - Pensionär
 - Föräldraledig
 - Egen företagare
 - Student
 - Arbetsökande
 - Annat, nämligen _____
8. Vilken är din högsta utbildningsnivå?
 - Folkskola/grundskola
 - Folkhögskola
 - Yrkesutbildning/KY
 - Realskola
 - Läroverk/gymnasium
 - Högskola/Universitet
 - Annat, nämligen _____
9. Vilket språk talar du/ni vanligtvis hemma?
 - Svenska
 - Svenska och annat språk
 - Annat språk, nämligen _____

B. INFORMATION

1. Hur fick du information om renoveringen i Långängen från Familjebostäder?
(Mer än ett alternativ kan väljas)
- Brev
 E-post
 Annonsering i trapphuset
 Möten
 Webbsida
 Telefonsamtal
 Annat, nämligen _____
-
2. Hur skulle du vilja få information om framtida renoveringar från Familjebostäder?
(Mer än ett alternativ kan väljas)
- Brev
 E-post
 Annonsering i trapphuset
 Möten
 Webbsida
 Telefonsamtal
 Annat, nämligen _____
-
3. Har du blivit kontaktad av någon annan organisation eller företag under renoveringen?
- Ja, nämligen _____
 Nej
 Vet ej
-
4. Deltog du på några av informationsmötena som Familjebostäder arrangerade inför och i samband med renoveringen?
- Ja
 Nej
 Vet ej
-
5. Deltog du på gåturen som arrangerades inför renoveringen?
- Ja
 Nej
 Vet ej
-
6. Deltog du i fokusintervjun som Chalmers genomförde inför renoveringen?
- Ja
 Nej
 Vet ej
-
7. Hur viktigt var det för dig att ha möten om renoveringen? Vänligen markera på skalan från "inte alls" till "mycket".
- Inte alls Mycket
-
- 1 2 3 4 5 6 7 Vet ej
-
8. Hur nöjd är du med informationen du fick innan renoveringen? Vänligen markera på skalan från "inte alls" till "mycket".
- Inte alls Mycket
-
- 1 2 3 4 5 6 7 Vet ej

9. Hur nöjd är du med informationen du fick under renoveringen? Vänligen markera på skalan från "inte alls" till "mycket".

Inte alls

1 2 3 4 5 6 7

Mycket

Vet ej

C. INFLYTANDE

1. Känner du dig involverad i beslut som rör din lägenhet? Vänligen markera på skalan från "inte alls" till "mycket" eller vet ej.

Inte alls

1 2 3 4 5 6 7

Mycket

Vet ej

2. Hur viktigt skulle du värdera att följande frågor är för dig? Vänligen markera på skalan från "inte alls viktigt" till "mycket viktigt".

Att boende ges inflytande i planeringsfasen vid en renovering.

Inte alls viktigt

1 2 3 4 5 6 7

Mycket viktigt

Vet ej

Att boende har möjlighet att påverka renoveringsförslag.

Inte alls viktigt

1 2 3 4 5 6 7

Mycket viktigt

Vet ej

Att boende får information om en renovering.

Inte alls viktigt

1 2 3 4 5 6 7

Mycket viktigt

Vet ej

Att dina önskemål beaktas.

Inte alls viktigt

1 2 3 4 5 6 7

Mycket viktigt

Vet ej

3. Känner du att du har fått gehör för dina önskemål och synpunkter du ställt till Familjebostäder inför renoveringen? Markera på skalan från "inte alls" till "mycket" eller jag har inte haft några önskemål.

Inte alls

1 2 3 4 5 6 7

Mycket

Jag har ej haft några önskemål /synpunkter

4. När det gäller din lägenhet, vad tycker du är viktigt att ha inflytande över vid en renovering?

D. RESULTAT

1. När det gäller renoveringen, hur nöjd är/var du med följande aspekter? Vänligen kryssa i det alternativet per kategori som du tycker överensstämmer bäst på dig.

	Inte alls nöjd					Mycket nöjd		Ej relevant
	1	2	3	4	5	6	7	
Din evakueringslägenhet under renoveringen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Renoveringens resultat som helhet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standarden i lägenheten idag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utseendet av byggnadernas nya fasader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utseendet av fasader innan renoveringen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ljudisolering inomhus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ljudisolering utifrån	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temperatur i lägenheter vintertid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uppfyllelse av förväntningar och önskemål som du hade inför renoveringen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dialogen med Familjebostäder inför renoveringen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dialogen med Familjebostäder under renoveringen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dialogen med Hyresgästföreningen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Att bo i din renoverade lägenhet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ar hyres sättningen rimlig i förhållande till den renovering som är genomförd?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Hur viktigt är det för dig att dina förväntningar uppnås? Vänligen markera på skalan från "inte alls" till "mycket".

Inte alls						Mycket		<input type="checkbox"/> Vet ej
1	2	3	4	5	6	7		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

E. FÖRTROENDE

Vänligen kryssa i det alternativet per kategori som du tycker överensstämmer bäst på dig.

	Inte alls					6	Mycket 7	Ej relevant
	1	2	3	4	5			
Är Familjebostäder en bra hyresvärd?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hur mycket litar du på Familjebostäder?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skulle du rekommendera Familjebostäder till personer i din omgivning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F. TILLFREDSSTÄLLELSE

Vänligen markera nedan hur du känner om följande påståenden. Du kan endast välja ett svarsalternativ per fråga.

- | | |
|--|---|
| 1. Om du kan påverka en renovering, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| 2. Om du inte kan påverka en renovering, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| 3. Om du får information från Familjebostäder under en renovering, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| 4. Om du inte får information från Familjebostäder under en renovering, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| 5. Om du har möten med Familjebostäder under en renovering, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| 6. Om du inte har möten med Familjebostäder under en renovering, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |

- | | |
|---|---|
| 7. Om renoveringen motsvarar dina förväntningar, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| <hr/> | |
| 8. Om renoveringen inte motsvarar dina förväntningar, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| <hr/> | |
| 9. Om Familjebostäder tar dina önskemål i beaktande, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| <hr/> | |
| 10. Om Familjebostäder inte tar dina önskemål i beaktande, hur känns det? | <input type="checkbox"/> Det känns bra
<input type="checkbox"/> Det måste vara så
<input type="checkbox"/> Jag är neutral
<input type="checkbox"/> Jag kan leva med det
<input type="checkbox"/> Det känns inte bra |
| <hr/> | |

Övriga synpunkter:

Tack för din medverkan!

Kontrollnummer:

APPENDIX B

CHALMERS

Hi,

In a research project at Chalmers University of Technology we are investigating the renovation process in Långängen. The work is carried out in collaboration with Familjebostäder.

The questionnaire concerns the tenants living in Långängen in one of the recently renovated apartments. In the study, we would like to capture your opinions and thoughts about the performed renovation. We also want to investigate your experiences with the dialogue.

By responding the questionnaire, you will help us performing such a good investigation as possible. We would therefore be grateful if you take your time to fill in the questionnaire and post it back to us. Please, use the enclosed envelope with paid postage. It is also possible to submit the questionnaire at your local Familjebostäder office, during the opening hours; weekdays 08:00am to 09:00am.

The information you will provide is anonymous and the results of the study will be shared. No personal details will be passed on to another party. For questions regarding the investigation or if you would like to have more information, please contact the project or the research leader (see contact details below).

We are looking forward to your response and you are more than welcome to contact if you have any questions. We need your answer on the 9th April the latest.

The ones who will participate in this research will have the opportunity to win double cinema tickets.

Thanks in advance for your participation!

Sincerely,
The project team



A. BACKGROUND

1. How old are you? _____ years old
2. Are you
 Female Male _____
3. How many people live in your household?
_____ adults _____ children
4. How long have you been living in Långängen?
 0-1 month
 2-6 months
 6-12 months
 1-5 years
 5-10 years
 More than 10 years
5. How long have you been living in your renovated house/apartment?
 0-1 months 2-6 months More than 6 months
6. Were you living in the same apartment before the renovation?
 Yes No
7. What is your main occupation?
 Employee
 Pensioner
 Parental leave
 Self-employed
 Student
 Job seeker
 Other, please mention _____
8. What is your highest level of education?
 Elementary school
 Folkhögskola
 Vocational training
 Secondary school
 Senior high school/High school
 College/University
 Other, please mention _____
9. What language do you usually speak at home?
 Swedish
 Swedish and other language
 Other language, please mention _____

B. INFORMATION

1. How did you receive information regarding the renovation at Långängen from Familjebostäder?
(More than one alternative can be selected)
- Letter
 Email
 Announcement at the entrance
 Meetings
 Web page
 Phonecall
 Other, please mention

-
2. How would you like to receive information regarding a future renovation from Familjebostäder?
(More than one alternative can be selected)
- Letter
 Email
 Announcement at the entrance
 Meetings
 Web page
 Phonecall
 Other, please mention

-
3. Have you been contacted by any other organisation or company during the renovation?
- Yes, please mention

 No
 I do not know
-
4. Did you participate in any of the information meetings that were arranged by Familjebostäder before the renovation?
- Yes
 No
 I do not know
-
5. Did you participate in the guided tour which was arranged before the renovation?
- Yes
 No
 I do not know
-
6. Did you attend the focus group interview performed by Chalmers before the renovation?
- Yes
 No
 I do not know
-
7. How important was it for you to have meetings regarding the renovation? Please mark on the scale from "not at all" to "very much".
- Not at all Very much I do not know
-
- 1 2 3 4 5 6 7
-
8. How satisfied are you with the information you received before the renovation? Please mark on the scale from "not at all" to "very much".
- Not at all Very much I do not know
-
- 1 2 3 4 5 6 7

9. How satisfied are you with the information you received during the renovation? Please mark on the scale from "not at all" to "very much".

Not at all						Very much		<input type="checkbox"/> I do not know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1	2	3	4	5	6	7		

C. INFLUENCE

1. Do you feel involved in the decisions concerning your apartment? Please mark on the scale from "not at all" to "very much" or I do not know

Not at all						Very much		<input type="checkbox"/> I do not know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1	2	3	4	5	6	7		

2. How important are the following statements for you? Please mark on the scale from "not at all important" to "very important".

The tenant influences the planning phase of the renovation.

Not at all important						Very important		<input type="checkbox"/> I do not know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1	2	3	4	5	6	7		

The tenant has the opportunity to influence renovation proposals.

Not at all important						Very important		<input type="checkbox"/> I do not know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1	2	3	4	5	6	7		

The tenant receives information about a renovation.

Not at all important						Very important		<input type="checkbox"/> I do not know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1	2	3	4	5	6	7		

Your wishes are taken into consideration.

Not at all important						Very important		<input type="checkbox"/> I do not know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1	2	3	4	5	6	7		

3. Do you feel that your wishes and comments mentioned to Familjebostäder before the renovation were taken into consideration? Please mark on the scale from "not at all" to "very much" or "I did not have any requests".

Not at all						Very much		<input type="checkbox"/> I did not have any wishes/ comments
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1	2	3	4	5	6	7		

4. When it comes to your apartment, what do you think is of importance to be able to influence during a renovation?

D. RESULTS

1. When it comes to the renovation, how satisfied are/were you with the following aspects? Please mark the option for each category that matches better to your opinion.

	Not at all satisfied					Very satisfied		Not relevant
	1	2	3	4	5	6	7	
Your evacuation apartment during the renovation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The results of the whole renovation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The standard of the apartment today.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The new appearance of the buildings' facades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The appearance of the buildings' facades, before the renovation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The sound insulation inside the apartment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The sound insulation related to the exterior Environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The temperature in the apartment during the winter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The fulfillment of expectations and desires you had before the renovation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The dialogue with Familjebostäder before the renovation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The dialogue with Familjebostäder during the renovation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The dialogue with the Swedish Tenant Organisation (Hyresgästföreningen).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To live in your renovated apartment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The rent relevance in relation to the completed renovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. How important is it for you that your expectations are met? Please mark on the scale from "not at all" to "very much".

Not at all					Very much		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> I do not know
1	2	3	4	5	6	7	

E. TRUST

Please mark the option for each category that matches better to your opinion.

	Not at all					6	Very much	Not relevant
	1	2	3	4	5		7	
Is Familjebostäder a good landlord?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How much do you trust Familjebostäder?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Would you recommend Familjebostäder to other people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F. SATISFACTION

Please mark below how do you feel about the following statements. You can select only one answer per question.

- If you can influence a renovation, how do you feel?
 - I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it

- If you cannot influence a renovation, how do you feel?
 - I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it

- If you receive information from Familjebostäder during a renovation, how do you feel?
 - I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it

- If you do not receive information from Familjebostäder during a renovation, how do you feel?
 - I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it

- If you have meetings with Familjebostäder during a renovation, how do you feel?
 - I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it

- If you do not have meetings with Familjebostäder during a renovation, how do you feel?
 - I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it

7. If the renovation fulfills your expectations, how do you feel?
- I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it
-
8. If the renovation does not fulfill your expectations, how do you feel?
- I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it
-
9. If Familjebostäder takes your wishes into consideration, how do you feel?
- I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it
-
10. If Familjebostäder does not take your wishes into consideration, how do you feel?
- I like it
 - I expect it
 - I am neutral
 - I can live with it
 - I dislike it
-

Other comments:

Thank you very much for your participation!

Control number:

APPENDIX C

RESULTS

A. BACKGROUND

Table A.1. How old are you?

	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	3	7.0	7.0	7.0
26-35	15	34.9	34.9	41.9
36-45	4	9.3	9.3	51.2
46-55	7	16.3	16.3	67.4
56-65	9	20.9	20.9	88.4
65+	5	11.6	11.6	100.0
Total	43	100.0	100.0	

Table A.2. What is your gender?

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	30	69.8	69.8	69.8
Male	13	30.2	30.2	100.0
Total	43	100.0	100.0	

Table A.3.a. How many adults do they live in your household?

	Frequency	Percent	Valid Percent	Cumulative Percent
1	15	34.9	35.7	35.7
2	23	53.5	54.8	90.5
3	4	9.3	9.5	100.0
Subtotal	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		

Table A.3.b. How many children do they live in the household?

	Frequency	Percent	Valid Percent	Cumulative Percent
0	36	83.7	85.7	85.7
1	4	9.3	9.5	95.2
3	1	2.3	2.4	97.6
4	1	2.3	2.4	100.0
Subtotal	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		

Table A.4. How long have you been living in Långängen?

	Frequency	Percent	Valid Percent	Cumulative Percent
0-1 month	2	4.7	4.7	4.7
2-6 months	5	11.6	11.6	16.3
6-12 months	4	9.3	9.3	25.6
1-5 years	7	16.3	16.3	41.9
5-10 years	8	18.6	18.6	60.5
More than 10 years	17	39.5	39.5	100.0
Total	43	100.0	100.0	

Table A.5. How long have you been living in your renovated apartment?

Period	Frequency	Percent	Valid Percent	Cumulative Percent
0-1 month	4	9.3	9.3	9.3
2-6 months	20	46.5	46.5	55.8
More than 6 months	19	44.2	44.2	100.0
Total	43	100.0	100.0	

Table A.6. Were you living in the same apartment before the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	29	67.4	67.4	67.4
No	14	32.6	32.6	100.0
Total	43	100.0	100.0	

Table A.7. What is your main occupation?

	Frequency	Percent	Valid Percent	Cumulative Percent
Employee	22	51.2	51.2	51.2
Pensioner	9	20.9	20.9	72.1
Parental leave	1	2.3	2.3	74.4
Self-employed	2	4.7	4.7	79.1
Student	5	11.6	11.6	90.7
Job seeker	1	2.3	2.3	93.0
Other	3	7.0	7.0	100.0
Total	43	100.0	100.0	

Table A.8. What is your highest level of education?

	Frequency	Percent	Valid Percent	Cumulative Percent
Elementary school	8	18.6	18.6	18.6
Folkhögskola	1	2.3	2.3	20.9
Vocational Training	10	23.3	23.3	44.2
High school	7	16.3	16.3	60.5
University/College	17	39.5	39.5	100.0
Total	43	100.0	100.0	

Table A.9. Which languages do you usually use at home?

	Frequency	Percent	Valid Percent	Cumulative Percent
Swedish	36	83.7	83.7	83.7
Swedish and other language	6	14.0	14.0	97.7
Other language	1	2.3	2.3	100.0
Total	43	100.0	100.0	

B. INFORMATION

Table B.1. How did you receive information?

Letter	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	32	74.4	74.4	74.4
No	11	25.6	25.6	100.0
Total	43	100.0	100.0	
Email	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	1	2.3	2.3	2.3
No	42	97.7	97.7	100.0
Total	43	100.0	100.0	
Announcements	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	17	39.5	39.5	39.5
No	26	60.5	60.5	100.0
Total	43	100.0	100.0	
Meetings	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	22	51.2	51.2	51.2
No	21	48.8	48.8	100.0
Total	43	100.0	100.0	
Webpages	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	4	9.3	9.3	9.3
No	39	90.7	90.7	100.0
Total	43	100.0	100.0	
Phone calls	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	2	4.7	4.7	4.7
No	41	95.3	95.3	100.0
Total	43	100.0	100.0	
Other way	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	5	11.6	11.6	11.6
No	38	88.4	88.4	100.0
Total	43	100.0	100.0	

Table B.2. How would you like to receive information?

Letter	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	34	79.1	79.1	79.1
No	9	20.9	20.9	100.0
Total	43	100.0	100.0	
Email	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	9	20.9	20.9	20.9
No	34	79.1	79.1	100.0
Total	43	100.0	100.0	
Announcements	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	21	48.8	48.8	48.8
No	22	51.2	51.2	100.0
Total	43	100.0	100.0	
Meetings	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	21	48.8	48.8	48.8
No	22	51.2	51.2	100.0
Total	43	100.0	100.0	
Webpages	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	11	25.6	25.6	25.6
No	32	74.4	74.4	100.0
Total	43	100.0	100.0	
Phone calls	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	3	7.0	7.0	7.0
No	40	93.0	93.0	100.0
Total	43	100.0	100.0	
Other way	Frequency	Percent	Valid Percent	Cumulative Percent

Yes	1	2.3	2.3	2.3
No	42	97.7	97.7	100.0
Total	43	100.0	100.0	

Table B.3. Have you been contacted by any other organisation/company?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	17	39.5	40.5	40.5
No	18	41.9	42.9	83.3
I do not know	7	16.3	16.7	100.0
Subtotal	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		

Table B.4. Did you participate in any of the information meetings?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	29	67.4	67.4	67.4
No	14	32.6	32.6	100.0
Total	43	100.0	100.0	

Table B.5. Did you participate in the guided tour in the area?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	4	9.3	9.5	9.5
No	35	81.4	83.3	92.9
I do not know	3	7.0	7.1	100.0
Subtotal	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		

Table B.6. Did you attend the focus group interview performed by Chalmers?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	7	16.3	16.7	16.7
No	26	60.5	61.9	78.6
I do not know	9	20.9	21.4	100.0
Total	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		

Table B.7. How important are the meetings regarding the renovation for you?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not all important	1	2.3	2.8	2.8
2.	0	0	0	2.8
3	3	7.0	8.3	11.1
4	4	9.3	11.1	22.2
5	1	2.3	2.8	25.0
6	4	9.3	11.1	36.1
7. Very important	23	53.5	63.9	100.0
Subtotal	36	83.7	100.0	
I do not know	7	16.3		
Total	43	100.0		
				Mean 6.00

Table B.8. How satisfied are you with the information you received before the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	1	2.3	3.1	3.1
2	7	16.3	21.9	25.0
3	4	9.3	12.5	37.5
4	7	16.3	21.9	59.4
5	7	16.3	21.9	81.3
6	2	4.7	6.3	87.5
7. Very satisfied	4	9.3	12.5	100.0
Subtotal 1	32	74.4	100.0	
Not answered	1	2.3		
I do not know	10	23.3		
Subtotal 2	11	25.6		
Total	43	100.0		
				Mean 4.06

Table B.9. How satisfied are you with the information you received during the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	5	11.6	13.9	13.9
2	8	18.6	22.2	36.1
3	4	9.3	11.1	47.2
4	8	18.6	22.2	69.4
5	7	16.3	19.4	88.9
6	3	7.0	8.3	97.2
7. Very satisfied	1	2.3	2.8	100.0
Subtotal	36	83.7	100.0	
I do not know	7	16.3		
Total	43	100.0		
				Mean 3.47

C. INFLUENCE

Table C.1. Do you feel involved in the decisions concerning your apartment?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all important	9	20.9	25.7	25.7
2	2	4.7	5.7	31.4
3	7	16.3	20.0	51.4
4	5	11.6	14.3	65.7
5	5	11.6	14.3	80.0
6	2	4.7	5.7	85.7
7. Very important	5	11.6	14.3	100.0
Subtotal	35	81.4	100.0	
I do not know	8	18.6		
Total	43	100.0		
				Mean 3.60

Table C.2.a. How important is for the tenant to influence the planning phase of the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all important	0	0.0	0.0	0.0
2	0	0.0	0.0	0.0
3	1	2.3	2.4	2.4
4	3	7.0	7.3	9.8
5	0	0.0	0.0	9.8
6	10	23.3	24.4	34.1
7. Very important	27	62.8	65.9	100.0
Subtotal 1	41	95.3	100.0	
Not answered	1	2.3		
I do not know	1	2.3		
Subtotal 2	2	4.7		
Total	43	100.0		
				Mean 6.44

Table C.2.b. How important is for the tenant to have the opportunity to influence the renovation proposals?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all important	1	2.3	2.3	2.3
2	0	0.0	0.0	2.3
3	0	0.0	0.0	2.3
4	4	9.3	9.3	11.6
5	2	4.7	4.7	16.3
6	6	14.0	14.0	30.2
7. Very important	30	69.8	69.8	100.0
Total	43	100.0	100.0	
				Mean 6.35

C.2.c. How important is for the tenant to receive information regarding a renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all important	0	0.0	0.0	0.0
2	0	0.0	0.0	0.0
3	0	0.0	0.0	0.0
4	1	2.3	2.4	2.4
5	0	0.0	0.0	2.4
6	3	7.0	7.1	9.5
7. Very important	38	88.4	90.5	100.0
Subtotal	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		
Mean 6.86				

Table C.2.d. How important is that the tenant's wishes are being taken into consideration?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all important	1	2.3	2.4	2.4
2	0	0.0	0.0	2.4
3	0	0.0	0.0	2.4
4	2	4.7	4.9	7.3
5	4	9.3	9.8	17.1
6	4	9.3	9.8	26.8
7. Very important	30	69.8	73.2	100.0
Subtotal 1	41	95.3	100.0	
Not answered	1	2.3		
I do not know	1	2.3		
Subtotal 2	2	4.7		
Total	43	100.0		
Mean 6.42				

Table C.3. Do you feel that your wishes and comments mentioned to Familjebostäder before the renovation were taken into consideration?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all	4	9.3	12.1	12.1
2	4	9.3	12.1	24.2
3	4	9.3	12.1	36.4
4	10	23.3	30.3	66.7
5	4	9.3	12.1	78.8
6	3	7.0	9.1	87.9
7. Very much	4	9.3	12.1	100.0
Subtotal 1	33	76.7	100.0	
Not answered	2	4.7		
I didn't have any wishes/comments	8	18.6		
Subtotal 2	10	23.3		
Total	43	100.0		
Mean 3.94				

D. RESULTS (RENOVATION)

Table D.1.a. How satisfied are you with your evacuation apartment during the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	7	16.3	26.9	26.9
2	2	4.7	7.7	34.6
3	4	9.3	15.4	50.0
4	2	4.7	7.7	57.7
5	4	9.3	15.4	73.1
6	2	4.7	7.7	80.8
7. Very satisfied	5	11.6	19.2	100.0
Subtotal 1	26	60.5	100.0	
Not answered	2	4.7		
Not applicable	15	34.9		
Subtotal 2	17	39.5		
Total	43	100.0		
				Mean 3.77

Table D.1.b. How satisfied are you with the overall renovation result?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	2	4.7	5.1	5.1
2	4	9.3	10.3	15.4
3	3	7.0	7.7	23.1
4	8	18.6	20.5	43.6
5	8	18.6	20.5	64.1
6	8	18.6	20.5	84.6
7. Very satisfied	6	14.0	15.4	100.0
Subtotal 1	39	90.7	100.0	
Not answered	2	4.7		
Not applicable	2	4.7		
Subtotal 2	4	9.3		
Total	43	100.0		
				Mean 4.64

Table D.1.c. How satisfied are you with the standard of the apartment today?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	1	2.3	2.5	2.5
2	2	4.7	5.0	7.5
3	0	0.0	0.0	7.5
4	8	18.6	20.0	27.5
5	14	32.6	35.0	62.5
6	10	23.3	25.0	87.5
7. Very satisfied	5	11.6	12.5	100.0
Subtotal	40	93.0	100.0	
Not answered	3	7.0		
Total	43	100.0		
				Mean 5.05

Table D.1.d. How satisfied are you with how the facades look like today?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	1	2.3	2.4	2.4
2	1	2.3	2.4	4.9
3	4	9.3	9.8	14.6
4	4	9.3	9.8	24.4
5	7	16.3	17.1	41.5
6	9	20.9	22.0	63.4
7. Very satisfied	15	34.9	36.6	100.0
Subtotal	41	95.3	100.0	
Not applicable	2	4.7		
Total	43	100.0		
				Mean 5.49

Table D.1.e. How satisfied were you with how the facades looked like before the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	5	11.6	14.3	14.3
2	7	16.3	20.0	34.3
3	6	14.0	17.1	51.4
4	8	18.6	22.9	74.3
5	4	9.3	11.4	85.7
6	4	9.3	11.4	97.1
7. Very satisfied	1	2.3	2.9	100.0
Subtotal 1	35	81.4	100.0	
Not answered	2	4.7		
Not applicable	6	14.0		
Subtotal 2	8	18.6		
Total	43	100.0		
				Mean 3.43

Table D.1.f. How satisfied are you with the sound insulation inside the apartment?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	10	23.3	23.8	23.8
2	2	4.7	4.8	28.6
3	6	14.0	14.3	42.9
4	5	11.6	11.9	54.8
5	6	14.0	14.3	69.0
6	7	16.3	16.7	85.7
7. Very satisfied	6	14.0	14.3	100.0
Subtotal	42	97.7	100.0	
Not applicable	1	2.3		
Total	43	100.0		
				Mean 3.95

Table D.1.g. How satisfied are you with the sound insulation related to the exterior environment?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	3	7.0	7.0	7.0
2	2	4.7	4.7	11.6
3	7	16.3	16.3	27.9
4	4	9.3	9.3	37.2
5	6	14.0	14.0	51.2
6	10	23.3	23.3	74.4
7. Very satisfied	11	25.6	25.6	100.0
Total	43	100.0	100.0	
Mean 4.91				

Table D.1.h. How satisfied are you with the temperature in the apartment during the winter?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	12	27.9	31.6	31.6
2	1	2.3	2.6	34.2
3	5	11.6	13.2	47.4
4	4	9.3	10.5	57.9
5	8	18.6	21.1	78.9
6	5	11.6	13.2	92.1
7. Very satisfied	3	7.0	7.9	100.0
Subtotal 1	38	88.4	100.0	
Not answered	1	2.3		
Not applicable	4	9.3		
Subtotal 2	5	11.6		
Total	43	100.0		
Mean 3.58				

Table D.1.i. How satisfied are you with the fulfilment of expectations and wishes you had before the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	3	7.0	10.3	10.3
2	4	9.3	13.8	24.1
3	5	11.6	17.2	41.4
4	7	16.3	24.1	65.5
5	3	7.0	10.3	75.9
6	4	9.3	13.8	89.7
7. Very satisfied	3	7.0	10.3	100.0
Subtotal 1	29	67.4	100.0	
Not answered	2	4.7		
Not applicable	12	27.9		
Subtotal 2	14	32.6		
Total	43	100.0		
Mean 3.93				

Table D.1.j. How satisfied are you with the dialogue with Familjebostäder before the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	6	14.0	18.8	18.8
2	2	4.7	6.3	25.0
3	3	7.0	9.4	34.4
4	5	11.6	15.6	50.0
5	5	11.6	15.6	65.6
6	9	20.9	28.1	93.8
7. Very satisfied	2	4.7	6.3	100.0
Subtotal 1	32	74.4	100.0	
Not answered	2	4.7		
Not applicable	9	20.9		
Subtotal 2	11	25.6		
Total	43	100.0		
				Mean 4.13

Table D.1.k. How satisfied are you with the dialogue with Familjebostäder during the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	8	18.6	25.8	25.8
2	0	0.0	0.0	25.8
3	5	11.6	16.1	41.9
4	6	14.0	19.4	61.3
5	4	9.3	12.9	74.2
6	6	14.0	19.4	93.5
7. Very satisfied	2	4.7	6.5	100.0
Subtotal 1	31	72.1	100.0	
Not answered	2	4.7		
Not applicable	10	23.3		
Subtotal 2	12	27.9		
Total	43	100.0		
				Mean 3.77

Table D.1.l. How satisfied are you with the dialogue with Hyresgästföreningen?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	3	7.0	18.8	18.8
2	3	7.0	18.8	37.5
3	0	0.0	0.0	37.5
4	6	14.0	37.5	75.0
5	1	2.3	6.3	81.3
6	1	2.3	6.3	87.5
7. Very satisfied	2	4.7	12.5	100.0
Subtotal 1	16	37.2	100.0	
Not answered	5	11.6		
Not applicable	22	51.2		
Subtotal 2	27	62.8		
Total	43	100.0		
				Mean 3.63

Table D.1.m. How satisfied are you when living in your renovated apartment?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	2	4.7	5.0	5.0
2	2	4.7	5.0	10.0
3	3	7.0	7.5	17.5
4	5	11.6	12.5	30.0
5	6	14.0	15.0	45.0
6	11	25.6	27.5	72.5
7. Very satisfied	11	25.6	27.5	100.0
Subtotal	40	93.0	100.0	
Not answered	3	7.0		
Total	43	100.0		
				Mean 5.20

Table D.1.n. How satisfied are you with the rent in relation to the renovation?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all satisfied	7	16.3	18.4	18.4
2	4	9.3	10.5	28.9
3	5	11.6	13.2	42.1
4	6	14.0	15.8	57.9
5	8	18.6	21.1	78.9
6	5	11.6	13.2	92.1
7. Very satisfied	3	7.0	7.9	100.0
Subtotal	38	88.4	100.0	
Not answered	2	4.7		
Not applicable	3	7.0		
Total	43	100.0		
				Mean 3.82

D.2. How important is for your expectations to be fulfilled?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all important	0	0.0	0.0	0.0
2	0	0.0	0.0	0.0
3	0	0.0	0.0	0.0
4	1	2.3	2.7	2.7
5	7	16.3	18.9	21.6
6	7	16.3	18.9	40.5
7. Very important	22	51.2	59.5	100.0
Subtotal 1	37	86.0	100.0	
Not answered	3	7.0		
Not applicable	3	7.0		
Subtotal 2	6	14.0		
Total	43	100.0		
				Mean 6.35

E. TRUST

Table E.1. Do you think that Familjebostäder is a good landlord?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all	1	2.3	2.4	2.4
2	6	14.0	14.3	16.7
3	1	2.3	2.4	19.0
4	8	18.6	19.0	38.1
5	12	27.9	28.6	66.7
6	5	11.6	11.9	78.6
7. Very much	9	20.9	21.4	100.0
Subtotal	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		
				Mean 4.79

Table E.2. How much do you trust Familjebostäder?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all	3	7.0	7.1	7.1
2	3	7.0	7.1	14.3
3	6	14.0	14.3	28.6
4	9	20.9	21.4	50.0
5	9	20.9	21.4	71.4
6	4	9.3	9.5	81.0
7. Very much	8	18.6	19.0	100.0
Subtotal	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		
				Mean 4.48

Table E.3. Would you recommend Familjebostäder to other people?

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all	4	9.3	9.5	9.5
2	3	7.0	7.1	16.7
3	5	11.6	11.9	28.6
4	6	14.0	14.3	42.9
5	11	25.6	26.2	69.0
6	5	11.6	11.9	81.0
7. Very much	8	18.6	19.0	100.0
Subtotal	42	97.7	100.0	
Not answered	1	2.3		
Total	43	100.0		
				Mean 4.52

B. SATISFACTION

Table F.1. Participants' answers

Tenant	F.1.	F.2.	F.1_2	F.3.	F.4.	F.3_4	F.5.	F.6.	F.5_6	F.7.	F.8.	F.7_8	F.9.	F.10.	F.9_10
1	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
2	Expect It	Dislike	M	Expect It	Dislike	M	Like	Dislike	O	Like	Dislike	O	Like	Live With	A
3	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
4	Expect It	Dislike	M	Expect It	Dislike	M	Like	Dislike	O	Live With	Live With	I	Like	Dislike	O
5	Expect It	Dislike	M	Expect It	Dislike	M	Like	Live With	A	Like	Dislike	O	Like	Dislike	O
6	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
7	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
8	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
9	Expect It	Dislike	M	Expect It	Expect It	A	Like	Live With	A	Like	Dislike	O	Like	Dislike	O
10	Like	Dislike	O	Like	Dislike	O	Expect It	Live With	I	Like	Dislike	O	Like	Dislike	O
11	Like	Dislike	O	Expect It	Live With	I	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
12	Expect It	Dislike	M	Like	Dislike	O	Don't Care	Don't Care	I	Like	Like	Q	Like	Dislike	O
13	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
14	Don't Care	Don't Care	I	Live With	Don't Care	I	Live With	Don't Care	I	Live With	Don't Care	I	Live With	Live With	I
15	Expect It	Dislike	M	Expect It	Dislike	M	Expect It	Dislike	M	Like	Dislike	O	Like	Dislike	O
16	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
17	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
18	Expect It	Dislike	M	Expect It	Dislike	M	Expect It	Dislike	M	Like	Dislike	O	Like	Dislike	O
19	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
20	Expect It	Dislike	M	Expect It	Dislike	M	Like	Live With	A	Like	Dislike	O	Like	Dislike	O
21	Like	Dislike	O	Like	Live With	A	Like	Live With	A	Like	Dislike	O	Like	Dislike	O
22	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
23	Like	Live With	A	Like	Dislike	O	Like	Live With	A	Like	Live With	A	Like	Dislike	O

24	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
25	Like	Expect It	A	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
26	Like	Live With	A	Expect It	Dislike	M	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
27	Like	Live With	A	Like	Dislike	O	Expect It	Live With	I	Like	Dislike	O	Like	Live With	A
28	Like	Dislike	O	Expect It	Dislike	M	Expect It	Dislike	M	Like	Dislike	O	Like	Dislike	O
29	Like	Live With	A	Expect It	Dislike	M	Expect It	Dislike	M	Like	Live With	A	Like	Live With	A
30	Expect It	Dislike	M	Expect It	Dislike	M	Don't Care	Don't Care	I	Expect It	Dislike	M	Expect It	Dislike	M
31	Like	Dislike	O	Like	Dislike	O				Like	Dislike	O	Like	Dislike	O
32	Don't Care	Don't Care	I	Don't Care	Don't Care	I	Don't Care	Don't Care	I	Don't Care	Don't Care	I	Like	Dislike	O
33	Expect It	Live With	I	Live With	Live With	I	Live With	Live With	I	Live With	Live With	I	Live With	Live With	I
34	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
35	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
36	Expect It	Dislike	M	Like	Dislike	O	Expect It	Dislike	M	Like	Dislike	O	Like	Dislike	O
37	Expect It	Dislike	M	Expect It	Dislike	M	Like	Dislike	O	Live With	Dislike	M	Like	Dislike	O
38	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Expect It	Dislike	M	Expect It	Dislike	M
39	Expect It	Dislike	M	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
40	Like	Dislike	O	Expect It	Dislike	M	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O
41	Like	Dislike	O	Like	Dislike	O	Like	Dislike	O	Like	Live With	A	Like	Live With	A
42	Like	Live With	A	Expect It	Dislike	M	Don't Care	Don't Care	I	Like	Dislike	O	Like	Dislike	O
43	Like	Dislike	O	Like	Dislike	O	Don't Care	Live With	I	Like	Dislike	O	Like	Dislike	O

Table F.2. Evaluation Table

	Dysfunctional (negative) question				
Functional (positive) question	(1) Like	(2) Must be	(3) Neutral	(4) Live with	(5) Dislike
(1) Like	Q	A	A	A	O
(2) Must-be	R	I	I	I	M
(3) Neutral	R	I	I	I	M
(4) Live with	R	I	I	I	M
(5) Dislike	R	R	R	R	Q

Note: A: attractive; M: must-be; R: reverse; O: one-dimensional; Q: questionable; I: indifferent

Table F.3. Table of results/Frequencies

	O	M	A	I	Q	Sum
Influence	22	12	6	3	0	43
Information	24	13	2	4	0	43
Meetings	23	5	5	9	0	42
Wishes	32	3	3	4	1	43
Expectations	35	2	4	2	0	43

Table F.4. Table of results/Percentages

	O	M	A	I	Q	Sum
Influence	51.16	27.91	13.95	6.98	0.00	100
Information	55.81	30.23	4.65	9.30	0.00	100
Meetings	54.76	11.90	11.90	21.43	0.00	100
Wishes	74.42	6.98	6.98	9.30	2.33	100
Expectations	81.40	4.65	9.30	4.65	0.00	100

Table F.5. CS-coefficient

	$(A+O)/(A+O+I+M)$	$(O+M)/(A+O+I+M)^{-1}$
Influence	0.65	-0.79
Information	0.60	-0.86
Meetings	0.67	-0.67
Wishes	0.83	-0.83
Expectations	0.91	-0.86

ADDITIONAL TABLES

A.1. Age * B.2.a. Would you like to receive information by letter?/ Crosstabulation

		B.2.a. Would you like to receive information by letter?		Total
		Yes	No	
A.1. Age	18-25	1	2	3
	26-35	14	1	15
	36-45	3	1	4
	46-55	5	2	7
	56-65	9	0	9
	65+	2	3	5
Total		34	9	43

A.1. Age * B.2.b. Would you like to receive information by email?/Crosstabulation

		B.2.b. Would you like to receive information by email?		Total
		Yes	No	
A.1. Age	18-25	1	2	3
	26-35	4	11	15
	36-45	1	3	4
	46-55	1	6	7
	56-65	1	8	9
	65+	1	4	5
Total		9	34	43

A.1. Age * B.2.c. Would you like to receive information by announcements in the entrance? / Crosstabulation

		B.2.c. Would you like to receive information by announcements in the entrance?		Total
		Yes	No	
A.1. Age	18-25	1	2	3
	26-35	9	6	15
	36-45	1	3	4
	46-55	4	3	7
	56-65	4	5	9
	65+	2	3	5
Total		21	22	43

A.1. Age * B.2.d. Would you like to receive information by meetings? / Crosstabulation

		B.2.d. Would you like to receive information by meetings?		Total
		Yes	No	
A.1. Age	18-25	0	3	3
	26-35	9	6	15
	36-45	2	2	4
	46-55	2	5	7
	56-65	4	5	9
	65+	4	1	5
Total		21	22	43

A.1. Age * B.2.e. Would you like to receive information through webpages? / Crosstabulation

		B.2.e. Would you like to receive information through webpages?		Total
		Yes	No	
A.1. Age	18-25	2	1	3
	26-35	5	10	15
	36-45	2	2	4
	46-55	2	5	7
	56-65	0	9	9
	65+	0	5	5
Total		11	32	43

A.1. Age * B.2.f. Would you like to receive information by phone calls? Crosstabulation

		B.2.f. Would you like to receive information by phone calls?		Total
		Yes	No	
A.1. Age	18-25	0	3	3
	26-35	2	13	15
	36-45	0	4	4
	46-55	0	7	7
	56-65	1	8	9
	65+	0	5	5
Total		3	40	43

A.1. Age * B.2.g. Would you like to receive information by another way? Crosstabulation

		B.2.g. Would you like to receive information by another way?		Total
		Yes	No	
A.1. Age	18-25	0	3	3
	26-35	1	14	15
	36-45	0	4	4
	46-55	0	7	7
	56-65	0	9	9
	65+	0	5	5
Total		1	42	43

Table E.4. Tenants' perception of Familjebostäder regarding their gender

Gender		Do you think that Familjebostäder is a good landlord?	How much do you trust Familjebostäder?	Would you recommend Familjebostäder to other people?
Female	Mean	4.90	4.56	4.66
	Frequency	29	29	29
Male	Mean	4.54	4.31	4.23
	Frequency	13	13	13
Total	Mean	4.79	4.48	4.52
	Frequency	42	42	42
Not answered	Frequency	1	1	1

Table E.5. Tenants' perception of Familjebostäder regarding their educational background

What is your highest level of education?		Do you think that Familjebostäder is a good landlord?	How much do you trust Familjebostäder?	Would you recommend Familjebostäder to other people?
Elementary school	Mean	5.14	4.43	4.71
	Frequency	7	7	7
Folkhögskola	Mean	7.00	7.00	7.00
	Frequency	1	1	1
Vocational Training	Mean	4.00	3.90	4.00
	Frequency	10	10	10
High school	Mean	5.43	5.29	5.14
	Frequency	7	7	7
University/ College	Mean	4.701	4.35	4.35
	Frequency	17	17	17
Total	Mean	4.79	4.48	4.52
	Frequency	42	42	42
Not answered	Frequency	1	1	1

Summary of answers under “other comments”

Most usual comments
<ul style="list-style-type: none">• The apartments are cold; several tenants have been complaining about that but nothing has been done according to them.• Small bathroom and they don't have any influence on that, there is only one wall and when they have a shower it is flooded.• Follow up has been insufficient.• The rent is not relevant to the executed renovation
Detailed comments from individuals
<ul style="list-style-type: none">• They are satisfied with the contact with Familjebostäder before and in the initial phase of the renovation. When it comes to the end and when the tenants are going to move back to their apartment, they are not satisfied with the communication. The results are not the expected ones. The apartments are not totally finished when the tenants are back. They are still dissatisfied with several aspects that Familjebostäder will not fix for them at the end. They want to move as soon as possible.• Hard to answer some questions since they are new to the area. Good quality of kitchen and bathroom. The wallpapers are not yet fixed and it is boring to wait for them. But all in all they like it.• Better communication with the workers and expect from them to work fast.• Familjebostäder's planning of renovation, information sharing and follow-up have been really bad. They sent out information that later was changed and sent out again. The inspection missed some big damages. You need to be very patient to cope with a renovation organised by Familjebostäder and PSAB.• Cannot answer all the questions as the renovation is not finished.• The whole renovation is not done after 14 months. Worried about the garden, when will be done.• Working late for the renovation and it is annoying because it gets noisy.• New tenants, they did not have any influence over the renovation.• Disappointing that some stuff are incomplete after the renovation and they are new tenants and they wanted everything to be fixed before they move in. It was difficult to communicate with Familjebostäder about the problems and they feel that it takes a lot of time.• A lot of stuff in the apartment were executed in a sloppy way.• Sound insulation inside the apartment is bad (they can hear their neighbors).• They have promised some stuff (e.g. fan for the kitchen) and they did not deliver it. Tenants had made some costs but never refunded by Familjebostäder. Damaged floors that they haven't been checked.• New tenant wants to see some pictures how it looked like before.• They are dissatisfied with the information from Familjebostäder before the renovation. They went to meetings but they felt that their questions could not be answered. So, they feel that they have no power. They wanted to participate to this focus group interview, but they were never contacted. Later they wanted to change apartment and they contacted by Lena and she was extremely helpful and everything worked really good.• PSAB forgot to do the insulation in the kitchen. Not satisfied with the information received before the renovation. They have not got any information about the garden and he couldn't participate to the guided tour in the area. He wanted to have more information as he couldn't participate. He was interviewed by PSAB and Familjebostäder about wishes regarding the bathroom and balconies but he did not get any information

about the results, even if he tried to create a dialogue. No communication during the execution of the renovation and not even today. Familjebostäder is late starting fixing the garden. All in all, really bad communication and treatment from Familjebostäder. Some damages were not reported. PSAB made many damages and left the apartment not clean at the end. Familjebostäder lost their stuff and they founded in storage and it was not locked. No information that will have less storage in the apartment because of the ventilation installation.

- He did not like the evacuation apartment because it was in these temporary buildings. The renovation is not totally finished.
- Renovation takes unnecessarily more time. It should have finished earlier.

APPENDIX D

Intervjufrågor

Bakgrund

1. Vad är din utbildningsbakgrund?
2. Vad är din roll och position på organisationen/företaget?
3. Hur länge har du arbetat på organisationen/företaget?
4. Vilka typer av projekt/uppdrag utför organisationen/företaget?
5. Vilka typer av projekt arbetar du med?

Renoveringsprojektet i Långängen

6. Hur var du/ni involverade i renoveringsprojektet i Långängen? (både på organisationsnivå och personligen).
7. Har organisationen/företaget varit involverad i liknande renoveringsprojekt förut?
8. Om ja, hur använder ni erhållen kunskap från föregående projekt?
9. Om inte, kommer ni att använda erhållen kunskap i liknande projekt i framtiden?
10. Vilka processer använder ni för kunskapsöverföring?
11. Hur kommunicerar ni med andra aktörer i projektet?
12. Om ja, vilka aktörer kommunicerar ni med?
13. Om ni har haft kontakt med hyresgästerna, på vilket sätt sker kommunikationen där?

Kommunikation

14. Hur har ni fått information om projektet?
15. Vilken typ av material eller information har ni fått av Familjebostäder?
16. Får ni fortfarande information/material om projektet?
17. Hur skulle du vilja få information av Familjebostäder i framtiden?
18. Har du några egna reflektioner om kommunikationen med Familjebostäder?

Dialogen med hyresgästerna

19. Vad tycker du om hyresgästernas medverkan i projektet? Vad är fördelarna och nackdelarna?
20. Hur tycker du att dialogen med hyresgästerna fungerar?
21. Vad har fungerat bra i dialogen?
22. Hur kan dialogen med hyresgästerna förbättras?

Samarbete med Familjebostäder

23. Vad tycker du om projektets resultat och process?
24. Vad har du lärt dig från projektet? (Finns det några nya kunskaper från projektet?)
25. Några utav hyresgästerna var delvis emot/resistenta mot renoveringen i början av projektet. Vad tror du det beror på? Hur påverkade det er verksamhet? Hur tycker du att motstånd mot ombyggnationer/renoveringar ska hanteras?

APPENDIX E

Interview questions

Background

1. What is your educational background?
2. What is your role and position in the company?
3. For how long have you been working at the company?
4. What type of projects does the company perform?
5. What type of projects do you work with?

Renovation project Långängen

6. In what extent are you involved in Långängen's project? Both personally and the organisation.
7. Has the organisation been involved in similar projects in the past?
8. If yes, how did you or organisation use the previous knowledge in this project?
9. If not, are you going to use the knowledge gained from Långängen's project in the future?
10. What are the followed processes to capture and reuse the gained knowledge?
11. How do you communicate with other stakeholders of the project? (direct communication?)
12. If yes, with which ones?
13. If you have contacts with the tenants, in which way do you communicate with them?

Communication

14. How did you receive information/material about the project?
15. What kind of information/material did you get from Familjebostäder?
16. If you still receive information about the project, what kind of information do you receive? Any follow-ups?
17. How do you want to receive information if you collaborate with Familjebostäder in the future?
18. What are your reflections about the communication with Familjebostäder?

Dialogue with tenants

19. What do you think about the tenants' active participation in this project? What are the advantages and disadvantages?
20. Would you recommend to follow the same processes in future similar projects?
21. What worked well and what should be improved and in what way?

Collaboration with Familjebostäder

22. Are you satisfied with the renovation as such?
23. What are the organisational learnings? (any conclusions?)
24. Resistance from the tenants: Did this affect the specific organisation's operations? Did it cause any problems?

APPENDIX F

Meetings with the project owner

1st meeting, 12th February 2015;

Introduction to the project

2nd meeting, 20th February 2015;

Discussion about the renovation of Långängen and guided tour in the district with the customer manager

3rd meeting, 6th March 2015;

Feedback and discussion about the questionnaire to the tenants

4th meeting, 8th May 2015;

Familjebostäder's goals and expectations regarding the investigation

5th meeting, 12th June 2015;

Workshop and presentation of results at Familjebostäder