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How to increase the attractiveness of the construction industry

- by tackling imbalance in gender

Master's Thesis in the master's programme Design and Construction Project Management

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ABSTRACT

The population in Sweden is quickly growing with increasing demands for more buildings and infrastructure. At the same time, the construction industry has a comprehensive labour deficiency, that hinders the industry from producing according to the need of the market. Forecasts indicate that the labour deficiency will increase. Concurrently, the construction industry has a major imbalance in gender. Unfortunately, the industry is unwelcoming towards women. The conditions are gender unequal, and discrimination occur at all levels in the industry. However, research has shown that gender equal organizations increase their competitive advantages, quality of output, and much more. Not only would an increase of women solve the labour deficiency, it would also improve the Swedish construction industry and make it more competitive globally. The aim of this study is to identify how the construction industry can become more attractive, and how to tackle the problem of imbalance in gender. A qualitative research methodology has been used, and interviewees with 14 representatives from both the construction industry and other industries compile the empirical data. Additionally, theory in relation to the construction industry and other industries is used for analysis. The result show that that with increased equality the industry will become more profitable, more innovative, and will be able to produce according to the need of the market. Organizations who become more equal will improve their competitive advantages and the productivity of their employees. To attract women an improvement of reputation is required. Role models, equal conditions to perform and leadership are other critical factors for the industry to both attract and retain women. Organizations who aim to become gender equal must adopt the iterative process of equality knowledge, actions, result, follow up and monitoring, and feedback and improvement. There are many incentives for the industry, organization and employee to engage in the equality progress. The most powerful incentive for increased equality in the construction industry would be if organizations demand equality from business partners.

Key words: Attractiveness, Gender imbalance, Equality, Strategies, The construction industry

Hur man kan öka attraktiviteten i byggbranschen

- genom att tackla könsobalans

Examensarbete inom masterprogrammet Organisering och ledning i Bygg- och Fastighetssektorn

HANNA JOHANSSON & WILLIAM STENSÖNES

Institutionen för Arkitektur och Samhällsbyggnadsteknik

Avdelningen för Construction Management, Chalmers tekniska högskola

SAMMANFATTNING

Befolkningen i Sverige växer snabbt vilket ökar behovet av fler byggnader och infrastruktur. Byggindustrin har emellertid en omfattande arbetskraftsbrist, vilket hindrar industrin från att producera i takt med marknadens efterfrågan. Prognoser indikerar att arbetskraftsbristen ökar. Samtidigt har byggbranschen en stor obalans mellan könen. Tyvärr upplever kvinnor att de är ovälkomna till industrin. Villkoren mellan könen är ojämlika, och diskriminering förekommer på alla nivåer i branschen. Forskning har dock visat att jämställda organisationer ökar sina konkurrensfördelar, innovationsförmåga, produktkvalitet och mycket mer. Inte bara skulle en ökning av kvinnor lösa arbetskraftsbristen, det skulle också förbättra den svenska byggbranschen och göra den mer konkurrenskraftig globalt. Syftet med denna studie är att identifiera hur byggnadsindustrin kan bli mer attraktiv och hur man hanterar bristen på jämställdhet. En kvalitativ forskningsmetod har använts och intervjuer med 14 representanter från både byggbranschen och andra industrier har bidragit till den empiriska datan. Dessutom har teori relaterad till byggbranschen och andra industrier använts för analys. Examensarbetet visar varför industrin behöver jämställdhet, hur man lockar och behåller kvinnor, vilka strategier som bör tillämpas för ökad jämställdhet och vilka incitament som motiverar jämställdhetsinsatser. För att locka kvinnor krävs ett bra företagsrykte. Förebilder, lika arbetsvillkor och ledarskap är andra viktiga faktorer för att industrin ska kunna både attrahera och behålla kvinnor. Organisationer som strävar efter att bli jämställda måste anta den iterativa processen med kunskap, åtgärder, resultat, uppföljning och övervakning samt feedback och förbättringar. Det finns många incitament för byggbranschen, organisationer och medarbetare att engagera sig i jämställdhetsutvecklingen. Det starkaste incitamentet till ökad jämställdhet inom byggbranschen skulle vara om organisationer kräver jämställdhetsåtgärder från affärspartners.

Nyckelord: Attraktivitet, Könsobalans, Jämställdhet, Strategier, Byggbranschen

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Preface

This master's thesis has been a joy to write and is our last assignment at the master of Design and Construction Project Management at Chalmers University of Technology in Gothenburg, Sweden.

In April 2018 we were working on a group assignment when the discussions that inspired the thesis began, it was regarding experienced inequalities at Chalmers University of Technology and at summer jobs at construction sites. Interestingly, all the female students shared example after example of experienced inequalities and the male students couldn't mention a single example. These gender-based experiences is what motivated us to try to find a solution to the equality problem. What has strengthened the outcome of our thesis, and the joyful experience of writing it, is that we have different perspectives and experiences due to our gender. Our differences have led to discussion after discussion, which have improved our insights of the industry. Additionally, the support of our tutor Viktoria Sundqvist has enabled us to stay on track. Thanks to her support we have kept our motivation high during the creation of our thesis, for which we are grateful.

Lastly, inequality is a difficult issue as it is hard to identify for those who do not experience it. However, equality is powerful and lead to improvements that benefit everyone, both men and women. Therefore, we strongly believe that the inequalities of the construction industry must be eliminated.

It is time for the construction industry to welcome everyone!

Gothenburg, januari 2019
Hanna Johansson & William Stensönes

1. Introduction

This chapter aims to provide a background to the Swedish construction industry with regards to the employee problems in relation to imbalance in gender. The chapter further includes a description of the aim of the study, the four research questions and the structure of the thesis. The area of interest in this thesis is gender equality, which describes the relationship between men and women. The thesis focuses both on quantitative (equal proportion of men and women) and qualitative gender equality (value, possibilities and power to influence is equal for men and women).

1.1 Labour deficiency in the construction industry

The construction industry has a major labour deficiency and need the younger workforce (DI, 2018; Byggcheferna, 2013). Concurrently, a new generation is entering the labour market and are slowly redistributing power from the company to the consumer or employee. Generation Y and Millennials put high expectation on a company's values and actions regarding gender equality, and for CEO's to not misuse their power (Kacim, 2017). In the Swedish construction industry, a macho culture is well established. The macho culture has a negative impact both on women and men, and those in-between. A consequence is for example that women experience an attitude from their colleagues that they are less suited for their jobs than their male colleagues, which contributes to women leaving the construction industry (Byggcheferna, 2013). A macho culture is a culture where a macho behaviour is the norm. Macho is defined by Cambridge dictionary (n.d.) as; "*Behaving in a way that is thought to be typical of a man, especially by seeming strong and powerful but also seeming too determined to avoid showing weakness and sympathy*". In the Swedish academy dictionary (2015), macho is defined as; "*A man who exaggerates or overestimates his masculinity and shows a condescending attitude towards women*". Due to the macho culture, the percentage of women in the construction industry is low (Sveriges byggindustrier, 2017:3; Byggnads, 2015). The inequality could explain why both men and women are leaving the industry (Sydsvenskan, 2013). Concurrently, several studies have shown that gender-diverse organizations develop better competitive advantages and become more innovative, creative and produce more highly qualified decisions than their counterparts (Ali, 2016).

1.2 A growing population requires more infrastructure

The population in Sweden is growing and with that comes an increased need for new buildings, such as schools, apartments, offices, and more. The need for improved infrastructure increases as well, demanding more roads, tunnels, bridges, and more. Built environment are experienced different by individuals, e.g. because of gender. SCB (2018:1) show that 37% women and 7 % men choose how they travel because they are afraid of being subject to violent crimes. What type of crimes is conducted depends on the environment (SCB, 2018:1). However, most of the decision-makers of the built environment are men, which influences how the built environment is designed (Sveriges byggindustrier, 2017:3; Lyckhage et al., 2015).

In the end of year 2017 the population in Sweden was 10 118 996, but the estimated population for year 2035 is 11 585 354 (SCB, 2017:1). That is an increase of 14,5 % in population during a period of 18 years. However, the population in Gothenburg is forecasted to increase with 130% during the same period (Koch and Lutteman. 2017; SCB, 2018:2). In Swedish cities with a similar development as Gothenburg, a lot will need to be built. Koch and Lutteman (2017) have forecasted that only in the Gothenburg region there will be 17 – 26 000 new jobs per year in the construction industry, at least until year 2035. Out of these jobs, about 84 % are for blue-collar workers and 16 % for white-collar workers (Koch and Lutteman, 2017). In the Gothenburg region there were 32 604 persons employed in the construction industry year 2016, so the increase of jobs per year in the region indicates the challenge to employ individuals with the required experience and education. During the years 2007-2016 the number of full-time employees in the Swedish construction industry increased with 77 723, which is an increase of 36 % (Sveriges byggindustrier, 2017:1).

The net sales of the construction industry were 373,2 billion SEK year 2007, and 639,1 billion SEK year 2016, which means that the net sales of the construction industry increased with 71 % during a period of 10 years. These numbers can be explained with the positive macroeconomic development that Sweden has had during the last 10 years. However, due to the expansive growth of the construction industry, there is a deficiency of workers with experience and competence (Fastighetskontoret, 2018; Sveriges byggindustrier, 2018:1). The construction industry is currently experiencing the bottleneck problem due to the labour

market. It prevents the industry from increasing their productivity and net sales (Sveriges byggindustrier, 2018:1). It is important to state that the construction industry has a significant impact on the economic development in Sweden (Arbetsmarknadsstyrelsen, 2002:9), which indicates the importance of solving the current labour issue.

1.3 Labour deficiency - A critical issue to solve

Foreign labour force has since late 1990s enabled the Swedish construction industry to produce according to the need of the market (Koch and Lutteman, 2017). There were about 14 000 foreign labour workers in the construction industry year 2014 and 43 595 of them year 2017, an increase of 211% during a period of three years. Most of these workers were men from Poland, Czech Republic, Latvia, and Lithuania (Arbetsmiljöverket, 2015:10; Arbetsmiljöverket 2018:3). Concurrently, there is an imbalance in gender in the Swedish construction industry. In Sweden, 51 % of those who educated themselves to become Civil Engineers year 2015/16 were women (Sveriges Byggindustrier, 2017:2). On average 30 % of the white-collar workers in the construction industry were women year 2014, which also includes administrative positions (Sveriges Byggindustrier, 2017:2). Only 12,8 % white-collar women are working at production sites. However, only 4% women are site managers, project managers, and production managers at building sites (SCB, 2016). Concurrently, when women are choosing a high school program, only 9% choose an education that is construction industry related, and which leads to a blue-collar job after three years of studies (Sveriges byggindustrier, 2017:3). Even if 9 % is a low number, the numbers are even worse when looking into the proportion of women who work as blue-collar workers in the construction industry, which is only 1,5 % (Sveriges byggindustrier, 2017:3). The total number of employed individuals in the industry was 392 900 years 2016, where only 24 700 were women (SCB, 2018:2).

As numbers above indicate, there is a deficiency of labour on the construction industry. Unfortunately, women face an unwelcoming environment. Construction works are with few exceptions identified as masculine activities, which hinders women from entering the industry with equal possibilities. Women have described the culture in the industry as terrible. Year 2017 many women working in the construction industry decided to join the Me Too protests unequal and sexist treatment towards women (Byggindustrin, 2017; Aftonbladet, 2017; DN,

2017; Rogvall, 2017; Lönn Lundbäck, 2018; Thorneus, 2018), thus requesting a change. As numbers further indicate, the construction sites have the lowest number of women and therefore focus is on the construction sites.

1.4 Aim of the study

The aim of this study is to identify how the construction industry can become more attractive, and how to tackle the problem of imbalance in gender. We aim to present strategies that could enable organizations in the construction industry to decrease their gender imbalances, in regard qualitative and quantitative gender equality. Our mission with this study is to change the fact that there are less women working in the construction industry compared to the amount who educate themselves to do so. It is time to welcome everyone to the construction industry and eliminate the structures that create an unwelcoming environment. We believe that the macho culture is strongest at construction sites, rather than in an office environment. Therefore, focus of the study is put on the job roles involved with the building phase at and in contact with the construction site, and are mentioned as the construction industry. As our aim is to present strategies and the problem is already known, we will focus on individuals with leading and governing positions for collecting empirical data.

This thesis has a binary gender perspective. Thus, the influence that a macho culture has on non-normative individuals working in the construction industry, e.g. the transgendered, is not studied in our thesis. This study does not involve the consequences of the white male norm from the perspective of foreign male workers either, and neither feminine men. However, we hope that our study will motivate others to study the white macho culture from these perspectives as well.

1.5 Research questions

To find the answers needed to conclude a solution for the issue of imbalance in gender in the construction industry, our research questions are;

- *RQ1. Why equality in the construction industry?*
- *RQ2. What retains and attract women to the construction industry?*

- *RQ3. What strategies and methods could be used to achieve gender equality in the construction industry?*
- *RQ4. What are the incentives for the industry to work towards increased equality?*

1.6 Structure of the thesis

Here we present the structure of our thesis, see Figure 1 at the next page for a short summary.

- Chapter one aims to describe the background for the chosen thesis subject. The current situation of imbalance in gender, deficiency of individuals to employ and the issues of the macho culture have been described. The aim of the study and the research questions are presented in this chapter as well.
- In chapter two, the chosen research method is presented, how data has been collected and how interviews have been performed. A presentation of the interviewees is also given and a description of the research process, strategy, method and more.
- In chapter three, we present research regarding perspectives of the current labour market and equality work in the construction industry, together with research from other industries. The chapter explain how future working generations influence the employment conditions and what the construction industry could learn regarding equality. The chapter also includes research of how sexist men influence the performance of women.
- Chapter four present strategies from an organizational perspective. In the chapter there are five themes, which are the basics of Equality, Reputation Management, Change Management, Diversity Management, and an inventory of marketed strategies. The basics of equality explains the different factors that influence and explain what equality is. Reputation management explain how the reputation of an organization influences their attractiveness and performance. Change management motivate why Transformal leadership is important, and how masculinity norms can be changed. Diversity management explain how stereotyping influences the interaction between individuals

and how Human resourcing influence. Diversity Management also includes a norm-critical Recruitment Guide developed by Gothenburg City. Lastly, the inventory includes a presentation of equality projects and campaigns, and a presentation of two certifications connected to equality.

- Chapter five presents the empirical inquiry. The interviews are sorted according to the research questions; Why equality in the construction industry, How to attract and retain women in the construction industry, Strategies for equality, and Incentives for equality efforts.

- In chapter six we analyse and compare the result from the both theoretical and empirical findings. Research question one is discussed from the subjects of the human rights perspective and anti-discrimination, what equality could bring to the construction industry, a performance quality perspective, and the future need of labour. Research question two is discussed from the subjects of conditions to perform, standpoint and leadership, Reputation management and the future. The third research question is discussed from the subjects of motivating strategies and preventive work, influential strategies, and practical methods and tools. The last research question is discussed with the subjects of forced incentives from clients, trade and professional organizations, competitive advantages and securing access to labour.

- In chapter seven we present our conclusions and answer the four research questions that were developed to reach the aim of the study. Lastly, we present our recommendation for future research regarding the subject of our thesis.

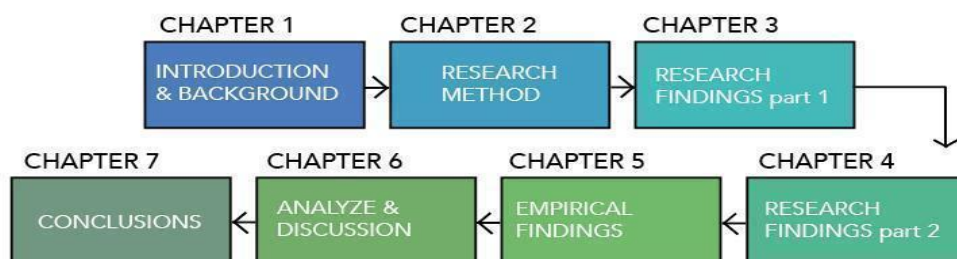


Figure 1. A presentation of the structure of our thesis.

2. Research methodology

In this section we present our research method, research process, methods used for collecting data and research, and lastly, our interview method.

2.1 Method

The research approach for this study is applied research. Applied research has a predetermined application for the knowledge searched for when researching. It is often a research approach that is used when there is a known problem aiming at searching for (Jakobsson, 2011). The solution has the requirement that it can be applied directly or relatively soon, and it needs to be pragmatic in terms of applicability. The imbalance in gender, and the inequality it brings, are problems that are known which is why an applied research design is chosen. Our predetermined application is a framework of strategies, which will be developed during year 2019 and based on the findings from this study.

The research design is descriptive. A descriptive design is often used when the research questions are general, and when the aim is to describe through categorization of the data collected (Söderbom, 2016; Jakobsson, 2011). A descriptive design is chosen because we have a basic level of knowledge for the problem, but solutions to the problem are unknown. Our aim is to describe possible solutions and not evaluate causation of the problem, an explorative research design could otherwise have been used. An explorative design is often used when the aim is to identify causation, and often includes multiple methods for collecting data (Jakobsson, 2011).

The research method is a qualitative method. Jakobsson (2011) explain qualitative methods as; “... a collective term for various research strategies that are used to analyse and describe character traits / properties of different phenomena.” (Jakobsson, 2011, p.83). Additionally, Jacobsen et al. (2012) explain qualitative methods as “Collecting data in the form of words, sentences and expressions” (Jacobsen et al., 2012, p.62). Examples of qualitative strategies are case studies, interviews and observations. According to Söderbom (2016) qualitative methods are suitable when the aim is to explain what is significant in certain processes and situations, and according to Jacobsen et al. (2012) it is a suitable method when variations are searched for.

A qualitative research method is chosen because the aim of the study is to find solutions to the problem of inequality through the experiences of individuals and a theoretical framework.

The qualitative strategy is interviews, where empirical data is collected through verbal communication. There are three types of interview methods; open interviews, semi-constructed interviews and structured interviews (Jakobsson, 2011). A semi-constructed interview method is used for this study. All respondents are asked similar question. We developed an interview guide for respondents of the construction industry and a separate interview guide for respondents from other industries with similar questions. An interview guide is a list of questions connected to the research area. The guide is often constructed so that initial questions leads to an open dialog where the respondent can decide what information and experiences to share (ibid.). The semi-constructed interview method is chosen because we wanted to access information we have none and little knowledge of.

Common strategies for the selection process for interviews are the convenience selection, unbound random selection, strategic selection and more. The strategy we use is strategic (Jakobsson, 2011). We chose to interview individuals who can give a representative picture to our research area, and who also has the experiences we need to find a wide variation of solutions to the problem of imbalance in gender. We chose to ask the respondents for individuals who they recommend us to interview, which allowed us to find individuals who had the specific knowledge and experience we search for. Other selection strategies were identified as less beneficial for the aim of the study.

Two approaches towards analysing data collected are qualitative and quantitative analysis. In a quantitative analysis, the findings are sorted based on frequency. A qualitative analysis is to analyse text in a structured way, it could be both implicit (non-spoken/written) and explicit (spoken/written) meanings (Jakobsson, 2011). We use qualitative analysis and focus both on the implicit and the explicit meanings. We will sort the empirical data into themes, according to our research questions. According to Jacobsen et al. (2012) sorting empirical data into themes simplifies and enhances the research process. First, we colour code the empirical data individually and then together. It allows us to process the findings multiple times, first with no influence of the other person and then with large influence of the other person. Together we

compared our individual understandings of the data. Jacobsen et al. (2012) mention that when sorting text into themes it becomes easier for the writer to identify relevant data and extensive data. Regarding the analysis process, an abductive approach is used. The abductive approach is a combination of the inductive and deductive approach, which are two different ways to develop conclusions. While the inductive approach focuses on empirical data to form conclusions, e.g. through case studies, the deductive approach focuses on the testing of theories to form conclusions, e.g. through surveys (Söderbom, 2016; Jakobsson, 2011). The abductive approach focuses on both the theoretical framework and the empirical data (ibid.). There is a lot of conducted research and theories about the interest area of our study, but with little focus on the construction industry. We choose an abductive approach because we want to form our conclusions based on both empirical findings and theories. The research methodology for this study is according to figure 2.



Figure 2. The research methodology for this study.

2.1.1 Research Ethics Considerations

Ethical consideration is important while conducting our study. Ethical consideration cover a set of principles for behaviour and approach (Jakobsson, 2011). Jakobsson (2011) mention four principles as the basics of ethics; the principle of respect for autonomy, the principle of beneficence, the principle of nonmaleficence and the principle of justice. Before every interview we asked the respondents if recording the interviews was acceptable for them, which it was for all of them. Recording the interviews allow us to listen to their answers repeatedly. This is in accordance with the first principle respect for autonomy, which considers respect for individuals' abilities, individual decision-making, and their right to decide how information can be used. Regarding the principle of beneficence and nonmaleficence, we choose to only name the job role of interviewees when referring to them to avoid that readers can identify them. We choose to not state their name but to state their organization for increased legitimacy.

The interviewees will be as anonymous and protected as we believe they need to be. It will influence how we refer to them, what information is shared, and how sentences are formulated in text. Answers from the interviews are stated in chapter two and five mainly. However, even with little or no sensitive content, it is not them as individuals who form our conclusion. Instead they will represent the variations of the industry, and information other than their job role and organization is identified as extensive regarding ethics. The principle of justice is to treat all individuals equally (ibid.), which we strive to do as best as possible, both in text, verbal communication, et cetera.

We will during the research process reflect upon how to avoid colouring statements with our personal perception, knowledge, interest, et cetera. However, we are aware that (interview) statements could have been coloured by us as we are the ones who have transferred verbal information to written information. We are responsible for presenting the interviews in a respectful and correct way. All interviewees are given the chance to comment on the written form of their interviews.

2.1.2 Credibility

Credibility is a form of quality assessment, and is a concept used in qualitative studies (Jakobsson, 2011). The credibility of a study requires that the authors have presented and motivated the chosen research methodology. The chosen research methods, approaches, and strategies must be motivated regarding theoretical statements. Further, for a study to have high credibility, both the empirical and theoretical findings must strengthen the conclusions (ibid). Chapter two in our thesis aims to provide the reader with information of how data has been collected and analysed in a transparent and detailed manner to assure credibility of our study.

2.1.3 Sustainability contribution

"Sustainable development is a development that satisfies today's needs without jeopardizing the opportunities of future generations to satisfy their needs" (KTH, 2018).

Sustainability development takes into regard three dimensions equally, environmental sustainability, social sustainability and economic sustainability. Earth has limited resources, and environmental sustainability focus on how we must consider these limits to secure that these resources will not end or run out. Environmental sustainability requires us to consider every piece that has to do with the ecosystem of earth (ibid.). Economic sustainability regarding Sustainable development is to ensure that increase in economic capital is not on the expense of the environmental and social sustainability. Lastly, social sustainability requires us to focus on the physical and psychological need of every individual on Earth. It includes power, justice, rights, safety, and more. To measure the progress of global social sustainability we measure life expectancy, expected duration of education and welfare in terms of purchasing power and gross national income. Sustainable development is to, regarding these three dimensions, create a safe and equal space for individuals to live in but not at the cost of social and planetary boundaries (ibid.).

Our thesis will likely contribute to the social sustainability dimension in such way that the final output should lead to an equality development in society and the construction industry. Regard will be taken to factors included in the social sustainability dimension, e.g. power distribution. These factors will be included when analysing the data collected. While conducting our research we will also consider the environmental sustainability development, e.g. by only traveling by tram, train and bus. We will avoid traveling by car because it has a negative impact on the environment.

2.2 Research process

After deciding to write about gender equality in the construction industry, a subject that was valued for both of us authors, we decided to address the issue from a direction that could motivate our readers for equality efforts; how to increase the attractiveness of the construction industry. In an early stage, we started off by discussing what we wanted to achieve, which motivated us to get started with reviewing existing literature in the subject area. We decided that the outcome of the study was to create a framework of strategies. As gender equality is a hot topic during 2018 it was not difficult to find literature regarding the subject of equality. However, it was difficult to find literature that focused on gender equality in the construction industry.

Before deciding our aim, we knew what outcome we aimed at: A framework. To motivate equality efforts from the members of the construction industry, we initially decided to create and deliver some sort of tool. Therefore, we decided that a framework will be developed based on the outcome of the thesis. The framework will be developed as a separate project during 2019. We believe that our research is extensive enough to develop a framework which can enable organizations in the construction industry to handle the inequality issues.

At our first tutor meeting we discussed the content of our thesis and prepared strategies for the empirical inquiry. Afterwards we contacted a diverse group of individuals from the construction industry and other industries to book interviews. These individuals were different in terms of knowledge of equality, experience, job position, education and gender. However, they were all chosen strategically based on either their equality knowledge or their construction industry knowledge and job position. We continued our literature study concurrently. Since the equality issue is a contemporary issue, the research on equality issues in the Swedish construction industry resulted in few findings. However, there were statistics on imbalance in gender, witnesses from the MeToo protest and studies published by a professional organization in connection with the campaign *Stop the macho culture*. However, research data regarding gender-equality was also collected from the social scientist area, e.g. regarding norm-critical pedagogy, and gender stereotypes. In addition, we also focused on finding research data regarding women in masculine dominated environments. Research regarding diversity management, reputation management, change management, et cetera was added to collect data needed for the future framework.

The second tutor meeting was mainly a guidance to start breaking the thesis into logical parts and further develop the logical path for how to present our findings. This led to a workshop where we mapped and used colour coding to sort the different parts of the thesis. This method helped us visualize what parts were extensive, and which parts that needed to be strengthened. The discussions held at the tutor meeting resulted in a better and more logical structure to the thesis.

In the middle of October 2018, before the interviews started, we had a second workshop where we structured and analysed our research, ideas and findings. The outcome was two updated interview guides, and further improvement to structure the thesis that enabled a better logical path. We also started to discuss and map potential results of our study. We had started to identify the potential tools and methods that could be used for increased equality, and therefore we tried to identify incentives for the members of the construction industry.

The interview guides were further developed, and we added questions connected to the literature findings so that we could collect empirical data to compare with. Accordingly, we asked the respondents to comment on the potential solutions found from theory. We conducted our first interview in the middle of October 2018 and the last interview in the end of November 2018. The interviews were recorded with approval from the interviewees. All the interviews followed the same structure, but the developed discussions were adapted for each interviewee. Nine interviews were held in a physical meeting, one on a phone call and four in a skype video call. The average interview length was between 45 - 60 minutes.

After each interview we listened through the audio files and took notes on characteristic impressions. We have listened through the audio files several times and processed eventually misconceptions. Every interview was written in text and sorted after our research questions. Our interviewees could clarify answers to questions via mail, which only one of them did.

2.3 Data collection

The data collected comes from a combination of qualitative interviews, statistics and literature studies. The literature is collected from databases, such as google scholar, Chalmers library, published reports and books. Data has also been collected from newspapers and web pages when identified as reliable source of information, e.g. Byggnads campaign website *Stop the macho culture* and the newspapers Dagens Nyheter and Göteborgs Posten. Research collected from our area of interest was research conducted both in Sweden and globally. We also collected research regarding equality from other industries, e.g. the forestry industry. There is also data collected regarding the equality situation of the construction industry that is from year 2000, but it has shown to still have high relevance.

2.3.1 Statistics

Statistics came from sources such as SCB (Statistics Sweden), the Swedish Work Authority (Arbetsmiljöverket), The Swedish Construction Federation (Sveriges Byggindustrier), and theoretical findings. SCB statics was also shared through email by an interview respondent, which is statistics from 2016 regarding the gender distribution between job roles in the construction industry, see attachment “10.3 Statistics - SCB”. The distance to the primary source of statistics have been kept short. Data from Statistics Sweden shared by secondary sources has been identified as reliable and has often been shared by organizations that are directly concerned by the statistics.

2.3.2 Qualitative interviews

Interviews were held with actors from different industries, different organizations in the construction industry, and individuals with different roles, see Table 1. The wide variety of roles, experiences, and types of organizations is what enabled us to better understand how equality efforts are conducted at different levels and contexts in the industry. All interviews from the construction industry are white-collar employees but some of them have experience of working as blue-collar workers. Their answers were influenced by their experience, position and educational background. Their answers do not necessarily represent the public opinions of their organization, but we have not identified any reason for them to give deceptive information.

Table 1. List of interviewee respondents for the study.

Interview	Organization * Org. is short for organization * [Organization type]	Role * [#] is used for separating interviewees with the same role description
1	Kunskapscentrum för jämlik vård (KJV). [Centre for Equity in health care]	Regional developer
2	Byggnads [Professional organization]	Trainee/Student

3	Byggnads [Professional organization]	Project Manager [1]
4	Skanska [Private - Construction organization]	Site Manager [1]
5	Chalmers University of Technology [Technical University]	Deputy President
6	Älvstranden Utveckling AB, [Public - Client organization]	CEO [1]
7	Lokalförvaltningen [Public - Client organization]	Head of Unit
8	Projektgaranti / Byggcheferna, [Construction Management] / [Trade organization]	CEO [2] / Chairman of the Board
9	Winnet [Centre for Equity]	Operational Manager [1]
10	The Swedish Construction Federation (Sveriges Byggindustrier) [Professional organization]	Project Manager [2]
11	ByggDialog [Private Construction organization]	Operational Manager [2] /Partner/ Business support
12	Skanska [Private Construction organization]	Diversity and Inclusion Manager
13	ByggDialog [Private Construction organization]	Site Manager [2]
14	JM [Private Construction organization]	Project Manager [3]

A description of each interviewee is given below. The detail of their presentations varies with what they choose to share, but a description of their career background and current job position is given for each.

Interview 1 - Regional developer at Centre for Equity in health care (KJV)

With an educational background in Gender Studies, interviewee 1 is today devoted to increasing equality in the Healthcare sector. She works at KJV, which is a support organization for equality in the Healthcare sector in Västra Götaland, Sweden. Her role is Regional developer. With the use of research, knowledge, management, and governing, KJV enable external organization to eliminate structures that facilitate discrimination. KJV is a political decision that was established 2009, and their purpose is to increase equality in the Healthcare sector.

Interview 2 - Gender studies student and currently trainee

Interview respondent 2 has worked as a Carpenter for three years and has an ongoing education of Gender Studies. Today he is a Trainee at Byggnads, a professional organization. He is involved in a large equality project, where he is working with developing equality efforts for the construction industry.

Interview 3 - Project Manager [1] at Byggnads

Interviewee 3 is a Project Manager for a project named *A Construction industry for Everyone*, which has a budget of 35 million. He started his career in the Construction industry as a Carpenter. His current role as a Project Manager at Byggnads involves responsibility for enabling organizations in Stockholm to develop their competency regarding equality and masculinity issues.

Interview 4 - Site Manager [1] at Skanska

Interviewee 4 studied the engineering program of Product design and development, and after that she entered the Construction industry. She began her career at the Contractor organization Skanska and worked with environment issues. Today, she is a Site manager at a production site and has also been working as a supervisor. She describes her role as very divided, with the need for overall control of a varied number of tasks which also varies between projects. Tasks are e.g. to coordinate the team, managing safety, time and production progress.

Interview 5 - Deputy President at Chalmers University of Technology

Interviewee 5 has a history as a PhD, which led to becoming a professor and later her current job as Deputy President of Chalmers University of Technology (CTH). She has an overall responsibility for CTH's Areas of Advance and she is also responsible for coordinating equality efforts in the president group of CTH.

Interview 6 - CEO [1] at Älvstrandens utveckling

With experience of architecture and digitalization, CEO [1] started her career at an operational level. After working in private organizations for a couple of years, she became more interested in working for the public sector. Her interest in the public sector was because that was where the power to influence was. She started working with urban development for a public organization, which has led to her current role as CEO for Älvstrandens utveckling AB. As CEO she is responsible for the whole organization.

Interview 7 - Head of Unit at Lokalförvaltningen

Interviewee 7 started her career as a Construction engineer and received support from early on, from both male and female senior engineers. Her interest in managing made her apply for a role as a manager, after joining a manager program. Today she is Head of the Project Unit at Lokalförvaltningen, which is an administrative organization of Gothenburg City. Lokalförvaltningen maintains, builds new, and manages the pre-schools, schools, retirement homes, and more, of Gothenburg City. When building new, they strive to represent the values of the city and to maintain the role as a leading builder, e.g. with projects such as a fossil-free pre-school.

Interview 8 - CEO [2] at Projektgaranti and a Chairman of the Board at Byggcheferna

Interviewee 8 has an educational background in social science and graduated in 1997. The recruitment industry exploded now when she had finished school and she got employed at a

staffing agency where she made career. At 2014 she was employed as CEO at the management consultant company Projektgaranti, and thereby entered the Construction industry. She also became engaged in the trade organization Ledarna for a long time, and 2014 she became engaged in their section for the Construction industry, Byggcheferna. At 2017 she became a Chairman of the Board, which she continues to be as of today. They have 17000 members of which the board try to improve the working situation for. The board work is a commission of trust beside her work as a CEO.

Interview 9 - Operational Manager [1] at WINNET

Interviewee 9 has an educational background as a teacher. Today she is working in an organization that certifies organization, they have developed an equality certification that all types of organizations can apply for. Her engagement for equality comes from many years of experience of working with sustainability development, from an environmental and human perspective. She is an Operational Manager at WINNET and is responsible for enabling ideas to become real actions.

Interview 10 - Project Manager [2] at the Swedish Construction Federation

Interviewee 10 is a Project manager at The Swedish Construction Federation (Sveriges Byggindustrier), where she is responsible for sector recruitment. She has her focus at trying to improve the attractiveness of the Construction sector. Most focusing is put on making educations connected to the Construction sector more attractive, but also more equal. She is actively trying to change the reputation of the sector as most organizations of the sector have issues recruiting enough educated employees.

Interview 11 - Operational Manager [2] / Partner / Business support at ByggDialog

Interviewee 11 has an education background of Civil Engineering and graduated 1995. After graduating she worked three years at Skanska with larger industry projects at site. Later, she was offered a job as an industrial PhD student. The subject was set to write a dissertation on partnering at Luleå University. After her dissertation she continued to work at Skanska as an

internal consultant, exclusively with partnering-related issues. After 12 years in Skanska she continued with partnering activities and worked as an Educator. At 2007 she joined and started a contractor business that was exclusively working with partnering projects. She is currently working as an Operational Manager, Business Support, and Partner in the contractor enterprise ByggDialog. She has competencies in enterprise development and organizational culture and has lectured in project management and equality.

Interview 12 - Diversity and Inclusion Manager at Skanska

Interviewee 12 has an MBA/degree in economics. She has worked with processes for change and diversity issues for many years. Former roles she has had are Project Manager, Consultant, Client Service Director, and Diversity Manager. Currently her role is Diversity and Inclusion Manager at Skanska, a contractor organization. She has gained experiences from many different sectors and worked in the construction industry for more than three years. She describes her role as being responsible for realizing a set of goals. She works in the Human Resource Department and is in charge for change management. She constructs strategies and meet and train managers in their work with Diversity issues. As a Diversity & Inclusion Manager at Skanska Sverige, her primary focus is to facilitate and motivate changes that are in line with creating an inclusive culture with a diverse organization.

Interview 13 - Site Manager [2] at ByggDialog

Interviewee 13 has a background as a carpenter. He started his career in a small Construction company and later moved to Skanska where he worked for many years. After 15 years as a Carpenter he got the offer to advance as a supervisor at site, and 6 years later he became a Site Manager for small projects. He is currently working as a Site Manager for ByggDialog, at a big building project that are actively working with innovation during and after the production time. He describes his role Site Manager as always being one step ahead and anticipating problems. The role as a Site Manager is according to him, 50 % technical problems and 50 % social work since there is a lot of people and communication involved.

Interview 14 - Project Manager [3] at JM

Interviewee 14 is a Project Manager at the enterprise organization JM AB. He has been employed at JM since 1989 and have had a wide variety of roles. At JM he has experience of being a white-collar worker and a blue-collar worker. Part of why he became a manager is because of his interest in humans, he enjoys making employees develop.

3. Perspectives of the labour market and equality

This chapter present research regarding the younger generations entering the labour market, equality in the construction industry, equality in other industries, and how sexist men influence the performance of women.

3.1 Generation Y and Millennials

Younger generations are entering the labour market and the conditions to employ and retain competence are changed. Studies regarding generations can gather perceptions of what values and attitudes can be expected from the next generation of workforce. All younger generations have differed from the elderly historically, but according to a study made in U.S. Generation Y and Millennials indicates to differ from former generations even more than before (Twenge et al., 2010). Individuals born between 1982-1999 are those who belong to Generation Y and the Millennials, also called the GenMe. The generation GenMe grew up during the rise of digitization and had an increased availability of information compared to former generations. What does motivate millennials when choosing a job are their interest, access to spare time and a good atmosphere. These values are not unique for the GenMe but are identified to be more important for this generation, especially access to spare time and freedom at work. What the GenMe values in a job is that it enables them to develop at work concurrently as they develop their personality. They are the generation that value work-life balance the most (Twenge et al., 2010). The GenMe's prefer a job which gives room for other things in life, such as friends, interests and family. They are more likely to leave a job if they are able economically, in comparison to elder generations. The result of the study shows how values varies from Baby Boomers (born 1946-1964) to Generation X (born 1965-1981), and the GenMe (born 1982-1999). The GenMe do not value extrinsic rewards as much as Generation X, but still value it more than the Baby Boomers. However, the efficiency of intrinsic rewards has slowly decreased in importance through the generations. The GenMe value it less than former generations, but the GenMe generation concurrently value intrinsic motivation higher than extrinsic motivation. Therefore, intrinsic values are still a useful motivator for both younger and older workers.

Generation X and GenMe have grown up with an increase of workload as well as extended need for dual-income, which might explain the valued freedom and leisure (Ibid.). It is mentioned workplace e.g. Google, which is rated highest as preferred workplace for the GenMe. Google have enabled their employees to combine private life and working life than other companies, for example through access to laundry machines at work, flexible hours and on-site doctor. Therefore, their employees have more spare time for other activities.

A difficulty identified in the studies of the working generations was that employers are astonished of what attracts and how to attract the younger generations. The GenMe generation does not resemble any other generation (Kacim, 2017). Further, individuals born during the nineties are the most conscious consumers, both in their consumption and demands of their workplace. They are also more conscious of their own behaviour and personality. They are both well-educated and illuminated about the outside world and the opportunities that are offered to them. The awareness of the GenMe puts high demands on the employer to meet the GenMe's values, such as gender equality, sustainable environment and how to save the world with ambitions far beyond a simple paper.

Another aspect is the overrepresentation of educated women: 3% women and 37% men in Sweden had a university education year 2017. The GenMe generation also distinguish itself from former generations when it comes to entrepreneurial and start-up companies, it is more common that their purposes are value connected. Kacim (2017) advices employers to not perceive the GenMe's as spoiled, and instead realize the opportunities they could bring. It is not a good idea to misuse power on millennials as they prefer straight, honest and quick communication.

A Norwegian study tried to map working values of the younger generations through interviewees. Wetlesen (2013) claims that gender roles in the middle-class families has changed and responsibility are slowly redistributed. The younger generations value an increased equally-distributed responsibility in family-life, aligned with an equal view on career for both men and women. In Equal households, both men and women experience a challenge in their work-life situation, those with full time jobs desire to work less to have a balanced family and work-life.

3.2 Learning from others: The Forestry industry

There are many resemblances between the forestry industry and the Construction industry, regarding the imbalance in gender. A comparison between the forestry industry and the construction industry show that both industries are dominated by men and are coded to be masculine. Imbalance in gender is identified as a problem for all industries characterized by it (SOU, 2015:50), especially regarding their attractiveness as workplace. The forestry industry, and the Construction industry, has had an employment focus on physical capabilities and technical competency, which are characteristics often attributed to men. Categorizing physical capabilities and technical competencies as masculine can be explain with the former work distribution between men and women that has created stereotyped attributes for men and women (Johansson, 2015).

Johansson (2015) has through the study *To make gender equality - motives, resistance and opportunities in Swedish forestry* made an extensive attempt to study how equality is constructed in the Swedish forestry industry. Due to the resemblances between the industries, her findings will be described further as they are applicable to our research regarding how equality is constructed in the Construction industry. According to Johansson (2015), the work of increasing equality in the forestry industry is a responsibility often assigned to women. Increasing equality in an organization is often thought of as something made for the sake of women, and not both men and women. However, focus is also put at the competitive advantages it could bring for organizations. An industry that focuses on the competitive advantages that equality can bring, believes there is a difference between men and women and their capabilities and functions. Thus, by increasing the number of females in an organization there is a hope that women can bring something new, and competitive, rather than valuing equality progress for the sake of having equal human rights between the sexes.

Homogenous groups often share social value and biases, which is why Johansson (2015) argues that a masculine dominated work culture won't change when slowly increasing the percentage of women, as the values of women are not the majority and due to them lacking equal social value (ibid.). Beliefs, such as that the male body has a higher physical value than the female, prevents women from improving their situations in these men dominated industries. Women

who do not adapt to the macho cultures of these industries become different from the norm, and as masculinity is valued higher than femininity, they are perceived as inferior to their masculine colleagues (ibid). These values are for example visualized through the norms used when describing the individuals involved in the industries, men are described with the job role they have or their functions while their female counterparts are given the prefix female before the job role or function, e.g. female carpenter. According to Johansson (2015) this is due to that men are perceived as the normal for the role or function, and thus are the valued norm. Men and women are thus given different possibilities. Therefore, the forestry industry and the Construction industry prevents women from entering and staying in these male dominated industries.

Unfortunately, as most men do not themselves experience gender-related disfavours and discriminations in these industries, they can ignore the consequences from them. Thus, an issue that needs to be considered when implementing the value of gender equality is that some men will try to resist its progress as they will then be identified as the privileged and lose the power that has evolved from behaving according to the masculine norm (Johansson, 2015). These men might therefore have the idea that when women get a job it is because it was reserved for a woman and not because she was better suited for the job than the men who also applied for it.

As mentioned earlier, gender equality in men dominated industries is something left for women to solve, which show that male dominated organizations are not taking the inequality issue seriously. Likely due to the male dominance in the leading and managerial positions, and the power position that inequality between men and women brings for men. Inequality is an issue for organizations and not women solely. Therefore, Johansson (2015) argues that the responsibility of men must be discussed, and norms disfavours women must be visualized, understood and solved by men and women together. Otherwise these norms, and how they discriminate women, continues to be invisible for men, and women must instead learn how to handle the consequences these norms bring for them on their own.

3.3 Gender dynamics on construction sites

In the study *A Participant Observation Study of Gender Dynamics on Construction Sites* conducted by Conway, Wade and Smith (2018), where focus was on the Scottish construction industry, important research and findings were presented. Not only in Sweden is the macho culture strong, but in all western countries which is why this study is relevant for our research.

In their study it is presented that bringing women into the construction industry could increase innovative problem solving, improved productivity and an increase of cohesive working groups. It is mentioned that women and men have different communication methods. Male communication is characterized by interruption and female communication is characterized by fewer monologues which leads to lower levels of conflicts. As a result, increasing the proportion of women in the industry could also improve communication in the Construction industry.

One of the biggest barrier for women entering the Construction industry is the macho culture. Also, in the Scottish Construction industry are women initially perceived as less capable than their male counterparts, and it exists a perception that women should be excluded from work that is “too dirty”. Further, the macho culture gives men the perception that they can negatively joke about behaviour and appearances that are feminine which is why women are commonly exposed to hostile jokes. Their study shows that when women are present at Construction sites men change their behaviour, e.g. through staring and making inappropriate comments. Earlier research has shown that women who are in a male-dominated environment must develop a coping strategy to handle the hostile or excluding behaviour from their male colleagues. It has also been shown that women at work in the Construction industry avoid reporting sexual harassment and discrimination. This is explained with women being afraid it could have a negative impact on their career. A survey from 2014 conducted by Opportunity Now showed that 59 % of women involved in the Scottish Construction industry have been sexual harassed. Conway et al. (2018) state that;

“If these issues are not addressed then the gender imbalance will continue, and the industry will suffer due to not being inclusive of 50% of the population”. (Conway et al., 2018, p.298).

Additionally, it is mentioned that mentoring and networking impact the retention of women positively in the industry, but it does not influence their career path. Instead further education, gender balanced organization and good early experience is what influences the career advancement of women positively (Conway et al., 2018).

3.4 How equal is the Swedish construction industry today?

In a study from Byggcheferna (2013) it was concluded that the majority of the 1415 respondents experienced the culture in the construction industry as macho dominated, a macho culture. Men and women experience unequal treatment and possibilities. Masculine ideologies have historically been incorporated in the Swedish construction industry through masculinity norms, beliefs, values and gendered biases. These ideologies have influenced the behaviour of members in the industry and the adopted practices. Concurrently, the construction Industry have had a passive approach towards developing and improving human factors, health for example (Raja et al., 2013). Further, the study of Byggcheferna (2013) showed that women experience an attitude from their colleagues that they are less suited for their jobs than their male colleagues. It is also identified that the culture of the construction industry has influenced its members towards a negative attitude of the LGBTQ community. LGBTQ is a shorter term for lesbian, gay, bisexual, transgender and queer people. The construction industry is in general identified as prejudiced. In practical terms, the inequality between men and women in the construction industry has led to women not being offered the same career possibilities and job opportunities. A result of the macho culture is that both women and men choose to devote themselves to other industry than the construction industry, and therefore the construction industry loses the possibility to recruit talented individuals and the risk of recruiting less a qualified workforce increases.

The macho culture is a society problem. 90 % of the female members in Byggcheferna identifies the industry as unequal between men and women (Byggcheferna, 2013). Statistics from SCB (2018:1) show that women receive a salary in the engineering sector that is 95% of what men receive. Female carpenters receive 7 % less than men in salary, female installation technicians receive 10% less, and regarding managerial work women receive less in salary both in the private and public sector.

Another issue with the current culture in the construction industry is that a homogeneous culture increases the risk for corruption and discrimination. The construction industry has been developed by men for men, and dressing rooms, tools and workwear are not adapted for women. One of the main issues with macho culture is the safety risk, 9 out of 10 that die in workplace related accidents are men (Byggcheferna, 2013). The macho culture prevents men from asking for help and show “weakness”. However, the main consequences of the macho culture for this study is that the Construction industry are losing labour, and few women find the Construction industry welcoming enough to devote themselves to it (ibid.).

According to Byggnads (n.d.), which is a professional organization for Swedish construction workers in the industry, it is important to be clear about what the management team expects from their employees and why they have these expectations. It is also important that the management team are responsive towards their subordinates and colleagues and confronts individuals who behave badly. A management team with good knowledge regarding equality will better understand and prevent the damaging structures and can more easily share their knowledge in their organizations. Other important acts are to interfere when discriminations have occurred, reporting discriminations is both a right and a duty according to law. The behaviour from the management team influences the whole organization and thus, showing colleagues that everyone is welcome is important. It is also important that reacts towards sexism, racism and other discriminating acts.

Today there are organizations in the construction industry that are breaking the Discrimination Act (2008:567) (Byggnads, n.d.), but there are organizations that offer help and tools for how to change that, e.g. Byggnads through their campaign *Stop the macho culture*.

3.4.1 A comparison of women and men in Swedish Construction work

Olofsson (2000) conducted the study *Kvinnor och män i byggyrken - en jämförande studie*, which can be translated into *Women and men in Construction work - a comparison study*. The study focused on the differences in conditions and possibilities that individuals of the two genders experience in the Swedish construction industry.

According to Olofsson (2000) there is little research about women in the construction industry, studies about the industry has most often been focused on men as there are very few women to study. Women are recruited during periods of boom, and during periods of recession blue-collar jobs in the industry are said to be too physically demanding for women (ibid). With excuses as such, women have constantly been disfavoured during recruitment and it is also mentioned that during periods of recession, mostly men with a Swedish heritage has been favoured.

Olofsson (2000) clarifies that a characteristic/attribute valued in a Construction worker is physical strength, which explains why men have an advantage in the recruitment process. Men are the norm of a construction worker and a strong man is how a construction worker is stereotyped. Applying for a job where physical strength is not needed still favours men because we expect a construction worker to be a man, which creates a barrier for women who desire to enter the industry. Thus, in the recruitment process women often come as the second option, no matter experience and other advantages. It is not only difficult for women to get a job as a construction worker, but it is also difficult to handle such a job and working environment. Physical strength is not what hinders women from performing construction work, instead it is the experience of exclusion and sexual harassments (Olofsson, 2000).

Historically, women are generally the ones responsible for taking care of the housework and children in heterosexual relationships. Therefore, a hinder for women is the working hours and the work models. Other hinders are the macho culture, building sites often being geographically dispersed, the high incidence of lonely work, and belonging to the minority as men are the majority, and therefore women experience alienation (Ibid.). The working environment in the construction industry has been developed by men and for men. Furthermore, Olofsson (2000) mentioned that younger men are experiencing a greater role conflict as household responsibility is becoming more equally distributed between parents, and therefore they are facing the same hinders as women when it comes to the low flexibility of construction jobs. Studies have shown that the future working generation will be more likely to demand more spare time for family, friends and interests. For the construction industry to improve its attractiveness for future working generations a change is required, not only for attracting and retaining women but all individuals who belong to the younger generations (ibid). Olofsson (2000) argue that

companies must improve the working environment to increase their attractiveness as employers. A working environment that enables equal development possibilities for all employees will more easily be able to attract new women and keep those who are already employed. However, the issue of unequal development possibilities for men and women was identified, which hinders the attractiveness of the construction industry (ibid).

Another finding was that the macho culture influences the communication system of the workers, how groups are developed, and which language that is used and accepted (ibid.). It is also mentioned that a macho culture prevents men that are different from the stereotyped macho man to enter the industry. Further, women involved in the study addressed the issue that to handle the macho culture, they must adapt to it or otherwise leave the industry. According to Olofsson (2000) there are three possible developments that can influence the situation for women in the construction industry; the technical development, the organizational development and the recruitment process.

Regarding a technical development, such as prefabricated buildings, could lead to a less physically demanding job for those in the construction industry. Such a development could have a positive influence for women and men as the working environment is improved. However, it could also have a negative impact as the need for labour decreases and thus, women remain unselected when competing against men.

An organizational development that has incurred already and influences the situation for women is the labour flexibility that companies have access to with the use of employment agencies. Companies recruit enough employees to handle periods of recession and hire labour during periods of boom. This could decrease the possibilities for women to establish a safe position in a company, which already is a difficulty for women (ibid.). There is a risk that employee agencies might not dare to invest in female workers, but if they do, it could be an opportunity for women to disprove existing prejudices in the building industry. However, Olofsson (2000) points out the difficulty in changing the attitude towards women in the construction industry and argues that there is a need for a strategy to succeed.

What about the recruitment process? Companies in the construction industry say they aim to

increase the number of women in their organizations. However, previous research shows that there is a lack of evidences of such efforts: recruiting women has instead shown to be nothing else than a strategy for companies to handle periods of boom (Olofsson, 2000).

3.5 Female board of directors improve the equality progress

Allbright (2018:2) releases a yearly report of the equality situation in Swedish organizations. Generally, there is a positive development regarding equality, but a major part of organizations fails equality progress. Further, the organizations that improve their equality situation improve and become more innovative and profitable compared to those who fail equality progress. The results in Albright's report show the how organizations with women in leading positions are better at increase equality. Companies with a female CEO have in average 47 % women in the head management team and 47 % women at positions in line to advancement. In case of a male CEO, there are in average only 21 % women in the head management team and 11 % at positions in line to advancement. There are 23 % women in Swedish board of directors, but one out of four CEO's exclude women from these positions. Swedish Enterprises have not increased their proportion of women during 2018, and it retains at 9 % women at positions in line of advancement. The Swedish construction organization Serneke is mentioned at the red list in the report of Allbright, which is a list of organizations who decrease their proportion of women at head management level. At Serneke there are only male representatives today, but they have had women earlier. Other construction organization found at the red list are Peab and Projektengagemang (Ibid). In the construction industry there are fewer women than men at positions in line to advancement (Bygginindustrin, 2017).

Allbright (2018:1) state that Nominee committees are problematic for equal recruitment. Nominee committees generally claim to recruit on equal basis, but research is pointing on the opposite when men are dominating on the positions in Nominee committees. Furthermore, interviews highlighted criticism on recruitment processes and indicated on recruitment of friends and through networks over competence. The recruitment process is one significant tool for equality and the working process needs to be challenged. Allbright (2018:1) gives five advices to the institutions. Firstly, to challenge the view of what competence is and the norm of a man as the traditional representative. Secondly, point your eyes internally to self-criticize the norms and culture. Identify what behaviours are encouraged. The third advice is to realize

that equality will not actualize automatically without efforts. Develop tools to threat the issues and do not stop work actively with the question. The fourth advice is to evaluate the existing competence to identify what needs to be complemented with. The last advice is to implement meritocracy and professional recruitment, nominate on merits and not gut feeling.

3.6 Sexist men influence the performance of women

Logel et al. (2009) conducted five studies to identify whether females who interacted with sexist male underperformed or not. Earlier studies have shown that in environments where only a homogeneous group is shown or existing, those belonging to the minority of the context can experience social identity threat (Logel et al, 2009). In the Construction industry, where females are a minority, especially at construction sites and where women historically have been negatively stereotyped, the findings of Logel et al. (2009) become important. Their studies have shown that women who interact with men who are caring a sexist attitude, experience a social identity threat and thus, underperform significantly. Other possible consequences from experiencing social identity threat can be distrust and uncertainty about social belong. A sexist behaviour could trigger social identity threat even when subtle, which Logel et al. (2009) explain is due to the high sensitivity that humans have towards understanding how others negatively perceive and value them through social interactions. In the study of Logel et al. (2009) it is also mentioned that in domains where females are negatively stereotyped, e.g. engineering, it is likely that females could also experience stereotype threat. Stereotype threat is described by Logel et al. (2009) as:

“A specific form of social identity threat, in which individuals targeted by a stereotype alleging inferior ability in a domain feel pressure to avoid being judged in light of that stereotype and worry that they could inadvertently confirm it through their performance in that domain.”

(Logel et al., 2009, p.1090).

An important consequence of stereotype threat is that it can cause individuals, not only to underperform in the domain, but also to disidentify from the domain. An explanation is that when exposed to stereotype threat they do not feel they belong there socially and therefore loses their interest for devoting to the domain (ibid). Logel et al. (2009) suggests that a solution is to change the environment. Organizations need to address the issue and reduce prejudices in

the environment, which the researchers identify as a difficult task. However, forbidding sexual harassment and gender discrimination is not in itself enough where gender biases exist. Unfortunately, sexual harassment and gender discrimination might be subtle and only visible for those disfavoured by them, e.g. females working in the construction industry.

A positive influence from the phenomena Group Polarization is that when a trait is negatively valued, e.g. sexist behaviour, it will be avoided. However, gender biases disfavoured females might instead be shown through attitudes regarding sexism which could be harder to distinguish. Individuals who adopt the negative perception of females might instead deny that women are discriminated against (Logel et al., 2009). A consequence of men's perception of females in the construction industry is that it could lead them to allocate scarce resources to men, especially if they are managers. These men might also motivate discrimination with the use of gender biases shared by the majority group as they can then easily obscure the bias (ibid).

4. Strategies - The organizational perspective

This chapter focuses on equality, Reputation management, Change management, Diversity management and present an inventory of strategies for equality from the industry.

4.1 The basics of equality

Here we present research regarding privileges, norms, norms criticism and the relationship between power, identities and knowledge. We further present the laws with the purpose to ensure equality in society. The headline is divided in sub headlines with focus on organizational culture, norms, values, the Discrimination Act (2008:567), norm-critical pedagogy, gender norms, masculinity and equality.

4.1.1 Organizational culture; norms, values, behaviours

Organizations come in all shapes and forms, especially in the Swedish construction industry. The Swedish construction industry represents multiple types of organizations with a wide range of size, disciplines, interests, knowledge, and specialties. That complicates co-operation as the way of working will vary depending on organizational structure, organizational culture and much more (Raja et al., 2013; Clegg et al, 2016). Every organization follow and act upon a different set of rules. There are different types of rules, e.g. formal rules, legal rules, standards, and informal social rules. Formal rules are for example your work hours; you must be at work at 8am. Legal rules are rules that must be obeyed, for example; you are not allowed to use the resources of the organization for private purposes. Standards are used to create a common routine; it is a way of making sure individuals follow best practice methods. Thus, using standards is an efficient way to shape the behaviour of individuals. There are also informal social rules, which are rules created by the organizational culture one exists in (Clegg et al., 2016). Organizational culture can be defined as;

“The deep, basic assumptions and beliefs that are shared by organizational members. Culture is not displayed on the surface; instead, it is hidden and often unconscious. It represents the taken-for-granted way an organization perceives its environment and itself” (Clegg et al., 2016, p.209).

Informal social rules are also referred to as norms. A more specific definition of norms is given by Lyckhage et al. (2015);

“Norms are unwritten rules, expectations and ideals that deal with what is considered positive, desirable and beneficial and what is not. Norms are situation-dependent, changeable over time and formatted based on power relationships” (Lyckhage et al., 2015, p.37).

Their quote indicates the complexity of norms from a human perspective. Understanding norms and being aware of how they influence our set of thinking requires a consciousness of how different classes, gender, sexuality, ages et cetera are valued differently. Norms are developed and maintained through the interaction between humans and their context. Norms are continuously changing and vary between cultures. Norms set the power orders in our society and simplifies the process of categorizing other individuals quickly (ibid.).

Your gender, class, place of birth influence what opportunities you receive in life (Lyckhage et al., 2015). Our mind carries multiple categories, each with a normative performance system that we expect from those we put in a certain category. These normative performance systems are based on what we value and believe is normal, e.g. heteronormativity or a white young heterosexual male carpenter. Other categories could for example be man, young, Swedish, and class (ibid.). An example of how this error our perception could be how we assume a feminine man to be gay, without knowing anything other than what the individual looks like. The need of categorizing other individuals is due to the power structures that categories carry and identifying someone as e.g. gay influences how we further interact and value that individual. All based on our perception of what norms have told us is normal and not. What is interesting with norms, and makes them even more complex, is that they become invisible for those who do not deviate from them and instead benefit from them. However, those who do derive from norms often meet the demand for an explanation of why they do. What makes norms difficult to change so that they are beneficial for all, even though they are continuously changing, is that norms are maintained through sanctions such as ignorance, being excluded, harassment, violence and more (ibid.).

Individual who deviate from norms in a certain context, e.g. their working environment, often develop a coping strategy. Strategies such as subsuming and confirming to the order of power or challenging the order of power in a try to shift the power distribution. Further, Lyckhage et al. (2015) explain that power is something you practice rather than possess. The order of power is both expressed in text and speech and tell us what is most valuable. The one who has a position of power in an organization has the space for influencing and controlling other individuals in that organization but might not be aware of his or hers order of power. All public institutions and organizations are part of the powers who help to preserve injustice and exclusion as they enable the prevailing power structures in society to continue. The current order of power will continue until resistance is expressed and heard from those who have the power to change them. An example is that labour wages have been higher for men than women, but expressed resistance have enabled a change, which is still ongoing (ibid.).

4.1.2 The Discrimination Act (2008:567) & Norm-critical pedagogy

All individuals must have access to their fundamental rights, no matter how others value them. *“A rights perspective implies an obligation to meet people's fundamental rights, rather than assessing and prioritizing certain needs over others.”* (Lyckhage et al., 2015, p.44). There is a law demand for organizations to eliminate these obstacles and daily discriminations, the Discrimination Act (2008:567). The Discrimination Act (2008:567) has the purpose to prevent discrimination and promote equal rights and opportunities for all. Discriminating someone is to for some reason treat them worse than another person in the same situation, the same goes for groups of individuals. The seven discrimination bases in the Act are gender, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation or age. These are further described in the Discrimination Act (2008:567) and can be fully accessed by anyone. The law is extensively formulated to counteract discriminatory acts. The consequence of breaking the law is a fine or penalty. In organizations discrimination exists at an individual level and at a structural level, an example of a structural discrimination in the construction industry is the one towards women, as women do not fit the normative performance systems of the category construction worker. Lyckhage et al., (2015) mention that discrimination at a structural level is based on existing ideologies, patterns of action and procedures.

A starting point for changing norms and making an environment more inclusive is to reflect upon the experiences of others and trying to understand what influences their experience of a certain situation and interaction. Reflecting upon why a certain status is assigned to them and what problems that might bring for them is part of a strategy referred to as norm-critical analysis, which is often used to identify issues related to exclusion, teamwork, group identity and more. A method for teaching others to become norm critical is using a norm-critical pedagogy. A norm-critical pedagogy enables individuals to understand how they categorize different individual and subconsciously exclude certain individuals in some situations, but it also teaches individuals to understand the perspective of others. An important statement regarding a norm-critical pedagogy as a method is that it is not about increasing tolerance towards those who deviate from norms, but rather question why those norms exist and for whom they were developed. Making others aware of norms is the main purpose, it is the first step towards questioning norms and changing norms who damage certain individuals and groups. The second step is to translate the critical perspective into action and create a strategy for eliminating discrimination.

An approach towards increased equality is thus working with norm-critical pedagogy. Awareness of norms contributes to more alternatives of action in situations and understanding the consequences of these actions from multiple perspectives (Lyckhage et al., 2015). Further, the norms in society influence the laws of the society, and vice versa. The Discrimination Act (2008:567) has influenced what we perceive as an acceptable behaviour and actions, and therefore influence our behaviour in the desired direction in accordance with the law (Lyckhage et al., 2015). However, many organizations in the Swedish Construction industry have not yet managed to eliminate discrimination structures (Byggnads, n.d.).

4.1.3 Gendered norms

Gendered norms are norms connected to gender, which influences how we raise boys and girls from birth and throughout life. These advocated gendered norms later decide our choice of behaviour, desire and actions. One example by Lyckhage et al. (2015) is an observation at a kindergarten. The observation shows that the kindergarten teachers threat and talk differently

to boys and girls. They used different tone of speech depending on the gender of the child, they also used different methods for pedagogy where the girls received better developing explanations. The boys on other hand more often received orders, which was mirrored back at the teachers through the communication of the boys, e.g.: Come here! Help! Tie my shoes!

What shapes the behaviour from men and women, and what we learn is acceptable behaviour, is shaped at a very young age. However, consequences of them are shown much later. Boys who are taught to command, grow up to become men who continue to command. Girls who have been taught to listen and show empathy, grow up to become women who continue to do so. Further, our society is based on a gendered system where men and women are believed to be opposites to each other, and it is based on a hierarchy where men are valued higher. What is interesting with gendered norms is that it influences us to believe that some characteristics only can be attributed to one of the sexes (Lyckhage et al., 2015). The danger of perceiving the two sexes as opposites is that it creates consequences such as erred categorizing of individuals, e.g. expecting men to be strong automatically translates to women expected to be weak. Gendered norms are a social construction and is not a development of nature, it is something we create in the meeting with other humans.

In an organization, four dimensions are mentioned because of gendered norms (Lyckhage et al., 2015, p.115):

- Gender-decided work distribution: how work and wages are distributed between the sexes in an organization
- Power-relationships based on gender: how power, authority and control is used within the organization
- Emotional and human relationships: how feelings such as loyalty, attraction, hatred, antagonism exist between groups and individuals due to gendered norms and beliefs
- Cultural and symbolical gendered norms: how identities connected to gender creates differences in symbols, expectations, attitudes and language.

These dimensions are important to reflect upon with a critical mind. Doing so is in the right direction for increased equality. Changing norms, perceptions and order of power is difficult and slow, but fully possible (Lyckhage et al., 2015).

4.1.4 Masculinities and equality

In the report *Masculinities and equality* written for the Swedish Municipalities and Regions Association, Hyllander and Jacobsson (2018) argue that differences between men and women are non-existing when studying cognitive abilities, verbal ability and differences in communication. Research have instead shown that it is the gendered stereotypes that influences our abilities and results. An example on such a gendered stereotype is e.g. men not being good at caring for others or women being bad at technical subjects. These gendered expectations and stereotypes influence our abilities, behaviour and how other behave towards us. The male and female stereotype have been given opposite attributes, which have developed a belief that women and men are more different than they really are. However, due the fact that men as a group are regarded superior women, masculinity is the norm of society and femininity its opposite. This has influenced our society in such way that e.g. our vocabulary is developed for men and women are given a prefix. An example is the profession medical doctor, a male doctor is referred to as a doctor and a female doctor is referred to as a female doctor. The same goes for many other positions and activities, which creates barriers for women. Women become the abnormal and receive resistance from others. A consequence of the perception that men are superior women is that it becomes even more difficult for women to change these norms, compared to men doing it. Valued attributes such as strength, independency, and rationality are developed from the male norm and are highly valued in society, thus when a woman and man apply for a job, gendered stereotypes allow the man to be perceived as more successful at these attributes from start and forces her to rather convince others she has these qualities.

According to Hyllander and Jacobsson (2018) masculine coded attributes are expressed as much by women as by men but have been developed to be associated to men by gendered stereotypes created by society. When individuals behave differently from the gendered stereotypes they often face negative consequences, these consequences can be loss of status, discrimination, losing a job, harassment and violence.

Increasing equality in an organization or in a social context has an influence on the distribution of power and resources between the genders, from men to women (Hyllander & Jacobsson,

2018). This could have an impact on the involvement from men in equality efforts as they experience a loss of power and it could result in men resisting equality efforts and preventing them from succeeding. Men in organizations has privileges at the expense of women, however to attain these privileges they must follow the masculinity norms that are expected of them through the gendered stereotypes. What is seldom a discussed issue being that men control each other's behaviour to maintain the male order, where it is also mentioned that the white, middle class and heterosexual man is on the top. However, men who do follow the masculinity norm are in risk of unhealthy relationships, short lifespan and unhealthy living.

4.2 Reputation management

How to manage your company's reputation is challenging since it relies on the thoughts of the community or society and not easily controlled internally. What can be done is to strategically act in accordance with what has been shown to bring an attractive reputation, and thereby competitive advantages (Omar et al., 2006). Here we present how Reputation can be managed, focus is put on corporate reputation, and the link between reputation and performance.

4.2.1 Corporate Reputation

A company's survival and profitability are strictly dependent on the reputation (Fombrun, 2000; Fombrun et al., 1997). A company's reputation is reflected in the ability to attract employees, customers, investors and communities. Factors that shape the reputation are complex and socially constructed. The management of reputation is often derived to an object and the quality of the actual product. However, the reputation is derived by subjective impressions rather than objective and created through internal features interpreted by stakeholders. The focus has lately moved from the product to subjective and collective assessments to map the reputational landscape. The reputation brings conditions significant to attract employees, "*People must be persuaded to join and work for the company*" (Fombrun, 2000, p.1). A reputation influences the possibilities of e.g. an individual, a company, or an industry (Burke et al., 2011). Industries such as the banking and financial services industries have during the past years developed a collective reputation program with purpose to retain their legitimacy. A damaged reputation does not only threat a single company in an industry but rather a collective of companies.

Corporate reputation is increasingly noticed as an activity with competitive advantages (Fombrun et al., 1997; Omar et al., 2006). Fombrun (2000) defines Corporate reputation as “the net” of perceptions of an organization’s ability to meet the expectations of all its stakeholders. The Corporate Reputation describes that;

“what people feel about the company [is] based on whatever information (or misinformation) they have, company activities, workplace, past performance and future prospects” (Fombrun, 2000, p.2).

Further, Omar et al. (2006) mention that *“The better the organization’s quality, the more popular it will become”* (Omar et al., 2006, p.269). This contains shaping a consistent identity to the public audience. Studies on Reputation Management are established to be significant to form a reputation but are seldom included in budgets as a separate entity, more often assembled with communication entities (Davis & Miles, 2016). Companies and Organizations need to learn how to build a reputation but also how to rebuild it (Omar et al., 2006). Three factors are mentioned by Davis and Miles (1998) as significant to keep as united as possible; the personality (what the organization really is), the identity (what it says it is) and lastly, the image (what the stakeholders think it is). Additionally, the main factors external stakeholders find important regarding reputation are marketing quality, being innovative, employing excellent staff and positive involvement in local or national community (ibid.). Answers from interviewees in the study show that the corporate culture is significantly important when shaping a reputation in practice. This includes sustained core values and consistency. Gaps between the personality, identity and the image were problematic during the construction of a reputation. Further, it is as critical to depend on a reputation as constructing one (ibid.).

The sociological view of corporate reputation contains the socio-cognitive process that generates rankings in reputation and the way people make sense of their environment (Fombrun et al., 1997). Every firm has their own evaluators with different criteria but have in common to review the actions and performance of the firm relative to expectations and norms. Fombrun et al. (1997) suggest an integrative view of subjective reputation and point out that;

“Reputations are the external reflection of a company’s internal identity - itself the outcome of sense-making by employees about the company’s role in society” (Fombrun et al., 1997, p.10).

4.2.2 Links between reputation and performance

Corporate reputation is claimed to be an organization's greatest asset (Burke et al., 2011). The reputation influences a wide scope of stakeholders, including the partners you do business with, the customers and client you serve. As well as how you attract talented employees. Not astonishing is it that employees work harder and stay longer in companies they like since both individuals and business partners prefer to work for a company with good reputation. Burke et al. (2011, p.11) outline five steps to build a favourable Corporate Reputation, these are;

1. Formulate a corporate reputation strategy and key factors in business sustainability.
2. Integrate the communication and social responsibility into the company’s corporate reputation strategy.
3. Develop a crisis management strategy to defend against threats to reputation.
4. Communicate the corporate story to internal and external stakeholders.
5. Build a corporate culture that attracts and retains talent.

Burke et al. (2011) conclude Corporate reputation through this quote:

“The Construction of a company reputation includes both objective factors (financial performance, financial stability, growth) and emotional factors (trust, liking, faith in, first-hand experience with its products and services). Reputation are also based on cognitive factors (e.g., facts, data, information) and affective factors (emotions, reactions)”

(Burke et al., 2011, p.11).

According to Roberts and Dowling (2002), good reputation is a strategic step to asset and financial performance. Their study shows that there is a relation between stable financial performance over time and good reputation, as well as corporate reputation, which has shown to help firms to sustain increased financial performance over time. Boyd et al. (2010) identify reputational work as the main reason why firms outperform others. Several independently

reputational factors have value adding effects in the total performance. The joint activities for reputation create a synergy effect on total performance.

4.3 Change management

Today, the environment in organizations are constantly changing. Organizations are required to continuously develop and improve according to the demand of the market, otherwise a company risk losing their competitive advantages and lose their shares on the market. Here we present how change can be managed, with focus on Transformal leadership and research regarding how masculinity norms can be changed. Changes are not always simple to implement, especially not if workers do not understand why these changes are important and therefore resists them. Motivating employees to adopt these changes successfully might require Transformal leadership, which is a type of leadership practice and change management (Clegg et al., 2016).

4.3.1 Transformal leadership and change

According to Peachey, Bruening and Burton (2011) Transformal leadership involve four dimensions; charisma, intellectual stimulation, inspiration and individualized consideration. When these four dimensions are applied in the act of leadership, visions can be shared, trust can be established, respect can be developed, high expectations can be communicated positively and motivation for adaptation increased. A transformal leader can lead their employees in their desired direction, with the use of these four dimensions. When Transformal leaders are actively involved in the change process, their leadership becomes more successful (Clegg et al., 2016; Peachey et al., 2011). According to Clegg et al. (2016), it is important for a leader to encourage behaviour that is desired timely and clearly so that employees understand which behaviour specifically that was rewarded. However, discouraging undesired behaviour is equally important, but a clear explanation should follow to eliminate misunderstandings (ibid.). Employees that are encouraged to deliver will perform better which improves the competitive advantages a company has access to. Employees can, for example, be encourages to perform better with the use of empowerment through self-actualization, e.g. with the use of feedback- and discussion time where employees can share knowledge, reflect, discuss and create new ideas in self-managing groups (ibid.). When these groups consist of individuals with mixed social belonging, experiences, cultural background, and disciplinary background, and more, a broader thinking pattern becomes available. Everyone can contribute with their personal insights and skills when reflecting, creating, discussing and more. Therefore,

multidisciplinary, multi-cultural and gender mixed groups are likely to be better equipped than homogeneous groups when developing new solutions and thinking patterns. However, a benefit for homogeneous groups is communication. A definition of what communication is, provided by Clegg et al. (2016), is;

“Exchange of ideas, emotions, messages, stories, and information through different means including writing, speech, signals, objects, or actions” (Clegg et al., 2016, p.301).

Individuals experience and interpret communication differently, both non-verbal and verbal communication. We make sense of what is communicated differently, which makes communication complex and the risk for misinterpretation a constant threat (Clegg et al., 2016). Thus, what is beneficial for a homogeneous group is that their knowledge barriers, the syntactic, semantic and the pragmatic, are lower than for a heterogeneous group. The syntactic knowledge barrier exists because individuals use different communication methods, and examples of communication methods are symbols, written language, body language and more (Newell et al., 2011, s.18). The syntactic barrier prevents us from perfectly interpreting what someone else is communicating. A method of reducing the syntactic barrier is by clarifying the communicative differences that exist among the individuals involved and allowing them to create a common language, e.g. by collaboratively defining meaning to symbols and the like (ibid). The semantic barrier is because we interpret things and situations differently. To minimize the semantic barrier, it is important to highlight and discuss norms and values present in a social context, e.g. by discussing differences in interpretation of situations, objects and more (Newell et al., 2011). Individual values used for interpretations can be clarified through visual communication, for example by creating illustrations, symbols, and stories (Clegg et al., 2016). Finally, we have the pragmatic knowledge barrier, which exists due to differences in interests, education and knowledge. To minimize the pragmatic barrier, it is important to facilitate transfer of knowledge, for example by providing an environment that motivates individuals to translate their knowledge so that it can be understood by other (Newell et al., 2011). These knowledge barriers are all relevant when aiming to change masculinity norms, however, more specific examples of how to do so is described below.

4.3.2 Changing masculinity norms

Differences, vulnerability, power and privileges are all factors that must be discussed to achieve successful changes to the masculinity norm. As mentioned earlier, what masculinity norm results in for men is early deaths, unhealthy living, dysfunctional relationships and more. However, the risk of these consequences vary for everyone as all men are different. All men experience different levels of power and privileges as well. Thus, when trying to change the masculinity norm, individual differences must be considered. Creating a strategy from the factors mentioned above enables men to recognize themselves and increases their motivation to change these unequal and unhealthy behaviours that the combination of these factors contributes to. Increasing equality and changing the masculinity norm will therefore not only contribute to an improvement in life for women, but also for men. However, a critical success factor for equality efforts is the inclusion of men.

Year 2007 the World Health Organization (WHO) presented four types of equality increasing efforts (Hyllander and Jacobsson, 2018). These efforts have been developed through analysis of 58 projects with the purpose to increase equality. These projects have had their focus on parenthood, prevention of violence, general promotion of gender equality efforts and more. The efforts presented by WHO that are relevant for our study are:

- Conversation groups and education, where the group consists of men or is gender mixed. An example is using a program with multiple lectures where the group through discussions learns to identify a masculinity issue and how to handle it.
- Information campaigns and the involvement of leaders in different arenas. An example is using media to present and question the masculinity ideal.
- Integrated efforts. A combination of efforts is the most effective, especially the combination of information campaign and group educations.

WHO (2007) also mentions that the involvement from men is greater when education for groups is repeated multiple times and involves time for reflection. It should also include time for practicing a change of behaviour and attitude. Another important finding was that when men received facts, knowledge, and information regarding inequality, without being allowed

participation, changing their behaviour was not successful and their former attitudes were not changed.

In the report *Masculinities and equality*, the Strategy of Equality is mentioned. With the Strategy of Equality, equality improving efforts are distributed to every department of an organization. An equality perspective is for example integrated in control and management systems, target documents, business plans, budgets and follow-ups. However, it requires gender divided statistics and ratios so that ideas, decisions and result can be analysed from the perspective of both men and women (Hyllander and Jacobsson, 2018).

As existing norms are maintained by both men and women, both genders should be involved in equality efforts. A few gendered mixed individuals will not be enough, it is important that all individuals in an organization are involved in the effort to increase equality as it enables organizations a better success rate at increasing equality. A factor that is important to motivate the involvement from organizational members is through education regarding the difference between women and men's possibilities and challenges, and equality in general. Informing individuals about how equality can be improved enables them to change their behaviour in accordance. Changing masculinity norms successfully in an organization requires clear goals and support from the management team (Hyllander and Jacobsson, 2018).

Hyllander and Jacobsson (2018, p.27-28) represent following ideas for changing norms successfully:

- Critical discussions regarding gendered norms and equality with focus on the involvement of the participants in conversation groups. The purpose of these discussions is to increase awareness of how inequality and masculinity norms influences us on individual- and group basis. Allowing room for participants to practice on how they can change their behaviour is recommended. They argue that it is important that the one leading the group can facilitate an allowing conversation climate as it enables participants to dare speaking openly about their reflections. Critical discussions involve reflecting and questioning norms.
- The Swedish Association of Local Authorities and Regions (SKL) argues that Information campaigns are more successful when they involve a positive message. A

positive message regarding the required change of behaviour from men and tangible advices of what they can do to contribute, influences their behaviour from these men more successfully. They argue that before creating an information campaign it is collect information regarding the targeted group through e.g. surveys.

- Involving men in the work to find new paths to changing these masculinity norms. SKL argues that a high participation is an important factor for reaching success in behavioural change from men and by allowing them space for reflection and contribution new ideas can be invented.

4.4 Diversity Management

Diversity can be increased and maintained through diversity management, where focus is put on the influence of stereotyping and the management of human resourcing. Equal opportunities regardless of race or gender is legislative requirement through the Discrimination Act (2008:567). Diversity management is an organizational initiative and a strategy to reach diversity as a competitive advantage, when valuing differences in the workforce, and to receive non-discrimination (Sharma, 2016). Different approaches can be used to perform Diversity Management effectively, and Sharma (2016) state: *“Effective diversity management requires a culture which is inclusive of a work environment that nurtures teamwork, participation, and cohesiveness”* (Sharma, 2016, p.2). The conviction of performance approaches in relation to diversity management can result in practical problems with the performance appraisal that may evaluate minorities differently due to biases. Discriminating behaviours in higher levels of the hierarchy undermines a fair judgment. One approach could be measured on performance on equality through a management system audit. It contains ratings on the equality performance and identification of components that may hindering to reach the goal through potential biases. Mapping how power is distributed in the organization, regarding gender, allow organizations to measure their balance of equality and set future goals. Through the process of mapping the structure it is easier to identify any barriers that hinder women and other discriminated groups to advance.

4.4.1 Stereotyping is normal but a threat in power relations

According to Cook and Cusack (2010), stereotyping is a phenomenon where people generalize preconceptions of other people's attributes or characteristics. It is commonly possessed on individuals from groups, e.g. women, refugees, or homosexual individuals. Stereotyping is common because we "*imagine most things before we experience them*" (Cook and Cusack, 2010, p.10). Only through education can people become more aware of individual differences. All this is derived from the need to simplify our surrounding, a common strategy used to make sense of the world. We categorize into gender, skin pigmentation, age and more. However, stereotyping is not free from consequences. Stereotyping hindering individuals to freely develop an identity, instead we are shaped through stereotyped expectations. This also result in ignorance towards individual circumstances. For example, women are assumed to have enjoy a caregiving role and motivated towards it through stereotypification. Concurrently, men are not expected to be caregiving and neither motivated for it.

Gendered stereotypes still exist and influences the perceptions of what characteristics a "good" manager should have. Historically, feminine leadership has been believed to be a risk, but women who have entered the workforce have changes these beliefs (Stoker et al, 2012). Stoker et al. (2012) implies that traits in leaders which are perceived feminine are increasingly appreciated by men, and the general perception of a good manager is slowly developing towards friendlier towards women. The contact hypothesis explains why men have disliked stereotypical feminine leadership while it was rare, according to the hypothesis "*People like members of other groups more if they have more contact with them*" (Stoker et al., 2012, p.39). Further, the Tokenism theory explain that men dislike female leaders because they are tokens, a minority at leading positions. It is also claimed that age and educational background influence men's attitudes toward female managers, however, the stereotyped manager is changing towards unisex, however, slowly (ibid.). Changing stereotypes is a long-term process. Adapting the strategy of appointing female leaders in several positions will decompose the stereotypes in the long run. Authors further suggests short-term strategies like "*encouraging managers and employees to participate in mentoring programs*" (Stoker et al., 2012, p.40) and continuously discussing how we stereotype.

Kang et al. (2015) conclude that a low-power position and exposure to stereotyping is threatening and the opposite, stereotyping with high-power is lifting. A threat for the appointed is when stakes is set high and expectations held low. Power-based expectations have impact on performance and are most effective when stakes are raised high.

4.4.2 Managerial Stereotypes

One approach to demolish stereotypes is the state obligations (Cook and Cusack, 2010). The obligation to respect, to protect and to fulfil. The obligation of respect highlights the importance of identifying the issue and its harm and is the first step towards equal treatment in any context. Hewlett (2007) identifies the traditional roles and career paths in work life as outdated and in need for change. Six tools for developing work life and keep talented women on the road are according to Hewlett (2007, p.108-112):

1. Establishing flexible work arrangements;
2. Creating arc-of-career flexibility (recognizing that women may off-ramp and on-ramp at different stages of their careers);
3. Reimagining work life (which includes recognizing that work-life balance goes beyond the nexus between children and employment);
4. Redefining and refocusing what ambition are for women;
5. Harnessing the altruism and alternative career drivers of women; and
6. Reducing stigma and stereotypes so that employees, in particular women, are not disadvantaged by choosing work practices that are work-life friendly.

The mainstream workforce is gone, and new families will request updated conditions, new views on motivation and increased knowledge of different groups and diversity (ibid). For example, a combination of male and females in working groups might be driven of different factors. Men who take larger responsibility at home might be changing their values that do not fit into the traditional role and expectations. Roles in extreme jobs with escalating pressure will probably attract a target audience with traditional gender roles at home and is probably easier combined for male than women to retain working life balance.

4.5 Gender-focused Human Resourcing

Hom et al. (2008) study showed that women are more likely to leave an organization in case of absence in Human Resource work. The HR policies and practices are also suggested to sensible approach and based on understanding (Shen et al., 2009). Gender-focused HR need to be more than equal opportunities which includes monitoring the well-being of women, make the women feel valued and attached, and the social responsibility of the organization as such (Ali, 2016). Several studies have shown that gender-diverse organizations are more innovative, creative and produce more highly qualified decisions than their counterparts. This can be explained by that people with different experiences, thinking patterns and perceptions of the world enriches the company's competence and expand the perspectives (Ali, 2016).

Hearn et al. (2017) discuss what gender is, gender relations and gendered power relations. He concludes the fact that gender and gender differences is naturalized and derived from biology while gender is a socio-cultural phenomenon. This means that women and men are not only distinguished by biological causes but also cultural and social causes. The differences are not always easily separated, the differences could be interrelated and both cultural and biological. Commonly there is a cultural elevation above the biological difference.

4.5.1 Recruitment and attractiveness

According to Danielsson (2010), the opportunity for development in an organization is found in their recruitment process. As the Swedish construction industry has difficulties recruiting individuals with experience and competency, establishing an effective recruitment process is important. However, women and men are differing in career path and positions. Women are generally found in the stab functions compared to men mostly working in line of advancement (Allbright, 2016). This regardless of equal educational background.

Linderfyhr and Malm (2017) have identified differences in how women and men react to leadership roles and what is important when recruiting women to leader positions. Since the leadership role still is associated with the male norm, the authors highlight the importance of challenging the normative view of the role. The general picture of the male leader with stereotypical male characteristics still exists and therefor conduce to an issue for women to

identify with the role. The possibility to identify with the role is significant to the applicants' interest. They further remark the importance of role models to capture interest, e.g. female leaders who applicants could identify with. Choice of words and pictures in advertising needs to be reconsidered to match the potential applicants. Their interviews showed that the picture of what is expected of the leader has been most important in the decision to entice the role. Other motivation factors for women to apply for role where support from female networks and the authors suggest supportive functions from Human resourcing (HR).

Managing roles are associated with many working hours and constant availability (Linderfyhr & Malm, 2017). The untenable family situation for many women assume the role of manager discourages women. Flexibility has been key in combination of the availability for women as leaders. They claim that the equal distribution of housework and responsibility for kids in their relationship, or even less responsibility at home, is significant prerequisite for women to enter a manager role.

It is suggested to use an encouraging strategy when recruiting women to roles (Linderfyhr & Malm, 2017). The interviewees in the study experienced a greater demand for encouragement for women than men to apply for management and leadership roles. In relation to encouragement and support, the immediate supervisor is preferably conscious of these crucial factors and supportive. Women has shown to prefer recruitment through relations and a recruitment strategy to construct a relation as an important complement to the traditional recruitment process. However, to achieve a non-discriminating recruitment process Gothenburg City has developed a guide: *The Recruitment Guide*.

4.5.2 The Recruitment Guide - a recruitment tool developed by Gothenburg City

The Recruitment guide developed by Gothenburg City (2017) has its focus on competency and norm-criticism. The guide was developed as part of the human rights work of the city, as the city has the goal of being inclusive and open for everyone. Actively working towards non-discrimination is a spoken strategy of the city to reach the desired inclusiveness of the city.

In their guide, competency is defined as “*ability, motivation and the prerequisite for performing a specific task by applying knowledge and skills*” (Gothenburg City, 2017, p.3). Competence-based recruitment has its focus on competency through the whole recruitment process in comparison to recruiting someone based on gut-feeling and individual belief of who is suited for the role. With a Competence-based recruitment process, the chance of recruiting a candidate with the best competency increases. Because of the structured recruitment strategy, the risk of discrimination decreases. The competence-based recruitment strategy is supported by checklists, templates and documents.

The thought of intentionally discriminate someone in a recruitment process is alien to most of us but recruiting based on gut-feeling increases the risk for it. The cause is the desire of the mind to simplify complex situations, e.g. through categorizing characteristics and stereotype. Our mind likes shortcuts. What we often refer to as our gut feeling is a feeling based on our experiences and perceptions of what is good or bad, and the gut feeling is often useful. However, the gut feeling is not appropriate as base in a recruitment process as biases and prejudice influences gut feeling. And often, we are not aware of how our gut feeling influences our perception.

As mentioned earlier, norm-criticism is a strategy that is focusing on our perception of what is normal and not, and why. What are we taking for granted, and what do we define as the abnormal? Using norm-criticism as a strategy during recruitment enables the recruiter to become aware of their biases, and question norms that discriminate. Relevant questions for the recruiter, before deciding who they find appropriate for the role, are:

- On which criteria do I find candidates interesting for the role?
- On which bases do I decide to invite for interviews?
- What makes me more interested in an individual during an interview?
- What makes me less interested in an individual during an interview?
- Am I aware of my choices and why I find them appropriate during a recruitment process?

Some of our most common errors during the recruitment process are mentioned as judging the looks and clothes of a candidate (inclusive visible disabilities), stereotyping (e.g. believing a

man is better suited as a carpenter than a women), the similarity effect (preferring to recruit someone who look like us based on gender, age, education and more), the halo effect (positive characteristic influences our valuing of an individual's other characteristics towards increased positive), the confirmation error (assuming to know more than we do, and only focusing on what confirms what we have assumed from start).

During a recruitment process it is important to focus on the competencies an individual has in work related situations, rather than in their privacy. Competencies are something we use to reach desired behaviours in specific situations and what competencies we apply depend on context. An example in the guidebook is that a person that is silent with friends could be highly competent for holding a presentation for many individuals. Thus, when evaluating the competencies of the candidates it is important to in beforehand define what competencies that are most valued for the role, and base these on the targets and needs of the organization. Only taking into regard work related competencies of the candidates increases the chances of recruiting the best person for the job and decreases the chances of discrimination.

Recruiting the wrong person for the job is costly, in terms of monetary resources and time. Concurrently, the recruitment process offers the change for developing the organization in terms of resources and quality. It is important to make sure that the requirements in a job ad are at a realistic level and will better attract qualified candidates. Choosing the right person for the job becomes easier with more candidates to choose between, especially with a competency-based norm-critical recruitment process. It would also enable organizations to have heterogeneous teams, which leads to more solutions and innovative ideas. Research has also showed that heterogeneous teams are better at delivering and problem solving. Lastly, we decrease the risk of discrimination, and the risk of breaking the law.

In the guide for how to achieve a competency-based norm-critical recruitment process, suggestions of what to focus on are given: the recruitment profile and the selection process.

When developing a recruitment profile, it is important that it is formulated strategically and carefully. The advice is to question it multiple times and look for discriminating prerequisites. Make sure text in the description is objectively formulated and that competency asked for has a clear relevance for the role. It is mentioned that during the development of the recruitment

profile it is important to reflect upon the working environment that is included for the role and what requirements it places on the candidates. Can the working environment be improved and is the description of the working environment realistic? Allowing candidates to fully understand how the working environment influences the role increases the chances of finding the right person for the job. Lastly regarding the recruitment profile, language is a tool and should be used so that it becomes inclusive and open. Who are you formulating the description for and who might not fully understand the language used? Can you adapt it to become more inclusive and understandable? Does it contain biases and other language barriers? These questions need to be answered.

Other than the recruitment profile, focus should be put on the selection process. The guide presents solutions of making it non-discriminating, e.g. through critically reflect upon how you personally value characteristics and how you believe different characteristics could influence candidates to perform the job well. A personal letter is often an attachment to an CV and contains a personal photo and description of the job candidate. It is often required in a job application. The danger of a personal letter is the risk of judging looks, stereotyping, the similarity effect, the halo effect, and the confirmation error. Instead, tests are recommended to be used as it enables an objective evaluation of the candidate for the role. Tests such as personality and competency tests and more.

The last focus should be put on interviews. With the use of an interview template you are more likely to ask questions connected to the competencies asked for. It is important to review the template critically and multiple times, especially from a norm-critical perspective. Use the same questions for each candidate. Ask for examples of how the candidate have made use of their competencies as it will allow a better understanding of how the candidate could handle future similar situations. It is also important to focus on describing the working environment for each candidate and what you as a recruiter are expecting of employees. Make sure your emotions do not interfere with the evaluation process, put your gut feelings aside and use the required competencies as base for your judgment. More suggestions are given, and using the guide of Gothenburg City as support during a recruitment process is the recommendation of its developers.

4.6 Inventory of marketed strategies

Strategies presented in the inventory are those presented in the campaign *Stop the macho culture* by Byggnads, additionally, two certifications with the purpose to increase equality are presented.

4.6.1 Stop the macho culture - by Byggcheferna and Byggnads

Stop the macho culture is an ongoing project by Byggnads. Year 2015 they identified that the macho culture in the Swedish Construction industry was problematic both for women and men and thus, needed to change. Through their project *Stop the macho culture* they aim to do just that - stop the macho culture (Byggnads, n.d.). Since then they have launched multiple campaigns, such as a workshop tour year 2016 and an advertising campaign between 2017-2018. During their workshop tour, Byggnads toured through Sweden together with two comedians and a discrimination expert. At each session during the workshop tour a lecture about the macho culture was held free of charge and available for anyone with interest. Byggnads second campaign was an advertising campaign that highlighted the importance for head management teams to take their responsibility regarding discriminations, and the importance for them to fully understand the Discrimination Act (2008:567) that all companies on the Swedish market are compelled to follow. The campaign included ads, movies, and debate articles which all received attention from different sources of media, such as TV news, news articles and other social medias. Also, the regulations of the Swedish Work Environment Authority exist with the purpose of controlling that employers fulfil their responsibility regarding the organizational and social work environment.

Byggnads (n.d.) confident norms are changeable and therefore also the macho culture. A change of the culture towards a less macho dominated one would make more individuals feel welcome to the construction industry. Some suggestions of how to change the norms that are strengthening the macho culture are presented at Byggnads campaign website (n.d.), www.stoppamachokulturen.nu, and some of them are; Setting up rules with the use of Byggnads checklist, conversation exercises, practices in macho norms through group exercises, hold a presentation with the use of Byggnads PowerPoint presentation about the value of diversity, and more. An issue with the macho culture in the construction industry is that it is

contagious on others, and small moral displacements can lead to larger ones. An important standpoint of Byggnads is that a workplace must advocate healthy values.

4.6.2 The Equality certification

There is a Swedish Equality certification that is connected to a management system for organizations, it is called *Jämställdhetscertifiering*. The Equality certification is managed by Winnet, a nationwide organization. Winnet has the resources and capability to support other organizations at reaching increased equality. They offer training, process support and the equality certification. Equality is described as equal value and same respectful treatment for everyone (Winnet, n.d.)

Some motivation to equality regards human rights and quality. Further, our legislation system does not allow working conditions that discriminates someone. It is also a question of increased profitability as equal organizations are better able to make use of all resources and therefore have better chances at increased opportunities for growth.

The equality certification is presented as a management system that has been developed for supporting the integration of equality work in organizations. The management system is based on the Discrimination Act (2008:567), and the purpose of the Act is described as;

“...to combat discrimination and in other ways promote equal rights and opportunities regardless of sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation or age.”

(Government of Sweden, 2015).

Another base of the equality certification is the Equality Policies developed by Government Offices of Sweden (2017), with the aim that “*women and men have the same power to shape society and their own lives*”. These policy goals are connected to six sub-goals presented as:

- Gender equal division of power and influence. Women and men are to have the same rights and opportunities to be active citizens and to shape the conditions for decision-making.

- Economic gender equality. Women and men must have the same opportunities and conditions about paid work which give economic independence throughout life.
- Gender equal education. Women and men, girls and boys must have the same opportunities and conditions regarding education, study options and personal development.
- Equal distribution of unpaid housework and provision of care. Women and men must have the same responsibility for housework and could give and receive care on equal terms.
- Gender equal health. Women and men, girls and boys must have the same conditions for a good health and be offered care on equal terms.
- Men's violence against women must stop. Women and men, girls and boys, must have the same right and access to physical integrity.

There must exist an engagement for equality work at management level for the development sustainable in an organization. When equality work is put on a few employees the chances of achieving the purpose with equality work decreases. Through this management standard, organizations can easier integrate equality work with their organizational activities. The standard fulfils multiple functions, such as identifying their current situation, developing an action plan, and measuring the progress. Multiple organizational structures have been established and all routines in the action plan are formulated based on the future vision of the organization. The main purpose with the equality certification is to make sure that equality work is integrated in organizational work and a long-term development towards increased equality. It is a standard that can be used by all types of organizations at the Swedish enterprise market (Winnet, n.d.).

4.6.3 HBTQ-certification

Several organizations and institutions have been certified with the HBTQ-certification (translates into the LGBTQ-certification) developed 2008 by RFSL, which is the Swedish Federation for Lesbian, Gay, Bisexual, Transgender and Queer Rights. The certification is a symbol for informing that an organization has been educated and are actively trying to create better conditions for individuals of the LGBTQ community. The heterosexual norm of society

creates issues for individuals of the LGBTQ community. However, the improvements that comes with knowledge attained from becoming HBTQ-certified should improve the environment for everyone. The improvements developed consider all seven grounds of discrimination. Both public organizations and private organizations have showed interest for the HBTQ-certification (RFSL, n.d.).

5. Empirical inquiry

This chapter presents the empirical material. The chapter contains four themes according to the research questions; Why equality in the construction industry, How to attract and retain women in the construction industry, Strategies for increased equality, and Incentives for equality work.

5.1 Equality in the construction industry

Our first research question was to find out why the construction industry needs increased gender equality and the findings from interviews are summarized below. The equality questions asked are presented in Appendix 1 and 2.

5.1.1 Regional developer: Equal rights for all humans

When asked why equality, the Regional developer answers with the human right perspective. Every human being must be allowed equal possibilities. Being different from the norm cannot be a hinder for that. It is to a certain point the task of the politicians to guide society towards handling these issues and allow support for managing them, e.g. through organizations that has a support function. Organizations allow the continued existence of discriminating structures and becomes in that sentence responsible to devote towards solving the equality issue. Increased equality will contribute to better health, both for men and women. However, the job of introducing equality efforts is a job for the Head management team. The decision must come from those at the top, whom are required to actively work with equality issues due to laws, e.g. the Discrimination Act (2008:567).

5.1.2 Trainee & Student: Improving the working environment

The trainee has worked as a carpenter, a job that is described as heavy and physically unsustainable, which according to him is proved by the number of injuries per year. Other issues were stated, such as a hard and unwelcoming working environment and culture. He states that the culture is adapted for the white, heterosexual macho man and is unwelcoming towards everyone else. Sexism, violence and degrading comments was part of the daily work climate. During breaks there were little restrictions towards what discussions that could go on, and there

was a lot of prejudice towards every other group in society than the homogeneous one at building sites. Leaving the job as carpenter became the only choice for him. What Gender studies have enabled him to identify was how the working environment at building sites damage the health of those who exist within it. Through his studies he has been giving the tools he needed to understand the issue in depth and is now devoted to solving the inequality issue that the macho culture brings.

For the trainee and student, equality is a question of improving the working environment from many aspects, e.g. health and human rights. There are no losers with equality improvements. Both men and women gain from increased equality, a classical win-win situation where we end up with an overall improvement. The ones who are disfavoured by a macho culture are men, he states that consequences are that they are overrepresented in suicide statistics and violent crimes. At construction sites, the macho culture prevents men from asking for help, and they are not performing tasks ergonomically. Instead they are pressured to pretend they are stronger than they are, and they damage their bodies. The reason why it still exists tasks that require inhuman strength is due to how men at building sites influences each other to believe construction work is a competition of strength. The high accident rate indicates how unsustainable that is. Other consequences of the macho culture are that it allows for exclusion of those who are new to the construction site, and those who look or behave different from the homogeneous group at site. However, he claims that there are more men who cannot perform the tasks at building sites than women who perform them. Women who leave the construction industry do not do so because of the heavy tasks. It is instead exclusion and sexism that makes women leave the industry. Working at building sites is not a question of gender, if one believes that a woman cannot perform a task because it is too heavy than it is not a task for anyone to perform. The only ones who gain something from the macho culture at construction sites are the employers who do not need to spend money on tools and more workers as no one is asking for help. The macho culture limits men, their perspective of what is acceptable, and not, regarding behaviour, interests, choices in life and more, is strongly influenced by the gendered stereotypes. The trainee answers that he thinks men should change their behaviour for their own sake, but ideologically, it is to ensure human rights. He does not believe that men will change their behaviour at building sites for the sake of women. However, motivating men to change could be done by informing them of the consequences that the macho culture brings for

them. A gender diverse workforce is more beneficial than a homogeneous one, both from competitive aspects and health aspects.

5.1.3 Project Manager [1]: Improving the working environment

The Project Manager [1] first identified issue of the macho culture during the 80ties but realized the real damaging consequences it had on women much later. What made him realize the consequences was speaking with female carpenters' year 2003, all of which he spoke to had experienced sexual harassment. It is why he is today devoted to equality. However, the consequences of the macho culture have not changed yet. Project Manager [1] mention that during his 30-40 years in the industry, he has not yet met a woman at production level who have not been exposed to harassment from male colleagues.

According to Project Manager [1], equality is about improving the working environment in the construction industry. The macho culture of the construction industry is slowly improving towards less destructive, but the transformation is slow. Eliminating a macho culture is not going to happen during a few years without active actions. Damages will continue to influence the industry if the macho culture exists, and examples of damages due to the culture are risky behaviour from men which results in a high rate of accidents, deaths, relationship issues, mental illness, physical injuries, high incidence of bullying and sexual harassments towards women. The macho culture also prevents women from joining the construction industry. Others who are hurt by the macho culture are trainees and newcomers. It is not uncommon that these individuals are bullied. The main purpose of increased equality is to eliminate the consequences that inequality brings, e.g. a shorter lifespan for men, men being overrepresented in crime statistics, men being more violent towards women, and men having difficulties talking about feelings. However, mentioning these reasons when motivating increased equality often ends up in the not-all-men discussion, which leads nowhere. It is not about all men, but all men must be involved in the process of changing the masculinity norms that contributes to the consequences mentioned. During the interview, Project Manager [1] mention that diversity increases performance in groups and the well-being of employees. Gender stereotypes limit the interests and well-being of both men and women, the consequences are damaging for both. Using motivations such as construction work being too heavy for women indicates that we

accept that men perform heavy damaging work activities. Work activities that are damaging for women are also damaging for men. However, due to the macho culture men are not protesting against it until already damaged for life.

During their annual congresses, the professional organization Byggnads have identified a greater interest for equality and equal parenthood discussions from their members. Men in the construction industry who become fathers are given less options to become good fathers, and women who take the majority part of the parenthood days receive an inferior position at the labour market. Other reasons to increased equality is to solve the labour deficiency of the industry, which limits our access to critical and needed competency.

5.1.4 Site Manager: Improve the work environment and output

Site Manager [1] was motivated to apply for a job at Skanska through a leadership engineering program for women. She became interested of that specific contractor enterprise as they showed that they cared for the human perspective. At first, the plan for her was to work as a Supervisor at the department for groundwork and concrete, instead she ended up working with sustainability in a groundwork project. She and three other women were placed at similar tasks, and they had to protest a lot to become Supervisors at a construction site. According to Site Manager [1] it is normal that women are placed at roles of quality, environment and work environment, even when not desired.

Site Manager [1] experience that there is a will to develop for the better in the construction industry, a current ongoing progress. However, she herself experiences problems with acts of discrimination as Site manager, e.g. comments on what she is wearing and discussions regarding what abilities she has and which she lacks. Why the industry needs to become more equal is because it would create a culture that is more welcoming for all. Diversity also brings a wider set of ideas, which is why it creates benefits such as better problem solving through access to more perspectives.

Site Manager [1] claim that the consciousness regarding the culture at construction sites differ between white-collar workers and blue-collar workers. The awareness of the macho culture

also varies between white-collar workers with and without experience of being a blue-collar worker. Additionally, the awareness of how equal the industry is differing between departments in an organization, e.g. her own department where there are many women compared to other departments where there are almost no women. She has chosen to stay in her department as she values that there are more women in it. She is afraid that changing department to one where there are less women will lead to her being exposed for more acts of discrimination. Today, sexist jokes are part of her work climate and she does not want it there. She hopes to be positively surprised regarding the future progress.

5.1.5 Deputy President: Quality and improving the work environment

Deputy President has many years of experience of male dominated work environments, which has led to many situations where she has been disfavoured compared to male colleagues. Some of her earliest memories were during her years at Chalmers Technical University as a student, e.g. the fact that it didn't exist women friendly toilets on all floors, and her choice for becoming a Machine engineer was questioned by the Program managers. These experiences have led to her promotion of equality efforts as a Deputy President.

Equality is a question of quality in results according to the Deputy President and leads to an improved work environment for both men and women. Equality is about having equal possibilities, opportunities, and more, for both men and women. The quality improves with improved equality. The best women get the same possibility to compete with the best men and the intermediate men are not getting free tickets into high positions. A consequence of inequality in the Research sector is that women receive less money for researching. Something that lacks an explanation other than men being favoured and women disfavoured, which CTH are hoping to change with equality efforts. CTH has a target of reaching a proportion of at least 40 % females at professor level and are actively working towards it. It requires the whole organization to become involved in the process of change. A male colleague to the Deputy President explained that he was ashamed and frustrated by how men at CTH only recruited other men. During his period as a Head of Department he identified that men were great at finding reasons to choose male candidates above female candidates, even when women were more qualified for the job. Being part of this made him ashamed, and instead he decided to

become a Chairman of the employment committee of CTH where he was able to change the recruitment process. These changes have led to an increase of women, and an increase of quality. However, in a recent survey answered by researchers at CTH, the results showed that in teams with only men the highest rate of how pleased employees were with equality were found, which Deputy President finds interesting and challenging. Teaching employees about the value of equality efforts is difficult as it depends on their own experiences and values. Individuals who have little understanding of equality tends to apply for jobs where they do not need to care for it. However, at CTH the President team share an interest in equality, and earlier efforts have already led to improvement.

5.1.6 CEO [1]: Better results

Equality is a question about quality, as equal organization delivers better results. An equal organization becomes better as that organization have managed to attract both men and women and have therefore been able to choose the best person for the job.

As a woman, CEO [1] is aware that she must argue more and try harder to make other listen when speaking, compared to her male colleagues. The statements of women are expected to have faults, which also influences the discussions that follow. Something presented by a man is often expected to be faultless and is more seldom questioned. As a female you must prove your words. CEO [1] has tackled this by constantly being on her top, as there have been less room for her to make mistakes in comparison to her male colleagues. In general, CEO [1] believes this has led to women in high positions have become more independent while men continue to follow the hierarchical orders. The consequence of the hierarchical order is that what an individual in a high position of a large organization say becomes fact, and the phenomena of “Simon says” appears. Instead of question the statements of others, they believe the statements of powerful men without questioning them. However, these phenomena appear when there is a group where the majority are men. Men, when not majority, show the same spectra of behaviour as women do.

CEO [1] believe that due to the pressure of the industry to increase the number of females in Leader boards, she and other women can more easily continue making career.

5.1.7 Head of Unit: Quality and improved output

When asked why equality, Head of Unit mentions the benefits that diversity delivers, such as improved and increased output. It is also a question about values for her, equality is necessary for making Gothenburg City a city for all. What increased equality also delivers is more alternatives, more perspectives, more solutions and therefore a better output. The organization of Gothenburg City has continuously a dialogue with its citizen, but how do we make sure we receive the opinion of all types of individuals? Today, the city has not been built with the involvement of women, and aspects such as safe environments have not been given as much room as one could desire. Areas where buildings have been shaped without consideration for creating a safe environment lose market value, equality could therefore lead to increased market value when built so that it works for all. The risk of allowing a homogeneous group to decide how we build, and for whom, leads to risks such as that we must rebuild, which is an undesired cost. In a diverse team, the chances of delivering quality, creating cost effective solutions, and minimizing risks, increases. Equality is beneficial from many aspects, e.g. economical, health, innovation and more. At one of her former jobs she was exposed to a gender discrimination, a male colleague with equal experience received a higher salary which could not be motivated. She chose to change her job.

5.1.8 CEO [2] & Chairman of the Board: Improved working environment

CEO [2] claim that it is possible to attach the macho culture as the overall superior culture in the industry. However, she experiences a positive cultural development in the industry. With 17000 members on varied levels, from Supervisor to CEOs, they are contacted by both women and men who experience problems with the inequality in the industry. The expressed resistance towards inequality has increased. According to CEO [2], a problem of inequality is that people are missing out on the chance to work in a diverse team, and the multiple benefits of that. Without the possibility to work in a diverse group, how are people going to understand each other? she asks.

In her work as CEO she has identified specific behavioural parts that are consequences of the macho culture, e.g. the lack of ability to ask for help. At her organization they have worked

with the understanding of that everyone has their weaknesses and faults, and to understand that good work instead relies on how well a team works together. If we create a safe and open work environment, everyone will be able to develop individually. Methods used during this progress are looking into each other's eyes when speaking and talk with the attitude that you like each other. It influences how we further cooperate.

CEO [2] highlights the fact that all human dislike and feel uncomfortable with change, but the motivation for changing the macho culture is that there are only benefits. Increased equality is also necessary for our industry as we are in a huge need of future employees. The construction industry must begin to address multiple questions, such as racism, homophobia, gender equality and more, so that we can attract everyone to the industry.

5.1.9 Operational Manager [1]: Competitive advantages globally and equal power distribution and ability to influence

According to Operational Manager [1], the reasons for equality are many. From an individual perspective, an unequal society leads to more women than men becoming sick with lost ability to have a functional work life. Due to the lack of equality in society, regarding power distribution, ability to influence, possibilities and opportunities, women have worse life conditions. From a structural perspective, it is completely devastating with inequality. We exist in a global and competitive market, and by not allowing women the same power to influence, and the same opportunities and possibilities, we are throwing away competence. Many women in Sweden are highly educated but are seldom offered positions where they can influence in the same extent as men.

The infrastructure has been developed and is being developed for men, and by men. Today, women take more responsibility than men when it comes to family and household. In a heterosexual relationship, this limits women and requires them to work close to home so that their time is sufficient to, besides working, also cook, buy food, buy medicines, buy clothes and more for the family members. The life quality and life structure of women have not been considered when constructing our society and infrastructure, especially not when discussing the opportunities that comes with enabling individuals to travel further for work. She mentions that research has shown that women are limited to work close to home and travel short

distances. Men, on the other hand, can use most of their time at work, and travelling to and from work, as they do not have the same responsibility for the household. The consequences of enabling men to travel further for work, e.g. with projects such as the West Link, is that women receive a greater household responsibility and become increasingly bound to working close to home. The risk of women becoming sick increases as well, the proportion of unpaid job increases and the time for rest and rehabilitation decreases. A good job far away could be beneficial economically for the household but would result in that the pension money the women receives are insufficient for living a decent life, while the man receives enough pension to live life well. She becomes trapped in their relationship, no matter if its good or badly functioning. Therefore, when discussing how to develop infrastructure we need the involvement of women. Would society work better if we would redirect the money from projects that are beneficial for men to projects that are beneficial for both men and women? Examples mentioned by Operational Manager [1] are hospitals and health care.

However, women who live in equal households do not have any difficulties to combine work life and family life. Where household responsibility is shared equally, it has led to families buying services such as ready-made food, and cleaning services, more often.

5.1.10 Project Manager [2]: Making the industry attractive to the future workforce

The macho culture can be described as loading too much and breaking down the machines too fast. A culture where workers carry too much, take shortcuts and become damaged by the heavy load. However, a change ongoing in the construction industry is the work environment. Today, focus is put on relationships between colleagues and the health of employees in the industry.

Why the industry needs to become more equal is because the macho culture makes the sector unattractive. We need more workers, which is why we must attract more women. Equality is not only needed to attract women; the industry is also unattractive for young men due to the macho culture. The younger generations find equality important and attractive. To attract both women and men, the culture must change, and the industry needs to become more equal. The changes we make regarding the culture and work environment which makes the industry more welcoming towards women, also makes the industry more welcoming towards men.

Improvements, e.g. better tools, are appreciated by everyone and are beneficial for both men and women. The industry has already begun to change, sexual harassments are no longer as acceptable as they once were. When the organization of Project Manager [2] organized a lecture and workshop regarding MeToo the interest from their members was big.

5.1.11 Operational Manager [2]: Access to a diversity of competences

Operational Manager [2] believes diversity is preferable and mention the importance of accessing everyone's competencies as main motivation for equality. She also mentions the fact that overrepresented gender tends to reinforce the differences. Equality between women and men in the construction industry is highly valued by Operational Manager [2], and something we always need to examine and discuss in terms of decision-making and actions. Since the industry historically has been dominated by men, it is possible that attitudes have created non-equal conditions. Even though she is experiencing the industry to be equal nowadays, she admits that prevailing norms are obscuring the view. Operational Manager [2] has notices the improved working climate, there are more women today than before. However, if there is most of men there will be signs on inequality.

5.1.12 Diversity and Inclusion Manager: To enter the next era of development

According to Diversity and Inclusion Manager, equality is needed as it enables more perspectives when making decisions, and without a diverse group it is impossible to get a wide scope of perspectives. She views inequality as an issue of justice and an issue of quality. The construction industry has so far only welcomed one single group. For the industry to develop and become innovative, diversity must be increased. The industry can develop and perform better through an increase of equality. Diverse organizations will make people, independently of who they are or where they come from, feel welcome and included. It enables them to use their potential to the fullest. She also adds the MeToo movement as a good example of why we need increased equality. The Diversity and Inclusion Manager believes that the quality argument is more powerful when it comes to influencing others to care for equality, it is an argument that many individuals can grasp.

The Diversity and Inclusion Manager describes her perception of the culture in the construction industry as generally good, with both good and bad characteristics. According to her, the industry has come a long way with their equality development. Different campaigns that informed about the macho culture made her worried when entering the industry. She believed it was worse than she experiences it today. At least regarding how gender equality issues are perceived, compared to companies in other countries. However, there is more to develop regarding gender equality in the construction industry. Since she entered the industry three years ago, she has only experienced positive attitudes towards her change management work. However, she has also heard negative stories of how the culture is in other parts of their organization.

5.1.13 Site Manager [2]: For a continued improved work climate

Site Manager [2] experience a huge equality development in the industry since he entered the industry as a blue-collar worker 26 years ago. He thinks that the development is a result of women entering the industry and challenging old behaviours. A situation that recently occurred at his workplace was inappropriate posters in an elevator, where the Safety officer directly reported it, and commented on the inappropriate behaviour of the workers at their morning meeting. According to Site Manager [2], the elevator poster would have been accepted 15 years ago and indicates that changes are happening, but there is a lot more to do. Site Manager [2] identifies equality efforts as important, the work environment was not considered before women entered the industry. It is therefore important to increase the number of women.

5.1.14 Project Manager [3]: Human perspective and work environment

When asked why equality, Project Manager [3] mentions that to create a better work environment and culture at site we need a mix of men and women. In a perfect world there would be 50 % women and 50 % men working at site. When the working group is diverse it results in a culture with a better set of values shared between employees. A macho culture is unattractive, both for men and women. It results in behaviours that are undesired but the few who find the macho culture attractive are unfortunately the loudest. However, in their organization the macho culture almost no longer exists due to good leadership. Behaviour connected to a macho culture are not acceptable and there are clear consequences when

occurring. The current reputation of the construction industry attracts individuals who have little interest for the human perspectives. The consequence is that we have managers who further recruit individuals who look like themselves, but who lack necessary competencies. The quality of projects is then at risk, a clear example of bad leadership.

5.2 Attracting and retaining women to the construction industry

Here we present the empirical findings for how the construction industry can retain and attract women.

5.2.2 Trainee & Student: Change the culture and stop harassing women

To attract more women, we must change the current culture and communicate these changes to society so that more become attracted to the construction industry. The Trainee thinks that to attract and retain women men must stop to harass them, which he says is a simple answer but intricate process.

5.2.3 Project Manager [1]: Role models and clear rules

At Byggnads there is a female networking group called NÄTA. Through surveys it has shown that the members most pleased with Byggnads are female members. There are more often in contact with them as it is more difficult for females in the industry to receive a full-time employment and trainee positions. NÄTA are actively working with female role models and support groups to attract and retain women. Project Manager [1] believe that an increase in number of women as a single strategy ends with women leaving the industry shortly after. Instead, it must come from the those in the leading positions to make a standpoint and send the message from top to bottom of the organization. A suggestion is that the routines and policies of the organization are developed to integrate equality efforts, and through them limit undesired behaviour. An example of what Byggnads have done is to change the gendered pronouns in their organizational chart with a neutral pronoun.

5.2.4 Site Manager [1]: Place women together to attract more women

Site Manager [1] claims that the key to attract women is to start with addressing the problems. The construction industry has a history of high tolerance towards sexual harassment, and men have gotten away with discriminating acts without consequences. Another key is by formulating job ads strategically to attract women and men, then we increase the possibility to find employees with the best qualifications for the job. She has multiple times reacted to how

her own organization have formulated job ads, as she would herself never apply for the jobs due to how the ads have been formulated. A suggestion she has of how we could better retain women in the industry is to avoid placing a single woman in a team with only men. It is far better to place multiple women together. Lastly, she motivates organizations to place women at all levels and types of roles. Why she mentions that is because women are not offered the same roles as men, mostly because their managers believe the roles are too tough for women. She herself had to threaten with termination to become a Supervisor at a construction site.

5.2.5 Deputy President: Give women the chance to influence

Improving equality by placing a woman in a male dominated environment does not contribute to increased equality, instead these women lose their chances to influence their situation. According to Deputy President, it is more effective to place women together and allow them to find comfort in each other when they are few. The more women there are, the more their chances of influencing their environment increases. Deputy President is currently working on supporting women, and men, at making career as researchers. Men generally receive more support than women, which she is trying to change. Another issue in the Research sector is that women are more careful when applying for a new position, and it is therefore important to actively work towards making women feel more welcome to all positions. When recruiting new employees, CTH are today reviewing how the job ad is formulated multiple times. There are multiple interviewers. These job ads are also published at multiple forums so that they can attract a wider group of candidates. A requirement for the interviews is that at least $\frac{1}{3}$ of the minority gender must be interviewed.

5.2.6 CEO [1]: Flexibility in working life balance and values

Most of the employees at Älvstranden Utveckling AB are women. CEO [1] believes it depends on the fact that men find public organizations less attractive. Women find public organizations to be more secure than private organizations and are therefore attracted to them. When recruiting new individuals, they often receive more CVs from men, but the female job candidates are most often the ones with the best qualifications. CEO [1] believes that why they manage to attract women with high competency partly depends on the flexibility of the job, that there is a female CEO, their approach towards parenting and their official values.

5.2.7 Head of Unit: Improve reputation, role models and flexibility

The Head of Unit believes that those who can influence the culture at construction sites are those who are in power positions. However, the industry must receive a better reputation to attract more women. Educations who lead to jobs in the construction industry must better attract women and show the multiple carrier options. A bad reputation for the industry influences all organizations within it. She believes the construction industry should put more effort into develop its reputation and trademark. It is important to show role models, at all levels, and visualize women on different roles and levels, e.g. at social medias. It is also important that Head managers in organizations show their support towards equality, e.g. through LinkedIn and other social medias. Some roles at construction sites are unattractive for women because of the low flexibility, and she believes that these roles must develop so they attract more individuals. It enables the industry to secure competence and quality if more individuals find these roles attractive, which further motivate why to develop them.

5.2.8 CEO [2] & Chairman of the Board: Role models, critical mass theory

CEO [2] suggest focusing on good stories. She never got recommended to work in the construction industry and never heard an advisor suggest construction as a career path, rather the opposite. This is because of the lack of knowledge of loads of exciting and meaningful assignments and projects, which we need to highlight and market. Make it clear why it is fun working in our industry, that it is an incredibly important industry that is planning and constructing the society.

To make the women stay in the industry, CEO [2] mention there must be more than one woman at each department, which is the theory of critical mass. This theory suggest that a minority needs to be over 30% to make a change as people are caught in social systems (Oliver et al., 1985). She mentions opposite examples of men in nursing services where a man moved to a section with some more men to feel comfortable in the work climate. It can be difficult to belong to a minority at work. There are a lot of well-behaved men in the construction industry who never had to reflect about how they are participating in maintaining a bad culture. Reasons to why is because they have never worked with a woman.

5.2.9 Operational Manager [1]: Live by the values

Organizations that have visible values and show they are working with improving equality can better attract women, as women will know that the chances for them to receive the same career opportunities as their male colleagues' increase.

5.2.10 Project Manager [2]: Early influencing and welcoming culture

To retain women, sexual harassments must be unacceptable, and the culture must become more welcoming for all. It is also necessary to have a working environment that hinders workers to become damaged. Project Manager [2] believes that many avoid applying for jobs in production, she believes it is because they know too little about it. Therefore, they put a lot of focus on showing what career options there are. Another issue is that there are too little trainee hours during the education, increasing trainee hours would be beneficial as it would allow more individuals to see what construction work really is. What Project Manager [2] also does is to arrange study visits, with the purpose to allow for better knowledge regarding what the jobs are about. Equality is not only needed to attract women; the industry is unattractive for young men as well due to the macho culture. The younger generations find equality important and attractive. To attract both women and men, the culture must change, and the sector needs to become more equal. The strategies used to increase diversity in the industry is to use role models when in contact with students. When meeting students, they arrange competitions such as Future City. Future City is about building a model of a future city, e.g. in Minecraft. It allows students to be creative. A part of the competition is to write a report with a vision for the future city. They also talk about the different jobs in the industry, with the purpose to eliminate the stereotyped picture of a man with a helmet and a hammer.

5.2.11 Operational Manager [2]: A sharing and open culture

According to Operational Manager [2], a strategy to increase the attractiveness of the sector could be to make employees putting their individual interest aside and instead focus on the common goal. This could be achieved through a more integrated working method than the traditional in the industry. An integrated organization between parties in an early phase, which

she specifically works with in partnering projects, makes sharing knowledge simpler. However, it requires that managers eliminate barriers and develop a sharing culture. It is a difficult and complicated process to develop such a culture, but the benefit is that knowledge flows more freely between the members. She believes such a culture could better attract women as it is a non-individualistic working method.

Operational Manager [2] also think that the recruitment process is a good method to attracts any target group and the work environment are prior. A meaningful job is an attractive job. When recruiting new employees' organizations must show that what they do is interesting and developing for the individual.

5.2.12 Diversity & Inclusion Manager: No one feels comfortable being “the woman”

A strategy for retaining women is to place more than one woman in a group. Skanska has initiated apprenticeship for female blue-collar workers as one strategy. They believe that women receive less support in the industry, and therefore offer it through their apprenticeship. Another advice is to not place a single woman at each production site. Being the only woman creates a situation where she becomes “the woman” and is to some extent excluded from the group. When instead placing many women together the chances of exclusion are less, and mistakes can be derived to individuals instead of blame based on gender stereotypes.

5.2.13 Site Manager [2]: Changed culture for the future

To work as a carpenter is generally a good choice because of the salary is better in comparison with work in the health care sector, and other industries. Blue-collar workers in the construction industry earn a lot in relation to the length of their education. The construction industry offers a various range of work tasks and advancement possibilities. The problem is that when individuals experience bad behaviour at site during study visits the bad reputation of the industry is confirmed. It is important to talk about the issue to increase the awareness of what the problem really is and work with the culture and work environment. The younger generation are more used to have gender balanced work groups in school and have more friends of the

opposite gender. This will change the work requirements in the future. Behaving in a respectful manner towards women at construction sites must be the norm, it might require that we add new personalities to make it work. Site Manager [2] confirms that strength is not anything that hinder women to work as a construction worker. He claims that a manager must build a team at site with different competences and dividing tasks depending of their competences.

5.2.14 Project Manager [3]: Improved working climate before the women arrive

At JM it has been important to make the work environment welcome for all, e.g. having locker room for women as well as for men. This has made the progress of increasing the number of women at construction sites easier. When women arrive, the work environment has already been adapted for them. Another way to retain women is to place multiple women at the same construction site, which is appreciated by their female employees.

Further, he suggests that the roles at building sites need to become more flexible when it comes to working hours. He mentions that the difficulty of having children and starting work early at site. He and his wife solved the issue with him picking up the kids from school after work, and she drove them there in the morning.

5.3 Strategies for increased equality

Here we present the empirical findings for strategies that can be implemented for increased equality in the construction industry.

5.3.1 Interview 1: Devotion and demand from individuals at power positions

When KJV are to support a new organization, they are careful to listen and to really understand the structure and issue at that specific organization. They do not give solutions, they deliver ideas and tools. However, for their efforts to become successful there must be a leader in that organization that is engaged to working with equality, and who have power to influence. Step one is motivating employees to become involved in equality efforts, but it must start with them hearing their leaders demand or motivate it. There are different motivational factors to equality work but the clearest is that it is law to have equal conditions for the whole population and informing employees of that can be enough.

Step two is to make an inventory of control documents, which of these fails to eliminate discriminating structures? It is important to make the equality mission as specific as possible. The equality mission should be connected to policies, plans, and control documents as it becomes easier to motivate spending time on equality efforts. When equality efforts are connected to a need of the organization it is more likely that employees engage in equality efforts.

But how can all the above be achieved? Who should be the one who creates a new equality mission for the organization? Equality efforts must be integrated in the daily tasks of each employee, and they must therefore all be involved in the process of creating a change. Everyone must be devoted in the process of change, to reach success. KJV thinks that it is better that employees form the need and identify the issues of the organization and can create their own ideas of how these issues can be managed. Support that enables them to develop these ideas into realistic actions is recommended, and those who have the supporting function can also suggest ideas but should avoid governing.

The organization could start with discussion in groups, where they are enabled to identify the issues, and then together discuss possible solutions and actions that are applicable. These can be collected into a checklist. These groups can be large or small. When KJV supports organizations, the groups are often 6-10 individuals. The main point during these Discussion groups is to make the problem as specific as possible, and the solutions as doable as possible. It makes a change more likely. These groups develop a plan of action and these are sometimes exchanges with other groups, sometimes even with other organizations. What's important during these organizational changes is that the members of the organization are involved in the process and can influence the plan of action. This is equally important when organizational members are not used to think from the equality perspective. What support functions can do is instead, is to give the tools that enable the employees to see and identify the issues by themselves. That could require giving them examples of inequality that they can relate to, regarding their gender, age, and more. It could initiate discussions regarding their own experiences.

A way to secure that the plan of action is followed is to assign a Supervisor to the group. It could be beneficial to have a Supervisor that is external, but who has knowledge of the sector that the organization exists in. The Supervisor should have the role to regularly check how well the action plan is performed and integrated in daily work, and to enable the organization to make improvements during the process of change. Why it is important that the Supervisor has knowledge of the sector which the organization exists in, is because it enables them to better understand which challenges, requirements, and opportunities, the organization could have. However, the most important aspect is good leadership during the process of change. When the plan of action is developed it must be given the power to enable changes, e.g. through sanctions for those who do not follow it. The involvement from the top is critical, according to KJV.

There are some risks during the process of change, for example when organizations assign the task of increased equality to some few individuals in an organization who lack the power to influence the organizational structures and members. Their ability to make a change are limited and changes will be slow and have little or none impact in the long run. Further, in a sector that has a high time pressure, the risk of resistance towards change increases.

5.3.2 Trainee & Student: Force men to talk feelings

To change the culture at construction sites, one must start to understand those who exist in it. Understand which difficulties these men could have when trying to change and becoming motivated to do so. It is important to simplify the process and give them the tools they need, give them examples of what changes they could make to improve their behaviour. Many of these men do not know how to change their behaviour, they have been shaped by their environments from early age and lack the tools to mentally step away from their current environments. It hinders them to reflect upon it. However, it is important that their leaders create rules of what is acceptable and not. When breaking these rules, Trainee thinks there should be sanctions as they motivate employees to follow the rules. There should be no room for being allowed to cross these limits. He believes that a change, to some extent, must be forced. Changes are constant, but they are slow when not forced.

The Trainee believes that role models have a positive influence on the current culture at construction sites. Using certain individuals to show what behaviour is desired, and what behaviour that is not, could be effective. We need groups of individuals who actively protest towards the current work environment. Management teams must also ensure that the work environment is safe for everyone and that those who work at construction sites experience it as safe. When an act of discrimination is identified it is important that there is supporting to receive, and that both the managers and colleagues show disapproval towards bad behaviour. What is also needed is to continuously educate employees regarding the benefits of equality and the consequences of the macho culture.

Discussion groups for men where they are taught to talk about feelings is something that could have a positive impact, it enables men to handle feelings with words rather than physical actions. Further, there is not only one strategy that can be applied and successfully work on everyone. Every individual we are trying to influence is different and making them change their behaviour will require different methods. That makes the change towards equality difficult. They must get access to support, and to be able to work in environments that reflection and open discussions.

5.3.3 Project Manager [1]: Strong statements and sanctions, and coffee talk

A tool for success regarding equality progress is to give men in the construction industry the tools they need to change their behaviour and the behaviour of the group. They need to become better educated and be taught how to change. Contractors who use Subcontractors can demand that their workers act according to the values of the Contractor, or else it will end with an ended contract and no payment. A strong statement of what is acceptable behaviour and not is easy to interpret by anyone and will more likely be successful in a macho dominated culture. Using means of control to set what behaviour is acceptable and not is recommended, especially when handling discriminative acts. However, each organization must develop their own strategy of handling the equality issue. Doing so might require a couple of attempts to see what strategies that are successful for that organization.

Byggnads campaign *Stop the macho culture* is directed towards external organizations, but they have recently started to work internally with equality. For example, they are beginning to talk about norms and stereotypes with their employees. It has led to employees naturally have conversations regarding masculinity norms during coffee breaks. Their external campaign is ongoing, but it has taken a lot of effort and time. However, more and more individuals are becoming aware of their campaign. They are also using external support who are currently planning for a male conversation group. The purpose is to teach men to speak to one another and learn to talk feelings.

A risk with equality efforts is that some organizations are afraid of to reveal and discuss the inequalities in the industry, as it could have the consequence that the industry becomes unattractive. However, after the MeToo protests organizations in the industry could no longer hide the ongoing injustice in the construction industry. Instead of hiding the issues, the MeToo protests have forced organizations to prove they are actively working towards a long-term change. Those men who thrive in the macho culture will most likely show resistance towards changing it, instead they might try harder to keep the culture strong and dominating. However, it is those men who must be involved in the process of changing the culture. They have the loudest voices and influences others more compared to those men who do not enjoy the culture. Those who are devoted to the macho culture use sanctions to maintain it, which increases their

power positions. Therefore, the risk of not involving these men in the development of the culture is that the efforts of changing it are non-successful.

Another risk is to handle the inequality issue badly, a common example is mentioned when a woman experiences sexual harassment, and instead of moving or firing those who have treated her bad, she is the one who is moved. This way of handle the issue is sometimes believed to be efficient, but instead it sends out the signal that she is the issue and not their behaviour. A better way of handle the issue is to fire those who discriminate their colleagues. A difficulty with sexual harassment issues is that women are slow at, or afraid of, reporting these acts.

5.3.4 Site Manager [1]: Talk about norms and inclusion, gather women and challenge mindset

Site Manager [1] believes that the consciousness of the consequences of macho culture differs between white-collar and blue-collar workers. The consciousness also differs between departments, e.g. her own with many women compared to other departments with almost no women. She chose to not change department to avoid exposure and discrimination, as she would have become a minor minority. As effective strategies, Site Manager [1] mention recruitment, but also starting with the culture at site. Change the culture before the women arrives, and work preventive. Stop arrange sauna parties and other exclusive activities. Talk about norms, exclusion and inclusion. Demand support for changing the culture from above, the head management team must believe in it. She arranged a diversity workshop, but on demand from the Project manager. She further decided that, as a Site manager, all blue-collars workers, some from the Head management team and Subcontractors must attend. The whole spectra from Truck driver, Executive manager and client representatives attended. An advice from Site Manager [1] is that exclusion is easier to talk about because everyone has sometime felt excluded, e.g. in a football team. Regarding inclusion, she has herself experienced it. She has been threatened as air from blue-collar workers.

Workshop has shown to be an effective and appreciated activity. She recommends working with the dialogue and reflections about norms. Discuss regularly, and the topics can continuously be pushed forward. After these workshops, she has experienced progress, e.g.

when her Blue-collar workers started to question why they do not greet each other depending on grouping. Small acts that might have been still ongoing if we did not talk about exclusion. Site Manager [1] mentions a bright story with a Blue-collar worker who had a challenging behaviour. He had to move from project to project and barked on people often. Site Manager [1] found a way to communicate with him during the project. She used different methods to try reach out to him. At one of the workshops she allowed workers to express themselves with a few accessories and products. The challenging employee proudly presented nail polish, which was a sign for a great progress with his openness. She mentions that as Site manager she always tries to challenge the workers and to include them as much as possible. She tries to change their way to communicate and think. When they complain about the mistakes of others, she tries to make them think from their shoes, which is often successful.

Site Manager [1] further suggest a system where you report sexual harassments, like we report injuries and risks. She would like to shadow workplaces and analyse their culture, and measure what is said, how often, and similar. An advice given is to quote in men to seminars and lectures for female networks. Education in all levels for everyone is the key.

5.3.5 Deputy President: Digital tools, lectures, and civil courage

At CTH Deputy President is actively inviting employees to lecturers of equality, these sessions often end with group discussions where employees at CTH can further reflect and discuss. These sessions are non-mandatory now. When inviting lecturers, male and female lecturers can influence and present different material. She has experienced that men listen more to other men who talk about equality, which allows for male lecturers to make strong standpoints and receive support. If a woman would have said the same thing, she would not receive the same support from these listeners.

Deputy President thinks it is important to invite men to become engaged in equality, where it is important to state that they do not have to be experts from start if they find equality important or interesting. She engages men to become involved and step out of their comfort zones. Equality efforts achieve better outcome when both men and women are involved. During some internal workshops, discussions are held both with men and women separated and then in

mixed groups, an appreciated method. What is important is that those with the most powerful positions in an organization are involved and show support. Her interest towards equality has influenced the whole organization and is therefore a critical factor towards keeping equality efforts active.

Another method used at CTH is workshops, e.g. where employees can practice how to behave in situations with discriminating acts. She believes it enables employees to handle and prevent further consequences when someone is exposed to e.g. sexism. Behaviour is something we can practice, e.g. how to mark a behaviour of a colleague as unacceptable. Employees who are sexist must also receive consequences from their superiors, e.g. by receiving a warning first and losing their job if it happens again. Further, CTH are currently developing an app, which students and employees can download to report sexism and discrimination. The app also enables CTH as organization to easier handle these situations and to monitor how equality efforts influences. However, the main purpose of the app is to make the process of reporting simple for the victim. The responsibility of taking actions towards the act is instead put at the department of HR. At CTH they also use surveys to collect the experiences of their employees, which is a method of measuring the progress of equality efforts. The results are later analysed and processed by Deputy President. What CTH has been doing as an organization is to develop their values and transfer them to their employees. Accepting their values is a requirement for all new job candidates, and it allows CTH to attract individuals who share them. A future target at CTH is to receive an equality certification, as it puts new demands on their organization.

5.3.6 CEO [1]: Access to more perspectives and better products

It is important that an organization try to handle the needs of all employees so that they can have a smooth work life balance with family. What Älvstranden Utveckling today are looking at when recruiting is differences in personalities. They want to attract individuals with the ability to have a broader perspective, they believe these individuals have the right attributes for how they desire their organization to work. The personalities they find attractive are equally often found in men, as in women. They educate these individuals afterwards, and focus is instead put on the abilities of the individual instead of their current qualifications. However,

when further educating these individuals they have clear demands and offers the help these individuals need to learn according to the requirements of their organization.

Further, as an equality effort they pressure men to stay home with their children when becoming parents. They have made it simple for their employees to go home and take care of their children. Influencing employees to take equal responsibility at home has been a simple process, which depends on the engagement from their Head management team.

When asked how the macho culture could be handled at production sites and how it influences the industry, CEO [1] answers that the focus is often put at the wrong areas. For example, risks are analysed with regards to the budget, time schedule or the quality. However, there are risks that appear more often but that are forgotten. The risk of producing an unattractive product is an example of such and could be handled with a bigger focus on the human aspects in a construction project. What future customers value is more connected to soft aspects connected to the product, rather than technical ones.

The biggest chances for influencing the industry towards change is when Älvstranden Utveckling sells land shares. They have recently started to focus on social criteria in procurement, as a requirement for tendering. One example of social procurement is when clients require the contractor to accept an apprentice who is currently unemployed.

CEO [1] does not see any actions that they as client could take to improve the situation for women at construction sites. She believes that the reason women stay shortly at construction sites is because they are quickly making career, as the industry is in need for more women. However, the issue with the macho culture is something she believes is mainly influenced by international blue-collar workers. Therefore, it is difficult to change the current macho culture at construction sites because the pressure to produce quickly does not allow for improvements connected to equality. As women are quickly moved from construction sites to the office, they do not have time to influence the macho culture. Instead efforts for changing the macho culture should be saved for periods with recession as the Swedish construction industry is less dependent on international Subcontractors then. What can be done meanwhile is that e.g. the Swedish construction federation, could control why women stop working at building sites and

make sure that it does not depend on sexual harassment and discriminations. Älvstranden Utveckling could then call the Swedish construction federation to make sure that organizations who tender are free from an act of discrimination and sexual harassments. However, she has yet not met or heard of a woman that has left the industry due to sexual harassments but is aware that the macho culture influences women negatively when working at construction sites.

A general change has occurred in the industry, the representatives of the contractors are today better at focus on soft values and understand how hard and soft values interfere with each other. When trying to influence others to change their behaviour, it is important to take small steps and avoid demands from Head management level that subordinates avoid as much as they can. The goals of equality efforts need to be clear and divided in many small milestones.

Internally, Älvstranden Utveckling AB are continuously working with equality through discussions regarding norms and values, e.g. through games that increases reflection regarding equality, and educations for leadership groups. They put most of their focus on their leaders and managers as they influence the organization the most. Their managers receive a lot of support regarding leadership behaviour from their HR group. With good leadership comes desired behaviour from employees, followed by good results and a working environment that employees enjoy.

5.3.7 Head of Unit: Equality bonds & Risk of losing competitive advantage

The Head of Unit mentions that some equality efforts end up in putting a single woman at a construction site and hoping she will change the work environment solely with her presence. What happens is that she become “the woman”, and that becomes her only attribute. She is powerless to influence the culture, as she is a minority who lacks the mandate to demand change. It is the Head management team who have the power to influence and set demands. The Head management team should instead develop a plan of action, with regular follow ups and analyses of its progress. There should be a plan of action for external equality efforts and internal equality efforts. An action could be an equality week, which the organization of Gothenburg City has annually for employees. During the equality week there are lectures and discussions. This week is not mandatory for their employees, but Head of Unit mentions that

at Lerum Municipality (the neighbour municipality of Gothenburg) equality and environment education is mandatory for all new employees.

When recruiting new employees, Head of Unit mentions that it is important to specify that women are wanted. Women and men are attracted differently by job ads and women are more restrictive to apply for male dominated jobs. When it is specified in job ads that women are welcome to apply, the chances for women doing so increases. It is also important to carefully formulate what criteria that are required and what criteria that are beneficial but not necessary at start.

Head of Unit believes that an equality certification could have a positive impact as it shows that an organization can deliver the demands of the certification. It could bring competitive advantages, especially if client and customers finds it attractive or demands it. Head of Unit believes that money could influence the equality progress of the construction industry. What Gothenburg City could do is to demand such a certification during procurement. Organizations who do not actively work with equality, would then risks its competitive advantages and negative economic consequences due to it. Their need for money will increase their interest in equality efforts. There is a chance that some organizations find the equality certification unattractive due to the worry for not attracting men who are comfortable with the current macho culture.

Another suggestion for how equality work could become improved, is through equality bonds. Equality bond could be a bond specifically to support equality efforts. She believes using monetary measures to improve equality is an effective method. When comparing the equality progress, we shouldn't measure equality in numbers, and instead use surveys. However, the outcome will be influenced by the knowledge and awareness of those who answers these surveys.

5.3.8 CEO [2] & Chairman of the Board: Mass-education and influencing

CEO [2] is actively working to change the macho culture with methods inspired by learning by doing. Together with Head management teams in organizations she has enabled them to

develop their values, and methods of how to handle when employees are behaving in the opposite from these values. She states the importance of speaking about the equality issue and spread knowledge regarding it. She calls for mass-education. Examples of how to make individuals reflect better is to ask them about situations where they were in minority, a situation where they have been different from all others. From there she can easier make them understand the situation for women in the industry.

A well-functioning strategy used by professional organization Ledarna is to influence the opinions of their members. Through influencing them they receive a lot of attention. It has become much easier to address equality issues after the MeToo movement, equality knowledge has become more attractive. They are contacted by multiple members who seek their supports regarding acts of discrimination. She also finds inspiring examples to be an effective strategy as these examples show that it is possible to successfully make a change, and that there is something to gain from it.

Strategies that can be applied in the industry is how organizations with the ability to set demands require others to actively work with equality. A client can demand it from the contractors, who can demand it from their subcontractors. Additionally, if big clients are setting the demands it will have a greater influence on the rest of the industry. It would create a development like the one of sustainability.

A strategy to influence the industry developed by their professional organization, is a foundation for equality initiatives. All initiatives are good. The board have invited members to inspirational lectures, with the purpose to open for reflections and discussions. However, the ones who shows up are mostly people who already is aware of the problem. Even if the interest is good for these lectures, it does not create the change needed as those who maintain the macho culture show little interest. They have instead begun to title the lectures differently and surprise the listeners with equality discussions.

CEO [2] believes it is necessary to start from above and use all muscles of the organization to trigger a positive development and an interest from their members. CEO [2] claims it is easy to think it is many “*silly white men*” who do not want to change. She disagrees with that view

and believes that these men rather lack the knowledge they need to be able to change. Therefore, she recommends education until everyone has received the tools they need to become part of the change. She believes the only way to eliminate the macho culture is to use education and brave leadership.

5.3.9 Operational Manager [1]: An equality certification system

Operational Manager [1] works in an organization that has chosen to tackle the inequality issue at the enterprise market with an equality certification. The certification is their strategy to improve equality and how we distribute power, money and the ability to influence the development of society. Why they have chosen to tackle the issue of equality in organizations with a certification, is because it enables organizations to internally and externally show stakeholders their values. It also shows that they have chosen to engage in the equality issue. When becoming certified an organization have decided to systematically and structurally work to improve their organization. However, for the certification to become an effective tool, the decision to become certified must be demanded from the head management team.

To become certified an organization goes through the steps of informing their members, making an inventory of the organization, developing the culture and their spoken values, having discussions with all employees and creating an action plan. What is important is that the action plan contains milestones and goals that are achievable and can be measured. The equality certification is a management system that enables organization to become equal regarding the entire structure of their organization. It further demands them to continuously create goals and achieve them. Every organization set their own goals which enables all type of organizations to become certified.

They have also developed an equality map. The equality map presents factors that influence equality in society, such as proportion of men and women in organizations, inhabitants per municipality, unhealthy rate, and more. The purpose is to show how power and the ability to influence is distributed in each municipality. They are hoping it will lead to political decisions that facilitate equality efforts.

Due to the small percentage of women in leading positions of organizations, women are not able to influence and improve the way we plan and structure our society. However, Operational Manager [1] is sure that with an increase of women in leading positions there would be a change of the game rules of the enterprise market. A competitive improvement for Sweden globally. Organizations that choose to become certified can better attract women and will then be able to create new competitive advantages. They will more easily be able to handle the increased globalization.

When it comes to working with equality issues, it is important to be aware that it requires different kind of approaches. However, it is always beneficial to work with facts and statistics.

5.3.10 Project Manager [2]: Sharing experiences

What strategies that can be implemented depends on the knowledge of the organizations that is working on equality. Factors that influences the equality efforts is the size of the organization and their knowledge regarding how norms influence us. It is therefore important to allow organizations to take the time they need to progress regarding equality.

They also facilitate discussions between organizations in the industry, where they enable them to share their ideas and improvements of how to become more attractive and equal. Sharing experiences is a key to progress.

5.3.11 Operational Manager [2]: Inclusive culture & equality plans

Operational Manager [2] suggest making a routine of reflecting upon structural discrimination, e.g. continuously reflecting and discussing the reasons to why we consider an individual as the right candidate for a leadership position. Is it due to their gender or because of their qualifications? Regarding workers on a construction site, managers need to reflect upon who we assign the tasks connected to quality, work environment and administration. If it is a woman, why is she assigned the task? Further, managers need to reflect upon why it is more commonly to find men in positions in line to advancement. Reflections as such, require an open culture where you can question the existing structure and individual experiences.

In the organization of Operational Manager [2] they systematically work with equality plans. They further have workshops where employees together discuss about the culture of the organization and prevailing norms, through which they increase their awareness. Continuously working with the culture of the organization have a positive influence regarding equality. A culture where openness and transparency are valued, employees can share and help each other to develop. Such a culture enables better development regarding social, technical and economic aspects. Further, Operational Manager [2] experience the younger generation to be more aware of the social system. She believes that their culture is found to be attractive for young employees, which enables them to facilitate innovative solutions and continue their development towards developing competitive advantages.

Operational Manager [2] believes that the reputation of the industry as macho dominated influence its attractiveness negatively. She identifies risks with negative market campaigns, as it strengthens the reputation of the industry as unequal. The industry differs, and all women do not experience the industry as unequal. Instead, focus should be put on positive examples of the industry, examples that everyone finds attractive.

5.3.12 Diversity & Inclusion Manager: Place women together & at many levels

According to Diversity and Inclusion Manager, a strategy to increase equality in an organization is to avoid putting women at administrative, environmental and staff functions solely. Instead, women need to be placed strategically at all positions and in teams with more than a single woman. To create a culture that is inclusive, there must be brave managers with good leadership skills. Diversity and Inclusion Manager mention that one of their initiative for equality is an apprenticeship for female carpenters. The apprenticeship has the purpose to offer extra support for women when entering the industry, as they are the minority gender of the industry. She claims inclusion is about taking care of what you got through care about each other. This requires brave leaders.

When supporting managers with questions regarding diversity, she often must remind them that the benefits of diversity is that individuals do not think alike. She points out that the employees of the future will not have the same background and experiences as the managers today has. A diverse team require a change on what managers can expect from their

subordinates and what characteristics that are viewed as preferable. It requires new management methods, a change that is not always simple or appreciated by managers and employees.

Diversity and Inclusion Manager mention that her organization is mapping women in line positions and manager positions. One important method is to measure in numbers and set goals. To reach increased equality, one must work with education and talk about the issues. E.g. she mentions “Etikstopp” (Ethic stop), an initiative to talk and reflect about ethical situations. One must continuously talk about the issues and how to behave in general, it requires practice. It is all about leadership and courage, as well as knowledge regarding organizational values.

5.3.13 Site Manager [2]: Equal conditions for men and women

It is important to eliminate the differences of conditions for the men and women to include all parties naturally in the group, e.g. separated dressing rooms. These dressing rooms must be positioned close to the dining room. It is also important to arrange inclusive activities and include everyone outside and at the workplace. To retain the competence, it is important to include them in the group, there are often clear groupings at site. You also need to make them feel appreciated and valued in their everyday work. When asking about if he saw a possibility to offer mentoring to the women at site he suggested that the supervisor or team leader should be educated for mentoring women.

Sometimes it easier to encourage the construction workers to initiate change themselves. He describes a culture where construction workers feel steamrolled by the managers, and therefore suggest including the workers and make them set their own rules. If you instead strategically encourage them, e.g. to recommend female colleagues, it probably results in increased efforts to include female carpenters. Employees must reflect about the issues themselves and get support to make their own conclusions of how they should act or behave. A leader can influence by informing employees about values and rules they need to follow, but they must live it themselves to make a difference. The culture in different companies differs a lot. It is getting more common to talk about soft values and thinking about the social environment, which is important to work with.

5.3.14 Project Manager [3]: Trainee program for women

A strategy used at JM to increase the number of female blue-collar workers is to have a trainee program only for women. The purpose is to increase their number of female blue-collar workers to 20% until year 2030. They use podcasts to market their trainee program. The trainee program is 3,5 years long and they are offered a salary during it.

An important factor for the success of all their actions towards increased equality is that the head management team are engaged in the issue, and that their values are spoken to employees at all levels. It is important that all managers set the rules for what behaviours that accepted and not. At JM they have discussions regarding how to make the work environment more welcoming for everyone, both at site and at the office.

What is common for the industry is that a blue-collar worker, e.g. a carpenter becomes a supervisor after 10 years of experience, and after further 10 years of experience they become a site manager. A consequence is that the site manager most often chooses to promote someone who is similar himself, regarding gender, values and experience. The risk of this is that someone with macho tendencies secures that the culture can continue exist. However, at JM they use an equality perspective when choosing who to promote for these roles. They are actively working for attracting women for the roles and making sure they are promoted on equal basis as men. They question what characteristics they find important for these roles. According to Project Manager [3], the focus is put on leadership skills and leadership methods that secure the organizational culture that they strive for. What makes it possible to develop individuals to handle the role as supervisor better, is that they offer them support which is often needed for employees that are recently graduated. A suggestion for the future is to change the working hours at construction sites and make them become better adapted for employees with children. It could make the roles more attractive and allow for a more diverse workforce.

Another strategy to maintain the culture that they value is to use their own blue-collar workers, instead of external workers. It enables them to educate their employees about their culture, their values, and more. The education is conducted through a five-day education that all their

employees must join. Focus is put on the work environment, values, culture, visions, structural production and more. There is some resistance from those who have become blue-collar workers only to avoid educational environments, but there has also been positive feedback. New employees must also play games and join other activities where they discuss ethics, values, and moral.

When it comes to influencing all organizations of the construction industry, Project Manager [3] believes that using workshops that include discussion is more effective than offering lectures. It is also important to measure the result of these workshops.

5.4 Incentives for equality work

Here we present the empirical findings of incentives for increased equality in the construction industry.

5.4.1 Regional Developer: Important to identify incentives for long term efforts

According to Regional Developer, what incentives that work for each organization varies with their employees. Head managers can facilitate discussions that would clarify what their employees need to become motivated to perform equality efforts, e.g. attention and appraisal from Head managers for their efforts. Another method is to allow individuals to develop their own incentives, which is what KJV often do.

When asked for opinion regarding a certification of equality, Regional Developer mention that using a certification to send signals to external parties that equality is valued is good if it creates a system for long term efforts. However, if it only becomes a sticker to show then it becomes a risk as the progress could end. Incentives that motivate organization to develop and follow a long-term action plan are what is needed for reaching progress.

5.4.2 Trainee & Student: Equality certification is not enough

According to Trainee, the construction industry has not yet realized the importance of equality and the benefits it could bring. The industry needs to mature before realizing the value of competences that could enable them to achieve increased equality. Incentives he believes can be used to motivate blue-collar men are to inform them about the consequences the macho culture brings for them, e.g. early deaths, damaged bodies due to heavy work, and other health related issues. It influences them to change so that their quality of life can be improved. He further recommends motivating them to act with arguments such as, that the only winner of the macho culture is their employer. The employer does not need to invest in required tools and more employees if employees avoid asking for help. He hopes blue-collar men will become frustrated enough to act. Another incentive for equality is that a diverse workforce is better from many aspects, competitive advantages and work environment. However, with the requirement that there are equal conditions for all.

When asked for opinion regarding a certification of equality, Trainee believes that the industry must actively work towards finding solutions towards equality, but we cannot put our trust on an equality certification to ensure that. It risks to become a symbol to show but nothing more. He believes organizations would assign an employee to maintain the certification, but probably not someone with equality knowledge. According to him, it is because the ambition for equality in the industry is low.

5.4.3 Project Manager [1]: Demands from important clients

When asked for opinion regarding a certification of equality, Project Manager [1] believe that it is better to focus on requiring that organizations in the industry act in accordance with the Discrimination Act (2008:567). However, if an equality certification would be a requirement from a client it could influence equality efforts. Especially if the demand for a certification of equality came from the larger clients.

Another good incentive that enables organizations to influence external organizations is money. He believes that clients of the industry, e.g. public organizations, should demand that the contractor have ongoing and active efforts towards increased equality, and that all means of control should be used. A client has a powerful position and could therefore set the demands of what is acceptable and not regarding the working environment at construction sites. Organizations in the construction industry are in a need of more tools as it would enable them to work more actively with equality issues. However, organizations also need more incentives to get started and speed up the progress. It enables the client to use money as a mean of influencing. The client therefore has the possibility to control the behaviour of contractor and their subcontractors. The incentive for other organizations in the industry should be to secure their access to qualified individuals. However, he believes that the members of the industry need more knowledge to identify incentives for equality.

5.4.4 Site Manager [1]: Good examples, enticed by men

Site Manager [1] suggest that incentives for equality could be strengthen with examples of improvements due to equality and equality efforts, e.g. how a wider set of ideas becomes

possible. Another incentive could be using a system where it is simple to report sexual harassments, like reporting injuries. Organizations will be motivated to lower the number of discriminating acts. Therefore, it will work as an incentive for equality efforts.

When asked for opinion regarding a certification of equality, Site Manager [1] answer that a certification could be good as it show that an organization is continuously working on equality. It makes an organization attractive as their values are clearly stated.

5.4.5 Deputy President: Money talks

According to Deputy President, the most effective incentive is money. Money influences what individuals are willing to put effort into and could therefore be used to influence their motivation for equality efforts. When there is a risk of losing economic gains due to being unequal, the interest for becoming equal simply increases. However, incentives used internally are the argument of quality and acting fair as an organization.

When asked for opinion regarding a certification of equality, Deputy President has an ongoing plan for certifying their organization. She believes it will put new demands at their organization which will enable them to progress. It also becomes easier for her to motivate equality efforts when demanding them from employees.

5.4.6 CEO [1]: Money and control

According to CEO [1] an incentive for influencing equality efforts externally is money and control. CEO [1] thinks that what they could do is to pressure federation organization in the construction industry to become the ones to control how equal production sites are and report to client organizations, e.g. the Swedish Construction Federation. An incentive for the contractors is then to make sure that what is reported by federal organizations is accepted by the clients. If clients do not accept what is reported, then they won't be allowed to tender.

Internally, CEO [1] thinks that the incentives they are using today is good, which is that if employees do not behave equal they could lose their job. Employees who discriminate are not

allowed to stay in their organization. A requirement they have for individuals to become managers is that they can handle discriminative situations and can make sure their employees follow the rules for what is acceptable. Therefore, an incentive for employees to become managers is to be able to take actions in discriminative situations.

When asked for opinion regarding a certification of equality, CEO [1] thinks that the danger of a certification is that the steps towards a certification might be too large, which could influence the motivation for equality negatively. Instead she believes that it is better for an organization to set small goals, which they can achieve, e.g. small cultural developments. Small goals that are achievable are better than to prove numbers. However, she believes that the main goal should be that an organization in the future become certified.

5.4.7 Head of Unit: Equality bonds, competitive advantages, and more.

According to Head of Unit, competitive advantages on the market is an incentive of why organizations should work with equality, together with the reasons mentioned of why we benefit from equality. She also believes that money influences how willing organizations are to work with equality, which clients would use during large procurements. The client is the one with power to influence.

When asked for opinion regarding a certification of equality, Head of Unit mention that she is interested in certifying the organization she is in. According to her, becoming certified helps the progress as it puts a lot of demands on an organization. It also attracts individuals who value equality. Head of Unit also thinks that organizations should become better at using equality index, which show the distribution between men and women regarding different aspects and enables organizations to measure equality. Interestingly, she also believes that for some organizations, an equality certification is unattractive and becomes the opposite of an incentive. There is a risk that when trying to recruit while there is a deficiency of workers, some will find the certification threatening. They might instead apply for jobs where they know the culture is like what they are used to.

Head of Unit mention that there are Green bonds, bonds reserved for green efforts and projects. Like that, she believes that Equality bonds could be a good incentive. It would be money reserved for only equality efforts, which would attract organizations in the industry to devote to equality.

Another incentive could be an equality plan with goals connected to the budget. Measuring the progress towards these goals would then influence employees' motivation to work with equality efforts.

5.4.8 CEO [2]: Power as a Client - forcing a positive spiral

When asked for opinion regarding a certification of equality, CEO [2] believe that a certification show that an organization value equality. It could influence its members to continuously work with equality efforts, e.g. the LGBTQ certification that is often used in other sectors. She adds that there is almost no openly homosexual in the construction industry, she has actively searched for open homosexual persons at leader positions in the construction industry without success. An LGBTQ certification could attract more individuals to the construction industry. Equality attracts a wider diversity of individuals, which could enable the construction industry to handle the deficiency of individuals to employ. Further, she mentions that clients could strengthen incentives for equality by demanding it during procurement, like the requirements of social sustainability efforts. If the larger clients join "the train", then it could have a big impact on the industry according to her. She adds that Byggcheferna has recently initiated a foundation for equality initiatives as incentive for equality progress in the industry.

5.4.9 Operational Manager [1]: Competitive benefits & increased economic gains

When asked for opinion regarding a certification of equality, Operational Manager [1] who is managing a certification herself, mention that a certification show that an organization value equality. It could enable them to attract more women, especially in smaller municipalities where the deficiency of workers is worse. It would also attract men who understand the benefits of equality. The certification allows organizations to structurally progress according to their individual need and will allow them to improve. Incentives for equality is that it gives a

competitive improvement, better work environment, better quality of what is produced, and the increased chance for building so that it works for both men and women. Further, equality enables organizations to reach better economical result, which is often a highly motivating incentive. However, due to the low interest for their equality certification, she is not sure that the incentive of increased economic gain is enough. There must be more demands from external parties. Otherwise, men will continue to preserve their work environments, as it has been developed by them and for them. Additionally, she mentions that she has not yet identified what incentives that could influence equality efforts from powerful men who show little support for equality. Their interest remains low.

5.4.10 Project Manager [2]: Attracting talented individuals

According to Project Manager [2], an incentive for equality is the need of making business. They must attract women so that they are able to have many ongoing projects. If they fail to attract women, they will not be able to compete for new jobs. Equality and diversity also bring advantages, as it increases competitive advantages. Equality would also make more job roles in the industry attractive, which could solve the deficiency of qualified individuals. Increased attractiveness could attract individuals with better performance in school if the reputation of the construction industry was improved. It could increase the overall quality of employees.

When asked for opinion regarding a certification of equality, Project Manager [2] became interested in learning more about it and apply it to her organization. However, she had no further comments now.

5.4.11 Operational Manager [2]: Requirements from client organizations

When asking about efficient incentives, Operational Manager [2] mention clients as an effective and powerful actor as a purchaser and creator of requirements. When client add requirement, contractors quickly try to match their inquiry. She adds that they try to influence a social development in the industry through their clients. The requirements from clients must be thoughtful in terms of eventual consequences. Clients could require contractors to report how they are working with equality as a means of control, e.g. through presenting their action plan which the client values in points. She states that it is extremely demanding to work with

the business and procurement process. Demands from the client influences the process and develop the industry the most, especially public organizations. Demands that have had time to develop and become integrated in the industry could become the core value for contractors and strengthen their competitive advantages on the market.

When asked for opinion regarding a certification of equality, Operational Manager [2] believe that it could have a good influence when demanded by clients. According to her it could be enough if the client asks for a presentation for equality efforts during procurement process. It influences contractors to start reflecting about equality and try to meet the requirements of the client.

5.4.12 Diversity & Inclusion Manager: Demands from clients

Skanska has the strategy to be a leading role model who positively influence the industry, which is an incentive for them to progress with equality. Diversity and Inclusion Manager believes that Professional organizations need to influence other organizations in the industry. When asked for opinion regarding a certification of equality, Diversity and Inclusion Manager mention that they have already certified their HR department with the HBTQ-certification.

Further, Diversity and Inclusion Manager mention innovation, development, and the advantage of employees mirroring the diversity of society as important incentives. The equality question is very relevant now, and just in time. 50 % of their business partners belong to the public sector, and if they would require equality during procurement it would be an efficient method to influence the equality progress of the industry. Equality progress would positively impact business, society and the work environment in the industry. She suggests to further investigate how requirements from clients could influence subcontractors and suppliers, and if this could create an incentive for their equality efforts as well. According to her, asking subcontractors to talk about their equality work could influence them to begin developing it as the reflective process begins.

Regarding campaigning about the macho culture in the industry, Diversity and Inclusion Manager suggest marketing good examples instead. She believes it would influence the

attractiveness of the industry better, without denying the problem. Confirming the macho culture makes the industry increasingly unattractive, according to her. She has experienced side effects where new employees expected a much worse culture before they entered the construction industry. Campaigns regarding the macho culture may have scared away potential employees.

5.4.13 Site Manager [2]: Contractual demand for equality consideration

In the project that Site Manager [2] is currently working in, they have a contractual demand to include social considerations. He thinks it should be possible to take similar action to the equality issue. It is probably one of the most efficient methods to influence the number of female blue-collar workers, which is necessary according to him. When asked for opinion regarding a certification of equality, Site Manager [2] has the response that a certification, e.g. the HBTQ-certification, could lead to an organization becoming satisfied with a paper. However, he mentioned that he had little knowledge of what the HBTQ-certification system is about. He believes it is more important that organizations act according to their values and have leadership to facilitate them. What could influence the development of incentives for equality, is increased knowledge regarding equality. Practical support for employees at production could increase their motivation for equality, it becomes easier to understand how to work with questions regarding equality.

5.4.14 Project Manager [3]: Appraisal and promotion

Using a certification as incentive for equality effort was not an attractive idea for Project Manager [2]. Instead he believes that a better incentive they could develop, would be to promote good managers, with focus on their ability to retain both male and female employees. Managers who can facilitate the development of employees, e.g. through a welcoming culture, should receive appraisal. Giving them appraisal could work as an incentive for them to continue improving the culture and work environment for employees.

6. Analysis

In this chapter we analyse and discuss the empirical material and data collected. Areas in focus are: Why equality; How to retain and attract women; Strategies for equality; and Incentives for equality.

6.1 Analysis of equality in the construction industry

The results from research show that there is an equality issue in the construction industry, women and men face different social rights, possibilities, and opportunities. The construction industry is unequal both from the qualitative and quantitative equality perspective. The quantitative perspective is simple to identify as there are fewer women than men in the industry and salaries are compared in numbers. However, qualitative inequality can be difficult to identify for those who do not experience them. Discriminating structures are often subtle. Inequality could occur in any situation and context. Unequal actions, even when subtle, bring consequences such as women experiencing social identity threat. Social identity threat influence performance negatively. Further discussions regarding equality and why equality is needed is presented below.

6.1.1 The human rights perspective and anti-discrimination

Gender discriminative structures that currently disfavour women, especially at construction sites in Sweden (Johansson, 2015; Byggcheferna, 2013; Sveriges byggindustrier, 2017:3, Lyckhage et al. 2015; Byggnads, n.d.; Hyllander and Jacobsson, 2018; Logel et al., 2009). The ideal construction worker and construction manager is stereotyped as a man due to the history of the domination of male workers. Further, jobs at construction sites have been developed by men and for men. It has resulted in a work environment that is unfriendly towards women. What makes the environment unfriendly is the macho culture, the prejudices male workers carry, the inadequate developed tools, erred stereotyping of women and men, and more (Johansson, 2015; Byggcheferna, 2013; Olofsson, 2000; Sveriges Byggindustrier, 2017:3; Byggnads, 2015; Conway et al., 2018). Research is clearly showing that due to the unequal distribution of power between men and women, women have little abilities to change the macho culture. Instead women must develop coping strategies to handle their work environment and

culture. What research has shown is that consequences of the macho culture is hostile jokes, sexist behaviour, exclusion, labour deficiency, low attractiveness of the industry, strengthened biases and stereotyping, lower quality, and more. The trainee who have experience from working as blue-collar worker mentions that the culture is only welcoming towards the white, heterosexual, macho man, and is unwelcoming towards everyone else. He further mentions that sexism and degrading behaviour is common, a part of the daily climate. Project Manager [1] mentions that during a period of almost 30 years he has yet not met a woman who has not been exposed to harassment when working at a construction site. Site Manager [1] mention her struggle to be allowed a position at a construction site, and according to her, women are often placed at roles of quality, sustainability and work environment. She has also experienced multiple discriminating situations. CEO [1] mention that women are expected to have more faults and less knowledge, compared to male colleagues. It influences how both men and women listen to a woman speaking, and the respect for what is said by a woman. Head of Unit mentioned a personal experience of gender discrimination regarding salary, where she was disfavoured as a woman. The rest of the interviewees do not mention specific situations they have experienced, but they all share a common perception of that it exists structures in the industry that are unequal. The inequality issue is confirmed by all interviewees from the construction industry and was also mentioned by interviewed representatives of the Research sector and the Healthcare sector. Not only should the construction industry develop so that discriminating structures are eliminated, all sectors should. Inequality is according to a human right perspective a society issue.

Discriminating structures exist because of norms and gender stereotypes. Norms especially important to question in the construction industry are gender norms. As mentioned by Lyckhage et al. (2015), men and women are believed to be opposites regarding their characteristics. Concurrently, the male body has a higher value socially which has influenced the normative system we have adopted in society. However, the consequence is that we have an erred perception of men and women that disfavours women. Gender stereotypes are a social construction, a construction developed through the interaction between individuals (ibid.). Both how Cambridge dictionary (n.d.) and the Swedish Academy dictionary (n.d.) define macho show that a macho culture excludes women. According to the Swedish Academy dictionary, a macho culture includes “...a condescending attitude towards women”, and according to

Cambridge dictionary men in a macho culture avoid showing weakness and sympathy. The research of Logel et al., (2015) show that women who work in a macho culture experience social identity threat and underperform significantly. The survey by Byggcheferna (2013) show that the majority of 1415 respondents define the culture in the construction industry as macho. The answer from our interviewees vary but most of them identify the industry as partly unequal. Our interviewees with recent experience of working at construction sites identify that the macho culture still exists and thrives, while the interviewees who have no experience of working at construction sites believe that the culture has changed. It indicates that it is the individuals who have positions of power in the construction industry who lack experience from working at construction sites. Only Project Manager [3] believe that the macho culture has been eliminated at their workplace, due to clear rules from managers. They have not identified signs of gender discrimination at their projects. Interestingly, in the study of Conway et al. (2018) it was shown that women avoid reporting discriminative acts because of the fear of it influencing their career. It could therefore lead to individuals believing that inequality do not exist. Further, CEO [1] believes that the current issue with the macho culture is strongly influenced by the use of international workers. She believes that some of the international workers have an old-fashioned view of women, which influences the culture at site towards macho. She believes that improving the culture is better done during periods of recession when there are fewer internationally workers. However, research show that the dominating group at construction sites are white men with a Swedish heritage, and there is little indication that the use of international workers can explain why the industry is gender unequal. Additionally, research has shown that women are recruited during periods of boom and discriminated against in the recruitment phase during periods of recession (Olofsson, 2000). Gender diversity in the construction industry has been kept low through discriminating structures. The survey of Byggcheferna (2013) showed that 90 % women identify the construction industry is unequal. In the cases where our interview respondents believe that the macho culture has been changed or eliminated, their equality effort focus were instead put internally. Concurrently, Project Manager [1], Chairman of the Board, and Project Manager [2] had identified an increase of interest for equality from their members. They are the representatives of trade and professional organizations. It indicates that the overall awareness regarding equality has increased. It indicates the relevance of the development mentioned by Kacim (2017), the younger generations value gender equality more than former generations. They want equality and they

require their future workplace to mirror their values (Twenge et al., 2010). It influences employer's conditions to employ and retain competence.

According to Lyckhage et al. (2015) consequences of gender stereotypes and norms are that there is an unfair distribution of work, power, control, and wages between men and women. All in the favour of men. These discriminating structures are not visible and outspoken. Hyllander and Jacobsson (2018) mention that gender stereotypes and norms influence our abilities, and that differences between the genders due to biological differences are non-existing regarding cognitive abilities, verbal ability and differences in communication. However, the erred and negative perception of women influences their ability to change disfavoured norms and stereotypes. Multiple of the interviewees mention that women influence the culture at construction sites, and what research show is that when women are in minority they are exposed to discriminating acts. However, when women are closer to majority their chances to improve their work environment increases. As mentioned by Logel et al. (2015), gender discrimination is subtle and can be obscured with biases. Examples of discriminative acts women face in the construction industry is that scarce resources and positions in line to advancement are allocated to men, which the reports of Allbright (2018:2) prove. Interestingly Allbright (2018:2) show that where there are women in positions of power there are more women in position in line to advancement. However, positions of power are dominated by men and therefore, women are given small chances to improve their position in the industry. Men show resistance towards giving these positions to women, which was exemplified with a case example by Deputy President. It indicates the importance for men to become better involved in the process towards increased equality, which is also recommended by Hyllander and Jacobsson (2018). Men must individually start to act in accordance with the values of their organizations, which includes equal human rights. The masculinity norm has clear disadvantages for men as well, it results in an increased number of early deaths, unhealthy living, dysfunctional relationships and more (Hyllander & Jacobsson, 2018).

Men are currently the ones with power influence and can choose how to make use of it. Today women must prove they have required qualities for a job, while men are expected to have these qualities initially. It errors an organization's ability to recruit the best person for the job.

However, research has shown that reducing prejudices is difficult and require strategies managed by leaders in an organization.

What is important to realize is that those who do not deviate from norms become protected by them, they access privileges and face less obstacles in their daily life. Concurrently, those who deviate from normative performance systems, and norms in general, are less protected by society. They face more obstacles and less support. Managers must start to question why those norms exist and for whom they were developed, and the reason for the MeToo protests in the construction industry. Employees at construction sites do not have the same ability to influence the macho culture, and they would risk being exposed to sanctions such as ignorance, being excluded, harassment, violence and more (Lyckhage et al., 2015). However, there is also a law demand for organizations to eliminate these obstacles and daily discriminations, the Discrimination Act (2008:567). It puts the responsibility of equality on the Head management team. Enabling equal human rights is a struggle, a difficult but a necessary development. Equality progress requires continuous efforts and active actions, unfortunately the law is a tool and not enough in itself.

The reasons to *why equality* become clear for those who understand them. However, not all men and women understand the equality issue or care to try to change them. Why we believe that some, especially women, do not understand that the industry is as unequal as it is, is because they have adapted to the culture and the game rules that men have developed. We believe that their adaptation happens subconsciously. Multiple researchers, e.g. Olofsson (2000), show that women adapt to these male developed structures as a strategy to handle them when disfavoured. Some women have accepted their work environment, and do not reflect upon which improvements other cultures and other game rules could bring. Another explanation to why the equality issue could be denied is because individuals transfers equality issues to an individual level. Thereby, it becomes a small issue and not a structural one. However, simplifying the equality issue depends on the lack of knowledge, which motivates the importance of education and information. However, strategies for increased equality is mentioned later in the thesis.

6.1.2 What equality could bring to the construction industry

SOU (2015:50) mention that imbalance in gender is a problem for all sectors, it influences their attractiveness negatively. Further, what has been found is that imbalance in gender increases the gender stereotypes, which limit men and women to express their values, interest and personalities freely (Cool and Cusack, 2010; Lyckhage et al., 2015). All individuals must be allowed equal rights and equal power to influence, which can only be made possible with equality. However, public organizations are part of what preserves unequal structures. There is multiple discriminating structure that they are not actively trying to dissolve, e.g. the power distribution between the gender. Interestingly, Byggcheferna (2013) mention that a homogeneous culture increases the risk for corruption. There are no benefits of the unequal construction industry of today, however there are clear benefits such as increased performance and quality further mentioned below.

6.1.3 Performance quality perspective

A common answer from interviewees was that equality is desired from a quality perspective. Both theoretical and empirical data show that there are benefits with gender-diverse organizations. Benefits such as increased innovation, creativeness, and productiveness. Becoming inclusive towards diversity requires that we allow each other to be different. However, for differences to not create inequalities, we must actively work towards equality. Innovative organizations are better at continuously develop according to the demand of the market and secure competitive advantages. Gender-diverse organizations are better equipped at developing new thinking patterns as their differences allow for more perspectives (Clegg et al., 2016; Ali, 2016). The weakness of a homogeneous group is that the group lacks a wide range of perspectives. However, with such an argument diversity should include more than differences in gender. Every person has different insights and skills, which enable broader thinking patterns and reflections.

Another method for increased quality is equal recruitment. Research has shown that women are discriminated against during the recruitment phase, as the dominating stereotypes and norms of the industry influence the perception of women negatively. The consequence is erred perception of the qualities of the recruitment candidates where males are favoured, and women

disfavoured, regardless of their advantages in education and experience. Instead, a person with less qualifications gets the job and the explanation is gender. What errors our perception of recruitment candidates is normative performance systems, which influence who we believe has certain qualifications based on their gender and other attributes. These normative performance systems influence our “gut feelings” towards interpreting individuals wrongfully. Importantly, as mentioned by Head of Unit, recruiting the wrong person for a job is costly.

Our findings also show that equality improves the work environment. When the number of women increase, improvements of work environment are increasingly demanded for. Further, the Trainee mention that there is a bias in the industry that women are not strong enough to perform construction work. Tasks that are identified as too heavy or dirty for women should not be performed by men either according to interviewees. These tasks should not be performed by anyone, especially not in a macho culture where employees cannot ask for help due to the risk of social sanctions. The benefits of equality, such as improved tools, developed best practice methods, inclusion, better relationships, developed job roles, non-tolerance towards discrimination and harassment, benefit both men and women. There are no losers of equality. When employees are encouraged they deliver better result, which improves quality. Therefore, the overall quality of the industry increases with equality. It allows the construction industry to develop an infrastructure that is adapted for all, and that further facilitates equality.

It is important to consider the perspectives of all groups in society to better understand the differences we have regarding needs. Most of the interviewee respondents answer that gender diversity bring an increased possibility to build more including environments, which is a clear example of what becomes possible with multiple perspectives. Today, there are signs of excluding environments everywhere, but they are only visible for those who find them excluding. Those excluded belong to groups of society with little power to influence these excluding environments, which is why their perspectives have not been considered. Excluding environments are not the result of evil intention, it has rather been a case where those developing it lacked the knowledge required to do it more inclusive.

6.1.4 The future need of labour

The population in Sweden is growing quickly, especially in bigger cities. The need for improved and increased infrastructure is currently high. However, statistics show that employing individuals with required qualifications is a challenge. There is a deficiency of workers, which influences the productivity level of the industry negatively. According to the study of Koch and Lutteman (2017), the increase of blue-collar workers is the biggest challenge. Concurrently, the construction industry has a significant impact on the economic development in Sweden (Arbetsmarknadsstyrelsen, 2002:9). Currently the number of women who are working in the industry is kept significantly low. While the use of international workers is increasing. Solving the labour bottleneck problem motivates why equality needs to be increased in the industry, as soon as possible. It should be in the interest of the entire construction industry to ensure the access to competency, as it would increase the possible production level of the industry. Ensuring the access to competency through increased equality would also minimize the obstacles to economic growth that the bottleneck problem brings. Further, with little regard to equality in the construction industry, the industry hinders the equality development of society.

6.2 Analysis of how to attract and retain women

Here we present our discussion regarding how to attract and retain women to the construction industry.

6.2.1 Conditions to perform

There is clearly an issue of equal social rights and possibilities for men and women in the construction industry. Firstly, the fact that machines, tools and work environment are adapted to men makes it harder for women to work with the same conditions as men (Johansson, 2015). It is mentioned by the Trainee, who is a former Blue-collar worker, that there could be more efficient size of tools, and packages to carry cement or sand, and more. Since the construction industry been dominated by men historically, and still is, it is explainable that the ideal construction worker or manager is derived to the male attributes. There are unequal conditions when industries systematically value male attributes over female (Johansson, 2015). This is confirmed by Byggcheferna (2013) who claim women experience attitudes from colleagues that they are less suited for construction work than their male colleagues. The unequal possibilities have shown to be reasons for women to find the construction industry unattractive. However, to realize that the industry is unfair, require individuals to be reflective and aware of which normative performance systems that are set for the industry.

Allbright (2018:2) are remarking on the same phenomenon going on in the Swedish industries that Site Manager [1] is, which are that women end up in stab functions instead of line positions. A question to answer is if women generally are more interested in matters of quality, sustainability, work environment and other administrative categories. Or are women placed and encouraged to work with these responsibilities because they are relatively new in the industry. In comparison to line positions that have been, and still are, dominated by men. It is time to challenge the view of what competencies that are creating value to the business, and what competencies that are just in line with what has historically been favoured. Cook and Cusack (2010) show that stereotyping on individuals, e.g. what women are better at or not, are hindering the individual to create their own identity. When women experience prejudice, it creates loss in confidence in roles like leadership, which is explained to depend on power-based expectations (Kang et al., 2015). Another thing to remark on is what conditions women possess,

considering that women are forced to demand certain roles to access them. Site Manager [1] had to threaten with termination before being allowed a position as supervisor at a construction site. As mentioned by Logel et al. (2009), managers' perception of females leads them to allocate scarce resources to men. Through gender biases they can obscure these discriminating acts, e.g. pretending women are at certain positions because they are better suited for them. It further influences women to find the construction industry unattractive.

The study by Conway et al. (2018) showed that the macho culture in the Scottish construction industry resulted in negatively and hostile jokes about women, and that women adapted the behaviour to defend themselves from exclusion and bad treatments. They also avoided to report sexual harassments and discrimination to not impact their career negatively. What is needed is a technical development and a work environment adapted to women, e.g. with better tools and machines. Additionally, a more inclusive culture where knowledge and relevant qualities for the job are valued, rather than fake strength and masculinity behaviour. According to the empirical study, a lot has developed lately, and the culture varies in the industry. The Trainee believes that the stereotyped ideal construction worker must change. Logel et al. (2009) show that women underperform when interacting with sexist men because they experience a threat to their social identity. The study shows it does not have to be sexist behaviour, it is enough with negative stereotyping and prejudice of persons. It results in that women underperform in their domain and stop to identify themselves in the domain. This might explain why women actively avoid the construction industry. Moreover, it is not very economically to have a culture where employees systematically underperform due to bad behaviour and exclusion.

Johansson (2015) mention that women are expected to change the bad culture by themselves when entering the industry. According to CEO [2], a minority need to be 30% to be able to impact on decisions and culture. This in accordance with what Site Manager [1], Diversity and Inclusion Manager, and Project Manager [3] think, that it is better to place a multiple woman in each group than separated.

6.2.2 Standpoint and leadership

To make a change in the group of applicants, women need to be leaders and role models who applicants can relate with and identify with (Linderfyhr & Malm, 2017).

The recruitment process is an important method to find female leaders. Reflection of how women prefer to be leaders is something to analyse about when recruiting and formulating job ads. The study showed that women generally need more support to apply for leader positions, compared to men. Women also prefer recruitment through relational interactions. Since the first women on every leader position will lack role models of the same gender, the supportive function is often crucial for women to feel comfortable in leading roles. Men are stereotyped as leaders and are expected to be found in leading roles, for women it is different. Deputy President mentioned that women need increased support because men generally get more support of their superiors and colleagues, as male leaders are in accordance with the normative performance system for leader positions. She adds that the more women there are, the more they can influence. Their position of power increases. This expression aligns with the statement of CEO [2], the theory of critical mass. The theory of critical mass is the phenomenon where a minority must exceed a certain percentage to influence their environment. To attract women there must be environments where women are able to work together and increase in proportion as group.

Leadership is claimed to be significant for change. Leaders show the direction and motivate other towards change (WHO, 2007). Transformational leadership is suggested during processes of change (Peachey et al., 2011). Transformational leadership is characterized by respect, communication and free exchange of ideas, which should attract the GenMe. The GenMe prefer a straight and honest communication and want to become motivated to work by a bigger motivational factor than money. According to Project Manager [3], the macho culture almost has been eliminated at his workplace due to good leadership that answered with consequences to bad behaviour. According to him, employees changed their values through good leadership. He believes that the real issue is when the industry attracts specialists in technical areas with little interest of the human dimensions, rather than good leaders. When people recruit people that look like themselves but lack in competence, it becomes an issue of quality and relationships. According to Operational Manager [2], the social consciousness is increasing in

the younger generations, and creates other demands of the future leader characteristics. Leaders who are good at human relation management are better at retaining women compared to leaders who are strictly focusing on technical aspects. An argument is therefore to choose a leadership style that allows for individuals to create a better culture and work environment, which could attract both women and men better.

6.2.3 Reputation management and the future

Historically the employees have tried to satisfy their employer, but according to Kacim (2017) the game rules has changed. Today, the consumer or employee has increased power. The need to satisfy the employee may be reinforced due to the deficiency of qualified workers. To attract the younger generations, it is important for organizations and leaders to understand what is expected from them. Several interviewees are highlighting the importance of leadership to change and to start a development that both retains and attracts new female employees. According to Kacim (2017), the younger generation is more aware of their possibilities than any former generation. The GenMe generation are also more interested in equality issues and sustainability issues. One could ask if the younger generation is bringing a change independently on efforts from the industry, at least it is what some interviewees believe.

Fombrun (2000; 1997) presents Reputation Management for companies to learn about how they can impact their reputation preventive. Since the reputation of the industry and company are significant to attract new talents, it is highly valued to control the stakeholder's subjective impressions as much as possible. Reputational managing activities are possible to do at the specific company, but also as an industry. For example, there have been collective reputation programs in banking and financial services to retain their legitimacy. All interviewees verify the historically bad reputation the industry has, but some of them do not think that the bad reputation is rightful. Operational Manager [2] think the reputation is somewhat undeserved, since there are a lot of possibilities and good initiatives ongoing. However, the industry fails to market the good examples. According to Fombrun et al. (1997), a damaged reputation does not only impact the company, but also the whole industry. Professional organizations like Byggcheferna and Byggnads, started the campaign *Stop the macho culture* to protest bad behaviour and the outdated culture. CEO [2] describes it as a necessary first campaign to

powerfully remark on harassments and discriminative cultures of the industry. Operational Manager [2] and Diversity and Inclusion Manager mentions that negatively campaigning may harm the reputation of the industry. They think the bad reputation becomes self-reinforced. They further suggest positively campaigning, and to inspire with good examples instead. The significant part to building a good reputation is the quality of the product, which in the construction industry would be the built projects. Boyd et al. (2010) state that reputation is a crucial factor to why some companies outperform other. This might be clearer during recession but could probably be seen when measuring competence and concentration of talents in companies.

As Kacim (2017) says, the GenMe know their rights and possibilities and are interested in companies that are advocating their values. They are less interested in monetary rewarding and are more likely to stop working when earned enough if they are not motivated for the job. It is important to create a culture and context where young people feel motivated and are doing something meaningful. And to develop through the young employees to create a context they enjoy. Moreover, employees tend to work harder in companies they like and are therefore strategically important to consider what factors are making people internally and externally like the business. The fifth step towards a good reputation is according to Boyd et al. (2010); Build a corporate culture that attracts and retains talent. The challenge is to influence the industry in general to not soak up the reputation of the industry and work with the second advice: Integrate the communication and social responsibility into the company's corporate reputation strategy. How much is expected from companies and the industry to take responsibility for in a social context? And the third advice: Develop a crisis management strategy to defend against threats to reputation. Could there be corporate risk preventions since the industry are losing collectively due to bad reputation. The industry has a deficiency of workforce and cannot afford a bad reputation that make potential employees and talents avoid the industry. Mentioned risks as scandals of harassment or exclusion of women must be prevented in broader operations to eliminate potential risks in the future. The industry cannot afford men and women from GenMe or any future generations to choose other industries. Soft values required for an inclusive culture might be hard to control, however there is a major need to investigate soft values further.

A development in the Swedish society lately is increased equal parenthood and equal responsibility at home. According to Project Manager [1], Byggnads are increasingly getting questions regarding parental leave of their members. Project Manager [3] request more flexible working hours in the industry to simplify for parenthood. A Norwegian study showed that there is a redistribution of the responsibility for home, and that both men and women are experiencing hard time to have a full-time job beside household work and children (Wetlessen, 2013). The study of women at manager positions showed that the key for women to attain the role is to have flexible working hours and equal distribution of house work and responsibility for kids in their relationships (Linderfyhr & Malm, 2017). This indicates that the expectations of people to both having a fulltime job and taking responsibility with kids is hard to achieve. Since the construction industry is late developing roles for both men and women, the roles are adapted to the male character that is taking less responsibility home with kids. The development that men and women increasingly share the parental leave and the overall responsibility for kids, will probably not decrease in the future. In order to attract the new generations that are valuing spending time with their family and equal relationships, it is time to reconsider how roles in the industry are encouraging working life balance. It is also time to reflects upon if it is reasonable that women with a manager position are dependent on an equal relationship, or even taking less responsibility at house work. This is most probably true for men as well where they historically have taken less responsibility, and still is. It is a huge risk to not form roles, e.g. Site Managers, Supervisors and Carpenters, to be reasonable with family life and working life balance for the new generation with equal relationships. If not reconsider what conditions it is to possess the specific roles, the industry will face a continued labour deficiency. Question if it possible today to only work full time, have flexible working hours, or even work less in these specific roles during a period with kids?

6.3 Analysis of strategies for increased equality

Several strategies have been gathered from the theory chapter and empirical chapter to further get analysed into themes.

6.3.1 Motivating strategies and preventive work

To create efficient strategies to develop the industry regarding gender-diversity issues, Site Manager [1] and Project Manager [3] are confident that there is a need to work preventive. It is not the woman's responsibility to change the macho culture. Instead the working climate must be adapted for the women who arrive to enjoy working in the construction industry. It is according to the theory of critical mass hard for a group of less than 30 % to impact on the culture and decisions. It indicates it is hard for women to impact on their work environment at the Swedish construction sites since the female blue-collar workers are less than 2 % women. There are about 12,8 % female white-collar workers at site (SCB, 2016), but only approximately 4 % have managerial positions. To create a preferable reputation, Reputation Management suggests working preventive to avoid outcomes of women not looking for the industry, and to prevent women from leaving the industry.

6.3.2 Influential strategies

The recruitment patterns to leader positions indicate on less possibilities for women to make career. Allbright (2018:1) state two problem with women encouraged to work in stab functions rather than at positions in line to advancement. The biggest industries, e.g. construction, are still behind and keep the numbers of women low. They have failed to take enough actions to increase gender equality. Although it is clearly showed that equal organizations perform better (Ibid). It is also stated that women in head management teams improve the equality significantly more than men in same positions. With the clear statements from how organizations improve with equality work, questions remain to why men find it hard to understand what equality could bring. Deputy President mentions that some men are lose their position when they are evaluated equally, as the competition increases. Men who do not understand equality seem to focus on individual competition rather than the total performance of an organization. This knowledge seems to be overshadowed compared to other strategies to

improved performance. To avoid that men recruit men, it is important with knowledge enough to analyse and understand the discriminating structures.

Recruitment

The recruitment process is recurrently mentioned as an important tool to start the equality process. Women need to pass recruitment to enter companies, and the recruitment must be equally market to the target groups as well as equal possibilities to move forward in the process. Olofsson (2000) claims that the construction industry has offered different possibilities dependent on gender through the recruitment process, which has been shown more clearly during recession periods. Allbright (2018:1) give 5 advices to improve the equality through recruitment. The first of them is to challenge the normative view of competence and reflect if the male ideal has impact of how competences are valued. As Lyckhage et al. (2015) state, the cultural and symbolic gender norms should be discussed. Individuals must reflect upon if expectations, attitudes, and language are different for men and women during the recruitment phase. When analysing masculinity and how society relates to the male ideal, it is important to reflect on what Hyllander and Jacobsson (2018) state regarding valued attributes. Valued attributes such as strength, independency, and rationality are developed from the male norm and are highly valued in society. Therefore, when a woman and man apply for a job, gender stereotypes allow the man to be perceived as more successful at these attributes from start and forces her to rather convince others she has these attributes. One must open for reflections of which male characteristics are favoured and why stereotypical female characteristics are less valued and why. According to Hyllander and Jacobsson (2018), men and women both possess female and male characteristics.

What is seldom discussed, is how men control each other's behaviours to consciously or unconsciously maintain the male order. Norm-critical pedagogy could be used internally. Additionally, the second advice of Allbright (2018:1) is to analyse what behaviours that are encouraged internally and why.

As a third advice, Allbright (2018:1) suggest to actively work with equality issues because change will not occur unless efforts are made. Diversity and Inclusion Manager mention the initiative at Skanska, where they are mapping women in numbers to measure how many women

that are placed in staff functions or line positions. Mapping is a Diversity Management strategy recommended by Sharma (2016). When mapping homogeneity in relation to power and influence, it is easier to view structural barriers and investigate if any discriminatory action occurs. Deputy President mention their policy to invite at least one third of underrepresented gender to recruitment interviews, to improve the possibilities for women to become the elected from the range of candidates. It is important that the communicated text in jobs ads is inclusive so that both men and women feel welcome to apply for the job.

The fourth advice is to evaluate existing competence to identify what is needed to be complemented with (Allbright, 2018:1). Both Deputy President and Project Manager [3] are stating the existing patterns of men recruiting other men. Diversity and Inclusion Manager tell managers that the future employees of their company will not look like they do or have the same background. She challenges their mindset and expectations. The recruitment guide of Gothenburg city describes the phenomena The Similarity Effect where people commonly recruit persons that are like themselves in categories like age, education, gender and more. Although diverse groups are enable increased performance and better decisions based the increase of perspectives compared to homogenous groups (Clegg et al., 2016; Ali, 2016). Work environment becomes improved when women enter the construction industry, which indicates that the homogenous group working in the industry today lack these insights, perception and reflections.

Fifth advice is to implement meritocracy to recruit based on qualifications and not gut-feeling (Allbright, 2018:1). Develop standards and tools to evaluate applicants fairly and allow for less subjective impressions as decisive parameters. However, women prefer recruitment through relations. At the same time, it is mentioned that an effective strategy is to allow blue-collars to invite women and guarantee women they will be included in the group of carpenters. This is somehow contradicting using meritocracy when recruiting as a tool to avoid subjective relationships to influence. Women could prefer recruitment through relations because there is a risk for them to get discriminated when they are applying with their merits, if the recruiter value male characteristics higher. The similarity effect might explain why women instead prefer relational recruitment. It is common to judge women subjectively and therefore, women might experience being the one favoured though relational recruitment in comparison to non-

relational recruiting. In the best of worlds, no discriminative factors are involved in the recruitment process and meritocracy evolve to be preferred.

After identified problems with few women applying to roles, Deputy President mention their initiated policy to at least bring a third of the underrepresented gender to interviewees for research services. Job descriptions should be adjusted and reviewed before publication due to attracting more individuals. Until the construction industry is equal, equality efforts must continue. These initiatives enable a wider range of applicants to certain roles in order to get the best person for the job.

Campaigns and Role models

Several interviewees mentioned trade and professional organization as partly responsible to market good examples. Good examples are inspirationally important to evolve a ripple effect for change. On an industry level this is suggested to influence other companies to act against bad behaviour, as well as inspire with diverse groups of people to attract diverse people. It is suggested to use the spirit of good examples to change into the better. A positive approach of realizing actions for improvement. CEO [2] experience the industry to have a lot of potential that must be uplifted. She finds the inspiring examples as efficient strategies to show it is possible to accomplish a change and what has been gained from changes made. The professional organizations use campaigns as and are getting a lot of attention due to their power to influence. The construction industry has according to many interviewees received an unfair level of bad reputation, which can be improved through marketing good examples.

On an individual basis, Site Manager [1] suggest spreading good examples of initiatives to inspire. Trainee think one could inspire with suggestions on possible improvements and with role models. One should explain what the changed behaviours could result in. Regional Developer suggests a method to get individuals to start reflecting through inspirational examples that the target group can relate to. The need to relate to, and identify with, is often mentioned as a key to inspire, weather it is for individual change or increased attractiveness to a profession. Project Manager [1] highlight the importance of female role models, in example the network NÄTA for female construction workers. Several female networks exist, with the purpose to inspire young women as the industry lack in female representatives. Head of Unit

think it is important with role models at all levels and positions, efficient tools could be show these role models in social medias. Project Manager [2] further suggest inspiring events for all ages, including elementary school, to present what the industry has to offer.

Networks for women and to market role models seem to be viewed as important initiative to attract and encourage women in the construction industry. Few initiatives are found to inspire men to participate in the work for change for increased equality. Equality workshops is mention by CEO [2] as a method to attract a target group that already is aware of the problem. The greatest challenge seems to be educating people that are not aware of the problem or actively avoid getting involved in equality work. Trainee suggest educating men to talk about feelings, because he thinks they must learn how to and start to reflect about bad manners dependent on that they feel sad, annoyed or angry. He further thinks blue-collar workers might need different methods to become influenced. Project Manager [1] also mention the same kind of solutions; to teach men to talk to each other and not least about feelings. Deputy President encourage her male colleagues to engage in equality work, and she is convinced that the outcome improves with both genders involved. If the organization is dominated by men in power positions, it could be even more important for men to work with equality issues. This when taking the analysis of leadership into account, where most of the interviewees require engagement from the Head management teams as step one.

6.3.3 Practical methods and tools

Practical methods and tools are presented here. The content is divided into five steps, how to handle knowledge, transforming knowledge into actions, achieving a result, monitor the progress, and using feedback to increase knowledge. The process for developing practical methods and tools is iterative. To achieve full equality the steps need to be repeated continuously, according to figure 3.

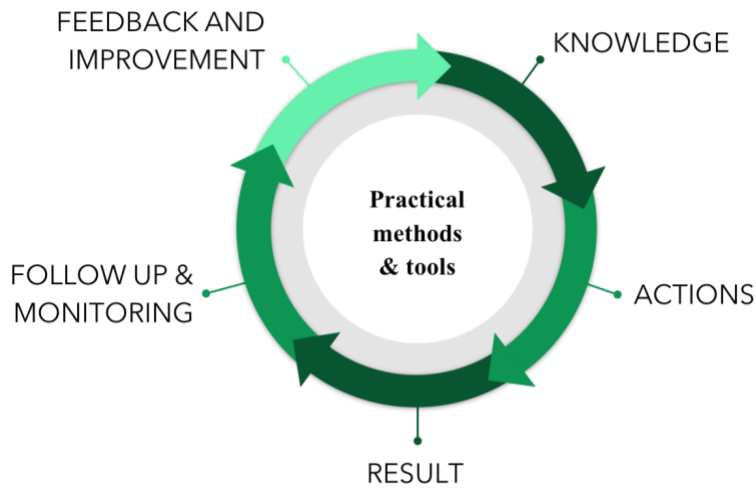


Figure 3. An illustration of the iterative process needed for equality progress.

Knowledge of the social system

The organizational perspectives have different implementation methods to realize equality. Organizations conform to formal rules, legal rules, standards and social rules (Raja et al., 2013; Clegg et al, 2016). The last mentioned depend on culture and are harder to write down and understand, because social rules are hard to control in an organizational perspective. Regional Developer is talking about the strategy to identify issues in group discussion to later be able to formulate what can be written into standards and policies. The identified social issue must be described as specific as possible and the solutions must be as doable as possible. However, it might be hard to formulate the social issues dependent on knowledge, and it is therefore important to get use of the experiences from the discriminated group. Almost all interviewees mentioned the lack in knowledge of equality, and lack in practical knowledge of equality efforts. However, social issues regarding norms are hard to identify if you are not disfavoured by the norm. Time and will to engage in the equality issue might also be dependent on the lack of knowledge for what equality could bring to the industry. Nevertheless, lack in knowledge limit the possibility to identify the issues of equality, and to further integrate equality efforts in standards and routines. It is suggested that different methods can be used to increase awareness of the problems connected to inequality, e.g. through workshops and reflective discussions. Regional Developer state the importance of reflecting upon problematic situations everyone can relate to. Many of the interviewees mention the problem to get men to learn about the equality issue. It is suggested to actively encourage men to engage in equality

efforts, even though they lack basic equality knowledge initially. Project Manager [1] thinks that men that show most resistance are the ones that need to be educated the most. CEO [2] suggest mass-education, and has asked her colleagues if they ever felt as a minority in any context? CEO [2] and Operational Manager [2] are using strategies to make individuals reflect in the moment and to increase their understanding for each other. They practice active reflections where they stop in the moment and reflect about the power situations at the meeting table. Questions they reflect upon are, e.g. did he feel dumpish during the meeting? Did you talk to her with an open attitude, with the feeling that you liked her? Did you watch him in the eyes when you spoke to him? These everyday reflections are suggested to increase the awareness of the social system for an everyday use.

Everyday reflections of the social system give a basic education of the social system, which should be initiated with knowledge and tools of how to interpret the social structures. The mindset might must be challenged, and knowledge must be based on facts to analyse the social system correctly. Site Manager [1] organized diversity workshop where she invited individuals from all levels, from subcontractors to Executive managers, where they together talked about inclusion and exclusion. She received very good reactions and feedback of the workshop. The construction workers started to reflect about their own behaviour, e.g. why they did not greet to each other on the construction site. Afterward she arranged a feedback workshop where she experienced great progresses from individuals she has tried to challenge during the project. Somehow, the progress might be more important to highlight than the actual knowledge in order to motivate the change. Trainee mention the need to understand individuals who maintain the macho culture and why they act as they do. Men need to talk about feelings and create forums where they can learn to talk more openly. Deputy President used workshops to discuss the issue regarding gender inequality. She had a good experience of both having workshops for men and women separately, and in mixed groups. She believes that the discussions are different when men and women are mixed, and not. She has facilitated practices where employees practice civil courage, and how to act when colleagues are behaving unacceptable. Even when the gender inequality awareness exists, there might be a need to practice on actions towards situations for when inequality or bad behaviour is identified. Practice in actions might help individuals to dare take actions, and to make employers more comfortable and braver to try for change. Operational Manager [1] and Project Manager [2] are remarking that the approaches

need to be adapted to their context, and the specific need of an organization because equality knowledge differs. Using statistics and facts to influence is recommended.

Inventory - Mapping the current situation

With increased knowledge and awareness of the problem in an organization, the problems are stated to be easily identified. What are the risks in the social environment, and how could the problems further be visualized, are questions that need to be answered. Mapping is an efficient tool to demonstrate facts, e.g. how many women that are placed at positions in line to advancement, compared to men. Further, it is necessary to identify if there are any patterns that must be investigated deeper. Other questions organizations must ask when mapping their current situation are;

- Are there any departments and projects that discriminate women?
- Why are the same department having problems with retaining women?

It is recommending using surveys as a tool to collect experiences from the employees. Another recommendation, inspired by the equality efforts at CTH, is to develop a reporting system for sexual harassments to simplify for the victim. As mentioned earlier, women tend to avoid reporting when they are discriminated, which is problematic when trying to evaluate the work environment from an equality perspective. Through a reporting system, the responsibility of what actions should be taken is assigned to HR department.

Turning social awareness into actions

When issues are identified through improved knowledge, solutions can be formulated. Discussions should result in a checklist for potential actions. It is according to Regional Developer important to support and influence but not govern when planning for what actions to be taken for increased equality. It is probably easier to motivate employees to follow rules and policies when they have been involved in developing them. After identifying problems and solutions, there must be clear sanctions if not followed. Sanctions motivate employees to act in accordance with the values and work practices they agreed upon. Sanctions has been efficient to maintaining a macho culture by men (Lyckhage et al., 2015), and is believed to be equally efficient to eliminate the macho culture.

Standards are efficient tools to shape behaviours to secure the quality, and similarity in the work. Furthermore, standards are a suggested method efficient to measure progress, and can be used as a basis for the Equality certification. Using standards are further motivated by Allbright (2018:1) to avoid subjective judgments. Not least when recruiting but could probably be efficient in how to act in situations with women entering the workplace. Additionally, standards enable organizations to avoid issues connected to bad culture.

Head of Unit mention that are there some municipalities that have equality education for new employees, both mandatory and non-mandatory. These are examples of education as a routine to ensure increased knowledge in the subject. It seems that lack of social awareness are hindering to actively invite individuals to talk about issues regarding gender inequality or other social power relations. As Operational Manager [2] mention, there are other normative behaviours that need to be questioned dependent on culture. To challenge normative behaviours, we must challenge our need to categorize humans, due to power structures (Lyckhage et al., 2015). There are natural reasons why our brain categorizes, but increased knowledge would make us able to control these cognitive errors and become aware of disadvantaged decisions. This opens up to criticize what behaviours are encouraged and favoured.

Site Manager [1] and Diversity and Inclusion Manager suggest to not place women alone, e.g. at a construction site, which practically would be possible to standardize. Site Manager [2] mention reflecting about where to place locker-rooms, and how to strategically use key persons as mentors to new female carpenters as suggested actions. When identifying activities that would help women as a minority to have equal conditions to perform and thrive in the environment, standards as such could be implemented. Previous mentioned issues could be strategically reformed into standards to eliminate macho tendencies and discriminatory attitudes, as well as a result were the women and men are used at their full potential. Suggestions of improvements in the recruitment process, that are mentioned before, is also easier controlled after visualized and described in word in standards.

Power and supervisory controls

Regional Developer further claim the importance of control documents when implementing standards and policies, to easier motivate to spend time on the issue. People are used to follow working routines and socially dependent issues cannot be controlled without routines that give space to work with the issue. This could probably be used internally to motivate everyday equality efforts and to measure progress. A potential outcome of measuring the equality progress is that it could increase motivation to continue equality efforts, provided that the work environment improves and that employees notice a positive development. As mentioned by many interviewees, a policy easily ends up only being a document which is rarely followed up. Several interviewees agreed upon that efficient strategies are to use power to motivate change. The power of a client can be used to control equality effort of their contractors.

6.4 Analysis of Incentives for equality

Incentives are used to motivate individuals to take actions towards change. Presented here are different incentives that can be used for increased equality. There are many different incentives as what motivates someone depends on multiple factors, e.g. context, gender, power position and more. The content is divided into themes of incentives; forced incentives, competitive advantages, and sanctions and appraisals. They involve discussions regarding money, procurement processes, power, and more.

6.4.1 Forced incentives from Clients and Professional organizations

Most of the interviewees believes the most effective incentive for change is money. This method to put pressure for change, would be equally possible to use in the issue of gender inequality. They shared the opinion that if clients demand equality efforts during procurement it will influence contractors to increase their equality efforts. An increased market advantage is the most efficient incentive since it affect the company's main purpose. The incentive for clients should be that imbalance in gender influences the attractiveness of the industry negatively (SOU, 2015:50), and influences access to labour. Further Byggcheferna (2013) mention that low diversity increases the risk for corrupted behaviour, which is another client incentive. Additionally, public clients contribute to the unequal structures as they are involved in developing the industry, which motivates why they should take a bigger part in developing incentives for external organizations in the industry. Project Manager [1] thinks that clients should use all means of control to increase incentives for equality efforts.

Two of the interviewed respondents belonged to public client organizations, CEO [1] and Head of Unit. Both confirm that incentive for equality efforts is money, and CEO [1] also mentioned using control. However, they differed in the opinions of how much responsibility clients should take regarding the equality progress of the industry. While Head of Unit had the opinion that clients should have equality requirements in the procurement process, CEO [1] has the opinion that organizations such as the Swedish Construction Federation should monitor external organizations. Federal organizations should further inform clients when discriminating acts occur. She believes it would motivate contractors to prevent discrimination better.

A forced incentive from clients is a powerful method to influence external organizations. If most clients in the industry share the opinion of Head of Unit, this could result in a faster equality progress. It could allow the industry to faster benefit from increased equality. However, there is a risk to only rely on Swedish trade and professional organization in order to attain change. The answers from our interviewees indicates that using monitoring to control as an incentive, is less efficient than using monetary and market advantages as incentives. A control function is suspected to only result in paperwork and not actual progress in the equality issue. The combination of money and control as incentives would most likely be more efficient than only using one of them. A mean of control, mentioned by Head of Unit, was Equality Index Measurement. It could be used to measure the equality progress internally in organizations and allow them to measure specific equality issues and compare, e.g. equal salary, equal health, equal power to influence, and equal education and career options. Concurrently, organizations such as the Swedish Construction Federation could monitor the equality indexes of their members. Continuously comparing these indexes annually and publish it should influence the monitored organizations to improve their efforts. What becomes important when monitoring is to follow-up and evaluate the progress, which could become an incentive for improving efforts further.

Multiple of the respondents compare the idea of client requirements for equality with requirements for social consideration, one strategy that client organizations already use to influence the social efforts of contractors. Social requirements in the procurement process has had a positive influence on the social efforts in the construction industry. Applying a similar strategy to the equality issue should be fully achievable, e.g. demand the recruitment of female carpenters or female trainees. The difficulty for clients to introduce equality requirements is that individuals are resistant to change, especially if they do not fully understand the problem.

Another incentive that could be developed is Equality bonds. Today there are Green bonds, which is used as incentive for environmental efforts. Similar, Equality bonds could motivate organizations in the construction industry to increase their equality efforts, and it could motivate organizations to devote to equality as a competitive strategy. What indicates the possible success of Equality bonds is that money is a powerful tool for change. Like the idea of equality bonds is foundations. It allows organizations and individuals to receive money for

equality projects specifically. It has shown to be an efficient incentive for increasing the interest in equality efforts.

6.4.2 Competitive advantage as incentive

Not being able to meet the demands of a client influences the competitive advantages of a contractor and their chances to survive at the market decreases. Their need of making business creates a strong incentive for equality efforts. Further, most of the interviewees mention that increased quality is an incentive for equality. Equality has shown to bring many advantages for organizations, e.g. improved working environment and increased productivity, and all the benefits found are incentives for equality. However, it requires that organizations are aware of these benefits. Equality has also shown to improve how we build cities and develop infrastructure, and these should be strong incentives for client and contractor organizations to achieve equality in the industry.

Many of the interviewees mention that working with equality will be increasingly important to both attract the younger generations and meet the demands of the future. It is confirmed by research that the younger generations, the GenMe, value equality more than older generations. Equality has become a question that influences how younger individuals choose their career path. Additionally, the deficiency of workers in the industry influences the productivity of the industry. With access to more individuals to recruit, organizations will be able to both recruit individuals with better competencies, and to increase their level of productivity and business. Making business and attract employees are clearly incentives that should motivate equality efforts, especially regarding the current deficiency of qualified individuals to recruit. In order to attract best talents, it is important to anticipate the reputational landscape and follow the companies values. The personality (what the organization really is) has to match the organization's identity (what it says it is) and the image (what the stakeholders think it is) to nurture the reputation and attract employees in the future. Efforts need to be way beyond paperwork to show trustworthiness for a company's equality status, and to be acknowledged by the new generation.

6.4.3 Sanctions and appraisal as incentives

It is mentioned that the equality efforts in the industry is low, and the discrimination Act (2008:567) has shown not to be enough for eliminating discrimination structures in the industry. The sanction for failing to meet the requirements of the Discrimination Act (2008:567) is a fine or a penalty, but it has not been enough to motivate organizations to step up their equality progress. Therefore, one could argue that the sanctions, e.g. from the Swedish Work Environment Authority, should be strengthened and the requirements of social and organizational work environment clarified. However, it requires an increased interest and knowledge of social work environment and how to take actions. Perhaps the phenomenon of Group Polarization could increase the incentives for equal behaviour and efforts, as traits that are identified as undesired are avoided. Concurrently as women and younger individuals demand equality, the interest in equality could increase from organizations who have formerly ignored the issue. The incentive for these organizations' is to avoid negative attention, which could influence their reputation badly. The reputation is critical for the survival of a company (Boyd et al., 2010; Burke et al., 2011).

What is shown to influence the progress of equality is the involvement of men. It is mentioned that men who are informed about the consequences of the macho culture become motivated to change. Incentives for men to involve in equality efforts could be to avoid consequences of macho behaviour, e.g. early death, damages, bad relationships, and unhealthy lifestyle. What the construction industry could learn from the Healthcare sector is to allow individuals to develop their own incentives, e.g. by allowing men to reflect on consequences the inequality issue brings for them personally. Another method to develop incentives or strengthen incentives is Storytelling. Storytelling is sharing stories and examples that inspire, and individuals could become motivated to be more involved in the equality issue. Further, presenting good results and benefits that equality bring also motivates engagement for the issue. Another method is to show role models, and to give these role models public appraisal for who they are or what they have done. It could inspire both women to enter the industry and men to change their behaviour. Using role models to motivate individuals towards certain actions is something all organizations can do, and these role models can serve different purposes.

Another important motivator for employees is the engagement of their leader, especially Transformal leaders. It is mentioned that it can be enough for employees to become engaged just by hearing their leaders advocate equality. The involvement of Transformal leaders is important because they can encourage good behaviour and discourage bad behaviour when using sanctions and appraisal as incentives. The order of power influences whose attention individuals are most influenced by. The Head manager, e.g. a CEO, has more power to influence than a Head of Unit, and so on. Informing employees that there are laws that demand equality, and that inequality could result in sanctions can be enough for them as incentive, a costless and quick effort from the head management team.

Lastly, organization could use employees' interest for career as incentive. In organizations where equality is valued and where it is stated that equality efforts could contribute to career development, employees will be more motivated to increase their equality efforts. It could require the organization to state that equality is one of their goals, it then enables managers to connect the equality efforts of employees to how well the organization is able to fulfil their goal.

6.4.5 Analysis of Equality certification systems as incentive

There exists a perception that a certification does not influence the progress towards equality. A common reason for the perception seems to be that individuals believe organizations choose to become certified only to receive a certification symbol to show and use to improve their reputation. Reputation has shown to both influence companies survival and is their greatest asset (Burke et al., 2011; Fombrun et al., 1997). Reputation influence how well organizations attract employees, business partners, clients, and customers. Choosing to influence their reputation through an equality certification require that individuals know equality is found to be attractive, which is an incentive for them to engage in equality efforts. Therefore, an equality certification does influence the equality progress positively even when used for increased reputation. It also exists an interest for becoming certified for other reasons. Many individuals show an interest for the certification as they believe it enables them to continue their progress towards equality and to develop as an organization. The Equality Certification developed by

Winnet is a certification system connected to a management system. It allows all types of organizations to set their own development targets and an action plan for increased equality, which should attract organizations to become certified. When the certification is received organizations must continuously work for improved equality, and it requires them to integrate equality efforts in daily organizational activities. The empirical study has shown that individuals both trust and distrust the influence an equality certification could have, and the response was similar for the HBTQ-certification. The HBTQ-certification has the purpose to inform organizations of the norms that disfavour individuals who are outside of the heterosexual white norm. When organizations have been educated and have begun to actively eliminate disfavoured norms they can become certified and receive a symbol to show. There are multiple advantages of becoming certified, such as an improved reputation, supporting for developing an action plan, and supporting for identifying and eliminating disfavoured norms and discriminating normative performance systems.

We interpret what is communicated differently because of our differences in culture, experience, personalities, gender, and so on (Newell et al., 2011). How the symbols for these certification systems is interpreted depends on the observer, how well the norms are adapted to that individual. For many, these are symbols of inclusion and an invitation to enter and take space in environments they are otherwise excluded from, while for some they are only symbols for bragging and do not influence anything. An equality certification symbol is a powerful communication tool for stating that equality is valued and is especially important for individuals who are otherwise excluded as it shows they are welcome. Further, becoming certified is a process that requires the involvement of employees. Everyone involved are forced to increase their knowledge regarding equality and how to improve it, which is why certification systems should receive more attention in the construction industry. The certification symbols are a reminder of what values an organization has chosen to adopt and what they require from others to adapt their behaviour to.

An equality certification makes it easier for the Head management team to require equality efforts from employees. Additionally, equality certifications attract individuals who belong to minority groups in the construction industry. The certification symbol sends the message that everyone is welcome. The diversity, and especially the gender-diversity, in the industry

remains low but could be increased with certification systems. However, it was also mentioned that there could be a resistance towards receiving an Equality Certification as it could influence how attractive organizations become to individuals who are comfortable with the current working environment and culture (the macho culture). The development from a macho culture and male dominated industry towards a gender-equal industry, and inclusive culture, is a risk while there is a deficiency of individuals to employ. A risk worth taking as solving the labour deficiency is critical. Gender-equality organizations are becoming increasingly attractive as the younger generations are entering the labour market. The macho culture must be eliminated for the industry to handle the challenges that the future will bring. It is mentioned that organizations who become certified and use the management system to increase equality become more competitive and better at attracting talented and younger individuals. It could influence their ability to survive, especially when located in smaller municipalities where it is difficult to attract future employees. There will be a cost for becoming certified but regarding the benefits it brings, it should most likely be worth it. To summarize the above, an equality certification creates strong incentives for equality.

7. Conclusions

This chapter presents our conclusions, which are developed from the empirical and theoretical findings of our study.

7.1 Reasons for equality

Conclusions of why the construction industry needs equality is presented below, with a focus on both qualitative and quantitative gender equality. Our findings show that equal rights are a statement of law and ensuring that both men and women have equal rights is a must for organizations. However, the construction industry is gender unequal. The path towards equality is difficult but necessary.

7.1.1 To eliminate qualitative gender inequality

Women are given less possibilities, power to influence and opportunities than their male colleagues when working in the construction industry, both at white-collar level and blue-collar level. However, at blue-collar level women also face an unwelcoming environment due to the macho culture. There are structures in the construction industry that disfavour women and unfortunately, they are often subtle for those who are not disfavoured. Discriminating acts towards women occur daily, which influences the performance of women negatively. Women experience social identity threat and deidentify from their working environment. Additionally, women are often excluded by their colleagues. There is a wide variety of knowledge regarding the ongoing inequalities in the construction industry, which hinder equality efforts. Unfortunately, because of the subtle unequal structures in the industry, women avoid reporting discrimination acts. Women are afraid they will lose their jobs or face sanctions if they report. However, managers with little interaction with employees at construction sites remains uninformed of the inequalities. It leads them to believe that inequality do not exist, which explain why 90% of women in the industry experience the industry as unequal.

7.1.2 Inequality strengthen stereotypes & influence performance

Gender stereotypes have a strong influence on the equality situation of the construction industry. These stereotypes lead to erred perceptions of men and women, which favour men because the ideal construction worker is stereotyped to be a man. The female and male stereotype influence what we expect from men and women, including our approach towards men and women in general, which leads to structural inequality. Both men and women are part of what maintains the gender stereotypes, as the stereotypes are a social construction and developed through human interaction. In environment where there is a majority of one gender, the stereotype of the opposite gender become strengthened. However, there are no differences between men and women regarding cognitive abilities, verbal ability and communication that depend on our physical bodies, instead, it is the gender stereotypes that create these differences.

Women have little power to influence the working environment at construction sites because they are in minority. The macho culture forces women to develop coping strategies to handle the discriminating structures, exclusion, harassment, discrimination and more. The macho culture brings consequences for men as well: it leads to unhealthy living, early deaths, violent behaviour, dysfunctional relationships and more. However, men have more power to influence the culture. Concurrently, male blue-collar workers have less power to influence than their male white-collar colleagues. Both men and women risk being exposed to sanctions, e.g. exclusion, discrimination, and violence, when protesting to the macho culture. It motivates why the engagement of the Head management team becomes critical for the industry to become equal. Additionally, the responsibility for organizations to act in accordance with the Discrimination Act (2008:567) lies on the head management team, otherwise they risk sanctions such as fines.

7.1.3 The chance for attracting the best person for the job increases

There is an increased interest of gender equality in the younger workforce (Kacim, 2017). Gender equality influence where the younger generations choose their career, therefore equal organization will more easily be able to attract individuals of the younger generation. Organizations conditions to employ and retain competence can become a competitive advantage if they give equality efforts much attention. The disfavours women meet during the

recruitment process must be eliminated, otherwise organizations in the industry will continue to recruit individuals based on their gender and not competencies. Women must prove they have certain competencies and qualities, while men are assumed to have them. The best person for the job is not the one who gets the job, it disfavours the organization and their competitive advantages. However, what hinders organizations to recruit the best person for the job is that men show resistance towards recruiting women, especially to powerful positions. When there are women in the head management team there are also more women at positions of line to advancement, compared to when there are only men in the Head management team. Women bring increased equality, but only when they have the power to do so. It is why more men must become involved in eliminating inequality and start to invite women to male dominated contexts.

7.1.4 Improved output & elimination of the labour deficiency

Gender equality allow organizations to access more perspectives and experiences, which further enables them to become more innovative, and increase their competitive advantages. Equality has also shown to lead to organizations becoming more creative and productive. Additionally, quality is increased when organizations become gender equal as the best person for the job is the one who gets the job. The risk for negative influence on performance due to gender unequal structures, cultures, and more, becomes irrelevant in a qualitative and quantitative gender equal organization. However, in gender unequal organizations, competencies are wasted as discriminated employees do not reach their full potential. Further, gender equal organizations are better at attracting candidates for recruitment, which increases their chances of attracting individuals with great competencies for the job. Finding the right person for a job is important for organizations who desire to survive at the market.

When organizations increase their number of women and place them together, their ability to influence increase. Quantitative gender equality increases the qualitative gender equality, and vice versa. Gender equality would eliminate the macho culture, which would improve the attractiveness of the industry, the working environment for both men and women, and the competitive advantages of organizations. In the long run there are no losers on gender equality.

The deficiency of workers hinders the construction industry from growing in line with the need of the market. There are less than 2 % blue-collar women, which show that we only recruit from half the population. The industry must secure access to competency with increased gender equality. It will minimize the consequences of labour deficiency on the economic growth of the industry and the economic development in Sweden as well.

7.2 How to attract and retain women

Findings with focus on the factors that influence the attractiveness of the construction industry and how to better retain women are presented below. Our findings show that main reasons why the construction industry is found to be unattractive, are unequal conditions to perform, and a change in requirements from the younger generation.

7.2.1 Women have worse conditions to perform

There is a gender equality issue in the construction industry and women are given worse conditions to perform. Research show that women are given less power to influence, that work is distributed to the favour of men, and that both blue-collar and white-collar women receive less wages than male colleagues. Further, women are found in stab functions and men at positions in line to advancement.

The construction industry is found to be unattractive by women due to the unequal conditions for men and women. It is more difficult for women to have a career in the industry as men award other men with positions that are in line to advancement. Women are instead given stab functions and assigned responsibilities in line with gender stereotypes. Positions that are linked to the normative performance system of men is given to men, which hinders women from getting them even when they have better qualifications and competencies. Women who are given positions characterized as male face negative attitudes from colleagues who believe women are less suited for such positions. In the construction industry, male attributes are valued higher than female. Women are hindered to reach their full potential and for making a career when devoted to an industry that has been developed by men and for men. To attract women, the construction industry must further be developed by men and women, for men and women. Stereotypes must change, the working environment must change, the culture must change, and women must receive equal possibilities and power to influence.

7.2.2 Female leadership & clear rules

In order for women to find the construction industry attractive there need to be more female leadership, individuals who women can relate to and identify with. As women are in minority

in the construction industry they have a higher need for support, especially when applying for male stereotyped roles, e.g. manager. Therefore, women who are working in the industry should be given a mentor, especially when new in their position. Women attract women and when there are many women working together they are more likely to stay in the industry. To attract women of the younger generation, organizations must become better at stating their gender equality efforts, and to have clear rules and communication.

To retain women in the industry there must be development. Leadership is critical for a successful change process. Leaders must state their engagement for equality so that employees follow. Good leadership influences individuals to change their values and attitudes. Leaders who focus on employee relationships are better at retaining women to the industry, and they are also better at facilitating an inclusive culture.

7.2.3 Reputation management and planning for the future

The game rules for recruitment has changed. The younger generation is attracted by organizations who share their values. Leadership becomes increasingly important for organization to attract and retain the GenMes, they must facilitate a work environment that fulfils the need of their future employees. Both men and women of the younger generation value gender equality more than older generations. The younger generation is likely to bring a positive change to the construction industry, provided they choose to enter the industry.

Reputation management is the key to success regarding attractiveness, it is through good reputation that organizations attract talents, both men and women. The campaigns to eliminate the macho culture are both appreciated and questioned, who believe it influences the reputation of the industry negatively. However, the purpose is to take a stand against the outdated culture and demand it to change as the macho culture has managed to survive until year 2018. The reputation of the construction industry must be strengthened concurrently for attracting women. Every organization must develop a culture that attracts and retains women through role models and positive marketing of the great assets of the construction industry. The industry cannot afford to remain unattractive for women, and men. If the younger generation choose to devote to other industries the labour deficiency will increase.

Men and women in younger generations value equal parenthood, equal responsibility for house work, and a reasonable working life balance with leisure in a greater extent than the older generations. This development will not decrease in the future. At the same time, women at manager positions are demanding equal, or even less, responsibility for house work to possess the role. Both men and women are experiencing hard times to work full time in equal relationships. This requires the construction industry to reconsider the conditions for equal parenthood and flexibility in working hours as a Site Manager, Supervisor and Carpenter. Otherwise, the industry will remain in risk of labour deficiency in the future.

7.3 Strategies for equality

It is necessary to implement strategies for increased equality in the construction industry. Our research show that there are many strategies to implement for increased equality, e.g. practice in social awareness.

7.3.1 Work preventive

In order to avoid hindering the equality development and to become attractive, organizations need to work preventive with the equality issues. Since there is a need for minorities to be more than 30% to impact the culture and decisions at the workplace, preventive actions must be taken. It is significant to ensure a good working environment for women to avoid that they leave the industry. A reputation management of the individual company should be considered. A corporate reputation strategy for the industry is suggested, since it is easier to prevent a reputation than to rescue a damaged reputation. Since the relation between the company and employer has changed with the new generations, and as the employee has increased power to impact their choice of employer, external reputational factors must be considered and prevented.

7.3.2 Recruitment as strategy

A strategy with direct effect on representation is through recruitment. The recruiter need to criticize existing norms to avoid impacts such as female attributes being valued less on irrational basis. Since female attributes are systematically valued less, even though they could

have positive impact e.g. communication, behaviours that are encouraged in the organization needs to be reconsidered. It is suggested to increase the consciousness of subjective factors to easier standardize justice recruitment processes with less similarity effects and more meritocracy. Examples of initiatives to ensure a fair recruitment process and the best applicant on the positions is; policy with a certain quantity of women to interview for certain roles, standardized evaluations of applicants to make fair judgment, review the announcements of services so they attract a varied set of applicants and last to map homogeneity in the organization to identify potential problems with discriminative recruitment patterns.

7.3.3 The power of role models

Use the power of role models on an organizational level, as well as on individual level. Good examples inspire organizations to adapt equality efforts and confirm the results and benefits equality efforts could bring to all parties involved. Inspiring examples of how the equality work has been implemented practically and evaluations of the results, must be communicated by the individual company and by the industry. On the individual level, it is important to have role models that employees can identify with. This partly explain why less women apply for certain roles and female networks or mentorship is viewed as efficient tools to inspire women into the construction industry. To attract and retain women and to get female applicants to certain roles, it is important to understand the power of role models and to extend and encourage such initiatives externally and internally. Men also need role models in equality statements so that they can identify with efforts for equality, however, this is rarely existing. It is therefore suggested to initiate forums where men are invited with a clear agenda to educate men to talk to each other as well as get inspired to devote to equality efforts.

7.3.4 Practical knowledge

The most efficient practical strategy is increased practical knowledge and awareness of the social system, basic knowledge of power structures and equal conditions to perform. Increased knowledge of the social system and norms are suggested to be taught through workshops that encourage reflections. It is also efficient to stop in the moment and reflect about how people feel and the power distribution, for instance, during meetings. It is important to increase the

overall knowledge level. The ones that avoid learning about norms and equality is generally the ones that need it the most.

7.3.5 Inventory, standards and control

Inventory of the current situation is more easily identified with knowledge. The current situation is suggested to be identified through mapping numbers of women in each department/project and numbers of women in line to advancements. Continually, it is important to collect experience through e.g. surveys about experienced equality issues. Since sexual harassments commonly are not reported, it is important to develop reporting systems that invite to reporting without risking exclusion of any kind.

With identified issues regarding equality at the workplace, solutions can be formulated to standards, which need to be adapted to the context. Examples of actions are: mandatory education of norms and equality issues; theme days in equality and diversity workshops; routines on how to place locker-rooms at site; policy to not place one woman in each workplace; sanctions and actions when bad behaviour occur; and finally, a recruitment plan to attract and retain women to male dominated roles.

To ensure that actions are taken regarding formulated solutions, a supervisory control function is suggested to evaluate progress in equality and to motivate change in the organization. Equality efforts are an ongoing progress that takes time dependent on background knowledge and the specific culture in the organization. A norm-critical approach needs to be used daily.

7.4 Incentives for equality

Below the conclusions for incentives for equality are presented. Our findings show that there are many different incentives for increased equality efforts and the efficiency of the incentives varies on organizational basis and individuals' basis. Both hard and soft incentives are found to influence equality.

7.4.1 Incentives to influence external organizations or the industry in general

An incentive for why organizations should influence the equality efforts of each other is to avoid a bad reputation for the industry, which could eliminate the deficiency of labour. It could further positively influence the productivity and economic gains of the industry.

A strong incentive for equality efforts is money, especially when influencing external organizations. In business relationships actors can use the need for business as incentive for influencing equality efforts, e.g. through demanding equality efforts during procurement. These demands can be developed in a wide variety of ways, e.g. demanding an equality action plan, a presentation of equality efforts, equality index measurement, a certain percentage of female employees at site, and more. Like the requirements for social consideration, which is common in the Swedish construction industry. Another way to use money as incentive for equality is through equality bonds, or foundations specifically for equality projects. Organizations in the construction industry need to make business to survive, and if an organization fail to meet the demands of a client, their competitive advantages are sufficient for enabling them to survive on the market. It will influence them to improve their equality efforts as making business is a strong incentive.

Forced incentives could have a positive development on equality, e.g. using money and control in combination for demanding equality and including sanctions as consequences for failing equality efforts. Organizations can use equality index measurement to measure if salary, health, power to influence, and education and career options are equal for men and women in the external organization.

Equality can bring better developed infrastructure regarding soft values, increased attractiveness, lowered risk for corruption, increased access to labour, and much more for the construction industry. They are all incentives for equality efforts of the industry.

7.4.2 Incentives to influence the organization internally

A strong incentive for organizations to devote to equality progress is that it enables them to secure their access to labour and handle the possible risks that comes with labour deficiency.

It further allows them to attract talented individuals and find the best person for the job. It further allows organizations to avoid bad reputations, which is critical for their competitive advantage. The benefits of equality are another incentive for organizations, regarding why they should improve their equality efforts. Additionally, organizations who work with equality avoid the risk for failing to meet the demands of the law, the Discrimination Act (2008:567).

7.4.3 Incentives to influence individuals

Organizations can use transformal leaders to influence the behaviour of employees, e.g. with the use of appraisal and sanctions. Transformal leaders could also use storytelling to influence the motivation and understanding individuals have for equality and the benefits it brings, e.g. through role models, good examples and more. Informing individuals of the consequences the macho culture has on individual level, e.g. early death and unhealthy lifestyle, could influence them to avoid behaviour connected to the macho culture. Another incentive is the chance for making a career, where organizations can place certain demands connected to equality that employee must fulfil before being able to make a career advancement. Lastly, organizations should facilitate employees to create their own incentives for equality.

7.4.4 Certification systems connected to equality

The purpose of a certification system of equality is that it forces organizations to continuously improve the conditions of how equal their organization is. There are multiple types of certifications that aims to influence organization towards becoming more equal, both gender focused and diversity focused. How stakeholders interpret the symbols of equality certifications depends on how well the individual fits the normative performance systems. For some it is a symbol for inclusion and an organization that welcomes all, or a symbol used only for improved reputation. An equality certification is a powerful tool that can be used to show stakeholders that the organization strives to be equal. There are also other benefits of becoming certified, they enable organizations;

- to get an improved reputation
- to demand equality efforts from their employees
- to integrate equality efforts in their daily work

- to receive supporting for developing an equality action plan
 - to educate employees and teach them how to eliminate discriminating structures
 - to increase their competitive advantages and attract a better mix of individuals
 - to access tools to measure the equality progress of the organization
- and more.

Certifications for equality should receive more attention in the construction industry as it could enable organizations to reach a high level of competitive advantages.

7.5 How to increase the attractiveness of the construction industry by tackling the imbalance in gender - A Summary

It is critical for the construction industry to become gender equal to solve the labour deficiency and to attract best talent. The existing homogenous groups of employees at production sites prohibit the industry to reach needed development and influences the wellbeing of both men and women negatively. The macho culture has led to men not asking for help, perform inhuman tasks and maintain structures that hinders individuals to develop freely. The problematic behaviour is often subtle and hidden in norms and biases. This hinders each organization to use the full competence of their employees. Diversity is a question of quality since gender mixed groups are better at creating solutions that work for a wide variety of individuals. These teams are more creative and produce more highly qualified decisions than their counterparts. Additionally, they are more profitable and innovative.

To attract and retain women the industry must create equal conditions to perform. Women have little power to influence the culture and decisions because they are in minority. The construction industry needs to develop strategies to work preventive with cultural issues, to retain employees. Currently women are found in stab functions and men at positions in line to advancement. Women who are given positions that are characterized as male face negative attitudes from colleagues who believe women are less suited for such positions. Recruitment strategies to avoid similarity effects and increased meritocracy should be implemented. Moreover, it is efficient to use influential strategies, e.g. role models and transformational leadership. To attract the best talent and to compete of workforce with other industries, reputational factors can strategically be managed through reputation management. The future generation value gender equality, equal responsibility for house work and reasonable working life balance. They are increasingly aware of their rights and possibilities which are changing the game plan for the employer that has to live up to their expectations.

Organizations who aim to become gender equal must adopt the iterative process of equality knowledge, actions, result, follow up and monitoring, and feedback and improvement. There are many incentives for the industry, organization, and employee to engage in the equality

progress. The most powerful incentive for increased equality in the construction industry would be if organizations demand equality from business partners. To find out more, read our report.

7.6 Future recommendation

There is a need for more research about equality in the construction industry, both equality and gender equality. We would like to recommend future researchers to investigate how to develop further strategies for diversity in the construction industry. The industry should welcome other generally excluded groups, and therefore we recommend to study how immigrants, homosexuals, and non-binary individuals experience working in the construction industry. Additionally, there should be more research regarding gender equality in the construction industry conducted with a quantitative research method. Another suggestion is to make two case studies and study how a private and a public organization are working with equality. Further, we would like to recommend studying how gender equality efforts can be learnt from other industries.

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9. Appendix

9.1 Interview guide 1

Interview guide 1 is applied to interview respondents from the construction industry.

1. Tell us about you and your career path to this position today.
2. How would you describe your role?

RQ1 - Why equality:

3. How would you describe the culture in the Construction industry in general? Has it changed during the last 5/10 years? How?
4. Do you think your gender have influenced your career and where you are today?
Do you believe gender has influenced the career of, for example, your colleagues?
Do you believe that you have the exact same rights, possibilities, treatment as your colleagues of the opposite sex? Please describe.
5. Do you think un-equality really is an issue? Why?
(In terms of possibilities, treatment, proportion and more).
6. How would you describe the culture in your organization/your industry?
Please name a cultural issue that affects you or others negatively?
Do you believe there is a need to change your culture?
7. How would you define a macho culture?
In what ways would you describe a macho culture as problematic?
Is (gender)-diversity favourable or a disadvantage according to you?
Do you see any signs of a macho culture in the culture of your organization/industry culture? Please describe them.
8. How often do you and your colleagues discuss norms, behaviours and values?
Do you believe that individuals in your organization are aware of which norms and values they have adopted? How those who are outside the norm are influenced by them?
9. How could increased equality positively influence women? And men?

RQ2. What retains and attract women to the Construction industry?

10. What do you believe attracts women to the Construction industry?

11. What do you think makes women stay in your organization/industry? How could one influence that?

RQ3. What strategies can be used?

12. In what ways do you work to eliminate macho tendencies in your organization?

At what levels? (Research, management teams, conferences etc.)

13. Who are assigned the task of increasing the level of equality in your organization?

Is the efforts equality distributed between men and women?

Are both genders equality involved in the efforts to increase equality? Why?

14. How do your organization handle issues connected to inequality between men and women/non-binary? E.g. sexist behaviour.

15. What strategy has your organization adopted to increase equality? What does this mean in practical terms? Workshops, education/courses, discussions etc.? Please describe in detail. Give an example or two.

16. What methods do you find effective when increasing the awareness of norms, behaviour and values of individuals?

What tools do you implement when educating groups of individuals? Workshops, etc.

17. Is there a strategy/idea you have that could improve the situation for women/non-binary individuals in the industry? How would you desire to implement your idea?

18. Do you believe that the work implemented for equality improvement is enough in your organization? Why?

19. What has been the outcome from your equality effort? Do you measure them? How?

20. How could an organization become more welcoming or inclusive for minorities?

RQ4. What incentives exist or could be developed for increased equality efforts?

21. Do you believe there are any current incentives for organizations to work with equality?

What are they?

22. Do you believe that an equality certification could increase equality work in organizations in the Construction industry?

9.2 Interview guide 2

Interview guide 2 is applied to interview respondents from other industries than the construction industry.

1. Tell us about you and your career path to this position today.
2. How would you describe your role?

Learning from others:

3. How does your industry currently work to increase equality?
Please describe in detail the first steps and the current steps with equality work in your industry? What is the next step? How far have you come according to you?
4. How is the equality progress measured? Can it be measured?
5. What can the Construction industry learn from your industry?

RQ1 - Why equality:

6. Do you believe that you have the exact same rights, possibilities, treatment as your colleagues of the opposite sex? Please describe.
7. Do you think un-equality really is an issue? Why?
(In terms of possibilities, treatment, proportion and more).
8. How often do you and your colleagues discuss norms, behaviours and values?
Do you believe that individuals in your organization are aware of which norms and values they have adopted? How those outside the norm are influenced by them?
9. How could increased equality positively influence women? And men?

RQ2. What retains and attract women to the Construction industry?

10. What do you believe could attract women to a male dominated industry, such as the Construction industry?

RQ3. What strategies can be used?

11. In what ways do your organization work to eliminate macho tendencies in your industry?
At what levels? (Research, management teams, conferences etc.)

12. How could an organization handle issues connected to inequality between men and women/non-binary? E.g. sexist behaviour.
13. What strategy has your organization adopted to increase equality in your industry? What does this mean in practical terms? Workshops, education/courses, discussions etc.?
Please describe in detail. Give an example or two.
14. Is there a strategy/idea you have that could improve the situation for women in male dominated industries? How would you desire to implement your idea?
15. What has been the outcome from your equality efforts? How do you receive feedback?
16. How could an organization become more welcoming or inclusive for minorities?
17. How could the recruitment process be improved?

RQ4. What incentives exist or could be developed for increased equality efforts?

18. Do you believe there are any current incentives for organizations to work with equality? What are they?
19. Do you believe that an equality certification could increase equality work in organizations in the male dominated industries?

9.3 Statistics - SCB

Riket Yrke (SSYK 2012)	Förvärsarbetande inom Byggindustrin (SNI 41-43) 2016. Fördelning efter yrke	Källa: SCB, RAAMS 2016									
		Antal		Därav kvinnor		Därav 65-år 2016		Personer per år som blir 65-			
		Antal	%	Antal	%	Antal	%	Antal	%	Antal	%
1	Ledningsarbete	22 023	6,4	2 410	10,9	887	4,0	397	1,8	537	2,4
1120	Verkställande direktörer m.fl.	2 465	0,7	112	4,5	129	5,2	46	1,9	68	2,8
1211, 1212	Ekonomi- och finanschefer, nivå 1 och 2	869	0,3	533	61,3	33	3,8	19	2,2	22	2,5
1221, 1222	Personäl- och HR-chefer, nivå 1 och 2	456	0,1	223	48,9	15	3,3	5	1,0	9	1,9
1291, 1292	Övriga administrations- och servicechefer, nivå 1 och 2	906	0,3	277	30,6	39	4,3	16	1,8	24	2,6
1321, 1322	Inköps-, logistik- och transportchefer, nivå 1 och 2	349	0,1	43	12,3	10	2,9	5	1,4	6	1,8
1361	Divisionschefer, Arbetschefer nivå 1, Produktionschefer nivå 1	2 049	0,6	161	7,9	55	2,7	36	1,7	53	2,6
1362	Arbetschefer nivå 2, produktionschefer nivå 2, platschefer	11 213	3,3	512	4,6	444	4,0	202	1,8	265	2,4
1xxx	Övriga inom yrkesområde 1	3 716	1,1	549	14,8	162	4,4	68	1,8	90	2,4
2	Arbete som kräver specialkompetens	8 964	2,6	3 316	37,0	490	5,5	129	1,4	159	1,8
2161, 2162, 2163	Arkitekter och stadsplanerare	688	0,2	313	45,5	37	5,4	12	1,7	11	1,6
2142	Civilingenjörsvrken inom bygg och anläggning, inkl konstruktör 1	1 991	0,6	619	31,1	52	2,6	21	1,1	26	1,3
2143	Civilingenjörer m.fl., elkraft	298	0,1	23	7,7	33	11,1	4	1,4	5	1,7
2144	Civilingenjörer m.fl., maskin	178	0,1	10	5,6	11	6,2			4	2,5
2164	Lantmätare	17	0,0	13	76,5						
2141, 2145, 2146, 2149, 2183	Övriga civilingenjörer m.fl.	1 329	0,4	271	20,4	49	3,7	21	1,6	27	2,0
2411, 2412	Revisor m.fl. samt Controller	696	0,2	427	61,4	33	4,7	8	1,1	13	1,9
2423	Personäl- och HR-specialister	471	0,1	304	64,5	17	3,6	6	1,2	7	1,4
2xxx	Övriga inom yrkesområde 2	3 296	1,0	1 336	40,5	258	7,8	53	1,6	65	2,0
3	Arbete som kräver kortare högskoleutbildning eller motsvarande kunskaper	30 521	8,9	4 736	15,5	1 182	3,9	437	1,4	587	1,9
3112	Ingenjörer och tekniker inom bygg och anläggning, inkl Entreprenadingenjörer, mätningstekniker, utsattare m.m.	6 756	2,0	862	12,8	248	3,7	96	1,4	127	1,9
3113	Elinjörer och elektriker	2 471	0,7	75	3,0	92	3,7	40	1,6	49	2,0
3114	Maskingenjörer och maskintekniker	1 094	0,3	159	14,5	66	6,0	22	2,0	29	2,6
3117	Kartingenjörer	139	0,0	50	36,0	18	12,9	4	3,2		
3111, 3116, 3119	Övriga ingenjörer och tekniker	1 860	0,5	325	17,5	95	5,1	30	1,6	35	1,9
3121	Arbetsledare inom bygg, anläggning och gruva	1 001,8	2,9	654	6,5	278	2,8	119	1,2	178	1,8
3313	Redovisningsekonomer	1 193	0,3	1 049	87,9	75	6,3	20	1,7	29	2,4
3322	Företagsällare	2 308	0,7	317	13,7	98	4,2	35	1,5	49	2,1
3323	Inköpare och upphandlare	869	0,3	244	28,1	29	3,3	14	1,6	15	1,8
3334, 3335	Fastighetsingenjörer	208	0,1	66	31,7	8	3,8	4	2,0	5	2,4
3341	Gruppleddare för kontorspersonal	208	0,1	95	45,7	4	1,9			5	2,2
3343	Chefssekreterare och VD-assistent m.fl.	104	0,0	92	88,5						
3511	Drifttekniker, IT	466	0,1	66	14,2					7	1,4
3xxx	Övriga inom yrkesområde 3	2 827	0,8	682	24,1	167	5,9	45	1,6	54	1,9
4-6	Kontors- och kundservicearbete, service-, och försäljningsarbete samt jordbruk, trädgård m.m.	26 562	7,7	11 761	44,3	1 519	5,7	480	1,8	542	2,0
5152	Fastighetsskötare	2 124	0,6	104	4,9	146	6,9	50	2,4	52	2,5
6113	Trädgårdsanläggare m.fl.	2 670	0,8	494	18,5	98	3,7	54	2,0	65	2,4
4xxx-6xxx, exkl. 5152, 6113	Övriga inom yrkesområde 4-6	21 768	6,3	11 163	51,3	1 275	5,9	375	1,7	425	2,0
7	Hantverksarbete inom byggverksamhet och tillverkning	175 138	51,0	2 956	1,7	3 997	2,3	2 219	1,3	2 816	1,6
7111	Träarbetare, snickare m.fl.	41 068	11,9	215	0,5	1 023	2,5	543	1,3	671	1,6
7112	Murare, plattsättare och putsarbetare	7 645	2,2	142	1,9	112	1,5	59	0,8	94	1,2
7113	Betonarbetare och håltagare	5 716	1,7	18	0,3	108	1,9	87	1,5	107	1,9
7114	Mark- och anläggningsarbetare inkl. beläggingsarbetare	13 061	3,8	255	2,0	344	2,6	223	1,7	293	2,2
7115	Anläggningsvårdare	198	0,1								
7116	Ställningsbyggare	2 882	0,8	25	0,9	42	1,5	19	0,6	30	1,0
7119	Yrkesarbetare, övriga samt brölngr	12 331	3,6	229	1,9	178	1,4	109	0,9	133	1,1
7121	Takläggare och undertaksmontörer	3 370	1,0	34	1,0	55	1,6	32	0,9	42	1,1
7122	Golvläggare	3 622	1,1	41	1,1	105	2,9	45	1,2	62	1,7
7123	Isoleringsmontörer	1 724	0,5	30	1,7	41	2,4	23	1,3	34	2,0
7124	Glasmästare	1 733	0,5	48	2,8	51	2,9	21	1,2	33	1,9
7125, 7126	VVS-montörer m.fl.	19 680	5,7	148	0,8	435	2,2	260	1,3	337	1,7
7131, 7132	Målare samt lackerare	13 820	4,0	923	6,7	352	2,5	200	1,5	250	1,8
7134	Saneringsarbetare	675	0,2	19	2,8	9	1,3			7	1,1
7213, 7214	Tunnplåtslagare	5 423	1,6	52	1,0	157	2,9	66	1,2	97	1,8
7215	Stålkonstruktionsmontörer och grovplåtslagare	298	0,1			8	2,7	5	1,8	5	1,6
7221	Smeder	783	0,2	12	1,5	22	2,8	14	1,8	15	1,9
7231	Motorfordonsmekaniker och fordonreparatörer	909	0,3	7	0,8	38	4,2	9	1,0	17	1,8
7411, 7412, 7413, 7420	Installationselektriker samt elmontörer, tele- och elektronikreparatörer m.fl.	33 258	9,7	552	1,7	699	2,1	413	1,2	463	1,4
7522	Fönsterhanverkare	1 520	0,4	37	2,4	38	2,5	15	1,0	22	1,5
7xxx	Övriga inom yrkesområde 7	5 422	1,6	164	3,0	179	3,3	72	1,3	101	1,9
8	Process- och maskinoperatörsarbete, transportarbete m.m.	27 078	7,9	742	2,7	1 122	4,1	446	1,6	513	1,9
8111	Gruv- och stenbrötsarbetare	2 539	0,7	19	0,7	66	2,6	61	2,4	67	2,7
8114	Maskinoperatörer, cement-, sten- och betongvaror	355	0,1			8	2,3	5	1,5	7	2,1
8115	Bergsprängare	328	0,1	9	2,7	7	2,1	4	1,3		
8332	Lastbilsförare m.fl.	5 513	1,6	267	4,8	256	4,6	89	1,6	105	1,9
8342	Anläggningsmaskinförare m.fl.	10 807	3,1	136	1,3	469	4,3	152	1,4	174	1,6
8343	Kranförare m.fl.	936	0,3	20	2,1	43	4,6	20	2,1	20	2,2
8xxx	Övriga inom process- o. maskinoperatörsarbete, transportarbete m.m.	6 600	1,9	288	4,4	273	4,1	114	1,7	136	2,1
9	Arbete utan krav på särskild yrkesutbildning	9 146	2,7	1 706	18,7	214	2,3	101	1,1	114	1,3
9111	Städare	1 952	0,6	1 152	59,0	44	2,3	24	1,2	26	1,3
9310	Övriga arbetare inkl. förädlingsarbetare	4 376	1,3	114	2,6	67	1,5	43	1,0	49	1,1
9xxx	Övriga inom yrkesområde 9	2 818	0,8	440	15,6	103	3,7	35	1,2	39	1,4
0/na	Övriga	44 257	12,9	3 207	7,2	6 174	14,0	615	1,4	670	1,5
110	Officerare	5	0,0								
210	Specialistofficerare	14	0,0								
310	Soldater m.fl.	87	0,0								
0002	Yrke okänt										
Totalsumma	Samtliga yrkesgrupper	343 689	100,0	30 834	9,0	15 585	4,5	4 823	1,4	5 938	1,7

Notera: Tabellen innehåller en röjningskontroll som innebär att om antal observationer för fyrsiffrig yrkeskod understiger fyra så har denna lämnats tom.
% 65- isar andelen inom yrkesgruppen som 2016 var 65 år eller äldre.

Förvärsarbetare inom Byggindustrin (SNI 41-43) 2016. Fördelning efter yrke. Riket.