Recruitment practices in IT companies: ways to increase hiring more women

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Abstract

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The topic for this thesis rose from the writer's own interest towards the heavily gender segregated Finnish working life, and especially towards the situation in the heavily male dominated IT industry. The objective of this thesis was to study the recruitment process in Finnish medium sized IT companies and identify gender neutral recruitment practices and solutions leading to hiring more women in technical roles in IT companies.

The theoretical background aimed to study the recruitment process and its different phases in general. The goal was to find and identify key practices that aim to include all genders in the recruitment process and ultimately lead more diverse employee groups in IT companies.

Two case organizations from the Finnish IT industry were interviewed to gather data of their recruitment practices. The data was gathered through semi-structured interviews and analysed using inductive analysis.

The results indicated that the case organizations' recruitment practices and the best practices identified from the theoretical background were not as coherent as expected. Further development suggestions and suggestions for further study topics were made based on the findings.

Keywords
Recruitment, hiring, gender equality, unconscious bias, diversity

Contents

1 Introduction

This thesis aims to study the disparity between men and women recruited to technological roles in IT companies. The writers own professional background is in people operations and especially in recruitment from the past 10 years. During my time in the software industry, roughly 80% of the companies' employees were male and 20% female, with women working mostly in other positions that technical ones, with only a few women occupying a tech role. In my experience, women apply and are hired mostly for roles in marketing, sales, admin etc. but not in techical roles. Attitudes, cultural traditions, and gender stereotypes - even unconscious ones - live strong and are challenging to change even from within companies and industries by the people operating in those communities.

Relatively recent literature review voice concerns for the lack of women in the IT field from the point of view of increase of jobs in the IT field with limited employee resources, the negative influence on companies' competitiveness around the world and of the overall economic efficiency of countries. The need for more diverse views of what does our digital life look like by having a more heterogenous group of people planning, designing and developing our digital services and tools should be taken into consideration. It is clear that women are underrepresented in the IT community workforce, which has led to a vast range of research on the topic, but not much has been discovered and the issue remains unchanged. Increasing the number of women in the field of IT would have many positive impacts on society: shortage of IT employees would be easier to address with more versatile labor pool, the versification of technological applications, products, standards and practices to serve also women's needs and helping to narrow the gender pay gap. (Iivari et al. 2019, 1-2, 4-5.)

1.1 Objectives, scope and research questions

The objective of the thesis is to study the recruitment process and to identify gender neutral recruitment practices in the IT industry.

This scope of this thesis is the Finnish work environment, more specifically medium sized companies in the IT industry. Medium sized companies are companies with more than 50 but less than 250 employees with a turnover of no more than 50 million euros (Statistics Finland a, 2020). The thesis is meant to serve any IT company in Finland who is looking to diversify their recruitment process by providing information on the subject matter and discussing common pitfalls.

Two research questions have been identified to guide the research of this thesis:

Q1. What kind of practices in the recruitment process could lead to hiring more women in technical roles in software companies?

Q2. What are the best practices to prevent discrimination between genders and biases in the recruitment process?

1.2 The context of the thesis

Inclusion and diversity have long been in the spotlight and under severe media scrutiny when it comes to the organizational life. Some might find it to be far-fetched, not concerning their organizations. The impact of diverse teams and inclusion in an organization might be hard to measure, which might be the reason that some organizations fail to see its importance. But the reality is that organizations can no longer afford to not invest in inclusive practices throughout their business functions.

McKinsey & Company's research from 2019 shows, that companies who have gender diverse boards and executive teams are 28 percent more likely than their peers to outperform financially. Companies in UK and US with female executive team representation exceeding 30 percent are significantly more likely to outperform companies with executive teams that have less female representation. In fact, there is a 48 percent difference in the likelihood of outperforming peer companies between the most and least gender diverse companies. The interaction between boards, executive teams and profitability is not fully understood at this point but it is hypothesized, that higher female presentation is linked to the increased possibility of financial outperformance of companies. The reason could be speculated: is it due to the diverse boards operating differently than their more non-diverse competitors or is the company's commitment toward diverse boards signaling a more open attitude towards diverse customers, employees, businesses and communities that influences their financial performance. (McKinsey & Company 2020, 13,17.)

Despite these findings, the representation of women on executive boards has not increased at a very fast speed between 2014 and 2019, with significant differences between industries. In financial services, media and technology industry, the yearly growth rate of women in executive teams have been about 1,5 percent, when in healthcare – an industry with female presentation in entry level is especially high – the yearly growth has been at only 0.3 percent. (McKinsey & Company 2020, 18.)

Finland, alongside other Nordic countries, is generally seen as an example country for gender equality and having equal opportunities for everyone. Despite Finland being a highly developed and educated country, our working life is severely segregated into women's and men's jobs and industries. According to Statistics Finland, health, education, accommodation and food

services are dominated by women whereas building, transport and technology industries by men. Equal occupations, where 40 to 60 percent of employees are men or women, cover only around 10 percent of the working people. (Statistics Finland b 2021.)

The same kind of trend can be seen already in the fields of education, both in university and in polytechnic studies. ICT students are roughly 80% men in both universities and polytechnics, engineering, manufacturing and construction students are roughly 70 % men in universities and 80% of men in polytechnics. Education students in universities are slightly above 80% of women in universities and roughly 70% in polytechnics, while in healthcare women make up around 85% of the students in polytechnics, and around 70% in universities. (Statistics Finland c 2021.)

The gender segregation can be noticed to take effect in educational choices as early as when applying to secondary education. Even though students generally study the same subjects during primary and secondary school, different industries become familiar to different genders in different ways, which further influences the path that these young people will pursue in education. Most of the information of jobs and educational lines come outside of the school setting: from family members and their perceptions of industries, friends that are often the same gender during primary and secondary school, hobbies that usually are highly segregated between boys and girls and from work practice programs. The importance of hobbies and elective studies are emphasized particularly high, since they provide good experience of the person's own abilities in that field. Gender biased imaginary in society and in study materials also have an influence on the student's perception of which types of jobs they find suitable. (Tanhua 2019.)

1.3 Most relevant concepts

The main concepts and terminology are based on my own professional opinion and on exploring recent literature and publications on what to consider when discussing gender neutral recruitment practices.

Company Culture

Company culture includes all the formal systems and informal behaviors (values, beliefs, assumptions) around a workplace and describes how a company get things done (Great Place to Work 2021; Smith et al. 2015, 52).

Diversity, Equity, Inclusion (DEI)

Diversity refers to all the dimensions and characteristics that shape our identity and define who we are. It includes characteristics that we may have little or no control over, but affect significantly to

our lives such as race or gender, or dimensions that we may be born into and may change during our lives, such as religion or socioeconomic status. *Equity* means recognizing that some people have unearned advantages due to them being a part of a group that is in a position of power and privilege in the society that we live in and aims to promote fairness and provide everyone with what they need to succeed. *Inclusion* refers to the practices, behaviors and structures that promote access to equal opportunities and resources as well as a sense of everyone being equally valued and having their voices heard. (Morukian 2022, chapter 1; Inklusiiv 2022.)

Recruitment

Recruitment refers to the process of identifying, attracting and assessing potential employee candidates to determine who would fit well into an organization and with its people (Thite 2019, 173). A recruitment process is a series of actions that aim to find the best possible talent for an organization. The recruitment process consists of identifying and specifying the job vacancy needs, identifying the right candidates and communicating with them to ultimately selecting and hiring the best candidate for the vacancy (Sangeetha 2010, 93-94).

Resourcing strategy

Organization's resourcing strategy defines how many and what kind of employees the organization needs, what is the plan to obtain and retain them and ultimately to match their people with the organization's strategy and operational needs. In the core of a resourcing strategy is the concept of gaining competitive advantage by attracting and employing more capable people with wider and deeper range of skills than their rivals and the aim to be the 'employer of choice' by creating a positive employment relationship that increases mutual trust and commitment. (Armstrong 2016, 219-220.)

Unconscious bias

Unconscious, or implicit bias, is an opinion that a person forms without being aware of it. Biases are unconsciously formed by using one's knowledge, culture, stereotypes and past experiences. (Burton-Hughes 2017.)

2 Recruiting women in technical roles in technical companies

A recruitment process can follow as many directions, have many different strategies and practices as there are different companies – there is no one universal way. However, certain common elements can be identified as successful recruitment practices, as seen on picture 1, and especially gender-neutral ones, which have been discussed below.

I have utilized my previous learning assignment from my free-choice studies' course Diversity and Inclusion in Global Organizations in the writing of this theoretical framework. The subject of the learning assignment was "How to hire more women in tech?"

2.1 General outline of a recruitment process

Recruitment is a part of a company's resourcing strategy, which aims to ensure that a company has more capable people than its rivals, which results in a competitive advantage. These types of people have a wider and deeper set of skills than people in their rival companies and are thus able to maximize their contribution to the company and create competitive advantage. Companies enable this by providing better opportunities and rewards than their rivals and by creating positive employment relationships to increase mutual trust and commitment. This viewpoint is called the resource-based view. By following this viewpoint, these types of organizations aim to be the employer of choice. Organizations that are considered to be the employer of choice are characterized to be flexible, customer-focused, performance-oriented, continuously learning and developing and encouraging their employees to be innovative and resourceful. (Baker 2014, 9.)

Based on the before mentioned, a recruitment process is formed to ensure that they have the people they need by identifying how many and what kind of employees are needed and by making plans on how to obtain those people, retain them in the company and how to employ them efficiently. A strategic approach to recruitment needs to consider the fact that it is people who implement the strategic plans, and that the processes should be planned with people in mind. The process needs to understand the direction the organization is going and integrate it into the overall business strategy. (Armstrong 2016, 171-172, 2020.)

Before starting a new recruitment process and defining a new job role, it is important to consider whether a new person is really needed or would there be other solutions to solve the need. That could mean e.g., sharing the responsibilities and tasks to existing employees without overburdening anyone or by developing existing working methods and tools to compensate the increased workload. (Joki 2021, 66; Viitala 2021, 60.)

The general recruitment process typically follows more or less the same main points as seen on picture 1. The process starts from defining the job role and its requirements and choosing whether the recruitment will be handled by an in-house recruiter or outsourced to and external headhunter or recruitment agency. After the job role's scope is defined, the positions will be advertised externally via chosen recruitment channels that are known to attract the type of talent the job role is meant to attract. The applications will be received either on an applicant tracking system or via personal/ shared email and the screened to find the candidates that best match the job criteria to move forward. The interview stage can consist of as many rounds as the organization seems necessary and by the people who seem to be most knowledgeable about the job in question. The final step is to make a hiring decision based on all the data that has been gathered about the candidates throughout the entire recruitment process. (Joki 2021, 69-73; Viitala 2021, 64-68).

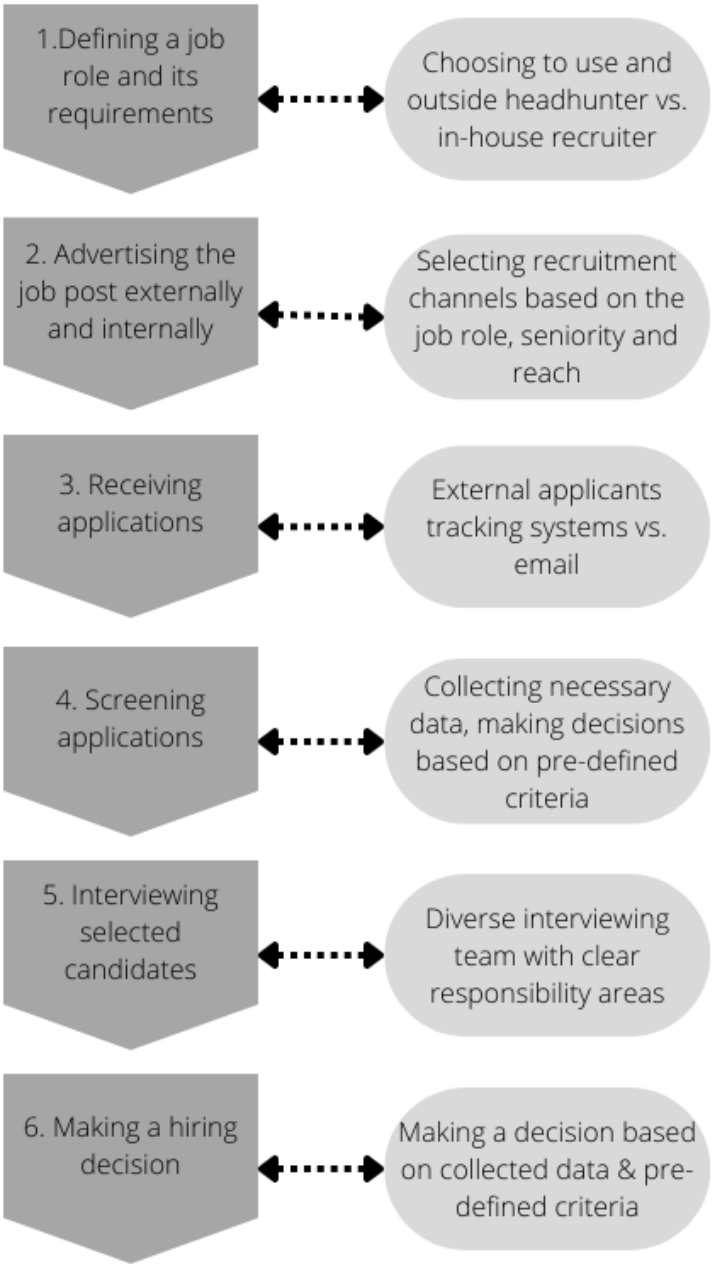

Figure 1. General outline of a recruitment process (Joki 2021, 69-73; Viitala 2021, 64-68).

2.2 Defining the job profile

From my experience all recruitments start by trying to find an answer to the question of “What are we looking for”. It’s a common misconception to think that the new hire should be and do exactly the same as their predecessor or someone who has occupied that specific role beforehand. Instead, recruiting new people should be an opportunity to think about the long-term goals of those positions and the best qualities needed to reach them. Joki (2021, 66) explains, that when an organization is considering hiring a new person, it is a great opportunity to reflect on the situation and

functioning of the whole working community and to focus on forecasting the changes in the working life and what kind of demands it will bring for the employees in the future.

Kaijalainen defines the requirement definition stage to be the most important stage in the recruitment process and it should be done from the beginning each time. Focus should be on defining what is the problem that we are seeking to solve by this new role and what are the goals and targets for this role. When identifying the needed competencies and skills, it is not relevant to consider what types of companies this person has worked with before, what their job role has been, but to focus on what they have actually done and achieved. The same skills and experiences that were relevant in the past might not guarantee success in another role in the future. (Kaijala 2016, 27-28, 32.)

To define a profile that aims to be a successful one and a match to the organization, Kaijala has identified four key elements on higher level that it needs to include: 1) competence; technical and professional competence needed for the job, the substance, 2) competency; what competencies a person has that are needed to do the job, 3) experience; achievements and accomplishments in work and studies that support the individual to be successful in this particular job, 4) personality; personal qualities and motivators that have an effect on enjoying the job and thriving in it. In addition to these elements, the concept of talent is important, since it is built on the individual's skills to adopt, their ability to learn, their emotional intelligence and personality. Past achievements are an important base for talent, but they are not the whole story. To assess past achievements' relevance for the role, the focus should be on analyzing what specific skills were needed to gain those achievements and exactly how those skills were used. When focusing on how those skills can be transferred to a new situation and role, the potential of that individual can be identified. (Kaijala 2016, 33-35.)

When defining a job profile, it is important to remember that the role is not separate from the rest of the organization. On the contrary, a job profile should be driven from the organization's strategy and vision. One example of this can be found in Figure 2 below, which is adapted from the European Social Fund and North Karelias ELY centers' project that aimed to develop new, innovative solution to competence management and leading competencies.

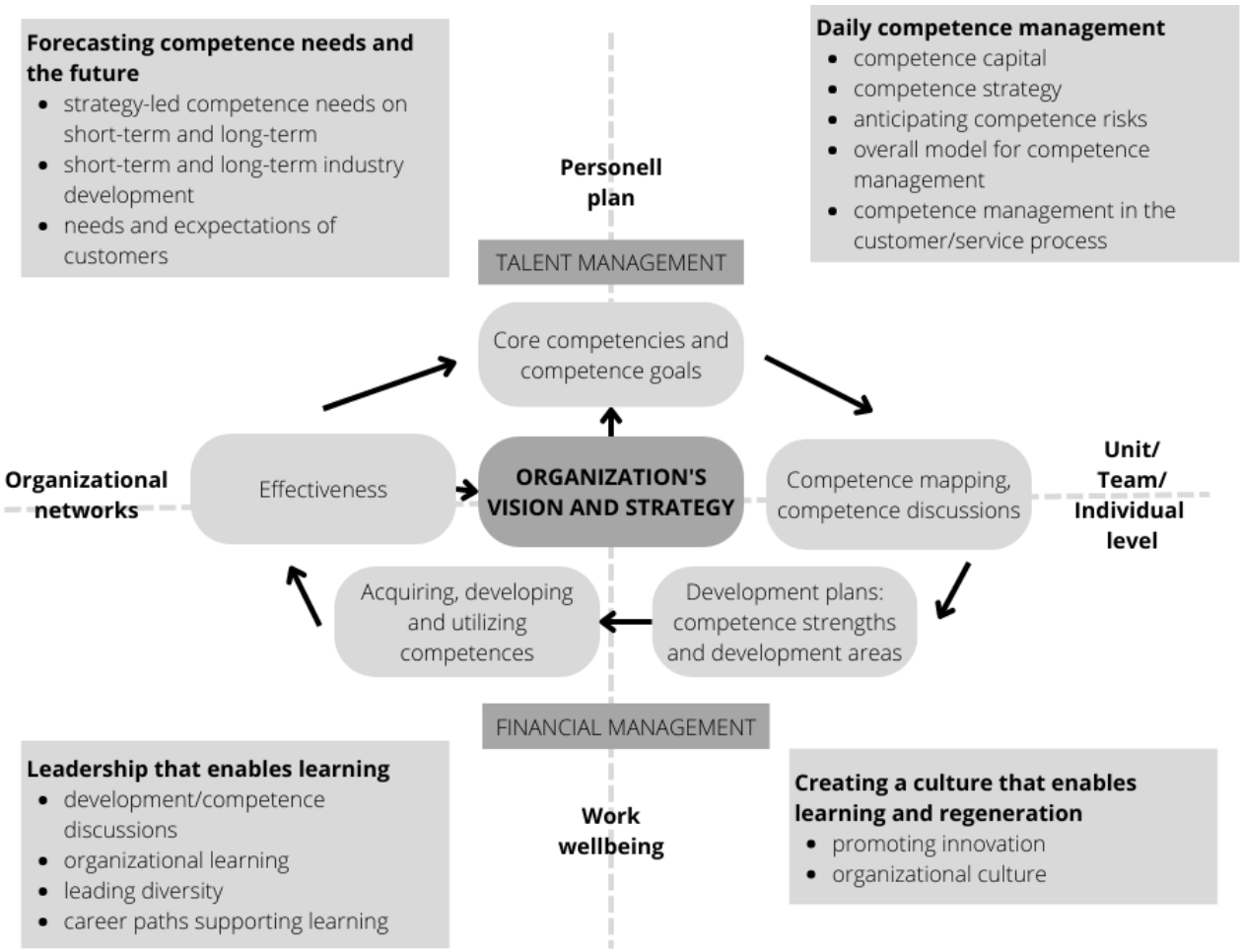

Figure 2. Competence map (adaptive from Kaijala 2016, 45)

At the core of the model in figure 2 lies the organization's vision and strategy, which is used to base the core competencies and competence goals on. Core competencies refer to that strategic competence that is vital to the organization for it to be able to execute its strategy and to maintain and improve its competitive advantage. Core competencies would be recommended to pack into 3-5 competence areas, which are usually defined by the organization's management. In the next phase, the competence map is defined and built. The competence map is a tool for competence management, and it describes and documents the different competencies that are needed for different levels of the organization. (Kaijala 2016, 44-45.) After this stage, the competence needs can be defined on organizational, unit, team and individual levels by defining what competencies are needed to obtain the strategic goals. (Kaijala 2016, 44-45; Viitala 2021, 60.)

2.3 Job ad

The language used in job ads is a way for an organization to communicate to the outside world what it values in its employees, what kind of culture it represents and what it is like to work with

them. When writing a job ad that is meant to attract a diverse applicants pool, the ad should answer the question: “Why would anybody want to work with us?”, especially if they are seeking applicants who are less represented in their core group of people. (Sanchez 2020.)

On general, men and women are almost equally open to new job opportunities (women 88%, men 90%) and equally interested to know what it is like to work in a company before applying to a job (women 41%, men 42%), but when it comes to applying, women apply to 20% fewer jobs than men. Interestingly, women also feel that they need to meet all the job criteria before applying, whereas men only feel the need to meet around 60% of them. It has also been shown that women appreciate knowing more about the company and the job itself than men: salary and benefits information, flexible working policies, parental leave and healthcare. (Ignatova & Tockey 2019, 5-7, 9.)

Companies should review their job ads carefully and avoid narrow job descriptions that are linked to masculine traits or aggression. When job applications include gender character traits that are associated with masculinity, companies end up hiring male candidates and male candidates are more likely to apply, when women and minority candidates are not. To avoid this, job ads should require skills that are measurable, provide salary information, use gender neutral job titles and emphasize terms that do not evoke gender stereotypes. (Gammal & Simard 2012, 14; Correl et al. 2019; Ignatova & Tockey 15; Sanchez 2020.)

Moreover, the actual description of the required qualifications also makes a difference in which types of applicants it attracts. When the job ad is *describing* the problem or challenge that the position will be hired to work on, it will attract a more diverse applicant pool, versus when the job description is *listing* the qualification the applicant must fill. When framing a job ad in a descriptive way, it increases the amount of people seeing themselves being the ones solving those problems and reflecting on their own strengths on how to do it, as opposed to being expected to just meet a long list of requirements. (Sanchez 2020.) Of course, certain hard skills are a must in certain positions and should be included in the job ad, but the list of qualifications should be as short as possible and only contain the absolute must qualities needed to succeed from day one, in order to attract a more diverse applicant pool. (Sanchez 2020; Joki 2021, 70.)

Using inclusive language in job post might be difficult to do, if a person does not know what that means. The way a company communicates partially determines who are the people applying to that company and by making sure that inclusive language is being used in job ads, companies can broaden and diversify their applicant pools. A software such as Textio detects gendered phrases, harmful language, age bias etc. to help companies to make their communication more inclusive and reach new candidate pools. (Textio 2022.)

2.4 Recruitment channels

There are several different recruitment channels available and choosing which ones to use will affect the reach of the job posting and the types of applicants it attracts. Below in table 1 are gathered the most common recruitment channels used (Interviewee 1 20.10.2022; Interviewee B 28.10.2022; Joki 2016, 68-69; Viitala 2021, 64).

Table 1. Different types of recruitment channels

Recruitment channel	Category and/or example
Newspapers and magazines	- Local newspapers: Helsingin Sanomat, Turun Sanomat - Specific union magazines - HR Magazines: työn tuuli, HR viesti
Online recruitment platforms	LinkedIn, Duunitori, Monster
Organization's own website	Organization's own career pages
Headhunting/sourcing	Recruitment agency or in-house recruiter
Competitors	Contacting direct competitor's employees
Employment agencies	Local employment agencies
Recruitment fairs	Educational institutes own, industry specific, general student fairs
Educational institutes	Partnerships with educational institutes, recruitment events, career days, visiting lectures, open door days
Rental work agencies	Academic Work, Staffpoint, Eezy, Bolt Works
Organization's own personnel	Finding the needed talent from inside the organization: internal recruitment

The selection of which recruitment channels to use is based on, among other things, which type of people the organization is looking for, to which position, with what level of seniority, and what type of employer image they want to portray. (Joki 2021, 69; Viitala 2021, 59-61.)

When choosing a recruitment channel, it is important to also consider who is responsible for it and what kind of people are taking care of which responsibilities. A study conducted on university recruitment events found out that women were often working with non-essential task, such as setting up refreshments and company goods, while men were often the presenters, answering questions and sharing knowledge on technical related questions. When companies had a female engineer in the event, their role was often to answer questions regarding company culture or to have no presenter role at all. The study documented an unwelcoming environment for women recruits that included sexist jokes, sexist imaginary used, sexualizing women, gender stereotypes and the absence of women engineers, which lead to intimidating or alienating women recruits. On occasions, when the event had women speaking on technical subjects, such problems were not as common. In these occasions, women recruits were more engaged and asked questions 65 percent of the time, compared with 36 percent of the sessions that had the before-mentioned issues. Women and men were also both less likely to leave in the middle of these events. Out of all the recruitment sessions - there were 84 in total – women attended on average to a quarter of them. This seems to emphasize the point that when women did not feel well-represented in the company, they did not feel interested. If only men are represented in the professional imagery and language, women have a hard time feeling that they would be seen as equally capable of doing the job or fitting into the company culture. (Hemple 2013.)

Gammal & Simard explain that the way a company advertises itself, its positions and to which audience it reaches out to will shape the group of people who self-select into its candidate pool. That is why it is important to shape the recruitment practices and re-think the ideal candidate and to avoid hiring for the right cultural fit. Many tech companies target specific institutions focusing on their small number of elite computer science and engineering programs to fill entry-level positions. This often leads to favoring white upper middle-class applicants, who are the majority of people attending those study programs. Broadening the target study lines and universities, companies will reach a larger applicant pool. Also limiting criteria to a narrow set of skills, such as certain programming experience or certain level of GPA, can also lead to a very limited pool of applicants. By rethinking the needed range of skills needed, for example adding problem solving or creativity, can lead to a more diverse applicant pool with more diverse skills. (2012, 9-10.)

To address the blind spot of concentrating recruitment only on limited sites that might favor one group of people over another, companies should broaden their recruitment channels and broaden

their applicant pool. Gammal & Simard (2012, 5) suggest that organizations should target events, educational institutes and professional organizations with a high number of women members. Hiring biasedly from educational institutes that have a good reputation and whose reputation is built on old, biased assumptions on success, leads to homogeneity that will not suit the organization in the future. By hiring from certain academic institutes based on their reputation, a lot of talent is missed simply because they are excluded from these systems, and it has nothing to do with intellect, creativity or potential. (Sanchez 2020.)

In Finland, institutes that promote gender quality and show a diverse participant pool would include for example Women in Tech Finland, Mimmit koodaa and Future Female. These organizations are working towards bringing more women into the tech industry and helping women network with other women (Women in Tech Finland 2022; Mimmit koodaa 2022; Future Female 2022). For example, the Future Female organization (Future Female 2022) hosts mentorship programs for young game and tech students that aim to provide information, and tools to show how they can influence on the equality of the tech industry and get acquainted with various kinds of career options. Participating in mentorship programs and different events, organizations not only spread information about them, the types of jobs they have available, but also increase their network and potential future, more diverse talent pool.

Before getting to the actual interview phase, hiring managers and recruiters need to first identify who are the people they want to talk to. Screening resumes and applications is usually a task that falls to the talent acquisition team in bigger companies and to hiring managers/team leaders in smaller companies. It is a time-consuming process, since one position can attract hundreds of applicants (Joki 2021, 73). It is also a process that can be very much prone to error and bias, unless clear selection criteria are not agreed on beforehand (Caven & Nachimias 2018, 231; Joki 2021, 73.) Especially on those occasions, when applicants submit information about themselves that are known to trigger stereotypes, such as their name, age, gender and photograph. Rather than reviewing applications individually, they should be compared with each other in batches. This way the people assessing those applications are more likely to focus on relevant matters, when as assessed individually, the assessors tended to focus more on group stereotypes. (Caven & Nachimias 2018, 231.)

To help tackle the issue of unconscious bias towards applicants, companies can utilize blind recruitment practices. In blind recruitment a system is moving personal information from their applications and conceals anything that could negatively affect a hiring decision. (Hipps 2022.) For Finnish markets, companies such as Laura (2022) offer recruitment systems to companies to facilitate blind recruitment.

2.5 Interviewing and hiring

From my own professional experience, the interviewing process can also look very different depending on the company. Typically, the interviewing stage has at least two rounds: initial screening interview (phone call, video interview, face to face) with the recruiter and a second interview with the hiring manager and team member(s) with some sort of an assessment task. Depending on the company culture, there might also be a more casual meeting with the rest of the team, where they get to meet the candidates that have passed the first rounds to assess how well they would fit within the team without a strict interviewing setting.

In the hiring situation the criteria to evaluate candidates also makes a big difference on how many women get hired in technical roles. In a recent benchmarking study of 52 US companies with roughly 420 000 technical workers some practices were found to be significantly favoring one group of people over others. For example, when using “whiteboard” interview techniques, where the candidate must solve a problem on a whiteboard while others watch, white men with traditional academic backgrounds were most likely to succeed. Whereas interview with no whiteboard interview techniques, black women were 2 times more likely to be hired. Interestingly however, only roughly 30% of companies are prohibiting the use of whiteboard interviews. (AnitaB.org 2022, 16.) When the interviewers have a clear system on how to assess candidates and they have clear responsibilities and areas to assess, less biased decisions are made. (Sanchez 2020; Caven & Nachimias 2018, 231-232.)

When we get to the hiring stage of a candidate, there are still many downfalls to be avoided when it comes to gender bias. Research shows that in male dominated industries, such as IT, men are more likely to be perceived more competent than women, even with equivalent qualifications or identical resumes. Women have learned to downplay their competency to be accepted as part of a male dominated environment thus leading to poorer hiring experiences. To be considered for employment, minorities often need to show superior qualifications compared to the majority candidates. (Gammal & Simard 2012, 15.)

One barrier for gender diversity in hiring is that people tend to prefer to hire people that resemble themselves in terms of gender, education and cultural background (Gammal & Simard 2012, 16-17; Sanchez 2020; Caven & Nachmias 2018, 225-226). The tendency to feel a strong agree of likeness and trust towards other people who we categorize as similar to ourselves is called in-group-bias (Caven & Nachimias 2018, 225). To tackle in-group bias, hiring teams should be diverse by including different genders and minorities in them. It has also been shown that experienced managers tend to be slightly less likely to make biased hiring decisions than younger managers, so it is

important to include people from different age groups into the hiring teams. (Gammal & Simard 2012, 16-17.)

Hiring for cultural fit can be criticized to lead to hiring men over women by valuing peer evaluation, emotional attachment to the company, which have been shown to be the most inhospitable traits in a company for women, since they are often based on stereotypical masculine behavior. Hiring people for cultural fit leads to creating homogenous teams, where there won't soon be space for diversity. Questioning cultural fit as a reason for hiring or not hiring someone is important, the conversation should be turned more towards "what are the teams missing" rather than "what are the teams looking for". (Gammal & Simard 2012, 11.)

Hiring for cultural fit also has a positive side, which makes it slightly controversial. Törnroos, Jokela and Hakulinen's article discusses how does an individual's personality affect their job satisfaction. They argue that people both select and are selected to occupations partly because of their personality, since it has implications to the person-environment fit. People with similar personalities tend to develop similar interest and direct themselves towards occupations that match those interest, thus creating homogeneity in those occupations. The more alike your personality is to others in your occupation, the more satisfied you are with your job. (Törnroos, Jokela & Hakulinen 2019, 82-83, 87.)

Group size can contribute to biased decision making in organizations, when we talk about groups that are underrepresented in the organizational context, such as racial minorities or women. Smaller groups have higher variability than larger groups, so data of handful women or racial minorities is much less informative than the data about their male counterparts. In companies that have small minority groups, the groups may be subjected to stereotype-based evaluations and tokenism. It is problematic, since not many people question the representativeness of the data from these small groups and consider it to be as valid as the data gathered from the majority groups. One way to solve the issue can be addressed by providing more visibility to the individuals of these groups by e.g., offering opportunities to present at internal events or outside conferences in a role that represents the company as a whole. By giving more visibility to the members in these groups can help in counteract stereotypes and even change them. (Pendulla 2018, 38-39.)

2.6 Company culture

Having gender-balanced recruitment practices is not enough on its own to drive for a more gender diverse workforce and especially for driving more gender diverse senior positions. If a company does not investigate its company culture with a critical eye, they might not understand why women, despite being equally recruited to the company, are dropping out when it comes to time for

advancing in their careers and being promoted to senior positions. A company culture that values e.g., long working hours, availability and visibility at the physical office are traits of a masculine working culture, which tends to discourage women's career advancements. These two realities may very well coexist in the same company: gender-balanced recruitment policies and organizational practices that discourage women's career advancement. (Visser 2021, 2-3.)

When choosing a job to apply to, many look to the organization's culture and the message their employer branding conveys. According to Smith & al., it is especially important for the millennial workforce in general, who value corporate social responsibility, diversity and inclusion, work-life balance, getting feedback and growth. They want to work for an organization that shares their own values, for example in the area of social issues, so organizations that demonstrate support for diverse groups and communicate it outside have higher numbers in recruitment and retention amongst millennials than their competitors who do not engage in these efforts. (Smith & al. 2018, 52.)

In today's society, bad behavior at organizations can be exposed in a matter of hours with the help of social media, which imposes the requirement for organizations to not only control the perception it conceives to the public about its product and services, but about its ways of working as well. Bad employer imagine can have financial implications directly to the organizations' share prices, but it can also prove to be costly when hiring new employees, since job seekers look for at least a 10% or more minimum salary raise to be convinced to accept a job from a company with a bad employer image. Websites such as Glassdoor or Indeed allow its users to give honest reviews on all aspects of working with a company, so information about what it is really like to work for a certain company can be easily found and shared. (Thornton, Mansi, Carramenha & Cappellano 2019, 97-98.)

Psychological safety is a key factor in building successful, well performing and diverse teams. For people that belong into a minority group in an organization (e.g., race or gender), the risk of speaking up or bringing on new ideas is considerably bigger than to people who do not belong to a minority group. For underrepresented people to be able to contribute fully to the organization, their leadership needs to be vulnerable, keep their promises and create an environment where people are not ignored regardless of their background or attributes. (Sanchez 2020.) It has been identified that roughly half of all discrimination and harassment complaints lead to some level of retaliation. Employees complaining about such behavior are more likely to experience career challenges and worsening mental and health compared to those who experienced harassment but didn't complain. Organizations could benefit from, for example, and outside intervention providers or ombudsman offices that employees can contact when in need of confidential advice. Key factor in changing the

way organizations handle complaint, is that leaders should treat complaints as insight that can provide a much-needed push towards an organizational change rather than a threat. When involving managers in building diverse and inclusive strategies and programs from the start, organizations can ensure a higher buy-in, smooth implementation and keep their changes realistic ensuring that interventions are more sustainable and long-lasting. One size does not fit all, and an outside model might not resonate with the way teams work in any given organization. Managers can present crucial information on how they are working already and in what way will the changes affect their already complex days. (Pendulla 2018, 24-26, 45, 47.)

Having a number of women and people of color in leadership roles implies diverse leadership ranks, which signals implicit bias in the promotion process which helps a broader range of people to be able to see if the leadership resembling themself. Organizations that highlight their learning opportunities and show appreciation towards their employees, are more likely to attract both women and men applicants. Often times women struggle with having to prove their worth and their abilities to get hired or promoted, while men are more often promoted based on their potential. (Correl, Mackenzie & Wynn 2019.)

2.7 Legal framework in recruiting

When hiring, promoting and attracting employees in the Finnish working life, there are many legal obligations for an organization to consider. These legal obligations intend to promote equal treatment, equity, diversity and inclusion and prevent discrimination at workplaces. These laws and regulations include, but are not limited to, at least the following laws: Non-discrimination act, Act on Equality Between Women and Men, Criminal Code and Employment Contract Act.

Non-discrimination act

The purpose of the non-discrimination act is to promote equality and prevent discrimination and to provide protection by law to people who have been discriminated against. In organizations, the employer is responsible for promoting equality at the workplace. The employer must assess the realization of equality at the workplace and to develop the working conditions and methods that are applied when selecting and making decisions concerning the personnel. If the employer employs at least 30 people, it is obliged to have a plan of the necessary measures for promoting equality. The act prohibits discrimination based on age, origin, nationality, language, religion, belief, opinion, political activity, trade union activity, family relationships, state of health, disability, sexual orientation or other personal characteristics. In addition to direct and indirect discrimination, harassment, denial of reasonable accommodation as well as an instruction or order to discriminate is prohibited under this act. (Non-Discrimination Act 1325/2014.)

Act on Equality Between Women and Men

The purpose of the Act on Equality Between Women and Men is to prevent discrimination that is based on gender, gender identity, gender expression, to promote equality between men and women and to improve the status of women in the working life. To promote equality in the working life, employers are obliged to: **1)** act in a manner that job application attract both women and men, **2)** promote equitable placement of jobs for both women and men and create equal opportunities for career advancement, **3)** promote equality between women and men in the terms of employment, especially regarding pay, **4)** develop working conditions to ensure they are suitable for both women and men, **5)** arrange working conditions in a way that promotes work-life balance, 6) act in a pre-emptive ways to prevent discrimination based on gender. If the employer employs at least 30 people, it must create a gender equality plan that includes an assessment of the gender equality at the workplace, details of women and men in different positions, a salary survey detailing classification of jobs performed by women and men, differences in pay, needed measure to promote gender equality and a review of the extent to which the measures previously included in the plan have been implemented and their results. The plan is to be done in co-operation with the personnel. (Act on Equality between Women and Men 609/1986.)

Criminal Code

Discrimination at the workplace is also prohibited in Finland by the Criminal Code. The code states that an employer cannot put a job applicant or an employee in an inferior position based on their race, national or ethnic origin, nationality, color, language, gender, age, family status, sexual preference, inheritance, disability or state of health, religion, political opinion, political or industrial activity or a comparable circumstance. (The Criminal Code of Finland 39/1889.)

Employment Contracts Act

The Employment Contracts Act states that employers must treat their employees equally, unless it is justified to deviate from this in the view of the duties and position of the employees. Fixed term and part time employees cannot be put into an inferior position to other employees unless there is a proper and justified reason. (Employment Contract Act 55/2001.)

2.8 Summary

To summarize this theoretical framework, I have drawn a mind-map, which can be seen below in figure 3, which I will discuss below. In the center of the mind-map lies the central theme of this

thesis: recruiting more women in technical roles. Each bigger header represents a theme in the theoretical framework and each smaller section describes the essential findings from those topics.

Figure 3. Mind-map summarizing the theoretical framework

From the mind-map in figure 3, it can be noticed that measurable, predefined and clear criteria for making decisions is important and promotes diversity in recruitment across different stages of the recruitment process. When these are in place, it is easier to make decisions that are based on data and correct criteria instead of gut feeling, intuition or prejudice. If discriminative decisions would be made, they would be harder or even impossible to justify when mutually agreed and predefined metrics are in place.

The same can be said about having diverse teams interviewing, selecting and hiring people. Since people tend to favor other people who resemble themselves, having people from different age groups, ethnical backgrounds, professional seniority level and of different genders, the decisions that are made acknowledge many different perspectives and prevent too homogenous teams being formed. As well as choosing diverse recruitment channels and investing on events and institutes that have high number of women members, more diverse audiences will be reached.

When the job role definition is derived from the organization's strategy and vision rather than simply using job descriptions from previous similar roles, there is an opportunity to consider and forecast the future and focus on the competencies this role will require as well as the problems this role will face in the future. By focusing on competencies and transferable skills, less-biased decisions are more likely to be made.

Communicating in a way that does not evoke gender stereotypes and ensuring that a company is promoting psychological safety for its employees with channels to report complaints, impacts its public image and encourages more women to apply in that company.

3 The research methodology

The research was conducted as case study research in 2 case organizations that have proven to have non-discriminatory recruitment practices in place by demonstrating a diverse employee pool. This thesis was not commissioned by any organization and the results of the thesis were not put into practice in any organization.

3.1 Research approach and methods

This thesis is qualitative research due to the nature of the topic and the type of data that was needed for the study. According to Kabir, qualitative approaches aim to answer questions of “how” and “why”, capture the feelings, emotions, or subjective perceptions and use unstructured methods for collecting data with open ended questions. These methods include focus groups, group discussions and interviews. (Kabir 2016, 254.) The case study method is not a research method of its own, but an in-depth investigation of a single person, group, event, or community (Kabir 2016, 203; Hamel, Dufour & Fortin 1993). Case study is suited when investigating event and phenomenon that are occurring in contemporary context and is concerned when studying a small number of units via interviews or surveys (Farquhar 2012, 6).

3.2 Semi structured interviews (data collection)

Face to face semi structured interviews were chosen as the data collection method for this thesis. As Kabir explains, face to face interview allows the interviewer to explore more complex issues and collect nonverbal data through observation and usually has a higher response rate compared to a virtual or a telephone interview. A semi structured interview is an interview type with a premade list of questions and topics that the interviewer needs to cover, but it also allows the interviewer to follow trajectories in the conversation that may appear when they feel appropriate. It is a relevant method to use, when there is only one opportunity to conduct the interview and when it is appropriate to allow the interviewee to express their views in their own terms. (Kabir 2016, 211-213.)

The interview questions were formulated based on the theoretical framework and the themes that were assessed to be the most important points in a recruitment process that help to define how gender neutral and non-discriminative the process is. These included for example asking about which data is being processed (interviewers knowing the applicants’ gender, nationality etc. beforehand), what criteria is used in assessing interviews and candidates (are they based on “gut feeling” or measurable data) and how they are making sure that the language they are using in job ads is non-gendered and inclusive (directly affecting the amount of non-white, non-male applicants applying). So, the actual questions were not formulated with the angle of directly asking about gender

and hiring women, but they were designed to find out more neutrally how the recruitment process in the case organizations work and reflect those answers against what I have learned from the theoretical framework and from my own professional experience. I felt that this way I would be able to get a more truthful answer from the interviewees. Of course, the topic of the thesis was clearly communicated to the interviewees, so they knew which area I was interested in.

The interviews were done during October 2022, and the process began by finding the companies to target. The search was done using LinkedIn Sales Navigator tool (LinkedIn 2022) which allows the user to search companies based on different criteria. For this search the criteria were narrowed to location (Helsinki metropolitan area), headcount (51-200) and industry (software development, desktop computing software products, mobile computing software products, IT services and IT consulting, technology, information and internet). The search produced 149 results, out of which 10 companies were selected and approached either via Linked in messages or via email. Out of the 10 companies that were approached, 1 responded to be open for an interview.

Since I was not successful in having more responses, I additionally contacted a recruiter from my own network who is currently working with a common client, but in completely different business units in different countries. In table 1 I have specified the background information of the two interviewees in more detail.

Table 2. Interview details

	Interviewee A	**Interviewee B**
Position in the organisation	Software Developer, Recruitment Lead	Recruitment Manager
Interview location	Face to face at interviewees office, Helsinki	Remotely through Microsoft Teams
Interview duration	1 hour	1 hour
Interview language	Finnish	English
Size of the organization	45 people	Whole corporation: 250 people, Separate business unit where the interviewee operates: 76
Industry	IT, Consulting	Electrical and Electronics Manufacturing (2/3 employees working in IT/software)

	Interviewee A	**Interviewee B**
Years of experience in current role	5 years 8 months	1 year 9 months
Transcribing method	Manual transcribing from an audio recording	Automatic transcribing function via Microsoft Teams

To allow the interviewee to prepare for the interview, the interview questions were sent to the interviewee a day before the interview took place. The topic of the thesis and the interview were specified already when the person was first contacted. The interviews were recorded in order to focus fully on the interview without the need to capture all answers and observations during the interview and to make the data more reliable.

The first interview with Interviewee A was done face to face at the interviewee company's premises. After initial introductions and small talk about their office space, we went to a meeting room that was a closed space and were not interrupted throughout the whole interview. As we started the interview, I asked for consent to record it with my phone's recording app and after receiving consent, we started straight with the interview questions. I followed the interview questions in the same order as I had prepared them and occasionally asked more detailed questions relating to the answers the interviewee was giving. For example, when they described their interview process and that people who fulfilled their requirements were put to the next round of interviews, I asked for specification of what those requirements were. After the interview, the recording was transcribed during that same day. Since the interview was done in Finnish, the transcribed text was also in Finnish, and only the emerging themes and direct quotes used in this thesis were translated into English instead of the whole text.

The second interview took place a week and a half after the first one, and it was conducted via Microsoft Teams video call. Since I knew the Interviewee B on a professional level, no introductions of their work history were needed. As with the Interviewee A, I also asked for consent to record the call and was granted permission. Teams provides an option to transcribe a videocall to text automatically after the recording is made, which I utilized in order to save time in not having to transcribe the whole audio manually. After reviewing the machine-made transcription, I had to modify and clean the text due to time stamps being included after each sentence or a pause that either of the speakers took. I also deleted some repetitive words that were used unintentionally due to stammering or trying to form a sentence on the spot, as well as words such as "Um" or "Uh", that come

quite naturally during a conversation. For example, a sentence that was straight from the machine-made transcription:

“Alright, um, and then uh, we'll move on to the job ad itself and the recruitment channels” (Interviewee B 28.10.2022).

I cleaned up to look like:

“Alright, and then we'll move on to the job ad itself and the recruitment channels” (Interviewee B 28.10.2022).

3.3 Analyzing the interviews

After each interview I took time to make sure that the transcription from the audio was in an understandable text format. I then highlighted what I found out to be the most important point in each answer to each of my questions, which acted as my initial analysis. Initial analysis is recommended to be conducted in order to be able to highlight the emerging issues from the data (Farquhar 2012, 92). After this, I prepared the table that shows the interviewee details without compromising their anonymity, as seen on Table 1. By using inductive analysis on the data, I was able to identify the common main ideas that rose from the interviews. Inductive analysis method is looking for emergent theoretical constructs or insight and is finding out whether there are common themes that emerge from the data and are supported across the interviews (Farquhar 2012, 92). The ideas that were found were then categorized under themes to find similarities and disparities between the interviewees, as can be seen on table 3.

Table 3. Ideas and emerging themes from the interviews

Ideas	Emerging themes
- Two stage recruitment process - Multiple participants in interviews - Different interviewers at different stages - No strict interview template	Inclusive recruitment process
- Applicants send open applications with whatever information about themselves they see relevant - Concentrating on people, not their characteristics - Not using blind recruitment, but have discussed it their organization	Sensitive, personal applicant data is being openly processes as part of the recruitment process

Ideas	Emerging themes
- Hiring decisions are made collectively within the group that participates in the process - People whose own work is affected by the new role will participate in defining it - Hiring managers and teams themselves participate in defining the new role since they understand the teams' competencies needed in the future	People whose own work is affected by the new hires are the one making the hiring decisions
- Gender neutral titles in use - Constantly reviewing job ads for the language and tone of voice - Asking for feedback from the applicants about the job ads - Focusing on using only gender neutral and friendly language in job ads - Not using any tools to ensure non-discriminative language is being used on written communication	Making an effort to ensure that non-discriminative language is being used in their written communication
- Using LinkedIn as the main recruitment channel - Posting job ads on their own website	Using the most popular job post channels
- Cooperating with universities and polytechnics in the form of visiting lectures - Hiring recently graduated people	Cooperation with educational institutes
- Interviewers are being open and honest about the company towards the candidate - Candidates are expected to be honest about their expectations of the job and their future aspirations	Trying to minimize the risk of a mismatch hire
- Willingness to teach and train new hires who do not have all the skills required	Candidates do not need to match 100% of the skills requirements of the job ad

Ideas	Emerging themes
- No tools in use for assessing candidates' competencies - Interviews are conversations about relevant topics that relate to the job in question - Interviewers are focused on the candidates' skill sets above all else - Company values are used as a criterion to assess the candidates match to the organization	Apart from the candidates' skillsets, values and fitting to the company are used as assessment criteria
- Being nervous during an interview is not held against the candidate - Interviewers recognize that the interview situation is an unnatural situation for both the candidate and the interviewer	Candidates job application skills are not a criterion for getting or not getting hired

3.4 Ethics, reliability and validity of the research

The interviewee's organizations were quite different in size and not directly comparable in their industries: one organization operates purely on IT Consulting and the other one in Electronics, however with 2/3 of the employees working in IT and software roles. This was a deliberate risk taken and it was recognized from the beginning that it could affect the interview results, since the perspectives were somewhat different. I do feel, however, that the focus of the thesis, which was explained to the interviewees before the discussions as well as the interview questions that were sent to them beforehand, set the expectations quite clear for the interviewees.

The research was done as a case study through semi structured interviews, which on a general level worked well in order to get a good understanding of the subject. However, I do feel that more discussion would have been helpful and more defining questions could have been asked to ensure that the interviewees and the interviewer both had the same understanding on all topics.

The fact that there were two cases in this thesis, is also quite small of a sample to be able to draw generalized conclusions of the phenomena itself or best practices scenarios out of. In the beginning of the study, one of the criteria for the companies to be interviewed was a diverse employee

pool that the company showcases on their website and through social media. This could have been defined clearer, whether it meant purely men to women ratio, people of color and ethnicity, diverse age range or something else.

4 Results and analysis of the interviews

The core interview results were uniform between the two cases on a more general level, but several disparities were also identified, some due to the size difference of the companies, some due to the nature of work or ways of working inside their companies and due to the interviewee's different level of experience in their respective companies.

4.1 Results of the interviews

Results of the interviews are presented as following the topics from the theoretical framework. Direct quotations from the interviews are provided with a common conclusion on each topic.

Defining the job criteria

In both companies, the roles are being defined by the people whose own work is somehow related to the new role and there are several people involved in that process. In both companies there is a trust in the people defining those roles that they will know best what competencies are needed to be successful in that role. In addition to this, the Interviewee B is a dedicated recruitment manager who is usually always involved in the job defining process themselves by challenging other people to think more critically about the experience and experience in using specific tools, since it challenges the others to think about the role in a broader perspective. The recruitment manager usually provides an existing role definition for the team to modify the new requirements onto it.

"It's up to the team and the hiring manager to agree between themselves what they need and then up to the head of department to then confirm and say this supports our strategic vision" (Interviewee B 28.10.2022).

" …the people whose job is affected by it (the new role) know what is expected of them (the new hire). Usually, people who are interested in it (the new role), know something about it and whose own work relates to it will get involved in it (defining the role)." (Interviewee A 20.10.2022)

In Interviewee A's company, they rarely have completely new roles defined, since they work in a consulting business and their recruitment is always on and they hire new people when they get an interesting applicant that matches their job criteria. Their job ads are constantly open on their website.

Job ad

Neither one the interviewees had any tools or practices in place to ensure that their job ads did not include discriminative or gendered language. Both relied on their ability to detect such language to

assume that the job ads were non-discriminative and gender neutral by reviewing them carefully and constantly. It was not clear through the interviews, whether they understood the question to only to concern clear, gendered terms, such as using the “he” or “she” pronoun when referring to people, or if they understood that the way they describe their working environments and ways of working might be non-welcoming to certain groups of people, such as using fraises as ‘work hard play hard’ etc.

“We talk a lot about people, and it has always been so that we focus on people, not gender. We of course recognize the challenges of this industry having more men than women, but in all of our materials that are directed outside of our company do not use that kind of language. And we don’t use that kind of language internally either. (Interviewee A 20.10.2022.)

Interviewee B assessed the inclusiveness of their job ads by asking for feedback directly from the job applicants:

“So, we constantly review our job ads all the time. Every time I get a new role, I will look at the job ad and review to ensure that it is kind of open, welcoming, friendly for everybody. However, what I find is more interesting or more useful is actually getting the feedback directly from the candidate. So, I always ask, during the interview process, the screening process, how did you find the job application? What about that attracted you to the process?” (Interviewee B 28.10.2022.)

Recruitment channels

Both interviewees stated that their main recruitment channels are LinkedIn and their own website. In addition to this, Interviewee B added that since they are an international business, they also use country specific channels, such as Monster in Finland and more targeted channels depending on who their target audience is. Both interviewees mentioned collaborations with local educational institutes in the form of visiting lectures, and Interviewee B also explained that they regularly hire recent graduates and interns from those local institutes.

“We, as mentioned earlier, have a very male dominated workforce. So, we are trying to diversify that. So, we used WomenHack (professional organization promoting diversity in workplaces) as an opportunity to reach female talent and to have a discussion with them about why they should come and work for us and also understand from them what they're looking for as well. So, I would say our channels are very directed on where is the talent that we're looking for.” (Interviewee B 28.10.2022.)

Interviewee A explained that their recruitment strategy relies more on focusing long term employer branding building than any recruitment marketing campaigns.

“…and we trust that people who are in our industry know us from somewhere else that through some aggressive advertising campaign” (Interviewee A 20.10.2022).

Interviewing & hiring

Both interviewees’ interview processes had multiple people participating in them, and the participants vary depending on which role are they hiring for. They both have typically two to three rounds of interviews, but the content of the interviews varies. Interviewee B had more of a constructed, more typical, interview process than Interviewee A, since they start with a quite typical screening call to the candidate by the recruitment manager, who then decides if the candidate’s skills allow them to move forward to the next stage. After that, the candidate is interviewed by the hiring manager and a future team member and/or HR, and finally by the department head.

“But we're quite flexible on that really depending on availability. So that's the usual process. So, HR, recruitment manager and the team really are all involved and that way you get the full spectrum. So, everybody feels included in that process.” (Interviewee B 28.10.2022.)

With interviewee A the process was more organic and depending a lot on the person, the role and the skills that are required from that person.

“In the first interview, it is me and our CEO. After that, we reflect on the first interview, that what should the angle for the second interview be. For example, if we want to discuss about a certain technology on a deep level, people who like to talk about that topic or are good at talking about that topic would be participating to that interview.” (Interviewee A 20.10.2022.)

When selecting who to invite to an interview or who to put forward in the recruitment process, neither of the interviewees felt that having the applicant’s sensitive data available would affect their ability to make fair decisions. Neither one of the interviewees felt that they have biases and said that they are focusing on both the skills of the applicants and the human behind the application.

“We have open applications in use, so we are not using any application forms on our website. People send their applications via email and the form (of the application) can be anything. We pick up (from the application) name, position they are applying to, email address, email, the actual text on the email and the attachments. That information is picked up automatically into an excel.” (Interviewee A 20.10.2022.)

“We usually ask for a minimum of a CV. Which is purely focused on their background, their skill set. However, within the CV of course some people include their full names, their date of birth, their addresses, their education history. That's up to the individual. But if that information is on the CV,

then we do collect that information. I mean, we don't tend to discriminate or positively discriminate candidates either way you know, we will always focus on the skill set. So, let's say we don't notice the other stuff. That's not really something we focus on." (Interviewee B 28.10.2022.)

When asked about if they are using anonymous recruitment practices, both interviewees said no, but had discussed it in their companies. Both specified that they are not requiring applicants to include any personal data of themselves to their applications, but that it is purely up to the candidate themselves to decide what information to include. Interviewee A explained that since their recruitment process is completely open, meaning that everyone in their company has access to reading the incoming applications and many pairs of eyes are reading them, they believe it naturally eliminates some bias in the process. They also specified that they do not have big volumes of applications coming in, so every application gets read quite precisely and there are many pairs of eyes doing the screening.

Interviewee B on the other hand explained that their company is still quite early on in defining their talent acquisition process, and that blind recruitment was simply something they have not done yet but should investigate. They also stated, that as a technology company, they are heavily male dominated, and since they are looking to diversifying their teams by having more female applicants, the applicant's gender is an important thing to know for that reason.

Company culture

Both Interviewees mentioned that they evaluate the candidates fit to their company culture as one criterion for hiring. Interviewee A explained that one of their hiring criteria is the candidate's natural tendency towards a self-guided working habit and how well they operate in such an environment. Since the company does not have managers (the CEO is the only supervisor and the supervisor for all employees), there are no people telling what other people should do, rather than having to decide themselves what to work on and how. They also evaluate if they are able to perceive excitement from the candidate towards their company and to the technologies, they job in question would utilize. It is important for them that the candidate would enjoy themselves and also that they would enjoy working with the candidate.

"The technical competencies need to be there, but we are looking so much more than just the hard skills. When looking for a consultant, there needs to be good human skills and a match with our culture. We are not looking for people that come from the same mold, who needs to be a certain way. You are allowed to be very different than for example our other employees." (Interviewee A 20.10.2022.)

“…it's about motivation, it's about the competencies and then about: do their values align with ours based on the discussions we've had. If the technical competencies are matching, the values are matching, is this person someone we can work with, then that's a yes.” (Interviewee B 28.10.2022.)

4.2 Development suggestions

During writing this thesis, conducting the interviews, transcribing them and analyzing the results, several development suggestions were found to create more gender equal recruitment practices.

Using data in decision making

Reflecting the interview results to the theoretical framework, it became clear that both interviewees relied heavily on their own perceptions and “gut feelings” when making decision instead of metrics and comparable data. Since comparable data is a clear way to show whether their decisions are made based on the applicants’ skills, competencies, values and motivation, like they stated, the validity of these decisions could be easily justified. Nonetheless, based on my own professional experience, this is a very common way companies make hiring decisions: based on gut feeling.

Further development on this area could be made by taking into use consistent metrics, universal hiring criteria to support decision making and making this clear to all who participate into the recruitment process. The same criteria should be used to assess all candidates and people who participate to the process should have clear responsibility areas that are defined beforehand. As discussed in the interviewing section of this thesis, interviewers should also be aware of what kind of an impact the different assessment styles have on the applicants and what they are actually measuring.

Understanding own biases and inclusiveness better

The fact that a person states that they don’t discriminate, does not actually mean that they don’t discriminate. Unconscious biases are tricky because they are in fact just that: unconscious. They are a concerning aspect of every recruitment process since they can lead to unfair favoring, inaccurate judgements or discrimination (Burton-Hughes 2017).

First step to tackle bias is to admit that it does exist and understand what it means. As the old saying goes: you cannot change what you don’t acknowledge. Educating oneself on the matter by attending webinars, courses or hosting discussion sessions inside a company to openly talk about the matter are good ways to bring awareness to the topic on a general level. The second development area would be to define what diversity means for the organization and to set clear goals to obtain that. This requires to first understand the current demographic and cultural aspects of one’s

company, what groups of people are underrepresented and why would it be important for the company to change that.

Deleting sensitive applicant data

Even though both interviewees stated that they do not use blind recruitment methods and accept open applications with whatever data the applicant has chosen to share with them, they did not really feel it was an issue. I would challenge that way of thinking and limit the amount of personal, sensitive, data being handled throughout the recruitment process. This would include building a more consistent way of defining which types of applications are expected, building a form where applicants submit their information or using a recruitment system that deletes the sensitive data for them. There are plenty of options to develop this area and not all involve big financial investments. The main concern should be to minimize risk of bias based on personal attributes during the recruitment process.

5 Discussion

The objective of this thesis was to study the recruitment process and to identify gender neutral recruitment practices in the IT industry. The scope of the thesis was medium sized companies in the IT industry in the Finnish working life and the purpose of the thesis was to provide discussion topics in the area of gender-neutral recruitment practices and discuss common pitfalls in the area.

In this discussion chapter, I will review the main findings from my research and reflect them to the theoretic framework presented earlier and to the interview findings. I will discuss how these objectives were met, how the research questions were answered, propose ideas for future studies and reflect on my own learning through this thesis process

5.1 Conclusions

Two research questions were identified to guide this thesis work and below I will discuss in which ways the research questions were answered. The research questions were:

Q1. What kind of practices in the recruitment process could lead to hiring more women in technical roles in software companies?

Q2. What are the best practices to prevent discrimination between genders and biases in the recruitment process?

From the theoretical framework, arose the topic of data and predefined criteria for evaluating a person's compatibility to the organizations and their competencies. As Kaijalainen (2016, 44-45) emphasized that the criterion for a new role needs to be derived from the organization's strategy and vision and core competencies are based on the targets and goals that are set for this role. Furthermore, past achievements are not the only thing that matters in a person's competence, but assessing which skills were used and how they were used to gain those achievements is the key factor (Kaijalainen 33-35).

In both interviews that were conducted a job defining process was in place that included several different people, who's own work was somehow affected by this new role: their future manager, colleague or an expert in the area. The interviewees felt that this was a way to ensure that the right criteria would be used to form the new job description. (Interviewee A 20.10.2022; Interviewee B 28.10.2022.) Reflecting on these findings, I would say that by having clear, measurable requirements for a new job role that either originate from the organization's strategy or from the actual day to day tasks that are needed to be taken care of would decrease discrimination and lead to more women being hired. Also, by understanding what the actual transferrable skills of the candidate

are, the risk of favoring past positions, companies or educational institutes allows a variety of people to get hired for a position even if they would not have direct experience from a similar role from before, e.g., women or people of color. Of course, it is possible that the organization's strategy or the day-to-day tasks and views of people working with those tasks is skewed from the start, but by defining and assessing competence this way, there is a way to minimize that risk.

By paying attention on the way a job ad is written and what kind of language and terminology is used in it can increase the number of women to apply for that position. By providing information about salary and benefits, not using terminology that is linked to masculinity or aggression, describing the role rather than having a long list or requirements, employers can attract more women applicants. (Gammal & Simard 2012, 14; Correl et al. 2019; Ignatova & Tockey 15; Sanchez 2020.) Both interviewees said that they do not have any systems or tools in place to detect gendered language, but that they always review their job ads carefully to make sure that the language is friendly and that no noticeable gendered terms are mentioned. However, they could only identify gendered language to mean using pronouns "he" or "she" or job titles that refer to a gender. (Interviewee A 20.10.2022; Interviewee B 28.10.2022.) Reflecting on this, it seems that a relatively easy practice to ensure the language a company uses to communicate is not biased, would be to take into use a language guidance tools to detect said biases.

To attract more women applicants, organizations need to choose wisely which recruitment channels they will use and why. To broaden their applicant pools and reach more diverse audience, organizations should target events, educational institutes and professional organizations that have a high number of women members. (Gammal & Simmar 2012, 5; Sanchez 2020.) Interviewee B's company was actively working with a professional institute that is targeting women in the technical industry to attract more female talent to their organization (Interviewee B 28.10.2022).

Utilizing blind recruitment practices and recruitment tools is a relatively easy option to ensure that an applicant's personal information, such as their name or gender, would not affect the decision to be selected for an interview and ultimately to an open position. This way unconscious bias towards women would not be a deciding factor on whether they would get a call back for an interview.

Having clear, predefined roles when interviewing candidates and clear assessment systems with diverse hiring teams (in terms of seniority, gender, ethnical background) people are less likely to make biased decisions and more women end up getting hired (Gammal & Simard 2012, 16-17; Sanchez 2020; Caven & Nachimias 2018, 231-232).

5.2 Future studies

A big area that this thesis excluded from the research is the study of gender segregation in educational choices and educational institutes. It would be important to study further, what kind of factors influence to which study line and institute a person will pursue. What could be done, to encourage more girls and women to apply to study ICT and what kind of practices could be put into place at an even earlier level of people's educational path. Since the situation now is quite severe, 80% of ICT students in universities are men (Statistics Finland c 2021), the issue is not of a small scale.

Another topic that was not in the scope of this thesis, is the retention of female employees in technical roles. Since there are still relatively few women occupying these roles compared to men, it is important for companies to be able to retain them and to not lose their diverse employee pool. It would be important to understand, what are the factors that make women stay at a technical role in a specific company and in what ways could the retention be improved.

5.3 Reflection of the thesis process and own learning

This thesis process has been a very interesting one with a lot of challenges. I started my first thesis process during my second year of studies and had to change topics twice after that due to changing jobs, since I had planned to write the thesis as a commission. For my final thesis topic, I chose to not have a commissioning party, so that I would not be tied to any specific organization.

Looking back at the process, I can definitely say that the schedule has been too tight with not that much time to fully focus on finding good, relevant source materials and to concentrate on quality writing. Combining the writing of a thesis with a full-time job has not been easy, since time is very limited and the energy levels after a full working day are not optimal in any way. If I were to start the process from the beginning again, I would have decided on a non-commissioning thesis from the very start and started to gather material from the very beginning of the studies. I would also have written as many assignments about that topic as possible, to ensure the knowledge base would have grown steadily.

Nevertheless, I recognize that plenty of learning has happened during this process. Even after working with recruitment and people operations for more than 10 years, I have learned valuable pieces of information from the theoretical framework. I feel that my thesis is not as in-depth as I would have hoped it to be, with not that vast and rich theoretical framework and fewer interviewees than I had planned. Had there been more data and material, the thesis could have had potential to be turned into a general best practice guide for anyone working with IT recruitment or employer branding tasks. That being said, altogether I am satisfied that I was able to conclude the demanding process of writing this thesis.

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Appendices

Appendix 1. Interview questions

Interview Questions
1. Recruitment process • What is your recruitment process like, which steps does it include and who participates in it?
2. Defining a new role • How do you define a new role in your organization and the competence that role requires? • Who participates into the defining process and why them in particular?

3. Job ad and recruitment channels
• What data do you collect of the applicant during the application stage?
• Have you taken into use/tried anonymous recruitment (the name, gender, age, nationality or other identifying information is deleted from the job application)?
  ○ If yes: why, in which way and what system(s) did you use?
  ○ If not: why?
• How do you ensure that there is no discrimination or gendered language used in your job ads?
• Do you have gender neutral titles in use at your organization?
  ○ If yes: why?
  ○ If no: why?
• Which channels and/or networks do you use to publish your job ads and why have you chosen those in particular?

4. Handling applications • How do you handle applications that you receive (e.g., where do they arrive at your organization, who reads them)? • What are the criteria an applicant moves on in the recruitment process?
5. Interviews • Who participates to the interviews from your organization?

• How do you assess the candidates during/after the interview and what assessment criteria do you use? • How do you evaluate the candidate's fit to your organization?
6. Decision making and selection • Who makes the decision to hire a new person to your organization? • What criteria do you use in your decision-making process and why have you chosen them particularly?
7. Evaluating the recruitment process • What metrics do you use to evaluate how well your recruitment process succeeded and why do you use those metrics in particular?