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**Talent Shortage in Southwest Finland: Regional
Actors' Views on the Situation and the Potential
Solutions**

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ABSTRACT:

In the past few years, the issue of talent shortage has been solidifying its position in the global labour markets. The issue of talent shortage is particularly prominent in countries such as Finland, where the demographic structure is experiencing steady decline. As the situation regarding this labour market phenomenon is estimated to accelerate, it is vital to understand the current situation to better prepare for what is to come.

Previous research on the topic of talent shortages has been mainly focused on national-level context, hence there exist a need for more specific regional studies. This study examines the current labour market situation in Southwest Finland's area to form a coherent understanding on the regional appearance of talent shortage. This study is based on secondary data sources, utilising research data collected from key actors in the region, combined with existing academic literature. The aim of this study is to create a comprehensive understanding of how organisations perceive and address talent shortages in their operational region.

The findings of this research suggest that while Southwest Finland's labour markets have been exhibiting signs of recovery, challenges related to talent shortages, such as mismatches between education and market demands, along with bureaucratic barriers pose concerns for regional development. The findings underline the position of human capital in the process of increasing economic growth. This study strengthens the importance of acquiring and retaining talents for sustainable development, and calls a need for continued, multidimensional research on the appearance of regional talent shortage that addresses talent management and labour market dynamics.

KEYWORDS: Labor demand, skilled labor, skilled labor recruitment, internationalization, international mobility

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TIIVISTELMÄ:

Viimeisen muutaman vuoden aikana osaajapula on vakiinnuttanut asemaansa kansainvälisesti työmarkkinoilla. Osaajapula on erityisen merkittävässä asemassa maissa, kuten Suomessa, jossa väestörakenne on laskussa. Koska tämän ilmiön odotetaan kiihtyvän vielä entisestään, on tärkeää ymmärtää sen nykytilanne, jotta sen seurauksiin voidaan paremmin valmistautua tulevaisuudessa.

Aiempi tehty tutkimus liittyen osaajapulaan on keskittynyt pääasiassa kansalliseen kontekstiin, minkä vuoksi alueelliselle tutkimukselle on tarvetta. Tämä tutkimus tarkastelee Varsinais-Suomen alueen nykyistä työmarkkinatilannetta, tarkoituksenaan muodostaa yhtenäinen käsitys osaajapulaa alueellisesta esiintymisestä. Tämä tutkimus perustuu toissijaisiin tietolähteisiin. Tutkimuksessa hyödynnetään alueen keskeisiltä toimijoilta kerättyä tutkimus dataa, yhdistettynä olemassa olevaan akateemiseen kirjallisuuteen. Tämän tutkimuksen tavoitteena on luoda kattava ymmärrys siitä, miten organisaatiot näkevät ja käsittelevät osaajapulaa toimialueellaan.

Tämän tutkimuksen tulokset viittaavat siihen, että vaikka Varsinais-Suomen työmarkkinoilla on viime aikoina nähty elpymisen merkkejä, haasteet liittyen osaajapulaan, kuten koulutuksen ja työmarkkinoiden kysynnän välinen kohtaanto-ongelma sekä erilaiset byrokraattiset esteet haittaavat alueellisesta kehitystä. Nämä tutkimuksen löydökset korostavat inhimillisen pääoman asemaa alueellisen talouskasvun kehittämisessä. Tämä tutkimus vahvistaa osaajien hankinta- ja pitovoiman merkitystä kestävä kehityksen kannalta. Lisäksi tämä tutkimus korostaa tarvetta jatkuvalla, moniulotteiselle tutkimukselle liittyen osaajapulaa alueellisiin eroihin, joissa huomioidaan osaamisjohtamisen ja työmarkkina rakenteiden vaikutukset.

AVAINSANAT: Labor demand, skilled labor, skilled labor recruitment, internationalization, international mobility

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1 Introduction

The Finnish labour markets along with the global markets are currently facing a significant challenge: a growing shortage of skilled talents. On estimate, 74 percent of employers on the global level are currently experiencing challenges regarding talented workforce, with Finland's corresponding figure being 68 percent (ManpowerGroup, 2025).

The international labour markets have undergone rapid changes over the past couple of years, and the estimation is that the pace will accelerate even more in the future. The change has been development-oriented, but recently there has been concerns on whether the change may not be entirely for the better. One of the estimations is that the labour markets' outlook will weaken moderately in the close future. While the markets are experiencing a fast pace of development, especially in the line of technological progress, the standard of living and productivity have remained stagnant across the globe (International Labour Office, 2024, pp. 11-15). This is especially true in Finland, where, according to Sitra's Chairwoman of the Board, Jorma Ollila, the economy hasn't grown for over fifteen years, with the labour productivity being extremely low (Keltanen, 2024).

However, the topics of labour and talent shortages, are currently facing some controversy as simultaneously the European Union member states, such as Finland, are facing a short-term issue of surplus of workers caused by the economic downturn (Uusitalo, 2024). Despite the current cyclical downturn, the issues of labour and talent shortages are largely present according to the reports from the different operators in the European area (European Commission, 2024, p. 1). As the number of skill gaps is growing ever faster, and a phenomenon of "skills mismatch" between the potential workforce and employers is appearing more prominently across the globe (World Bank, 2024), the existence of these issues can be seen as a clear sign that the labour markets are out of balance.

The situation demands more inclusive and comprehensive solutions on a fast pace, including improved immigration and skills development policies, as well as strategies to

adapt education and training systems to meet the different employers' future needs (International Labour Office, 2024, p. 70). Long-term investments on comprehensive strategy and policy changes, need to be done to secure stability and create opportunities for growth especially in countries such as Finland, where the labour markets are affected by demographic decline (Statistics Finland, 2024). To enable the different countries and regions to do this, it is essential to understand how exactly the different labour market imbalances, such as talent shortages, appear and what factors contribute to their development. For this reason, it is important to take a look on the previous research done on the subject.

The subject of talent shortage has been relevant in the world of academic research since the 1990's and the existing research suggest that its relevance is estimated to accelerate fast in the future (Trost, 2014, p.5). Previous research done on the topic have explored various aspects of the issue, including its general existence (Chambers et al., 1998; Günther, 2013), employer's perspective (Brunello & Wruuck, 2019; 2021), and the effect of factors such as skill mismatches (McGuinness, 2018). Other studies in relation to talent shortages have also been done on its impact on innovations (Horbach & Rammer, 2021), and on its existing variations caused by business cycles and structural factors (Brunello & Wruuck, 2021). Previous research has also been observing the possible solutions that can be used to alleviate talent shortage's appearance and the challenges caused by it. The scholars have suggested that investing in talent management (Chambers et al., 1998), including talent relationship management (Trost, 2014), and promoting skill migration, can all be potentially used to address and solve the challenges posed by talent shortages (Smale & Suutari, 2011).

While its evident, that a good number of academic research has been done on the subject of talent shortage, there still exist some aspects that have not gained too much of attention. One of these aspects is for example the lack of a precise definition for the term itself (Günther, 2013, p. 11), and another is in relation to its detailed region bound

perspectives within different countries. One such countries where this kind of research is still lacking is Finland.

In this thesis Finland's situation in relation to talent supply and demand will be discussed from Southwest Finland's perspective to get a better understanding on the future outlooks the region might be facing. This thesis is conducted as a re-analysis based on existing research data, and the aim of this study is to contribute to academic research by increasing the general understanding of talent shortage's appearance and how its perceived in one of Finland's provincial labour markets.

On a practical level, the aim of this research is to provide an overview of the current status of the issue for the different organisations and decision makers in the micro- and macro-levels of the selected region, to create a basis for more effective strategy work. As emphasise in the study by OECD (2024, p. 12), a holistic understanding of the issues is required to be able to alleviate the existing talent shortages and mismatches in the labour markets.

1.1 Research question and objectives

The working life is constantly undergoing change, which is essentially shown through the concept of national talent shortage. As the competition for talents is intensifying, understanding how different actors address the issue is key to identify both potential risks and opportunities for economic development. For this reason, the aim of this thesis is to gain a holistic understanding of the current talent outlooks in Southwest Finland, and more precisely on how talent shortage is being perceived and addressed by the regional actors.

The research question set for this thesis is:

“How do regional actors in Southwest Finland experience talent shortage and what measures have they adopted to ensure talent supply?”

In relation to this research question, the more detailed objectives set for this study are:

1. What kinds of the challenges the regional actors express in relation to the current situation regarding talent supply and demand?
2. What measures regional actors perceive as potential solutions to talent shortages, and what actions have they already implemented to address these challenges?
3. How do regional actors perceive the use of international talents as a solution to their talent needs and what kind of experiences they already have in relation to international recruitment?

1.2 Definitions of key concepts

To get a coherent understanding of this thesis' contents, it is important to understand what the key concepts in this thesis are. In this section these key concepts are introduced briefly.

Talent

Talent in general refers to an ability or aptitude that a person has in general. The term is often paralleled with the term "skill" and due to their similar meaning, their distinction can be at times a little vague. To clarify this issue, the term "skill" refers specifically to an ability to use the knowledge that one has already learned well (MOT Oxford Dictionary of English, n.d.). In relation to these definitions, in this thesis' context, the term "talent" is understood to have a boarder meaning, as it can be used to refer to all levels of skills and capabilities that are required in the labour markets.

Talent shortage

The term "talent shortage", i.e. "skills shortage", doesn't have a specific, universally agreed-upon definition; however, it is generally used to refers to market situations where there is a greater demand for individuals with specific talents than there is available supply (Günther, 2013, p. 11; Heery & Noon, 2017). Talent shortages are generally defined as macro-level issues caused by labour market imbalances which are influenced by number of causes, such as demographic outlooks, migration patterns, as well as working life transformation (Troost, 2014, pp.5-7; Academic Work, n.d.). This is one of the reasons why

the term can't be defined in just one manner as it is a combination of many different factors. However, out of these factors, demographic dynamics are one of the most commonly recognised factors in the creation of talent shortages (Stahl et al., 2007, p. 5).

Talent management

Talent management refers to a human resource management process, that is a collection of well-defined key activities that help organisations measure and improve their competitive advantage. The way talent management can achieve this, is by creating a set of strategies used to gather a collection of committed talents with potential to fill the organisation's different roles (Collings & Mellahani, 2009, p. 304). The focus points in talent management are to acquire, retain, develop, and engage talented individuals to achieve the organisations' set goals (Stahl et al., 2007, p. 6).

Skill migration

Skill migration refers to the transfer of human capital from one economy to another. Skill migration is a growing global phenomenon, and it is seen as one of the possible solutions to increase development and hence alleviate existing shortages in the labour markets (Kuznetsov & Sabel, 2006, pp. 3-4).

International talents

In the context of this study, international talents refer to individuals with a varied level of skills, who are not Finnish citizens but may already be living in Finland. Hence in this thesis, the term "international talents" is used to refer to migrants in a broader term and to address the international workforce as a whole.

1.3 Delimitations of the study

This thesis will examine talent shortage's appearance in the Finnish labour market with a focus on Southwest Finland's perspective. While a general understanding on the topic's national appearance is provided, a limitation is required to form a more detailed understanding on talent shortage's regional appearance.

The selection of the region for the study is done by comparing the financial situation between Finland's different regions. The reason this approach has been used to determine the research area, is because regions with healthy finances typically have more investment opportunities to make on development and as such opportunities to impact on labour needs and shortages (Heil, 2018, p. 5). In Southwest Finland, the revenue flow is currently on the rise. In the third quarter of 2024, the development rates of all the companies' revenues in the Southwest Finland's area were three percent higher than in the previous year, and the trend of development seems to be growing still. In the rest of Finland, the trend of development has been on the decline since the year 2022 (Lounaistieto, 2025).

1.4 Structure of the thesis

This thesis is structured into five chapters to give a comprehensive understanding of the procession of this thesis. The first chapter introduces the research topic and explains its relevance. This chapter begins by introducing the topic and proceeds to discuss its purpose as well as the research question and objectives. After this, the key concepts and the research scope's delimitations are explained together with the overall structure of the thesis.

In the second chapter the conceptual and theoretical groundings of this thesis are introduced to form a framework to support the research aim. This chapter is divided into four sections. The first section introduced the main concept of this study, which is followed by the introduction of the main theories. In the third section, an overview of Finland's and Southwest Finland's labour market and demographic outlooks is presented. To tie these aspects together, the chapter ends with a summary of the framework.

In the third chapter the focus is on the chosen methodology, beginning with an explanation of the selected research approach. This is followed by an examination on the data collection method. In this section the main data sources are introduced, and the sources'

use and relevance are explained. After this the method of data usage and analysis is described. At the end of this chapter, the research methodology is assessed to determine the study's validity and reliability.

The fourth chapter of this thesis examines the research findings. This chapter starts with an overview of the national situation in Finland, before narrowing down to discuss the actual research findings gathered from Southwest Finland's region. These findings are first approached from a broader perspective, followed by more detailed insights. This section begins by inspecting the regional actors' views on talent shortage, which is followed by discussion on the challenges in relation to it. After this, the possible solutions to talent shortages are evaluated. Lastly, the use of international talents as a potential solution to the situation is analysed. This is done by examining its current utilisation in the region, and the regional actors' capabilities as well as challenges regarding international recruitment.

In the final, fifth chapter the conclusion of the research findings as well as the contributions and practical implications of this study will be discussed. After this the limitations regarding this thesis are addressed and suggestions for future research are provided along with the afterwords. At the end of this thesis, the used references as well as the appendices are provided.

2 Theoretical grounding of the thesis

In this chapter the conceptual and theoretical grounding of this thesis will be introduced. This chapter is divided into four sections: main concepts, main theories, their relation to the context of this study, and a summary of the theoretical framework.

This chapter begins by first examining the concept of talent management, starting with a general overview and then taking a closer look on its main concepts in relation to this study. These concepts are talent relationship management, employer branding, and skill migration. After this, the main theories are introduced. The main theories in this study are the resource-based view, human capital theory, and push and pull theory.

In the third section the context of the study is presented. This section describes the labour market structures and outlooks, first studying the aspects from the national level, and then followed by an examination on Southwest Finland's region. In this section the current demographic situation and its influence on the demand and supply of workforce is discussed.

2.1 Conceptual grounding of this thesis

In this section the key concepts in relation to the topic of this thesis are introduced. This section starts with a look on talent management and talent relationship management, followed by an introduction to employer branding and skill migration.

2.1.1 Talent management

As the purpose of this thesis is to understand how exactly talent shortages appear and how they are perceived on the organisational level, the concept of talent management needs to be addressed.

Talent management is a process generally used by organisations to estimate and supply their need of human capital (Pucik et al, 2023, p. 175). It is an inclusive selection of well-defined activities that organisations use to attract, develop, retain, and engage talented individuals, that are deemed necessary to the organisation to improve their competitiveness in the markets (Schinnenburg & Böhmer, 2025, pp. 1-3).

One of the principles in talent management is to identify and develop individuals to the right roles. The more traditional approach in talent management states that this should be focused mainly on the high-level positions, but the more modern approach addresses this aspect from all existing levels. The traditional approach's strong focus on high-level roles and individuals has been for long criticised for neglecting the broader workforce and their development as that can potentially cause damage for the organisations in the long-term (Pucik et al, 2023, pp. 175-177). For this reason, this thesis discusses talent management according to the modern approach.

As stated, strategically implemented talent management can affect an organisations success largely, especially when the approach is aligned with organisations' stakeholder expectations (Joubert, 2007, p. 16). Talent management can be explained as a strategic human resource management (HRM) process, that has a holistic effect to all aspects of workforce planning. The idea behind talent management operations is to develop and maintain a pool of committed, highly potential talents to fill an organisation's different positions, to protect the organisation's position in the markets (Collings & Mellahani, 2009, p.306-307).

While talent management is seen as a solution to the different labour-market phenomena, it needs to be understood that its different approaches are also affected by the same phenomena. Some of these affecting phenomena are for example increased skills mobility and talent shortages. To address the possible challenges caused by these issues, talent management approaches are required to be proactive and flexible. It also needs to be addressed that as these existing labour market imbalances can vary between

regions, the different regional and national level aspects also play a part in the forming of the situation and the needs for talent management. Essentially, this is to say that besides organisations, the different countries also need to manage the occurring market changes and accordingly implement their own national and regional talent management strategies. To guarantee a region's organisations adequate supply of human capital, talent management needs to be inclusively and effectively done in cooperation with the different actors. For this reason, the different regional strategies need to respond to the regional organisations' perspectives as well as their future needs (Pucik et al., 2023, pp. 177-178).

2.1.2 Talent relationship management

One of the relevant concepts beneath talent management is talent relationship management (TRM). TRM refers to the different strategies and processes in organisations that are used to build and maintain relationships with their potential and current talented employees to generate value for the organisations. The general approach used in TRM is closely related to the principles of relationship marketing, such as segmenting the target groups, developing personalised communications, and focusing on the creation of long-term relationships (Balthazard, 2006, p. 7).

TRM is a more proactive approach to talent management that focuses on creating and developing long-term relationships between organisations and individual talents, focusing its strategy nearly solely on the talents themselves on a more personal level. TRM approaches this gathering of talented individuals through methods such as employer branding, as well as transparent and targeted communication strategies (Trost, 2014, pp. 11-13). This is to say, that TRM attempts to address the labour market dynamics by focusing on both attracting and retaining talented individuals by making sure that the organisations' strategies are engaging all the parties involved.

One of the reasons behind TRM's current relevance lies behind the fact, that it can be seen as being a direct reflection on the current global labour market's development. At

the moment, the trend on sourcing talents is shifting to a new direction where, there exist global competition for talented individuals between different organisations (ManpowerGroup, 2025). According to Trost (2014, p. 1-2), TRM can be seen as a viable option to the solving of this issue, as it addresses this competition caused by the acceleration of global shortage of talents on an individualistic level, which can be seen as a beneficial approach from the organisations' perspectives. As TRM's approach to the issue can be considered to be rather forward, it can be concluded that if it is implemented strategically and systematically, there are a lot of potential benefits for organisations. According to the study made by Trost (2014), in the best-case scenario, TRM can promote the organisation's ability to respond to the existing labour-market imbalances and challenges. This is based on the statement, that properly implemented TRM can improve an organisation's talent acquisition processes, lessen the costs of it, and help the planning of future workforce needs while maintaining a competitive advantage in the global markets.

2.1.3 Employer branding

Employer branding is one of the strategies that is linked to both talent management and talent relationship management. To put it simply, employer branding refers to the act of strengthening an organisation's image to acquire and retain the much sought-after talented individuals (Łącka-Badura, 2015, p. 12). The concept of employer branding can be seen as a key element in modern talent management in organisations, due to its direct effect on any future potential employee.

From the perspective of employee value proposition, employer branding is an approach that reflects on an organisation's culture, their existing values, and benefits they can offer to employees, so that they can acquire new talents to further improve their competitiveness. It approaches this goal with the same approach as talent management by creating and improving long-term recruitment processes and retention strategies, by focusing on the organisation's external image (Chambers et al., 1998, pp. 50-52). This is to say, that employer branding is not just a specified marketing approach, but a strategic management tool that can be used to support an organisations performance goals and value

creation in the increasingly competitive labour markets. Addressing the aspect of employer branding provides a good argument for the purpose of this thesis, by offering a lens that can reveal possible inconsistencies on the organisational-level practices.

2.1.4 Skill migration

As the purpose of this thesis is to inspect the phenomenon of talent shortages in a selected region, it is essential to address the different macro-level dynamics that have an effect to the issue. One of these issues in relation to talent management, is the talented individuals' mobility, or more specifically the skill migration happening within and out of different labour markets.

In today's society, the migration is a very current, yet simultaneously conflicting topic, with the general public's perception towards it tending to be more on the negative side. An exception to this however are the highly skilled migrants. These skilled migrants represent a portion of the migration flow that is sought after both in national and organisational levels globally due to the current labour market situation, where there is a shortage of talented workforce (Weinar & Klekowski von Koppenfels, 2020, p. 1). Previous research done on the global migration dynamics, has shown that this group of skilled migrants, are more likely to migrate than those with lower skill levels (Kar, 2019, p. 196). But despite this notion, the global labour markets are exhibiting substantial imbalances in relation to the essentially needed flow of skill migration.

In 2024, the number of international migrants globally was 304 million, which is around 3,7% of the world's population (United Nations, 2025, p. 2). This figure is a relatively small, when taking into consideration the level of importance that skill migration has in the global discussion on labour demand. According to Gentile (2019), many countries also tend to overestimate their number of migrants and aren't often addressing the topic with the accurateness and seriousness that it requires. This is to say that countries do not often recognise what are their actual needs towards skilled migration, which can lead to the increasement of labour market imbalances. This generalised tendency can be

seen as a rather concerning phenomenon, as skill migration is one of the solutions that can alleviate labour and talent shortages happening in different regions. After all, if the supply of talented workforce can't meet the demand locally, solutions need to be searched elsewhere. Skilled migrants, i.e. international talents, can be seen as valuable solution in the alleviation and solving of different countries' existing skills gaps, and in the improvement of their international competitiveness as well as their dependency ratios. At the moment, skilled migrants' direct effect on the different countries' economy, growth, and development opportunities can already be seen as at large, indicating that they also have the potential to impact these aspects even more so in the future (Snellman & Rodina, 2024).

While skill migration already has a relevant position in the markets, it is estimated that the concept will have even more relevance in the future due to the increasing demographic pressure that affects the appearance of talent shortages. If the mobility of available global talent pool is to weaken, the amount of skill mismatches in the labour markets is destined to increase and hence affect overall economic growth (Gentile, 2019, pp. 34-35). As talent shortage is currently a global problem, it needs to be stated that if one wishes to keep up with the global competition on talent, the topic of skill migration needs to be observed and addressed better to provide sustainable and balanced solutions to acquire and retain the much-needed talents. For this same reason, it is key that the existing misconceptions on migration and the different groups of migrants are also better addressed.

2.2 Key theories related to talent needs

In this section the relevant theories in relation to talent needs and their management are introduced. The first two theories addressed are the resource-based view and human capital theory that are related to the concept of talent management. The third theory, push and pull theory, on the other hand is related more closely to the concept of skill migration.

2.2.1 Resource-based view

One of the main theories under talent management that needs to be mentioned in this thesis' framework is the resource-based view (RBV). RBV is a theory that started to position itself in the field of strategic management in the 1980's through the findings of academic studies by Rumelt, Wernerfelt, and Barney (Barney & Clark, 2007, p. 247). These studies regarded the possibilities on how an organisation's future outlooks could potentially be more aligned with the different capabilities and resources in their use, form an aspect that hadn't been thought of previously. The studies suggested that utilising these aspects to the full and giving them proper attention could potentially increase organisations' value creation and growth. This thought by the researchers led to a wider study on these aspects, which eventually caused the creation of the resource-based theory that its currently recognised globally. Essentially, RBV examines value creation in strategic management from the perspective of organisations' different internal resources (Pucik et al., 2023, pp. 13-15).

The aim behind RBV is to enable organisations to achieve a competitive edge by highlighting their capabilities. To recognise and measure organisations' resources, Barney and Clark (2007), suggest that an analysis should be done using the VRIO framework. This framework addresses extensively the questions regarding value, rarity, imitability, and the organisation itself to understand what position the selected resources play (Barney & Clarks, 2007, pp. 69 -70). One of these generally recognised resources from the perspective of human resource management, is the organisation's employees, i.e. human capital, i.e. the organisation's needed talented individuals (Barney & Clark, 2007, pp. 129-130).

The general idea behind RBV is to organise an organisation's existing resources and capabilities to align with their business model and strategic goals. By doing so, this approach can significantly improve the organisation's competitive advantage. Essentially, the approach used in RBV underlines the importance of leveraging all of their existing resources - both tangible and intangible - as inclusively as possible to improve the

organisation's market position and long-term performance (Barney & Clark, 2007, pp. 49-50). The flip side of RBV however is, that it tends to also highlight the negative aspects in the organisations, meaning that when there is a lack of a specific resource needed to maintain their advantage, such as human capital in the case of this thesis, it's exceedingly apparent. Therefore, understanding how organisations are able to use their capabilities to maintain proper talent management is essential in the exploration of their strategic decision making during the existing labour market challenges.

2.2.2 Human capital theory

The aspect of labour market theories is important to address in a study concerning the inspection of labour market outlooks. For this reason, in this section one of the key theories under its title, the human capital theory, is introduced.

Human capital theory, developed by Theodore Schultz, Gary Becker and Jacob Mincer in the sixties, addresses the importance of education, gained experience, and skills as forms of resources that can potentially affect organisations' productivity and value creation (Marginson, 2017, p. 287). At the time of its creation, human capital theory was seen as revolutionary, as it gave new outlooks on individuals position in the value creation process as well as on the study of labour markets. The approach of analysing the labour markets from the perspective of investments done on development was something that hadn't quite been pinpointed before and for this reason, the approach gained a lot of public attention. The human capital theory's outlook, which is nowadays categorised as a classical approach in value creation, has changed the labour markets greatly and due to its fast development over time, it has increased its reach in the global scale continuously (Becker, 2011, pp. 13-15).

Today, this theory has a prominent position in the general public's understanding on the economic effect of education and development. Because of this, the theory itself has also had its effect on the public policies by framing education as an important investment that is necessary to make to attain growth (Marginson, 2017, pp. 287-288).

But despite the theory being both relevant and well respected in today's society, it also has been facing some critique. According to Marginson (2017), human capital theory oversimplifies the interaction between education and work by not giving enough attention to the social and economic practices as well as the environments affecting them. Correspondingly, Hartog et al. (2007) also note in their study that there exists the risk of making flawed investments in education and skill development, due to poor analysis of the overall situations, which in turn can lead to either under- or overeducation of individuals. These issues can all affect the general occupational mobility in different regions as well as international skill migration.

While human capital theory can provide valuable insight into the economic value of education and skill, its limitations suggest the need for using a broader theoretical perspective in the forming of a framework for this thesis. Although the human capital theory provides support to the importance of studying the regional appearance of talent shortages through showcasing education and skills development's effects and position on the labour market demand, complementing this theory with the other related key concepts and theories allows the creation of a more balanced, inclusive, and sustainable analysis on the main subject of this thesis.

2.2.3 Push and pull theory

To better understand the current skills mobility happening in the selected research area of this study, it is key to understand the different factors that affect the process. By understanding what attributes to the forming of this phenomenon, can one develop more targeted strategies to address regional labour and talent shortages. For this reason, in this section the push and pull theory is introduced.

The push and pull theory is a theory developed by the scholar Everett Lee in 1966. In push and pull theory, the phenomenon of skill migration is not seen as a result achieved solely through individuals' potential opportunities, but rather the phenomenon is

regarded as a whole to understand all the aspects that factor in the process. To be precise, the theory attempts to address the different barriers that make people move and the enablers that attract them to specific location. These different factors are further divided to fit into four categories: aspect related to origin, destination, limiting factors, and individual attributes (Niu, 2022, p. 1).

The push and pull theory's framework addresses factors that are highly reliant on the different location and individual specific circumstances in relation to skill migration, hence it can be seen to address both macro- and micro-level conditions affecting the process (Kar, 2019, p. 196). The establishment of the push and pull theory has allowed the forming of several other directions for research and enabled the creation of flexible frameworks to help better explain the multitude of complex phenomena that exist in the labour markets currently (Kato, 2019, p. 167).

2.3 Context of the study

As the topic of this thesis is closely related to the observation of labour market outlooks, one of the key issues that needs to be addressed in this section is the current demographic situation and its ties to the labour market dynamics in Finland. This is due to the fact that demographic dynamics are one of the key-affecting factors to most imbalances that appear in the labour markets (Mentzelopoulou, 2025, pp. 1-2). In this section, this aspect is first examined from the whole nation's level, followed by a detailed look on the selected research area of Southwest Finland.

2.3.1 Finland's labour market situation and demographic outlooks

At the moment the Finnish labour markets are perceived as employer-driven, meaning that the mismatch between job seekers and employers has widened in a direction that allows employers to hand pick the desired applicants (Honkanen, 2025). The number of openings in the labour markets has drastically decreased in the past few years and this can be seen clearly on the country's employment statistics. According to the recent

update on Statistics Finland's Labour Force Survey (2025b), the employment rates on the Finnish labour markets in the age groups of 20 to 64 was 75,9% in the last quarter of 2024, with the unemployment rate being 8,9% in its entirety between the ages 15 to 74. This number of unemployed people has increased by 27 000, compared to the previous year's last quarter (Statistics Finland, 2025b). This trend indicates that while the current labour market situation in Finland is not yet dire, it still isn't the most promising from the perspective of job seekers.

The situation is, however, rather conflicting taking into consideration the existing talent shortage caused by the demographic outlooks. At the moment, Finland's demographic structure is on the decline: the population is aging, and the birth rates are falling rapidly (Statistics Finland, 2024). This will lead to a general labour and talent shortage in the country that will continue to develop if nothing is done to this trend.

According to the official preliminary statistics of the year 2024, the birth rates in Finland were at their all-time low in the country's statistical history, with the net recurrency rate having decreased approximately to 0.6 (Pyykkönen & Soininvaara, 2025, p. 9). At the same time, the number of migrants – a key solution to this demographic issue– moving to Finland also decreased by over 10 000 in 2024, when compared to the previous year. In 2023, Finland had 73 236 migrants which was a historically large figure (Statistics Finland, 2025).

At the same time, the process of globalisation and technological development have not slowed their pace of change but has instead accelerated. This has in turn increased the need of new talents to the labour markets, and hence migrants to the country. According to an estimation made by Statistics Finland (2024), the country's situation would continue to be manageable with a steady net immigration of 40 000 people. This is to say, that despite the newest estimation of decrease on the arrivals of new migrants, the current level of arrivals could sustain the current acceptable demographic dependency ratio of 60% in Finland till the year 2045, though the overall distribution might not be even

in all the regions as can be seen in Figure 1. This regional dependency ratio variation is estimated to reach from the lowest figure of 50,8% in the capital region, to up to 84,9% (Statistics Finland, 2024). From this information, it can be concluded that while the situation regarding the decrease on the arrival of migrants is not yet too concerning, there is reason for concern if the decline is to continue. This is due to the fact that while the country's overall dependency ratio estimation is manageable, there simultaneously are regions that are on the verge of not being able to operate without help from the other regions.

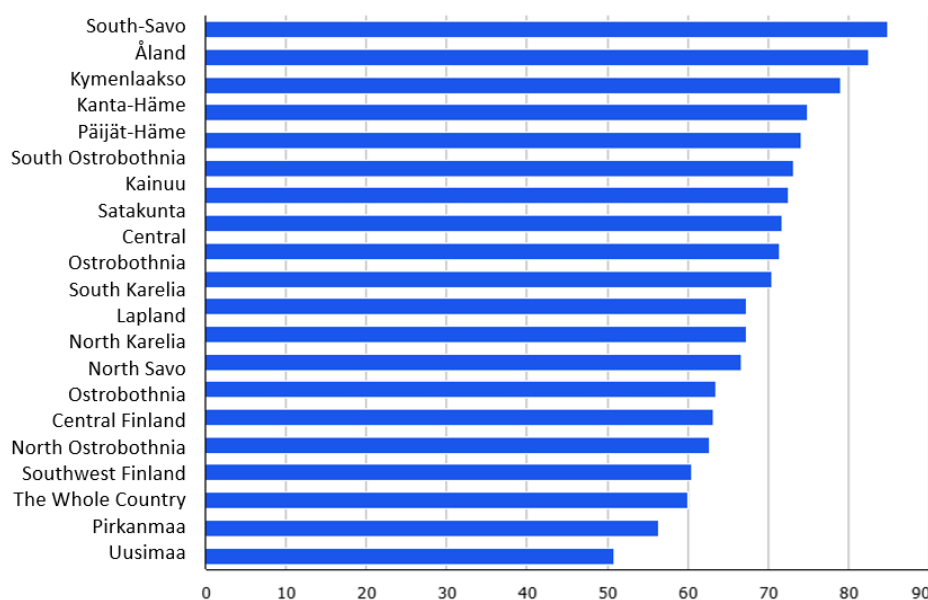


Figure 1. Estimations on the demographic dependency ratio by region in the year 2045 (Statistics Finland, 2024).

Judging the trend of the demographic situation, Finland will be relying on the future migrants to continue to function and grow. For this reason, it is vital for the country to focus on the different factors that influence the arrival of international migrants. Finland and its different provinces' actors must understand how the different factors manifest themselves within their operational environment, to better prepare for the future. After all, the existing statistics indicate that the current employer-driven labour market situation caused by the economic downturn will not last forever.

2.3.2 Southwest Finland's demographic outlook

In the year 2024, Southwest Finland's region experienced steady population growth, and it was named as one of the regions with the highest percentage of growth in the country. Despite some fluctuations in the figures between the year, the region achieved an annual growth rate of 8,1% (Statistics Finland, 2025a). This growth, however, has not been evenly distributed in the region. Approximately 90% of the increase in population is situated in the Turku region, while many smaller municipalities have been facing stagnation or even decline in their population. Immigration was one of the key factors that has contributed to this growth, as well as the increasing internal migration from the other regions (Regional Council of Southwest Finland, 2024, p. 12). At the same time, the area's birth rates have remained low, following the national trend, with the decline being of just under six percent in 2024 (Statistics Finland, n.d.).

According to the projections created by the Regional Council of Southwest Finland (2024, p. 12), the growth of population in Southwest Finland is estimated to reach 536 000 by the year 2040. This phenomenon is estimated to be supported by in the regional economic development, caused by the investments done across various key industries in the area such as marine industry, pharmaceuticals, biotechnology, and infrastructure. The parties that have contributed most to this situation, are the higher educational institutions (Regional Council of Southwest Finland, 2024, pp. 4-9).

However, despite these optimistic views on the growth rates of the population, the region is simultaneously facing different structural challenges. These challenges are the labour and talent shortages, decline in education, and widening disparities in well-being and access to health-care services (Regional Council of Southwest Finland, 2025). The current dependency ration in the region is 61,2% and it is estimated to stay on the same level the next 20 years. As shown earlier in Figure 1 (p. 25), Southwest Finland's future dependency ratio for the year 2045 is projected to be 60,6%. This figure's development aligns closely with the national average (Statistics Finland, 2024).

Currently, Southwest Finland's region has approximately 26 400 unemployed individuals in their labour markets, an amount that has increased by 16% compared to the previous year. While this trend is not too positive, the region still has a substantially lower rate of unemployment in their labour markets compared to the other regions, reflecting the region's potential resilience (ELY Center, 2025, p. 2).

The demographic outlook for Southwest Finland is cautiously optimistic, with economic development and increasing migration providing a foundation for future growth. The data suggest that addressing the existing labour market imbalances—particularly through improving workforce training, education, and the available services—is essential for achieving the needed demographic stability and alleviate the challenges related to a high dependency ratio. But while the situation appears to be steady in this particular region, it as well is affected in the long-term by the national labour market and demographic outlooks.

2.4 Theoretical framework of the study

The theoretical framework of this thesis introduces the theoretical grounding of this study and provides structure to the empirical study.

The concepts of talent management, talent relationship management (TRM), and skill migration, offer theoretical grounding on understanding how talent shortages are viewed both on the macro- and micro-levels. Combining these concepts to the theoretical insights can provide a more multidimensional view on the analysis of this research. From a theoretical perspective, talent shortage can be explained as a result from the existing imbalances of human capital in the labour markets that address the existing economic and strategic concerns different organisations may have (Brunello & Wruuck, 2019, p. 4). According to the human capital theory, investing on employees' skill development can support an organisations productivity, which resource-based view (RBV) supports by suggesting that skilled individuals, i.e. talents, are crucial factors in developing

organisations' performance and position in the markets (Becker, 2011, pp. 13-16; Pucik et al., 2023, pp. 13-15).

When considering Finland's demographic development alongside with these theoretical views, it can be seen that the situation with talent shortage is at risk of becoming dire. At the moment, Finland's demographic situation is on the decline: the percentage of aging population in relation to the birth rates is alarming. This has amounted to the country having a declining amount of labour force, which in turn can increase the level of talent shortage in existence as well as accelerate the regional decline of the demographic dependency ratios (Statistics Finland, 2024). While the overall labour market outlook in Southwest Finland's region is expected to remain stable for the time being due to the increased mobility from the other regions, the national demographic trends' effects are still visible (Regional Council of Southwest Finland, 2024, p. 12). This can for example be seen from the region's accelerating unemployment rates (ELY Center, 2025, p. 2).

The current demographic trend underlines the country's need of talented workforce through migration. The situation in relation to this aspect is not as ideal, with the country's retention rates of migrants lowering steadily (Statistics Finland, 2025b). Based on this information, it can be concluded that there is a need to study how talent management and different human capital strategies can be used to address Finland's demographic challenges and ensure a more long-term availability of talented workforce. It is especially vital to understand what factors push and pull the much needed talented individuals to the region (Niu, 2022).

3 Methodology

In this chapter the research methodology is explained. The chapter will start by first taking a look on the chosen research approach and then the data collection methods. In the section on data collection methods, the selected primary data source and its creator are introduced, along with a brief description on another supporting dataset. This section is followed by a description of the data analysis process. At the end of this chapter, the reliability and validity of the research findings is discussed.

3.1 Research approach

This thesis aims to address Southwest Finland's talent supply outlooks, focusing on gaining an understanding on its current appearance in the region, existing challenges, and possible solutions to improve the situation. To form a coherent understanding of the current situation, this study uses a mixed-method research approach, meaning that both quantitative and qualitative research approaches are utilised in this thesis (Saunders et al., 2023, p. 181). Quantitative approach is adopted to form quantitative measures in the data while qualitative approach is applied to analyse the written responses in the survey.

Quantitative research approach is used to measure different phenomena and study their possible patterns. This can be done by utilising numerical data, which is gathered most commonly through different questioners or surveys (Saunders et al., 2023, p. 184). Quantitative approach is used in this thesis to form and measure different statistics to form a general understanding on the overall situation.

Simultaneously, a qualitative research approach is applied to the thesis to analyse the open-ended responses in the survey data and to connect them to the theoretical aspects addressed in this study. Qualitative research approach is seen as interpretive due to its aim to form understanding on different phenomena that are difficult to measure. This approach inspects these specific phenomena through individuals' relation to it by addressing their experiences and perspectives, instead of using numerical data. Qualitative

research often uses a mix of different approaches in the forming of research findings, with the most commonly utilised research strategies being different types of interviews and observations (Saunders et al., 2023, pp. 181; 185).

In this thesis the selected qualitative research materials are gathered from an open-ended-survey. While surveys are often connected to quantitative research strategies, their method of analysis and interpretation dictates what research approach they follow (Saunders et al., 2023, p. 184). In this thesis, the selected method of analysis follows the selected research approach, meaning that the method of analysis is a mix of quantitative and qualitative approaches.

3.2 Data collection method

As this thesis is done for the purpose of providing an understanding on the general talent supply outlooks, focusing on how talent shortages appear and are addressed in the regional labour markets, it is vital that the data reviewed in this thesis is gathered from the regional actors directly. According to Brunello and Wruuck (2021, p. 1147) employer insights are critical for the reason, that they possess accurate knowledge of the needed skills in the selected markets. To guarantee that the findings of this research are both current and well-grounded, the data utilised in this thesis is gathered from the employer level.

The data that is analysed in this thesis is secondary data. Secondary data refers to existing research data that is gathered by another party and is repurposed to address new research questions and to gain new insights from the original data (Saunders et al., 2023, pp. 342–343). Secondary data is used in this thesis to provide a comprehensive and more resource-efficient analysis. The use of secondary data also supports ethical research practices as all the data has been previously coded by the original researchers, guaranteeing the respondents anonymity (Saunders et al., 2023, pp. 358–359).

The main secondary data source that is analysed in this thesis is the Skills Survey by Finland Chamber of Commerce (2024), as this data source has the most current data on the selected regional actors', i.e. employers', views on the topic of this study. To support the findings on existing trends, some of the findings gathered from this survey data are supported by the Employer Survey conducted by Barona (2024). This survey by Barona is used as support data in this thesis, as its objectives are closely linked to Finland Chamber of Commerce's. Both surveys examine labour market outlooks by addressing both the public and private sectors' actors' perceptions.

These two surveys however have a slight differentiation in their specific research focus. The study by Barona discusses the employers' views on the labour market shortages in a more general manner, whereas the study by Finland Chamber of Commerce is directly related to talent shortages. Thus, the study by Finland Chamber of Commerce is selected as the main data source in this thesis, rather than the study by Barona.

3.2.1 Survey by Finland Chamber of Commerce

Finland Chamber of Commerce consists of nineteen regional chambers of commerce, that all share a common goal of working as advocates of their members and being nation-wide enablers in the promotion of success and vitality of their operating areas. Finland Chamber of Commerce is part of the International Chamber of Commerce network (ICC), and their operations are based on the Act on Chambers of Commerce, with their membership being voluntary for businesses in Finland unlike in many other countries. Currently, the different chambers of commerce in Finland represents well over 23 000 companies, which employ around one million people (Finland Chamber of Commerce, n.d.). Finland Chamber of Commerce can be considered as a credible and relevant source of information, as its operations are directed through laws and it has extensive engagement with a wide array of organisations and policymakers, that allow them to form informed and balanced insights into the labour market dynamics.

According to the Finland Chamber of Commerce's vision statement, Finland's future is built through the country's strongest values: freedom, responsibility, a functioning market economy and free competition, as well as equal opportunities (Finland Chamber of Commerce, n.d.). To fulfil their missions and set visions, the chambers of commerce are actively shaping and improving their regions through committees, working groups, reports, surveys, and publications (Turku Chamber of Commerce, n.d.). One of these surveys is the Skills Survey held yearly in the beginning of Autumn.

The Skills Survey is a survey revolving around the discussion on the appearance of talent shortage in Finland, and the employers' challenges as well as their views on how to address the current situation. The survey is conducted through email, entailing open-ended questions. The sampling size in the whole survey in the year 2024 was $n=986$, with a corresponding figure in Southwest Finland's region being $n=79$. The used quotas aren't weighted, and they vary yearly as the survey is intended for all members of the chambers of commerce in Finland. This is to say that no industry specific restrictions have been used in the collecting of this survey's data (Finland Chamber of Commerce, 2024). For this reason, the survey results are re-evaluated accordingly in this thesis to gain an overall view of the situation, rather than focus on the industry specific findings. Additionally, to guarantee the forming of inclusive findings from this data, the regional chamber of commerce's personnel is consulted in the analysis process. The selected research questions for further analysis are presented in Appendix 1.

3.2.2 Survey by Barona

Barona, as a Finnish working life solutions company, has worked around the issue of international recruiting for well over a decade and has extensive networks in and outside of Finland (Barona, n.d.). In 2021, Barona acquired a majority stake of the company Finland Relocation Services, FRS, as part of their strategy to increase the volumes of immigration, which has further widened their expertise on the matters related to international talents (FRS, n.d.). The reason for this, is that Barona has for long seen that labour-related immigration is necessary for Finland's economic growth and to upkeep its status

as a welfare society. For this reason, Barona has decided to conduct research focusing on the organisations' views on this issue. The Employer Survey is the result of this decision, and it has been conducted for four consecutive years. The purpose of the survey is to get a clear understanding of the current trends in the labour markets and understand the attitudes and opinions that different organisations have on the use of international workforce. Another point of interest in this survey is to find solutions to improve the overall situation by recognising the points of improvement (Barona, 2024).

The Employer Survey by Barona is an interview-based survey and the latest research's sample size was $n=508$ in the whole country. The survey by Barona uses slightly different definitions for regions, and for this reason there is no direct quota for Southwest Finland's area. The used survey quotas are formed based on the TOL2 industry classification, participants' annual turnover, and the organisations size (Barona, 2024). Due to this survey's slight difference in scaling and focus, the results gained from it will only be utilised in this thesis to support the findings on the different organisations' general perceptions on the Finnish labour market dynamics. The data from this survey won't be used to form detailed interpretation on the specific occurrences in the selected research area.

3.3 Data analysis

In this thesis the research data is analysed using a mix of quantitative and qualitative approaches. Using a qualitative approach along with the quantitative approach allows a deeper understanding of the organisational and societal factors that influence the regional talent management.

In this thesis, quantitative analysis approach is applied to provide structure to the analysis of the secondary data. The descriptive analysis is done by calculating the mean scores and standard deviations (SD) to identify key findings, possible patterns, and trends in the data (Saunders et al., 2023, pp. 607-608). Using these methods can ease the process of estimating regional needs and the extent to which regional actors are able to engage in the improvement of the situation regarding labour supply.

To complement the gathered quantitative findings, this thesis uses qualitative analysis to provide deeper insights into the selected research data. In this thesis, this is done by coding and grouping the research data into categories to better analyse the meaning and purpose behind the recurring perceptions that are apparent in the survey responses. First, the data will be analysed to recognise the information that can be used in thesis to form coherent findings. These findings are then analysed categorically in this study, starting from the broader contexts to gain an understanding of the overall situation and then, narrowed down to address the more specific findings.

3.4 Evaluation of secondary data sources

The main secondary data sources chosen for this thesis have all been carefully selected through an evaluation process model introduced by Saunders et al. (2023). This model assesses secondary data sources through their validity, coverage, relevance, accuracy, and reliability. As the number of aspects that need to be evaluated is extensive in this framework, the process is divided into three sections as seen in Figure 2.

The first section in the evaluation process is related to the data sources' suitability regarding one's research objectives. This step involves the evaluation of the sources' context, scope, and possible time frames. After this section has been completed successfully, begins the second phase of the progress. In this section the sources' credibility will be assessed through evaluating the publishers' and the researchers' backgrounds. In this section, the data's accuracy and consistency will also be further analysed to understand whether the data is reliable and valid, and whether it's subjected to any biases. At last, the use of the secondary data sources should be evaluated based on the data gathering methods ethicality, the data's availability, need, and potential benefits (Saunders et al., 2023, pp. 370-377).

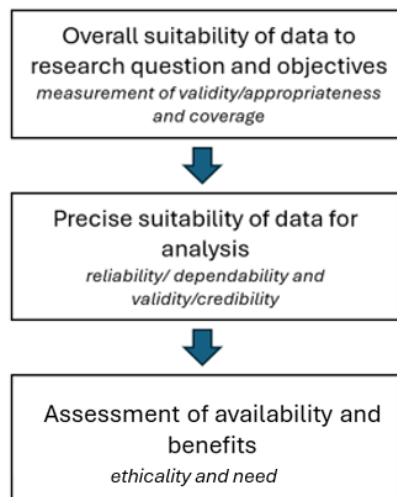


Figure 2. Evaluation process model of potential secondary data sources, by Saunders et al. (2023, p.370).

By using the frameworks provided by Saunders et al. (2023) to analyse the selected data sources, it can be ensured that they are credible and appropriate for the purpose of this thesis. By systematic checking, each data sources' relations to the research objectives can be measured, and their validity as well as relevance assessed to make sure that they contribute meaningfully to answering the set research question and objectives.

3.4.1 Suitability of the data

As the purpose of this study is to understand the current appearance of talent shortage through secondary data, the focus in this analysis regarding the suitability of the secondary data is on the aspects of appropriateness, coverage, and relevance.

In terms of appropriateness, the selected research data conforms well with the set research objectives. The Skills Survey by Finland Chamber of Commerce address the different regional actors', perspective on the current talent landscape. This is aligned with the research objectives of this thesis, as the aim of this research is to comprehend how the supply of talent is perceived currently by the different organisations in Southwest Finland, and how its outlooks can be improved. The Skills Survey by Finland Chamber of Commerce is a compilation of the data regarding just this, and it is gathered from all of

the different regions that the chambers of commerce operate on. The data in this survey was collected in 2024 from a wide range of organisations across various industries and sectors, which indicates that the findings are inclusive and recent. The studies also possess an adequate participant rate from the selected region (n=79), meaning that the research findings are quite generalisable to employer population in the area (Finland Chamber of Commerce, 2024). The coverage of the survey provides a clear snapshot of the selected region's employer perspectives on the topic of this thesis.

3.4.2 Reliability and validity

The aspect of reliability and validity are one of the key aspects to evaluate in any research (Saunders et al., 2023, p. 371). Their evaluation and emphasis however depend largely on the used research approach and methods (Saunders et al., 2023, pp. 371; 520).

Reliability and validity are both used to determine the value of a research (Wagemaker, 2020, p. 1). These aspects are generally intertwined, and thus equal in the determination of research value, although they both regard the issue from slightly different angles. Reliability measures in a quantitative context the coherence of the research, or more precisely the aspect of whether the research can be repeated with similar end results. However, in this thesis measuring reliability from this aspect is difficult, as the selected data is based on surveys reflecting individuals' perceptions. This is to say, that the research will be difficult to replicate with similar results. For this reason, the analysis of reliability in this thesis is based in the transparency and consistency of the data collections, data analysis, and forming of the research findings (Saunders et al., 2023, pp. 215-216). To guarantee the reliability of this thesis, this approach is followed as consistently and precisely as possible.

Validity, or credibility, as a term means the act of determining whether the selected data sources and research methods support the purpose of the research and all of its' objectives (Saunders et al., 2023, p. 215). The data sources have been analysed by addressing just these aspects, and through this analysis, it can be determined that they are

conducted by credible and well-known actors within the regional labour markets. Each data source has clear citation that support their arguments, and the used surveys have clear information on their methods of implementation and research objectives, which further support the data sources credibility.

3.4.3 Availability and benefits of data

The accessibility of these data sources was considered in this thesis by utilising sources that are both current and publicly available. The selected research data was sourced using academic databases to select well-known and credible national publishers. The selected survey data was sourced accordingly, and they were gathered from their creators' own sites. The surveys' creators were also personally contacted for permission to use the data in this thesis, as well as to access their available raw data to be used for further analysis.

In the selection and analysis of the data sources, the research ethic guidelines are also considered to ensure academic integrity (Tritonia, n.d.). One of the benefits of using secondary data is that the data has already been processed by the original creators following the ethical research guidelines (Saunders et al., 2023, pp. 358–359). As the used data in this thesis stems from secondary data sources, the focus in the ethical considerations is on using the data responsibly. For this reason, the data sources are all carefully selected, and attention is paid on their proper citing. Additionally, all of the used data containing sensitive information and possible identifications have been carefully re-processed to further protect the original research's participants anonymity and confidentiality.

4 Research findings

In this chapter the empirical findings will be presented to answer to the set research question and objectives. This chapter will first begin with a brief overview on Finland's national labour market overview, before moving on to discuss and analyse the research findings on the selected research objectives.

The research findings will be reported in three sections reflecting the objectives of the study. First, the Southwest Finland's labour market structures are examined to provide an overview on how the markets appear and what challenges exist in them currently. This is followed by an examination on the potential solutions to alleviate the challenges related to talent shortage, with a focus on the solutions' usability and effectiveness. This section also discusses the different actions taken by the regional actors to coherently address the issue. Finally, the role of international workforce is examined to understand how the regional actors perceive and utilise international talents as a potential solution to the existing talent shortage. This section includes an analysis of the current use of international talents in the region, as well as the opportunities and challenges in relation to recruiting and integrating these said international talents into solving the regional labour market challenges.

Each of the sections and themes in this chapter begin with a presentation of the gathered numerical findings, i.e. quantitative findings, which are followed by further analysis based on the qualitative insights.

4.1 Finland's labour market overview

Before analysing the data regarding the existing talent shortage and its different aspects in Southwest Finland, a brief overview of the national situation is given based on recent reports on the labour market outlooks provided by national media outlets. These reports describe these national level findings on the basis of the same data that is utilised in the present study.

The Finnish labour markets are currently experiencing the effects of business cycle fluctuation, mainly in the form of economic downturn. The effects of this economic situation have caused the Finnish labour markets to take on a new form, a phenomenon called the “employers’ market”. This means, that the labour markets are currently defined as employer-driven (Kauppalehti, 2024; Honkanen, 2025). This situation caused by the economic downturn will, however, not last forever, as these cycles are prone to fast changes due to their nature. For this reason, it is key to stay to be aware of the current situation to be able to estimate what can expect from the future and on what time scale. According to Finland Chamber of Commerce (2024) survey, it is reported that despite this current cooling of the economic cycle, the shortage of talented individuals is persisting in the regional labour markets, which can have further implications to the progression of the current situation.

As stated, at the moment the Finnish labour markets are facing significant structural imbalances, mainly appearing in the form labour and talent shortages. In the Skills Survey by Finland Chamber of Commerce (2024, pp. 2-3) 45% of the regional actors’ state that they are currently experiencing a shortage on talented individuals, with 59% of the participants reporting that the issue is directly affecting their business operations and growth development. In the previous year, the corresponding figure for talent shortage was 59%, with 66% seeing that the shortage affects their organisations’ growth opportunities (Sipola, 2023). In the Employer Survey by Barona (2024, p. 6), 26% of the interviewed organisations reported that they are currently suffering from a shortage of labour, which, compared to the previous year, has decreased by 15 percentages. This is to say, that the fluctuation caused by the economic cycle is on a similar scale between the two surveys, indicating that the current phenomenon has direct effects to the labour market situation.

While fewer organisations report that they are currently experiencing talent shortages compared to the previous year, the issue is not resolved as many estimate that their

needs will increase in the future. On the national level, both Barona and Finland Chamber of Commerce's surveys' participants also have similar expectations on the future labour demand. In the survey by Finland Chamber of Commerce (2024, pp. 4-5), 40% of the respondents believe that their needs on recruitments will increase in the timeframe of six months and 66% estimate changes emerging in the next two to three years. In the survey by Barona (2024, p. 13), 61% of the participants don't believe that their organisations will experience any changes in their demands on labour in the coming year, but estimate that the situation might change later on.

According to the gathered data, one of the key findings is that the current shortage of talents doesn't consist solely of individuals who have a higher, university level, degree background. This is to say that the definition of talent is viewed from a broader spectrum by the survey respondents.

In the study by Finland Chamber of Commerce it was discovered that the biggest shortage in the markets, is currently on the vocational schools' graduates with 48% of the survey participants reporting that they need employees with this background, and 31% needing more personnel with a degree from a university of applied sciences, as illustrated in Figure 3. This trend was consistent in all sized organisations but is especially prominent in the small-to-medium sized organisations (SMEs). The larger organisations (organisations employing over 250 workers) were the biggest group reporting the need for university graduates (Finland Chamber of Commerce, 2024, pp. 11-12). This need for different levels of talents was also indicated by the labour statistic showcased in Barona's survey (2024, pp. 7-8) which described that the industries that are experiencing the most talent shortages currently are from the service sector - public sector, hospitality, and retail -, as well as the fields of construction and manufacturing.

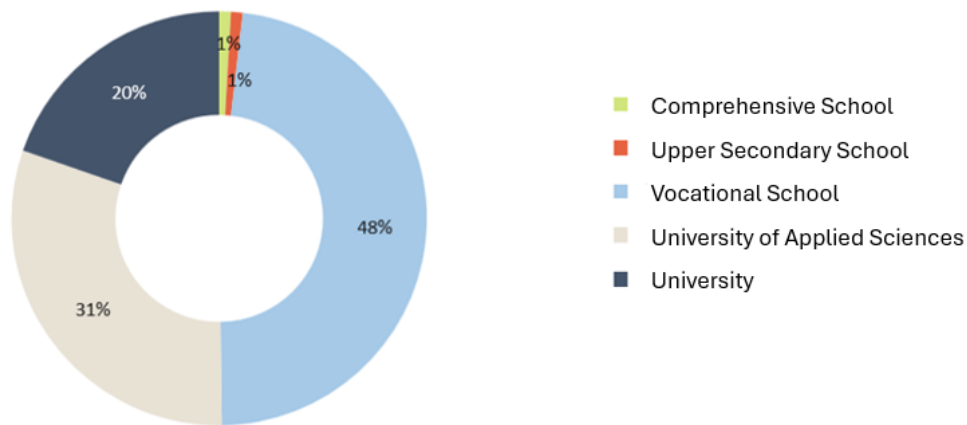


Figure 3. Different levels of educational background needs of organisations experiencing talent shortage (Finland Chamber of Commerce, 2024, p. 11).

These findings can be interpreted in a way that the organisations' current needs are focused specifically on practical competences and the different industry related skills. This suggestion is supported by a research publication from the Finnish National Agency for Education (Nyyssölä, 2022). In the research, Nyyssölä, suggests that the development of education structures will be experiencing a shift in the near future from the previous traditional hierarchical model to a more network-based approach based on the current needs on the markets. It is estimated that in the future, the different learning approaches will need to become more holistic and diverse, with individual study paths taking the spotlight to allow a faster response rate to the changing market demands (Nyyssölä, 2022, pp. 126-127).

4.2 Southwest Finland's talent landscape

According to the survey conducted by Finland Chamber of Commerce, the availability of talented workforce in Southwest Finland's region is currently uneven. While some of the regional actors report that they have a balanced situation regarding the supply and demand of talented workforce, simultaneously many report that they are struggling to find suitable employees even after multiple recruitment attempts.

Southwest Finland's figures related to the current labour needs are on a similar level when compared to the whole country's result. According to the survey 35% of the organisations in Southwest Finland's region reported that they are currently experiencing shortages of talented labour, with the corresponding figure being 57% in the previous year. This decline suggests that while there has been an improvement on the situation, the respondents are still facing some uncertainties with the continuation of the situation as 45% of the respondents predicted that their needs for new recruitments will rise in the next six months. When asked about the regional actors' potential needs for new recruitments in the timespan of two to three years, the number of responders stating growing needs rose up to 57% (see Figure 4).

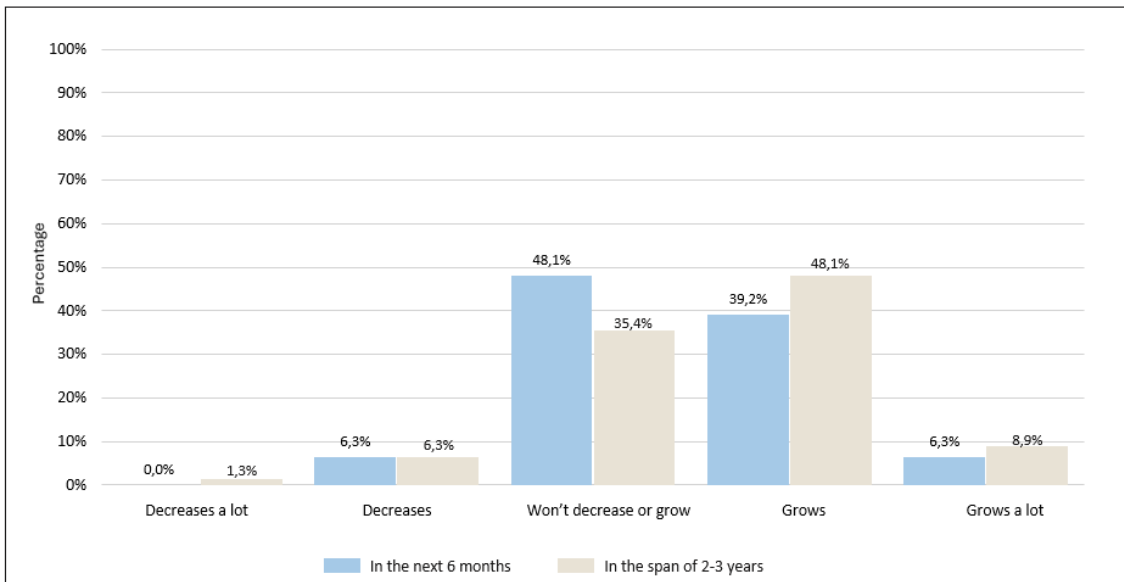


Figure 4. Regional actors' estimations on future recruitment needs.

While this development appears rather moderate, its implications raise concerns especially when this information is connected to the current demographic outlooks. If the regional labour market outlook plays out as predicted in the survey, the economic outlooks as well as the dependency ratio in the area are at a risk of experiencing accelerating challenges, as the supply of workforce won't be able to cover this demand (Statistics Finland, 2024).

When examining the overall spread of the industries that are currently suffering from shortages of talented workforce, it can be estimated that if nothing is to change, the issue can cause a large impact on the regional economy and infrastructure in the future. Based on an analysis of the required skills that the respondents noted in their answers, the industries that are currently the most affected by talent shortages include the service sector, and construction and manufacturing (see Appendix 2). These findings are consistent with the national trends and are supported by recent labour market studies by Barona (2024), ManpowerGroup (2025), and the Finnish employment platform Duunitori (n.d.). This finding also supports the national finding on the need of talents with a vocational school background. In Southwest Finland's region, approximately 52% of the respondents stated that they require vocational school graduates, whilst only 15% require talents that have a previous university level degree.

In the actors' further elaboration on the situation regarding talent shortage, it was noted that although 60% of the respondents' report having momentarily "a balanced situation" or "adequate" supply of talented workforce, there is a coming change to this in the next few years. This change is further explained by the nearing wave of retirements coming in a short-to-medium timeframe. The situation in the regional market is described as illustrated in the following quotes:

"At the moment, the situation is balanced, but in the next 10 years, a large part of the employees in our field will retire. There is no new direct institution that trains individuals for our needs."

"The availability of talent has become and will continue to be relevant due to retirements."

"Resolving the imbalance in the dependency ratio will be one of the biggest challenges for this and the next government."

From this it can be seen that the country's demographic structure is already affecting the different regions' labour markets. As the issue of aging population will continue to pressure the national labour markets in a wider reach in the future (Statistics Finland, 2024), its current appearance must be carefully inspected in more detail. In the survey, the

regional actors that are suffering from this phenomenon, report having growing concerns over the issue as there aren't any suitable replacements or even educational programs that could train potential individuals for many of their most critical roles.

When asked of the actors' specific views on the appearance of talent shortage, there were many consistent findings across the data. The gathered responses were especially focused on the need to retain the current talents, due to the difficulties in finding and acquiring new ones. The respondents described the situation as follows: *"There is no competent, motivated personnel available on the markets. All the experts are already working"*, and *"We need to hold on to talented staff more determinedly than ever, because there are hardly any new talents available"*. These findings indicate that while the labour markets appear to be currently employer-driven, in actuality the employees with the needed talent have the advantage in the negotiations.

4.2.1 Challenges related with the supply of talent

As stated earlier, one of the main concerns in the Finnish organisations is related to how the talent shortage will affect their growth opportunities. In Southwest Finland's region, 50% of the respondents regarded the shortage of talent as a limiting factor to their business's growth and future development. In the survey, the respondents further describe the situation's direness in the following manner: *"We cannot respond to fast-paced customer needs in the desired way due to a shortage of talents. We are missing out on deals"*, and *"We are currently in a situation where we are estimating whether our operations will continue or whether we will shut down by the end of the year"*.

This concern posed by the regional actors is supported by the research done by Brunello and Wruuck (2021, p. 1145), where the authors state that talent shortages can cause serious issues to organisations, especially on aspects such as productivity and innovation that drive development. In a further elaboration on the situation the survey respondents state that they are also at cross-roads on how to approach the situation:

“We do not dare to make investments because there is a risk that the utilisation rate will not be high enough to cover the costs of the investment or the expected return.”

The implications of these findings can be seen as complex. While it is reasonable for organisations to be cautious with investments when there exist structural challenges in the markets, it is also known that this sort of caution can also lead to missed opportunities due to underutilised resources that will ultimately hinder the organisations’ long-term growth. Essentially, this underlines the previous statement that existing talent shortages and unstable workforce availability do not solely reflect on the operational concerns but also pose risks that can directly impact an organisation’s growth.

In relation to this, another key concern of the respondents was related to Finland’s current educational system. In Figure 5 it can be seen that only 33% of the respondents find the level of education being on an adequate level. Simultaneously, 34% of the respondents perceived the situation to be neutral for now, while 23% of the respondents described the current level of education as either being too light in their contexts or being nearly non-existent in selected fields. Additionally, 10% of the respondents couldn’t provide an evaluation on the level of education, which was further elaborated to be caused by there not being any educational institution providing the training needed in their fields.

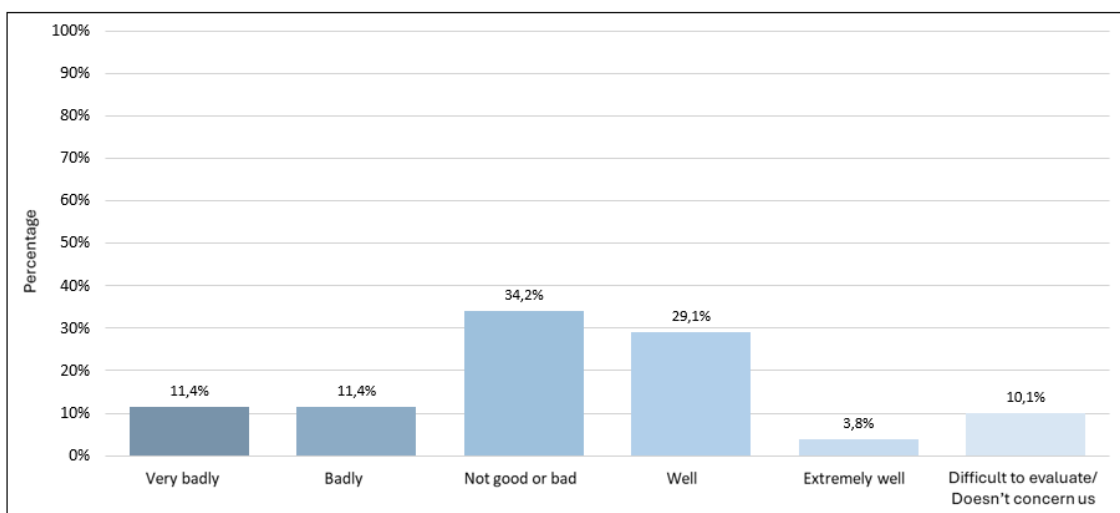


Figure 5. Alignment between the graduates' level of knowledge and organisational needs in the region.

While 33% of the respondents reported that they perceive the level of education of recent graduates to be still good - with the graduates gaining praises especially for their language and IT skills -, a large percentage (60%) of the respondents expressed concerns in their further elaborations on the situation. According to the respondents the existing education and training possibilities are insufficient to meet the current as well as the future labour market demands. The respondents emphasise in their responses that there is a need for education to be better aligned to address both the foundational knowledge and the practical skills that are required in the workplaces:

“There exists a lack of practical skills. The basic theory may be mastered, but the practical things regarding the work itself and the possible problem situations that can arise at work are not taught sufficiently.”

“A lot of training courses are organised... but these training do not actually prepare for work in any way.”

“Educational institutions should at the very least ensure that graduates master the basics of the degree.”

This criticism regarding the current level of education is directed to the existing educational programs from a wider perspective. Approximately one-fourth of the respondents' state that the existing educational programs don't enable graduates with the practical skills required in the workplaces. As a result of this, many of these respondents perceive that the recent graduates are significantly less prepared to take on the different available work positions. One of the respondents elaborated on this decline in more detail:

“The readiness of graduating students for the tasks in working life is quite weak. The number of teaching hours in educational institutions has been reduced so much over the past 20 years that those who graduated in the early 2000's cannot be compared to those who graduated today, even if the grades on the certificate are the same. The current version is not capable of independent work, which someone who graduated in the early 2000's had good prerequisites for. In other words, the current graduates' break-in phase / training takes place in companies, not in educational institutions.”

This finding suggests that a gap has formed over time between the educational institutions and the labour market demands. As a result, this has caused the employers to be increasing more responsible of the new hires training to meet the industry specific requirements. This existing gap not only limits the individuals' employability but also reflect on the broader challenges that can affect organisations productivity and growth, particularly in the sectors that depend on specific skills.

When this information is combined with the other previously mentioned findings, it can be seen that there is a strong need for increasing the communications between the regional organisations and educational institutions. According to the respondents, the current communication between educational institutions is not on the required level to support the needed development, suggesting that action must be done fast to improve the situations. In the responses it can be noted that respondents are especially interested on learning of the students' current conditions, to partage in their development:

"We are informed very little about what is happening at the institution and what kind of students are currently graduating."

"Educational institutions could recommend their students more to companies in our area."

The respondents' views on the need for improved communications and cooperation between educational institutions and organisations is supported by Pucik et al.'s (2023) study. According to this study, the communication and cooperation between employers and educational institutions are essential in the addressing of both current and future skill mismatches. Regions that have been able to successfully minimise these different mismatches typically have strong education systems closely aligned with the labour market demands (Pucik et al., 2023, pp. 177-178). The authors also suggest in their study, that in addition to practical knowledge, organisations will be needing more soft skills such as social skills, critical thinking, collaboration, and adaptability, that are taught on all stages of education. This was also something that was noted in survey responses,

though some of the respondents also viewed that there is currently too much focus on this especially in higher education. One of the respondents reflects on the situation as seen below:

“Educational institutions nowadays focus more on social skills and networking instead of teaching students even the basics of the field. Currently those who come straight from educational institutions don't even know what the basics are. Because of this, we have to start from scratch in the workplace.”

4.3 Organisational measures to ensure talent availability

In the survey by Finland Chamber of Commerce, the respondents named and evaluated several key measures to secure the availability of talented workforce.

To form an understanding on how the regional actors view the proposed solution to the situation, they were provided a set of statement and asked to assess their importance through their usability and level of impact. These suggested solutions were related to the improvement of available education and training opportunities, increasement of communications between companies and educational institutions, improving immigration and migrants' employment, improving employment services, and removing incentive traps for accepting work. The results of this evaluation are stated in Table 1. In this table it can be seen that the regional actors' views on these suggested solutions are mainly positive. These measures are seen as important by most of the respondents, with a rounded up standard deviation average being 1,0. While some of the sections had a slightly higher polarisation than others, the variation is mostly consistent. This suggests that these national level solutions are seen as viable in the region.

One of the most important solution noted by the respondents in this section was related to the existing incentive traps. Incentive traps, meaning the different systems in existence that may unintentionally discourage individuals from accepting employment (YSO, n.d.), were underlined by 78% of the respondents as an important step towards increasing regional and national workforce availability. This suggest that a majority of the

regional actors share a consensus that targeted policy adjustments could improve the current situation.

Another key finding from this table is the respondents' emphasis on the importance of aligning educational and training opportunities more closely with the demands of working life. As noted in the earlier discussion on the existing challenges, the strengthening of co-operation between the different levels of educational institutions and various organisations was seen as an important development point to allow more responsive and effective talent sourcing by nearly all of the respondents.

The need for increased number of educational internships, apprenticeships, and hands-on trainings during studies is highlighted in the survey responses as possibilities to improve the current challenges. 57% of the respondents view that the improvement of current opportunities is a vital investment, with 48% highlighting the need for better cooperation to achieve this. This finding is further supported by the OEF's (2024) estimation, that the rapid change of the working life will increase the need for position specific and apprenticeship type of learning. In response to the situation in Finland, the study by Finnish National Agency for Education (Nyysölä, 2022), state that the partnerships between educational institutions and regional actors are positioned in key roles in the future development of educational institutions' approach.

What also needs to be noted from this table is, that while 22% of the respondents saw the improvement of current employment services as not important, the findings in a general suggest otherwise. Several respondents highlighted in their elaborations on the topic, that they are currently dissatisfied with the existing employment services and their limitations, describing them as: *"being of no use to applicants"*. This finding is related closely to the respondents' requirement that the existing incentive traps needs to be removed.

Besides this, the other points raised by the respondents underlined the value of better integration of the migrants already living in Finland into the labour markets, seeing this as a resource with potential to alleviate the existing talent shortages. This aspect is closely related with the need of improving the existing employment services, as the gathered responses suggest that the services currently do not enable immigrants the equal level of service. The respondents' views on the situation suggests that there could potentially be an urgent need to improve this aspect, as simultaneously the regional actors recognise the need for increasing immigration to the region. In the survey, the increasing of work-based immigration and study-based immigration were ranked as mid-priority solutions, with work-based immigration being seen as a potential tool by 81% of the respondents. This potential is aligned with the demographic outlooks estimated by Statistics Finland (2024).

Table 1. Respondents' evaluation on the possible solutions to securing talented workforce.

Statements	Not important (1)	Somewhat important (2)	Important (3)	Extremely important (4)	Can't say	Mean	SD
Developing the content of education to better meet the needs of working life	0,0 %	6,3 %	29,1 %	57,0 %	7,6 %	3,66	0,71
Removing incentive traps for accepting work	6,3 %	10,1 %	16,5 %	62,0 %	5,1 %	3,49	0,97
Increasing cooperation between companies and educational institutions	1,3 %	11,4 %	35,4 %	48,1 %	3,8 %	3,42	0,79
Increasing the amount of degree education in educational institutions in the region	7,6 %	17,7 %	41,8 %	24,1 %	8,9 %	3,09	1,03
Increasing the amount of conversion and supplementary education	10,1 %	19,0 %	36,7 %	26,6 %	7,6 %	3,03	1,08
Promoting labour mobility within Finland (various incentives, etc.)	11,4 %	16,5 %	40,5 %	26,6 %	5,1 %	2,97	1,04
Actions to employ immigrants already living in Finland	13,9 %	19,0 %	30,4 %	32,9 %	3,8 %	2,94	1,11
Actions to support employers in recruiting international talents	15,2 %	25,3 %	24,1 %	25,3 %	10,1 %	2,90	1,23
Increasing apprenticeship training	16,5 %	24,1 %	25,3 %	30,4 %	3,8 %	2,81	1,15
Increasing work-based immigration	13,9 %	26,6 %	35,4 %	19,0 %	5,1 %	2,75	1,07
Increasing study-based immigration	15,2 %	29,1 %	36,7 %	7,6 %	11,4 %	2,71	1,16
Increasing resources for employment services	21,5 %	26,6 %	30,4 %	15,2 %	6,3 %	2,58	1,16

The findings in this section indicate that there exists a disconnection between the current national actions and employer needs. The gathered responses define that there is an urgent need for more efficient and targeted support from all stakeholders so that the current situation can be improved. The different bureaucratic issues and the poor alignment of the existing employment services with the labour market requirements are factors that enable both domestic and international resources from not being utilised to their full potential in the solving of talent shortage.

4.3.1 Organisations' actions to solve talent shortages

The measures that the regional actors have used in an attempt to alleviate and solve talent shortage in their own organisations are aligned with the findings on the proposed national-level solutions.

In the survey, the key aspect that the regional actors have focused on in their action plans, is related to the existing educational mismatches. According to the responses, due to the existing educational mismatch, many of the regional actors are in a position, where they have chosen to provide in-house trainings for their employees to alleviate the situation. In their further elaborations on the topic, the regional actors view this as a necessary action to alleviate the situation, despite it demanding considerable amounts of resources, such as time and funding. This finding underlines the regional actors' understanding on the accelerating importance of retaining and developing current employees to minimise any possible losses caused by the existing mismatches.

In the survey responses, it can be noted that the regional actors are using a multitude of different approach in relation to developing their personnel's skills. A majority of the respondent (around 65%) reported that they currently buy training services, whereas 58% report that they provide in-house training as well as allow employees to engage in self-learning through different platforms. Of the respondents encouraging self-learning, approximately 46% state that they cover all additional costs caused from utilising different learning channels. Additionally, 35% of respondents state that they support independent skills development using these different trainings options during their working hours. From the viewpoint of talent management, and more specifically human capital theory (Marginson, 2017), these findings illustrate the forthcoming shift on organisations becoming more and more responsible on directly investing in their employees' skills development as well as retaining their current talents. This statement is further implied by the respondents' descriptions on the other measures they have taken to guarantee the available talent supply.

According to the survey data, besides of the more traditional educational aspects, around 32% of the respondents are enabling their employees to rotate work tasks to allow a more diverse learning and to improve their organisations' talent retention. This is to say that besides the aspect of skills development, the regional actors are focusing on improving their organisations' work conditions in their organisations to motivate their personnel. In their responses the regional actors report that they are also using other incentives, such as flexible work arrangements and enhanced employment benefits, as measures to improve their employee retention:

"We need employees who are motivated to do and enjoys their work. The conditions in the workplace must be such that one can enjoy their work."

"We need to hold on to skilled staff more determinedly than ever, because there are hardly any new talents available. This has increased salary costs significantly, but because of this the situation has also remained stable."

"Flexible working hours are agreed locally to develop the attractiveness of our workplace. Top talents are encouraged to perform even better with good pay."

According to the respondents, these actions have improved their talent retainment, but they also note that there currently exist issues that they cannot solve by themselves. These issues are related to the regional and national-level aspects, such as the attractiveness of the region and the existing policies that can limit the process of employment. This finding supports the notion that there is a need for long-term concrete, systemic reforms and investments, that require cooperation between the public and private sectors. Yet despite the existing challenges in the regional and national levels that affect the labour market outlooks, 40% of the respondents rated the Finnish government's efforts to secure the availability of talented workforce as seven on a scale from four to ten (Table 2). This suggests that, while there is definite room for improvement, the regional operators still have a degree of confidence in the government's actions.

Table 2. Respondents' evaluation on the government's efforts to secure talented workforce.

4	7,6%
5	7,6%
6	10,1%
7	40,5%
8	20,3%
9	11,4%
10	2,5%

4.4 The role of international talents in solving talent shortages

Due to the country's demographic decline and its future outlooks, the position of international talents in the conversation on alleviating talent shortages is becoming more and more present. This aspect is also recognised by the respondents, though its exact position as a solution to talent shortage vary as was also seen earlier in Table 1 (p. 51).

In the survey, 35% of the regional actors state that they are currently pondering the option of looking for solution to talent shortage from the international level, with the perception that this could simultaneously affect their future development and growth plans positively. According to Finland's official international recruitment consultant network, Work in Finland (n.d.), organisations that employ international workforce show signs that can lead to faster economic growth compared to their counterparts who rely solely on domestic employees. This effect of increased growth opportunities can be attributed to the organisations' more diverse environment that allows and supports the mix of different viewpoints, enabling the forming of new innovations and strategies, as well as widen the organisations' networks. It is also estimated that this diversity can benefit the said organisations' employer brand which can further increase their opportunities by making them appear more attractive as employers through being more inclusive (Work in Finland, n.d.). According to the research findings, this importance of diversity and its possibilities are also recognised by nearly all of the Finland Chamber of Commerce's survey respondents (87%). As the previous description aligns with the views gathered from the survey responses, it can be concluded that the regional actors are seeing the use of

international recruitment as a strategic response to the current talent shortage and the challenges posed by it.

4.4.1 International recruitments and organisational readiness

According to the survey, 63% of the respondents in Southwest Finland's region currently have at least one employee with an international background employed in their organisations. When asked where the organisations had hired their international talents from, over half of the respondents (58%) stated that they had recruited migrants already living in Finland. This finding aligns with the respondents' views on the need of better utilising the international workforce already living in the country. Besides this, 17% of the respondents report that they have recruited talents from inside the European Economic Area (EEA), and 25% state that they have recruited employees from outside Europe and EEA. These figures suggest that while most of the regional actors are interested in utilising international talents, some limitations are in existence.

According to the information provided by the survey, it appears that the regional actors have a preference on utilising talent pools that have easier access. The previously mentioned figures suggest that the regional actors' direct exposure to diverse international recruitment is currently rather minimal. But within this low exposure, the respondents' views on the use of international recruitment have been mainly positive. In the survey, 59% of the regional organisations that have experience in recruiting international workforce described their experiences as being good, with 21% describing the experience from a more neutral perspective.

When asked of the organisational readiness and capabilities on the aspect of recruiting international talents, the respondents estimated that their capabilities are on a moderate level. However, there is reason for doubt this statement based on the figures summarised in Table 3. While the standard deviation is approximately 1,0 between the answer rates, indicating a moderate spread in the responses, there seems to be some

contradictions in the data. An example of this is related to the strongest capabilities rated among the respondents: the organisations' linguistic skills and capabilities.

In the survey responses, a large portion of the regional actors state that they currently have a strong level of capabilities regarding linguistic issues, but later on when describing their challenges in relation to international recruitments, many of the same respondents also viewed that linguistic issues cause them challenges. In Table 3 it can be seen that the different linguistic abilities stand out as both one of the regional actors' most highly rated strengths and one of the most reported areas of improvement.

To be more precise, in the survey approximately 80% of the respondents describe that they can provide recruiting materials as well as hold interviews using English, with 69% of the regional actors stating that their organisations enable their employees the opportunity to work multilingually. Simultaneously, 62% stated that they can adapt their working environments to some degree to enable a more linguistically and culturally inclusive environment, meaning that the regional actors are inclined to conform to match the need. In relation to the different challenges posed by the linguistic issues, 44% of the respondents described that they are currently unable to provide language training for their international employees, with only 10% indicating that they can fully support their domestic personnel's language skills development. These findings suggest that these issues are posing significant limitations in the regional actors' capabilities in relation to the future labour market demands.

According to the survey responses, the regional actors' readiness to utilise international talents is also somewhat lacking in relation to their current capabilities in relation to international talent management. More specifically, these limiting issues are related to the proper sourcing of international talents, promoting of diversity in the recruitment processes, and the integration of international talents to the workplaces as well as society.

In the survey responses, only a small percentage (10%) of the regional actors state that they fully know where and how to reach potential international talents. This finding suggests that the regional actors have either a limited outreach or they are still in the process of developing strategies to source talents from the international scale. Additionally, only 19% of respondents state they can fully support the acquired international talents' integration to their organisation and work environment, with solely 15% describing that they can provide support to these talents outside of work.

In the survey it was also noted that only around 22% of the regional actors state that they are fully able to promote diversity in their recruitment processes, with 48% viewing that they are not yet able to do this. In further descriptions on the situation, around 46% express some level challenges in relation to the proper assessment of international talents' qualifications. Despite these apparent challenges regarding the regional actors' capabilities on providing and promoting a diverse recruitment processes and work environment, approximately 87% of the respondents still reflect in their further elaborations that diversity is an important aspect listed in their organisations' values.

These findings together suggests that while few of the regional actors seem to possess sufficient capabilities in relation to recruiting and managing international talents, there still remains significant gaps in their abilities to support the creation of an inclusive and diverse environment. These results suggest that while the regional actors' basic capabilities seem to be on a moderate level, more comprehensive support systems and strategic planning are needed to effectively attract, integrate, and retain the needed international talents.

Table 3. Respondents' assessment on their capabilities regarding international recruitment.

Statements:	Completely agree (1)	Partly agree (2)	Partly disagree (3)	Completely disagree (4)	Mean	SD
We can write recruitment advertisements or interview in English	50,6 %	29,1 %	10,1 %	10,1 %	1,80	0,99
We are able to work multilingually, in plain Finnish/Swedish or English if necessary	32,9 %	36,7 %	16,5 %	13,9 %	2,11	1,02
We are able to assess the previous skills and education of international experts	22,8 %	31,7 %	27,9 %	17,7 %	2,41	1,03
We know how to promote diversity in applicant communications and the recruitment process	21,5 %	30,4 %	31,7 %	16,5 %	2,43	1,00
We are able to integrate international talents into our work community and familiarise them with their work tasks	19,0 %	32,9 %	30,4 %	17,7 %	2,47	0,99
We are able to take care of the obligations related to hiring an international talents (e.g. securing a work permit, making an employee declaration)	17,7 %	31,7 %	22,8 %	27,9 %	2,61	1,07
We know where to find international talents	10,1 %	41,8 %	22,8 %	25,3 %	2,63	0,97
If necessary, we know how to support international talents in matters outside of work (such as housing, schools, leisure, family, etc.)	15,2 %	27,9 %	34,2 %	22,8 %	2,65	0,99
Our clients are prepared to work multilingually, in plain Finnish/Swedish or English if necessary	17,7 %	24,1 %	31,7 %	26,6 %	2,67	1,05
We have the opportunity to offer English language training to the work community	10,1 %	25,3 %	30,4 %	34,2 %	2,89	0,99
We have the opportunity to offer language training to international experts	7,6 %	15,2 %	32,9 %	44,3 %	3,14	0,94

4.4.2 Challenges regarding the use of international talents

While the views on the exact position of work- and study-based migration as a solution to talent shortage varied in the survey responses, there was a shared recognition of the overall need of international talents when considering the country's future labour market outlooks. In relation to this, the respondents however expressed some concerns and challenges, particularly in relation to the need for improved processes and workplace readiness as can be deduced from Table 3.

According to the survey, 67% of the respondents indicated that they are not employing international workforce at the moment, with approximately 35% stating this to be due

to their lack of need (see Table 4). Among the respondents that are simultaneously facing talent shortages, linguistic challenges were identified as the primary challenge in the consideration of recruiting international talents. This finding is also supported by Barona's Employer Survey (2024, p. 37), where the biggest challenges related to the use of international workforce were also related to different language barriers. According to Barona (2024), these linguistic challenges have been on the top of the list for all the years the survey has been conducted, granted not always in the highest position.

In a breakdown of the situation (see Table 4), approximately 64% of the respondents indicate that Finnish and Swedish are the required working languages in their organisations' industries, while 18% reported that their current work communities lack the necessary language skills to effectively welcome English-speaking employees. Simultaneously, as seen in Table 3 (p. 58) 78% of the survey's respondents reported that they are experiencing different levels of challenges in relation to providing language trainings to international employees, whereas 64% report not being able to provide sufficient language trainings specifically on English to their work communities.

These findings on the linguistic challenges further support the perception that there is a significant development needs in the support systems meant for both international and domestic employees. Additionally, the organisations' inability of offer adequate language training opportunities suggest that the linguistic challenges could also be one of the key limiting factors in the creation of inclusive and diverse work environments.

Table 4. Respondents' limitations on recruiting international talents.

Statements	Answer rates (%)
Our work requires native-level Finnish or Swedish skills	63,6 %
We have no recruitment needs	34,5 %
Our work community does not have sufficient language skills	18,2 %
We are unable to attract international talents at our salary level	10,9 %
Other reasons	7,3 %
Recruiting international talents is too difficult	3,6 %
Recruiting international talents is too expensive	3,6 %
Our work community does not have the capacity for multiculturalism	1,8 %
The permit process for international talents from outside Finland is too slow	1,8 %
The permit process for international talents from outside Finland is too complicated	1,8 %
We do not want to recruit/hire international talents	1,8 %

According to the respondents' further elaboration on the issue, besides the organisational factors, there also exist a larger issue in relation to the existing language barriers. This issue is related to the current national regulations and administrative procedures, that restrict different actors' possibilities to employ international talents. In a further elaboration on the linguistic issues, the respondents described that the existing challenges are not solely reliant on the capabilities of their organisations' work communities, but the industry specific factors also have a role in the forming of these challenges. This is the case especially in the industrial sector, as described by one of the respondents in more detail:

“While the recruitment of talented workforce in general is one problem, a bigger one is resolving diversity and language issues in the jungle of the industrial sector's already very demanding instructions, rules and regulations. Just having multilingual versions of all instructions, signs, signage and regulations in a factory is a big deal - as well as their constant updating.”

These challenges related to the linguistic issues identified by the survey respondents indicate a multidimensional challenge in the markets that is related to broader structural and policy-related issues. When this information is combined with the data on the labour market outlooks and future labour needs estimated by Statistics Finland (2024), it can be deduced that a change is vital for organisations to act on improving the conditions in relation to international mobility.

While most of the respondents report having positive experiences of using international talents as a solution to talent shortage, it was also found, that the current policies and procedures related to work-based immigration are seen as more complex than necessary. The respondents however did not see this as a limitation in the recruitment of international talents, but rather as something that complicates it. This notion was especially voiced by the respondents who described their experiences on international recruitment as negative.

As earlier seen in Table 3 (p. 58), only 18% of the respondents indicate that they are fully able to process all the required obligations in relation to these policies on their ends. According to the further descriptions, the respondents described these obligations as well as Finland's immigration processes as overly complicated and restrictive. This survey respondents' view on the need for policy development is supported by the Finnish Startup Community's (Zad et al., 2024) report on the topic. According to this report, if Finland and its different regions wish to increase especially their work-related immigration, the different policies and recruitment processes needs to be unified and changed to be more adaptable to suit the labour market needs. Currently the immigration process forms from many separate stages managed by different bureaus and operators. The process has strict laws that need to be abided, and the durations of these legal processes can complicate the process further by lengthening the procession period (Zad et al., 2024, pp. 4-5).

This development wished by the regional actors, however, might be difficult to achieve due to some of the Finnish government's most recent actions underway which have raised further concerns among the respondents. These actions related to immigration are for example the reducing of financial reception support, changes on the border procedure act, and tightening the rules for obtaining citizenship (Peltonen, 2024). Simultaneously the government also plans to tighten the conditions for work-based residency even further by setting a three-month unemployment rule, which essentially means if a migrant's employment ends prematurely while they reside in Finland, they only have three months to find a new job. For international specialist and those who have had a work-based residence permit in Finland for more than two years, this timeframe is set as a little longer, to six months (Ministry of Economic Affairs and Employment of Finland, 2024). The situation with the current practices and the set short time-periods for re-employment is questioned by the survey's respondents:

“The bureaucracy needs to be simplified, there are too many contradictory overlaps. Three months is too short a time for foreign job seekers to find a job.”

According to the respondents, when these findings are combined together with the other existing challenges in the markets, they can be seen to discourage employment between both domestic and foreign work seekers, hence affecting the flow of talent supply even further. The implications of this are significant, as these aspects can also have a direct effect on the country's appeal as a destination for migration – and according to the regional actors, it seems that they already have.

In the survey responses, the regional actors describe that they are currently experiencing difficulties in effective branding of their organisations and their operational region to appeal to international talents. This finding aligns with research conducted by the Universities of Eastern Finland and Turku (2024), which highlights challenges faced by the international talents residing in the country. According to this research, while Finland has been seen for a longitude of time as an attractive destination for international talents, it is currently starting to struggle with the issue of retaining these same migrants due to

the same issues that were mentioned in the Finland Chamber of Commerce's survey results. The current migrants residing in the country have been consistently reporting how difficult the integration to the society is now-a-days and how difficult it is to get employed especially due to the regulations and harsh requirements regarding language skills. As these experiences are slowly gaining attention, Finland's attraction as a migration destination is slowly being affected (University of Eastern Finland, 2024).

This change can already be seen in the amount of residence permit applications that have been declining now for a few years (Finnish Immigration Service, 2025, pp. 5-7). The insights provided in the study by the Universities of Eastern Finland and Turku, supports the concerns expressed by the regional actors in relation to the current national and regional talent management. If the situation is not addressed with the seriousness it requires, there is a growing possibility that the overall labour market outlooks will continue to deteriorate.

5 Conclusions

The purpose of this thesis was to gain an understanding of the current situation regarding talent supply and demand in Southwest Finland's region, focusing on the appearance of talent shortages. The emphasis in this thesis was on understanding the situation from the regional actors' perspective and connect these findings to existing academic research and literature. This thesis was done in the form of a re-analysis of Finland Chamber of Commerce's Skills Survey from the year 2024. In this thesis, the set objectives were to examine the challenges regional actors face regarding talent supply and demand, the measures they consider and have already taken to address talent shortages, and their perceptions and experiences regarding the use of international talents as a potential solution to the situation.

According to the findings of this thesis, the issue of talent shortage is relevant to many of the actors in Southwest Finland's area. According to the survey by Finland Chamber of Commerce, around one third of the regional actors are currently experiencing talent shortages with half of the participants estimating the situation worsening in the next one-to-three years. The findings of this research suggest that although the scale of talent shortages have slightly improved from the previous years, the structural imbalance in the labour market still remain. According to the respondents, this largely due to the fast-approaching retirements. The situation in the Southwest Finland along with the rest of the country is declining slowly but surely with the natural growth of population hitting its all-time lows (Statistics Finland, 2024). Because of this, the importance of developing human capital is extending in the markets.

The research findings of this study suggest that the existing talent shortages play a significant and relevant position in the selected research area. As the shortage of talented individuals is widely seen as a long-term issue, the regional actors are particularly concerned about the possible lost business opportunities resulting from the insufficient talent pools. While the research findings also revealed some positive developments, the overall outlook remains uncertain, as the different organisations are facing increasing

pressure to adapt by developing their capabilities to better align with the evolving market demands.

In the survey, the regional actors' main concern was related to the mismatch between education and labour market demands. Over half of the respondents (60%) expressed some level of concern with the current educational systems and their contents, with many especially questioning the existence of sufficient teaching on practical skills. The research findings further suggest that the development of education and training opportunities can directly affect the labour market outlooks, making the aspect of developing human capital one of the key solutions to the situation. This solution is also recognised by the survey respondents, and in relation to this the respondents state that there exists a need for better cooperation between educational institutions and employers to achieve the needed development. This finding is further supported by a study conducted by Finnish National Agency for Education (Nyysölä, 2022), where the author highlights the importance of developing educational systems together with all stakeholders to better meet the future societal and labour market needs.

Besides the aspect of improving the level of education and training systems, the other proposed key solutions to alleviate talent shortages, were in relation to removing the existing incentive traps, as well as utilising international workforce. The key actions the regional actors have taken themselves to improve the situation are aligned with these suggested national level solutions.

In relation to the use of international talents as a solution, the survey respondents report having increasingly positive experiences. As the overall findings of this thesis suggest that there exists an increasing need of acquiring and retaining international workforce to the Finnish labour markets, this is a particularly good notion. However, the respondents of this survey also note in their responses that the process of gaining and retaining international talents, is currently not easy. According to the respondents, there especially exist challenges in relation to insufficient organisational capabilities, proper

employer and regional branding, as well as national policies that limit the organisations from acquiring and using international talents. These findings are supported by the researches conducted by Zad et al. (2024), and the Universities of Eastern Finland and Turku (2024), which highlight similar structural obstacles. Additionally, these findings suggest that understanding the different factors that push talented individuals to move to specific destinations and make them want to stay there, are important to note in designing better international recruitment and retainment strategies.

The findings of this thesis underline that there exists a need for more comprehensive and systematically structured investments done on talent management on multiple levels. Addressing and solving the existing imbalances in the labour markets requires not only organisational and regional efforts, but also national efforts. The gathered research findings indicate that the different actors in Southwest Finland's region, are currently facing increasing challenges in acquiring and retaining talented individuals, underlining a need for more inclusive branding and talent retention strategies. This need can be further explained through the lenses of the resource-based view (RBV) and human capital theory, that are outlined in the theoretical framework of this thesis. According to these theories, talented individuals can be seen as vital resources that not only improves organisational performance and value creation, but can also improve the organisations' overall competitive position in the markets (Barney & Clark, 2007; Becker, 2011). By aligning the development of the regional talent management strategies with the theoretical perspectives, the different actors in the region will be able to respond more effectively to today's competitive labour market demands and make their organisations more resilient and better prepared for the future. Promoting such alignments will not only strengthen the regionally operating actors, but will also essentially support the development goals of the region.

5.1 Contributions of the study

This thesis makes a contribution by clarifying the general understanding of how talent shortages are addressed and perceived across different organisations in Southwest

Finland's region. This specific research perspective has not been previously studied in an academic sense in the selected region, and therefore this study provides new insights into the regional labour market conditions, especially from the employer perspective.

The findings of this thesis align with Brunnello and Wruuck's (2021, p. 1147) statement that employers have insightful and practical data on the current labour market needs. By utilising an employer-centric perspective, this thesis allows broader and better-grounded analysis of the position of human capital and talent management strategies in today's labour market dynamics.

5.2 Practical implications

One of the reasons behind the creation of this thesis, was to provide the regional actors and decision-makers with a coherent overview of the current situation of regional talent supply and demand, to serve as a basis for more effective strategic planning. Based on the research findings, a few insights have emerged that could be noted in the developing of more inclusive and responsive talent management strategies.

The findings of this thesis indicate that the issue of talent shortage is currently challenging the different regional actors, with many seeing the situation to worsen in the span of one-to-three years. As the acquiring and retaining of talented individuals is becoming an increasingly pressing concern, there is a need to adopt more inclusive and forward-looking talent management strategies. This involves strengthening employer and regional branding, investing in the development of human capital, and improving the collaboration between public and private sector's actors within the region.

Besides the organisational level, the findings of this thesis indicate that there is also a national level need for better coordinated, long-term talent management strategies that addresses the existing labour market imbalances. The research findings suggests that the government's decisions and actions play a crucial role in the supporting and promotion of successful attraction and retention of talented individuals to its different regions. As

there is a shared need between the regional actors and national level decision-makers to develop more inclusive, collaborative talent management strategies to better address the existing labour market misbalances, better cooperation between these stakeholders is required. The regional actors and policy makers alike should systematically evaluate their existing strategies and approaches together with the future outlooks in mind. To effectively do so, it is also suggested that there is a need for continuous study on the different region-specific factors and how they contribute to the forming of the labour market outlooks.

5.3 Limitations of the study

As this study is based on secondary data sources there are certain limitations in effect. While the use of secondary data sources can help in the process of saving resources such as time when compared to the collection of primary data, it also has its disadvantages and limitations (Saunders et al., 2023, p. 358). These disadvantages are mainly related to the predefined scope of the study, and the possible inaccuracies and biases stemming from this.

While the selected data source conforms with the objectives set for this study for the most part, limitations exist particularly due to the pre-defined, structured survey questions. These set questions may have had an effect to the respondents' possibilities to elaborate on context-specific appearances of talent shortage, which could have affected the interpretation of the survey data. Additionally, there exists a possibility that some relevant aspects of the topic may have remained unexplored due to this.

5.4 Suggestions for future research

The ongoing changes in both Finnish and the global labour markets make this time period interesting for the study of talent shortages. To gain as inclusive research data as possible, future research on the topic of talent shortages and their appearances could benefit from the use of more open, qualitative research approach.

Future research on talent shortages could also potentially focus on the ethical considerations regarding competitive international talent acquisition and management. This suggestion stems from the initial research done for this thesis, as during the selection of the main data sources, I came across several data sources that hinted criticism towards the tendency of some organisations to avoid ethical and responsible proceedings in the recruitment of international students and employees. A study on the issue of talent shortage from the aspects of inequality and accountability in international recruitment practices could add a topical addition to the existing research.

5.5 Afterwords

At the end of this thesis, I would like to thank all the regional experts that I consulted along the way of creating this thesis. A special thanks is dedicated to my supporting colleagues at the Turku Chamber of Commerce.

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Appendices

Appendix 1. The selected research questions from the Skills Survey

1. What industry does your organisation represent?
2. Number of employees of the organisation?
3. Is there talented workforce that your organisation needs available at the moment?
4. What are the work positions that your organisation is experiencing shortages of?
5. Does the availability of talented workforce limit the organisations' growth and business development?
6. What is your organisation's outlook for recruitment needs in the near future (in the next 6 months)?
7. What is your organisation's outlook for recruitment needs in the future (2-3 years' time frame)?
8. Evaluate the usability of the following solutions to securing talented workforce:
 - Increasing the amount of degree education in educational institutions in the region
 - Increasing the amount of conversion and supplementary education
 - Increasing apprenticeship training
 - Developing the content of education to better meet the needs of working life
 - Increasing cooperation between companies and educational institutions
 - Increasing work-based immigration
 - Increasing study-based immigration
 - Actions to employ immigrants already living in Finland
 - Actions to support employers in recruiting international talents
 - Increasing resources for employment services
 - Promoting labour mobility within Finland (various incentives, etc.)
 - Removing incentive traps for accepting work
9. Describe in your own words how the availability of talented labour appears to your organisation and how you have tried to resolve the situation?
10. How does your organisation support the development of personnel skills?

11. At what level of education is there the greatest shortage of qualified professionals in your organisation?
12. How well does the skills of graduates from educational institutions in your area meet the needs of your organisation?
13. Has your organisation recruited or hired international talents (in the last 5 years)?
14. Why haven't you recruited or hired international talents?
15. Has your organisation considered, or could you consider recruiting or hiring international talents?
16. Where have you mainly recruited international talents?
17. Could you evaluate your experience in recruiting or hiring international talents?
18. How many employees in your organisation have an international background?
19. Assess what capabilities or skills your organisation has to recruit international talents?
20. What else would you like to bring forward to the decision-makers regarding talent shortages?

Appendix 2. Occupational shortages in Southwest Finland's region

Structural designer, M.Sc. (Eng.)	Mechanical design	Electronics production worker final assembly	Nurse
Civil engineer	Mechanical engineering	Mobile crane driver	Physiotherapist
Electrical designer	Machine operator	Combined vehicle driver	Special needs teacher
Construction consultant/project manager	Machine repairer	Vehicle fitter/maintenance mechanic	School attendance assistant
HVAC designer & engineer	Manual machanic	Procurement & Logistics Manager	Finnish language teacher
Installer	CNC machinist	Software developer, embedded systems	Work coach
Construction worker	Technical salesperson/expert	ERP and Data Expert	Accountant
Technical designer	Production designer	ICT specialist	Financial advisor/expert/manager
Project manager	Production management	IT manager	Financial management expert
Ironworker	Maintenance worker	System expert	Payroll accountant
Foundry worker	Maintenance and repairman	Telecommunications expert	Investment specialist/manager
Bender	Troubleshooter	Automation designer	Investment advisor
Welding	Post-processor	Automation programmer	Office worker
Plumber	Line worker	Automation installer	Expert work salesperson
Sheet metalworker	Electronics production worker	Technology expert (specialized fields)	Communications and marketing
Reinforcement production	Car painter	Oracle database expert	
Employment coach	Truck drivers	Software designer	