



International Tech Talent in the Netherlands and Finland: Analysis and Recommendations for Companies

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Abstract

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<p>The bachelor's thesis focuses on analyzing the international tech talent experience in Finland and the Netherlands. The dissertation is conducted in collaboration with a tech recruitment agency. The primary objective is to offer practical recommendations for areas of improvement for companies in both countries. The recommendations are directed towards building a more effective and efficient retention strategy.</p> <p>The bachelor's thesis comprises five sections, enriching the reader's comprehension of the topic. The introduction provides the dissertation topic and objective, its relevance, and trends. The next chapter delves into the theoretical review of the topic and its in-depth comprehension. The empirical chapter introduces the survey process and methods. Chapter 4 provides essential insights into the international tech talent experience in the Netherlands and Finland. Finally, the last chapter summarizes all the work and provides visually comprehensive recommendations.</p> <p>The thesis has broader relevance to international tech experience and the current shortage of tech personnel. The author provides valuable insights for companies located in the Netherlands and Finland. Moreover, the formulated recommendations aim to assist companies with present challenges and enhance their retention strategies.</p> <p>The academic paper strongly demonstrates a commitment and dedication to the professional growth of the author. Owing to the research-based thesis, the researcher has developed a theoretical and practical comprehension of recruitment and retention in the tech industry. Just as technology continuously and rapidly advances, so does the author's path toward ongoing learning and success.</p>
Key words IT industry, Retention, Shortage, Tech Recruitment, Tech Talent

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1 Introduction

The overall objective of the undergraduate thesis is to explore the retention strategy for international tech talents within companies in Finland and the Netherlands. The topic presents current theory, research analysis, and recommendations based on observations supported by current trends and collected responses in this academic paper. The dissertation facilitates a better understanding of the international personnel's experience regarding relocation and occupation in the IT industry in both the Netherlands and Finland.

The broad purpose of this chapter is to introduce the research, terminology, findings, and Company X. Furthermore, the thesis introduction presents the research question and investigation questions and explores the processes undertaken to answer them. Firstly, the introductory chapter examines the meaning of the terms and abbreviations like HRM, Talent Acquisition, and their phenomenon, supported by the literature and reports. Secondly, it also briefly touches on the current IT industry challenges from various trusted sources. Finally, the introduction provides an overview of the tech recruitment agency that collaborated with the author to ensure the research design and data collection accordingly.

Human Resource Management (HRM) is a key operational function in a business that strategically and efficiently aims to manage people within an organisation. Armstrong (2012, 4, 328) emphasizes the latest trends in HRM and highlights that HRM functions have a strategic and long-term approach to employment and personnel development. Talent Acquisition is one of the crucial components in this undergraduate dissertation. Talent Acquisition is responsible for the recruitment process, the selection of candidates, workforce planning, employer branding, and candidate retention. Michaels, Handfield-Jones and Axelrod (1997, 57, 150) emphasise that the competition has increased, making it challenging to recruit and retain skilled and talented employees. Since then, Talent Acquisition has become a significant department as a supportive function in a company and has been integrated into most industries.

Technological innovations have created a multitude of jobs in the IT industry. The increase in the technology job market worldwide causes a shortage of highly skilled workers in the technology industry. As a result, recent findings highlight the complexity of the European IT industry. The report emphasizes the urgent need for skilled workers and underscores a lack of technological comprehension and competencies. Moreover, it demonstrates unawareness of tech talent needs and their initial motivation to relocate (Anderson 2022, 6).

This undergraduate dissertation directly addresses the current issues in the technology market. Generally speaking, technology recruitment has been considered to be the most demanding due to

its shortage of personnel, as mentioned in European Commission 2022. Furthermore, another report highlights the considerable negative impact of HR practices on the recruitment of tech-skilled workers, indicating a critical challenge in the industry. For instance, the time-to-hire has been considerably high in the recruitment process, making businesses unattractive and undesirable for technical employees. Additionally, the retention of talent has decreased. The present issue is that the Talent Acquisition strategies are considerably outdated due to the fast-paced, dynamic and rapid industry nature. The modern approach to attracting, hiring, and retaining skilled technology talents is in need (General Assembly 2023).

One such instance of Company X that solves the need for highly tech talents collaborated with the author to support the research design and data collection in question. The recruitment agency, founded in Finland, specializes in tech recruitment and employer branding. Company X is referred as the tech recruitment agency or the tech recruitment consultancy in the bachelor's thesis.

1.1 Objective Briefing

The principal goal of this thesis is to analyse the collected data from the survey participants. Furthermore, this academic research paper aims to provide recommendations to the companies located in the Netherlands and Finland. The analysis and suggestions are achieved through quantitative research method with the determined target audience. The method is conducted in the form of a survey.

The research question (RQ) of this thesis is: **How can the long-term retention and growth of international tech talents be ensured for companies in the Netherlands and Finland?**

The investigative questions of the bachelor's thesis are as follows:

1. What can be long-lasting retention strategies for companies?
2. What are the key criteria that influence international talents to stay in the Netherlands or Finland?
3. What is the main focus for companies to build a sustainable and long-term development plan?

The selection of the dissertation topic involves many professional objectives of the author that are explained in the following section. As a researcher majoring and working in HR, the tech recruitment has been always a questionable and undiscovered area of professional development. Furthermore, conducting the survey related to Talent Acquisition meets the author's occupational title. On such occasion, the tech recruitment agency offered its collaboration for author's academic

and professional development. Lastly, the comprehension of the present international technology circumstance allows the researcher to explore and analyse real-world challenges. As a result, the topic of the bachelor's thesis was decided together. Data collection and research design have been conducted in collaboration with the tech recruitment consultancy. By understanding the IT talent requirements, the author develops skills and expertise in more effective and efficient end-to-end recruitment. Furthermore, the topic showcases the present shortage of personnel in the technology industry. In summary, the research builds upon the in-depth analysis of the market.

Many highly skilled talents are scarce and require higher than average salaries, compensation packages, relocation, and so on (Anderson 2022). For many smaller-scaled companies, it is a considerable cost that is difficult to implement. General Assembly (2023) emphasises the problem with the tech recruiters in the companies remain at the highest rate of time-to-hire (TTH). This challenges hiring highly skilled technology workers. In conclusion, the emerging and current observations encourage to analyse the market and discover possible solutions.

The outcome of the research is to provide analysis and recommendations for areas of improvements for companies. The report aims to re-evaluate the current approach to retaining tech talents in the Netherlands and Finland. The IT industry is considered to be a fast-paced environment; therefore it is crucial to observe the new trends and upskill the personnel accordingly. A minor change in the world of technology can be beneficial if it is discovered and implemented in a timely manner. The observation of current trends improves the relevancy of the training quality for the technology talents.

1.2 Current Trends in the Technology Industry

For the purpose of better comprehension, there are some progressive and emerging trends in the Information Technology (IT) industry. Global transformation and automation will be shaped by the trends as follows:

Generative AI solutions

With the public release of ChatGPT 3.5 in 2023, a large scale of companies focused their resources on building and automating the alternative of the tool. As of 2023, there has been an enormous rise in the popularity of tools such as File Chatbots, Assistant Chatbots, Productivity AI tools, and so on. These tools can considerably outperform and increase efficiency in the long term perspective.

Low-code or no-code tools

Most programming entry jobs are repetitive and time-consuming; therefore the transformation towards leveraging low-code tools can increase effectiveness. Utilization of the low-code or no-code programming enables and simplifies the application creation with low hand-coding skills.

Buy Now Pay Later services

Technological innovation also affects the financial sector by bringing a faster and proposed payment approach. With the present rise of BNPL, which stands for Buy Now Pay Later, this service is predicted to be populated and utilised by many users.

Digital Transformation

The fast movement toward digitalisation has been caused by the COVID-19 pandemic in 2020. Since the pandemic appeared, it is predicted that half of the Global economy will be influenced by the latest technological inventions.

Health Tech Transformation

HealthTech, in other words, Health Technology, has been an urgent field of interest influenced by technological advancements. The solutions in HealthTech promise to make a long-term impact on revolutionize medical services such as medical electronic records of a patient, health applications, diagnostic and wearable devices, and immediate medical assistance between a nurse or doctor and a patient.

All of the trends mentioned above have been predicted to be sharing the future of the Information Technology industry (Pacitto 9 January 2023).

In conclusion, cutting-edge technology is advancing, yet skilled technology talents are limited. Many technological advancements occur frequently and unexpectedly. Being aware of these important trends in the IT industry assists both employees and candidates to priorities IT education and further professional development in this field. The trends listed above clearly demonstrate the significance of the highly IT specialist in the future.

1.3 Sustainability in Curricular Concerns

Having provided a brief overview of the HRM, Talent Acquisition and recruitment and trends in the technology industry, it is crucial to address the current problem of an emerging highly skilled workforce. Particularly, knowing the present tendencies and challenges. The analysis of the retention strategies in the tech industry contributes to many aspects of sustainability in the long-term plan. By directing attention to the current issue, sustainable solutions will be addressed accordingly.

The analysing and sharing of the current tech market tendencies in the Netherlands and Finland can contribute to more sustainable remediations. Firstly, it will be able to showcase the aspects of retention gaps. For instance, inclusion in the workforce can considerably create a modern and efficient way of working. Additionally, it brings more ideas and creativity to the company's success. The tendency to upskilling and reskilling employees is a sustainable solution to both employer attraction and retention. With the evolving needs of the tech talents, it is an important consideration to provide training and reskilling programmes for the tenants for long-term progression and development. In summary, the suitable initiatives emphasise the significance of continuous advancement and flexibility in Talent Acquisition. Monitoring the market dynamics can dramatically integrate the tech personnel sustainability in Finland and the Netherlands.

1.4 Undergraduate Thesis Structure

This undergraduate thesis is divided into five sections. The first chapter which is named Introduction consists of the introduction to the topic, terminology overview, dissertation objective, current trends in the IT industry, and sustainability concerns. The second chapter named Theoretical Review focuses on the theoretical aspect of the topics and phenomenon. The third part refers to the Empirical Research deeply demonstrates the process of the survey implementation, targeting, and conducting. The fourth chapter named Analysis provides insights of findings and reflections on the topic. The last section called Conclusion summaries all the aspects of the thesis sections, provides recommendations and concludes outcomes.

2 Theoretical Review

The Theoretical Review is structured in a way that provides comprehensive and relevant terminology. The idea is to introduce the reader to the necessary terms and phenomenon of the undergraduate dissertation. Through this methodology, it is aimed to achieve the full comprehension of the research and a smooth transition to Empirical Research of the thesis.

2.1 Relevant Terminology

Human Resource Management, known as an abbreviation of HRM, is an operation field of a business function that focuses on managing people within an organisation. Most organisations require HR professionals. In the HR literature, it has been stated that if a company has a significant number of employees, the HR-to-employee ratio is the number of HR people divided by the total number of employees and multiplied by 100. For instance, if a company has 200 employees, the company might consider having 1 to 2 HR employees, according to Armstrong (2012, 31-44).

Talent Acquisition is integral to Human Resource Management, in which it concentrates on the journey from identifying suitable candidates to their onboarding. It ensures that the organisation's needs align with its business objectives and the competencies of candidates (SHRM). Talent Acquisition strategy consists of five main components emphasised in the HR literature. The components are workforce planning (a process of identifying the future workforce needs and sourcing (engaging candidates with suitable skills and expertise) (Yu & Cable 2014, 102, 178).

Recruitment is also an outcome of the sourcing phase. Having sourced the potential candidates, *recruitment* refers to the process of interviewing and assessing the applications accordingly (CIPD 2023). Candidate Assessment (evaluation of an applicant's skill) is an aspect of recruitment (Yu & Cable 2014, 39-44). The impactful strategy that is used in the recruitment process is called *Employer Branding* (reputation of a company) (CIPD 2023).

Retention is a strategy aimed to keep personnel in a company (SHRM).

Compensation and Benefits refers to financial or non-financial bonuses for work. For instance, health insurance, retention plan (SHRM).

Upskilling is a component of the process of learning and development. The relevant literature explains that *workplace learning* focuses on reflecting upon current expertise, skills, and knowledge and identifying gaps in the professional development. Upskilling determines the new skills that are in demand due to the market or organisational needs (Armstrong 2012, 293-306).

Diversity, equity, and inclusion (DEI) is the concept of maintaining recognition, justice, and inclusiveness in the workplace. Through multiple reports, it has been demonstrated the impact of the growing diverse workforce.

Diversity stands for individual visible and non-visible differences like different backgrounds, origins, abilities, ages, and so on (Hunt, Layton and Prince 2015). *Equity* is the concept of providing each employee with equal opportunities at work (Hunt, Yee, Prince and Dixon-Fyle 2018). *Inclusion* is the practice of belonging and safety in the workplace (Dixon-Fyle, Dolan, Hunt, and Prince 2020).

IT, which stands for *Information Technology*, refers to the sciences of utilising digital devices to store, deliver, and exchange information (Cambridge Dictionary). Common synonyms used when speaking of IT are Digital Technology, Tech, IT industry, Tech industry, and Information Management.

Technical recruitment, commonly known as *tech recruitment*, is the recruitment process with a focus on skilled IT talents according to the Indeed Career Guide (2023).

Tech talent, also known as *technology talent*, is an individual who specialises in the Information Technology field. The categories of occupation fields can be software engineering, back-end development, data analytics, cyber security, and so on (CBRE 2023).

2.2 Global War for Talent

The War for Talent phenomenon was introduced publicly to a wide audience in 1997. The research stated that companies were advised to attract and, most importantly, retain highly skilled talents. Over time, the demand for top professionals in various fields would be the future scenario for many companies in the world. Furthermore, it was mentioned that the ability to attract, develop, convey, and retain top-performing talents would be a valuable and beneficial approach for most firms. Significantly, the behaviour change would also need to be adopted. The mindset shift would differentiate the more contemporary and transformative outcome from the traditional method of hiring personnel. In the rapidly changing environment, the willingness to change was defined as an important step towards outperformance in the organisation. Referring to the New Talent Mindset emphasised in the book, these were the aspect of the transformation as follows:

1. Every single HR manager is accountable for discovering suitable talents and placing them in the talent pool. This way the businesses and HR personnel ensure the security and maintenance of the top talents in the industry.

2. The more skilled and highly performed the talents are, the more effective and efficient a company performs. As per the book, talents with suitable expertise, years of experience, and skillsets can lead a corporate success.
3. Talent Management should be one of the main operation functions in a company. Since it is needed to have employees who deeply comprehend the ongoing trends and challenges, the establishment of Talent Acquisition specialists is necessary.
4. The talent pool should be integrated into the hiring process. The invention of open applications and talent pipelines secures the loss of talented personnel and provides flexibility in the recruitment phase.

Upon further reading of the War for Talent, it is considerably important to have an understanding of common HR practices and fundamentals of Human Resource Management. Armstrong's Handbook of Human Resources Management Practices, the 12th edition, fundamentally builds and gathers principal practices, theories, and HR context. The terminology in Relevant Terminology section has been read and appropriated for the purposes of understanding the subject. Notably, the 12th book edition highlights the critical aspects of recruitment, in particular the importance of retaining personnel and decreasing the employee turnover index. If the index is low or is equal to 0, the costs of recruitment remain significantly low. Yet the income towards other areas of the Human Resource Department.

In conclusion, The War for Talent and Armstrong's Handbook of Human Resources Management Practices are from the early 2000s and might be considered outdated. On the contrary, they outline the present challenges in recruitment and Talent acquisition, particularly in the IT industry. Moreover, it retains high relevance in the current context to establish the HR or Talent Acquisition department for future company improvements and more efficient performance.

In the undergraduate dissertation, it has been stated that the predictions of the "talent war" and the need for highly skilled personnel would be a dilemma for many companies. Additionally, the underestimation of the Human Resource support function, especially the Talent Acquisition operations. Recently, Talent Acquisition has solved demands for skilled employees in many industries as predicted. Currently, the IT sector remains to be one of the industries with high expertise.

2.3 Current Trends and Challenges in IT Industry

The trends in the IT industry change rapidly. More and more predictions and research have been conducted to anticipate the future. It is also done to enhance the recruitment process and implement upskilling programs. The focus should be on adopting new technologies and services to achieve a proficient outcome. One of the biggest predictions outlined in the report underscores the

digital reliance, connectedness, and sustainability in the data-dominated world. The document provides a graph that demonstrates cutting-edge technological predictions (Potnis 2021).

IDC FutureScape: Worldwide IT Industry 2022 Top 10 Predictions

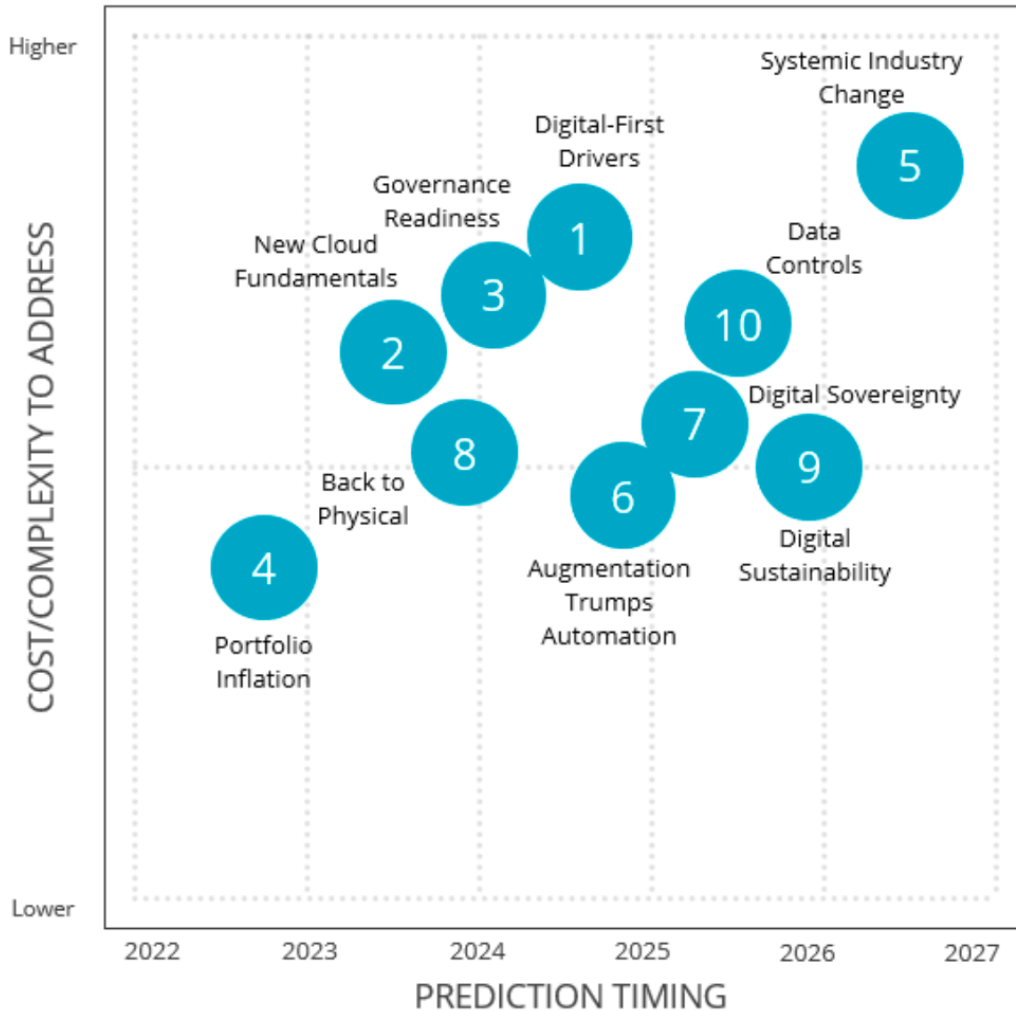


Figure 1. Worldwide IT industry predictions from 2022 to 2027 (adapted from Villars & al. 2021)

Image 1 illustrates the possibility of technological innovations and shift to the next level of tech progress. To sum up, it is clearly observed that beyond 2023 there will be technology advancements affecting the IT talents and businesses' needs (Villars & al. 2021).

These innovations will play a major role in the countries' development. Observing the tendencies in the IT industry, these technological solutions may affect a variety of businesses and industries (Pacitto 9 January 2023). The list of progressive IT solutions is as follows:

1. The age of Generative & Adaptive AI Solutions reached its peak in 2023. Key business matrices are expected to be integrated with the AI solutions. These might include customer satisfaction scores, revenue per employee, and so on.
2. Blockchain and the Metaverse provides unlimited possibilities for both business and individuals to create an interactive digital experience. Slowly, many companies will plan to consider one of these contributions to their overall objective.
3. Health Tech, also known as Health Technology, ranks as the high-priority technological solution. Contributing to and developing the deep tech predicts to make a long-lasting impact on the health industry.
4. Beauty Technology will affect the quality and safety of future skincare products and likely to have more organic ingredients.
5. Gamification as a part of learning tends to transform the educational gap. Additionally, it boosts the learner's confidence in the skill acquisition.
6. Buy-now/pay-later (BNPL) has been on the rise since 2019. The payroll grows and increases interest in financial services that allow users to pay later or in instalments.
7. Green Tech as well as previously mentioned Beauty Tech and Health Tech expects to reduce the carbon print and deliver eco-friendly solutions.
8. One of the future trends emerges to develop technical products without hand coding skills. This phenomenon is now being coined as low-code or no-code tools.

Gathering all the trends under one scope, it is considerably anticipated that the tech industry will grow dramatically and might double the innovations. This leads to calculating the workforce dedicated or committed to making a contribution to the industry (Pacitto 9 January 2023).

The IT industry remains the pivot in the world of innovation and technological shift. However, the companies and government stay unaware of new technology advancements and trends. The critical shortage of IT talents and limitations in hiring are altering.

The outcome of the survey in the General Assembly (2023) was conducted with a total number of hiring managers of 1000. The participants are from The United States, Canada, the United Kingdom, Singapore, Australia, Ireland, Sweden, the Netherlands, Switzerland, and France. Through survey results, the General Assembly researchers indicated an issue with inclusive and effective recruitment processes. The addressed problem states that the Talent Acquisition function lacks a diversity, equity, and inclusion (DEI) concept. Furthermore, the hiring phase remains prolonged and causes 87% of respondents' dissatisfaction with the absence of DEI. As a result, it emerges many companies to restructure their recruitment procedure with the implementation of diversity,

equity, and inclusion rights. It is crucial to emphasize the challenges in the areas of recruitment and DEI to act accordingly and strategically (General Assembly 2023).

2.4 IT Industry in Finland

In late November 2022, the President of the European Commission, Ursula Von Der Leyen, made an announcement about 2023 to be the European Year of Skills. There has been a discussion and evaluation of a dedicated gap in tech skills. Generally speaking, one-third of the workforce lacks basic digital skills. The EU initiative is to employ over 20 million IT specialists by 2030 and bridge the digital gap for skilled workers (European Commission 2022). Interestingly, the report gathers research from 2022 presenting countries with basic knowledge of IT skills. The leading countries are Iceland, Norway, and Switzerland. The 4th and the 5th ranking places are the Netherlands and Finland. The graph provides insights influencing strategies for educational and professional development in the field (Eurostat 2022).

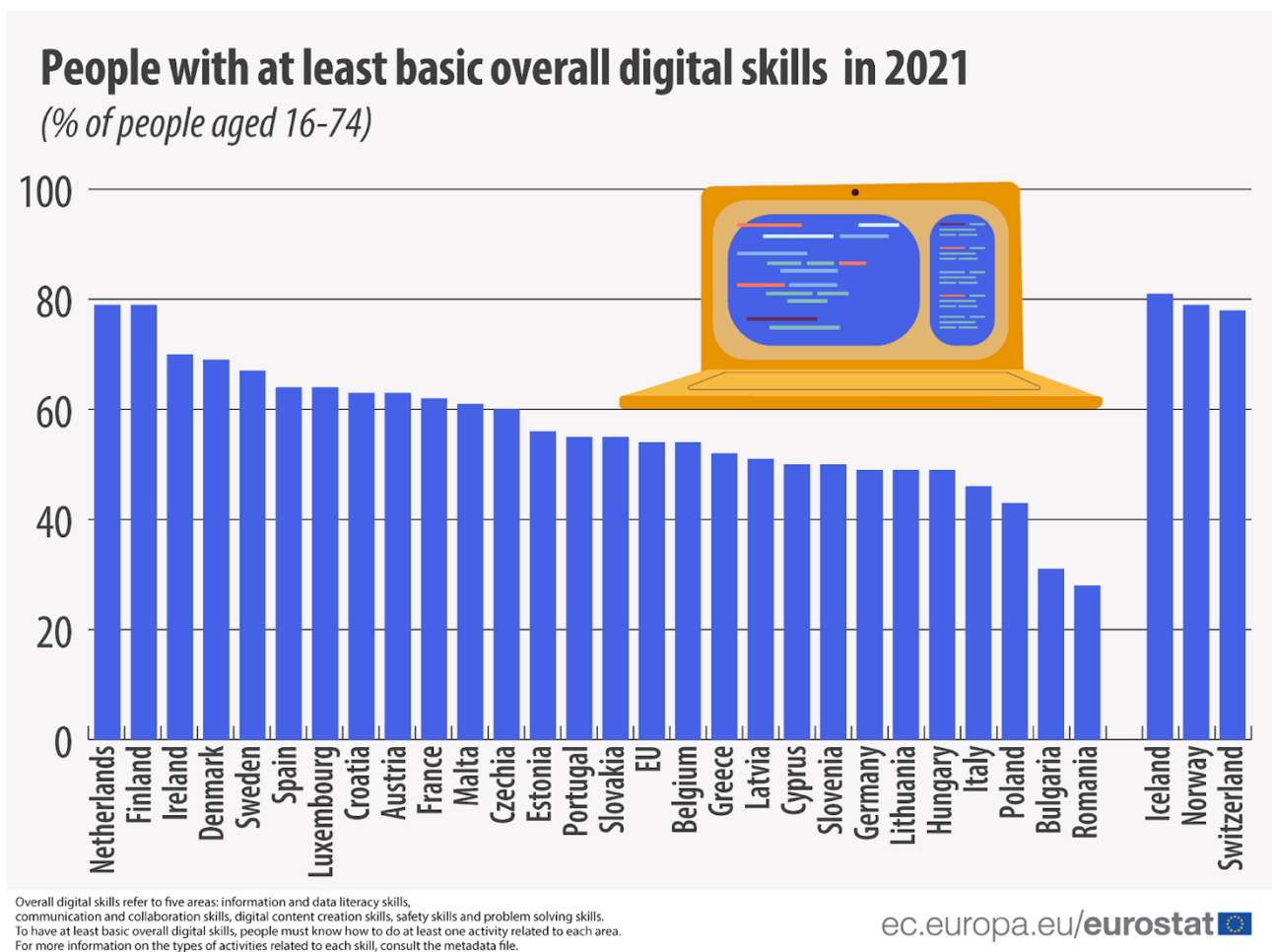


Figure 2. Basic IT competences among European countries in 2021. (adapted from Eurostat 2022)

The report highlights the issues of urgently requiring more skilled workers. Also, it emphasises a need for more technological comprehension and competencies. The issue of unawareness of tech talent needs has been always a topic of discussion. Officially approved that 58% of EU companies actively seek tech talent specialists yet fail to find them. Tech recruitment is challenging due to many factors. Inflexibility and inadaptability are the major problems in hiring highly skilled tech personnel. The growth of tech specialists is highly expected (Anderson 2022). It is predicted that a rise in technology information innovations is beyond current resources. Therefore, the IT job market will demand more specialists in the field (Pacitto 9 January 2023).

It has been announced that Finland ranks as the first country in the EU Digital Economy. It mentioned that Finland has performed consistently and effectively in digitalisation for several years, particularly during the COVID-19 years (Finnish Government 2022). The Digital Economy and Society Index measures from 0 to 100. Finland reached a score of 69.6 with the EU average of 52.3. This demonstrates the digital perspective and commitment in the tech market (European Commission 2022). Finland illustrates proficiency in basic digital skills. Furthermore, Finland leads the advanced technological future like artificial intelligence and big data in businesses (European Commission 2022). Additionally, Finland is recognized to be the most technologically advanced country in the world. It highlights the Finnish recognition for its high level of education in Information Technology and technological innovations. In conclusion, Finland outperforms other European countries in the tech industry. It has demonstrated a high potential and dedication to building and impacting EU Digital success (The United Nations Development Programme (UNDP) 2023).

Despite being one of the leading technological countries in the industry, Finland has faced many challenges recruiting and retaining IT personnel. According to the Ministry of Economic Affairs and Labor, these sectors face a shortage of highly skilled personnel as follows:

1. Information Technology and Gaming, particularly specialists in software engineering, computer science, AI, Robotics, Big data, and cloud computing.
2. Bioeconomy, chemical engineers, environmental engineers.

Due to the shortage in the major industries in Finland, the focus on recruiting and retaining talents is crucial. In response to the labour shortage, Finland needs an international workforce. The labour market is significantly small which causes staff shortages. Yet the demand in the occupation market and HRM role is emerging. The establishment of tech workforce planning and the international environment with the DEI concept appeals to both employees and employers. Also, the importance of not only recruiting highly skilled workers but also providing them opportunities to upskill their

skills (Ministry of Economic Affairs and Employment in Finland 2023). It has been also highlighted by Cobbett (2023) that the skill mismatches in finding a suitable candidate for a role. Consequently, the strategy should align toward not only hiring the workforce but also retaining them by offering upskilling opportunities. The talent shortage has been growing among Finnish companies. The factors influencing the personnel deficit are insufficient applicants, limited or no work experience, and unsuitable education. The current issues with the tech recruitment of international talents have been challenging. The HRM department, particularly the Talent Acquisition department, observes the skill mismatch in the sourcing phase. Many tech talents lack competencies in cutting-edge technologies (Helsinki Times 11 October 2023). Another ongoing issue is to recruit an IT workforce. For the Human Resource Department in Finland, the recruitment procedure to hire one international talent remains at least six months according to Työmarkkinatori. It states that the prolonged process of hiring an international worker may impact the business objectives and workforce planning. In conclusion, the findings from many sources highlight the need to reevaluate current approaches to sustainable and long-term recruitment, retention, and upskilling.

Ministry of Economic Affairs and Employment in Finland (2023) announces that skilled workers with unique skills in Information Technology are not currently available in the country. Therefore, the Ministry of Economic Affairs and Employment in Finland (2023) reports The Talent Boost program to attract international students to immigrate to Finland. As a result, Finland aims at a long-term digitalization plan that can reduce the shortage of highly skilled workers and develop more diverse and inclusive environments (Talent Boost Programme).

2.5 IT Industry in the Netherlands

One of the growing and leading countries in Europe in Information Technology is the Netherlands. The Netherlands Foreign Investment Agency (NFIA) (2023) reports the country's success and leading position in the IT industry. The attractiveness and strengths of the tech industry in Holland have grown in the 21st century, therefore influencing a huge concentration of IT companies as well as tech talents. The tech hub is on the top list in Europe along with tech industry leaders like the United Kingdom, Ireland, and Germany. Digital Infrastructure and AI Leadership have been recognised in the global economic community.

On the official website of the Government of the Netherlands, the topic raised in the Human Resources and Employment matter showcases the significance of professional employment development, flexibility with working hours, and hybrid or remote opportunities. These steps are taken into consideration for enhancing the labor market and economic situation in the Netherlands. In addition to the key points of the government initiatives, the Government of the Netherlands introduces the HRM policy by 2025 to reconsider the traditional talent acquisition procedure to maintain

flexibility, effectiveness, and technological progression. There are seven key components in becoming a more attractive and desirable country for relocation as follows:

1. Employer branding as well as country branding to maintain a long-term labour market.
2. Collaborate with interns and recent graduate to contribute to the long-lasting employment perspective.
3. Focus on the DEI concept to build a solid international and inclusive environment and workforce.
4. The focus on people and their needs and wishes to be a priority.
5. Learning and development programs as well as upskilling focus on the candidates with an IT background.
6. Offering organizations the flexibility to recruit personnel on a short-term or project employment.
7. HR personnel and managers to be trained for a new "talent mindset" model.

Reversing and concluding the seven key points of the HRM policy by 2025, the Netherlands' commitment to attract and retain personnel, in the Information Technology sector, increases the probability of a long-term tech progression.

Despite the new Strategic HRM policy and the country's leading rank in the IT industry, the shortage of tech talents is ongoing. The investment in the amount of €123m directs to enhanced collaboration and promotes IT education and upskilling. Furthermore, the government recommends reducing the experience requirement and welcoming students and recent graduates for the tech contribution. Another investment of the Green and Digital Jobs Action Plan sets a goal to recruit and retain one million highly skilled tech talents by 2030. In order to achieve this objective, factors like the aging workforce, temporary factors, and "leakage," particularly among females need to be addressed accordingly (Loohuis 2023).

In conclusion, Holland faces an ongoing shortage of a highly skilled tech workforce yet addresses the issues accordingly by investing and strategically planning. Consequently, the implementation of the Strategic HRM policy and the standing country in the IT industry demonstrates the proactive approach to resolving the talent deficit.

Summing up the theoretical framework, it is stated that both the Netherlands and Finland progressively grow in the Information Technology market. With Finland leading in the EU Digital Economy (Finnish Government 2022) and the Netherlands being a major player in IT (The Netherlands Foreign Investment Agency (NFIA) 2023), these factors make the countries attractive to international

tech talents. Yet employer branding, recruitment, and retention are undergoing struggles facing both countries. Tech recruitment is impacted by the shortage of personnel its limitations and inflexibility.

The empirical chapter of the undergraduate thesis focuses on the research insights that will be used for further tech talent retention.

3 Empirical Research

This chapter introduces Company X and the theoretical and empirical alignments. Next, it outlines the research design process and describes the implementation of the method, and details data collection.

3.1 Company X Introduction

The tech recruitment consultancy was founded in Finland. They specialise in the field of tech talent acquisition and employer branding. Company X is alternatively names as the tech recruitment agency or the tech recruitment consultancy in the thesis.

The topic for this thesis was discussed and decided together with the tech recruitment consultancy. Company X had planned a survey for international tech talent in two market areas: Finland, and the Netherlands. It was decided to conduct the survey in collaboration.

3.2 Theoretical and Empirical Integration

The theoretical framework solves the dilemma associated with attracting highly skilled tech talents and the challenges associated with it. As technology evolves, with the rise of AI, the competition grows ever more intense. The demand for tech talent grows, as described by Michaels, Handfield-Jones, and Axelrod (1998). Organizations now struggle to attract and maintain current top-tier talent.

The Netherlands is currently acknowledging a shortage of IT personnel. Experiencing a similar shortage in Finland, which is made even more pertinent because of its growing tech industry. Yet Finland is a globally recognized tech hub; this labour shortage is starting to affect the industry's growth. As the effects of this tech shortage grow ever more worrisome, the European Union has started investments in the IT sector. To address this challenge faced in Finland and the Netherlands, this strategic investment by the EU demonstrates the importance of skilled tech professionals in driving economic growth (European Commission 2022).

3.3 Preliminary Phase and Research Design

The research was conducted in cooperation with Company X. The idea was to understand the international tech talent experience in the Netherlands and Finland. By conducting the research, the objective was to comprehend the tech talent experience and challenges.

Referring to Theoretical Review, the shortage of IT personnel remains demanding and alarming. The RQ presented in Introduction focuses on how to ensure the long-term retention and growth of

international tech talents for companies in the Netherlands and Finland. The investigative questions seek to build long-lasting retention of international tech talents and understand the key criteria that influence international talents to stay in the Netherlands or Finland. Finally, one of the goals is to define the focus for companies to build a sustainable and long-term retention plan.

Hence, the research method was a survey; it was the most suitable method for the data collection for Company X. The reason to conduct the survey lay in several motivational factors. Firstly, the feedback gathering was less time-consuming and could be analysed and reviewed at any time. Secondly, the quantitative method generated a more in-depth understanding of current trends, experiences, and so on. Many sources in the theoretical framework were conducted using surveys or questionnaires. For instance, the General Assembly (2023) implemented the survey as well. Considering that the survey was conducted anonymously, it ensured a deeper level of honesty and reduced social desirability bias. Also, it increased privacy and confidentiality leading to more open responses with minimised hesitation and fear. Thirdly, demographics played a crucial role in the survey as it provided more information on where international tech professionals immigrate or originate from. Finally, the data-driven approach in the survey directed to evidence-based strategies. In conclusion, for these reasons, the justification was made for the quantitative method. The decision to use a survey aligned with undergraduate dissertation objectives and questions (Agresti and Franklin 2013, 47-54).

Initially, the marketing plan was assigned to deliver the most accurate outcome. During the research, Company X decided to continue the research and investigate upon undergraduate dissertation completion. Therefore, the product-based thesis was changed to the research-based dissertation. Nevertheless, the survey remained the same throughout the dissertation preparation and writing.

The target audience was proposed by Company X. The questions in the introduction of the research clearly suggested targeting the group of talents who have relocated to Finland or to the Netherlands. The precise age, gender, or seniority of the role were not included in the survey because of their irrelevance and lack of helpfulness for the study's objectives. Instead, the questions on the influential factors on immigration and settlement in the country were prioritised. Another priority was to comprehend the process of decision-making of a tech talent. Importantly, the questions about the challenges and plans to stay or leave a country were determined to be decisive (Appendix 1 & 2).

The purpose for choosing this target group was, firstly, the demographic component. As the objective was to understand the international tech talent background, the selection covered the talents

residing in Finland who are not originally from another country. Similarly, the survey for the Dutch market was structured: the talents located in the Netherlands who are not native to the country.

The survey was created within one week before its release to the wider audience. The survey software used for the data collection was Google Forms. As Company X used Google Suite, it was decided to create a survey in Forms. Additionally, the tech recruitment consultancy could effortlessly monitor the progress and suggest changes. The tech recruitment agency assisted the author clearly; therefore, the researcher created questions accordingly. The author formulated a mix of query types. The questions in the survey were closed questions, open questions, and open-ended questions. The approach of selecting different question types would provide more descriptive insights and encourage a responder to share their experience and perspective. All the questions and changes were approved by Company X. Employees of the tech recruitment consultancy carefully reviewed every question to ensure correctness and relevancy. Meetings were also arranged to maintain the accuracy of the questions.

Before the analysis, data cleaning and preparation were crucial steps to ensure the data accuracy. The errors, spelling mistakes, and the number of responses were reviewed before the analysis. The utilisation of data was constructed in the form of data visualization. The creation of pie charts in Google Forms was a crucial component of analysing data. The tablets presented in Analysis were created in Google Sheets (Table 1, 2, 3 & 4). In addition, Table 5 and 6 were also created in Sheets. The analysis of the tendencies and variability were within responses through descriptive statistics. Furthermore, there were closed-ended questions with multiple-choice answers to gather insights and experiences. As a result, the analysis became more insightful and in-depth. In conclusion, the methods ensured the full examination and data analysis at a glance, and in detail.

Having addressed a disruptive and informative implementation of the quantitative method, the next chapter provides the results of the survey and its observation.

4 Analysis

4.1 Survey Results: Finland

The survey was divided into three parts: the demographic and background of the respondents, different types of questions related to the international tech talent experience, and a call-to-action prompting them to leave the email address for future surveys. The first part determined respondents' origin, the range of age, and their specialisation. This structure was designed to evaluate tech talents' experience living in Finland and potential engagement in future activities. The number of respondents recorded was 104.

The demographic and background part:

Where do you come from?

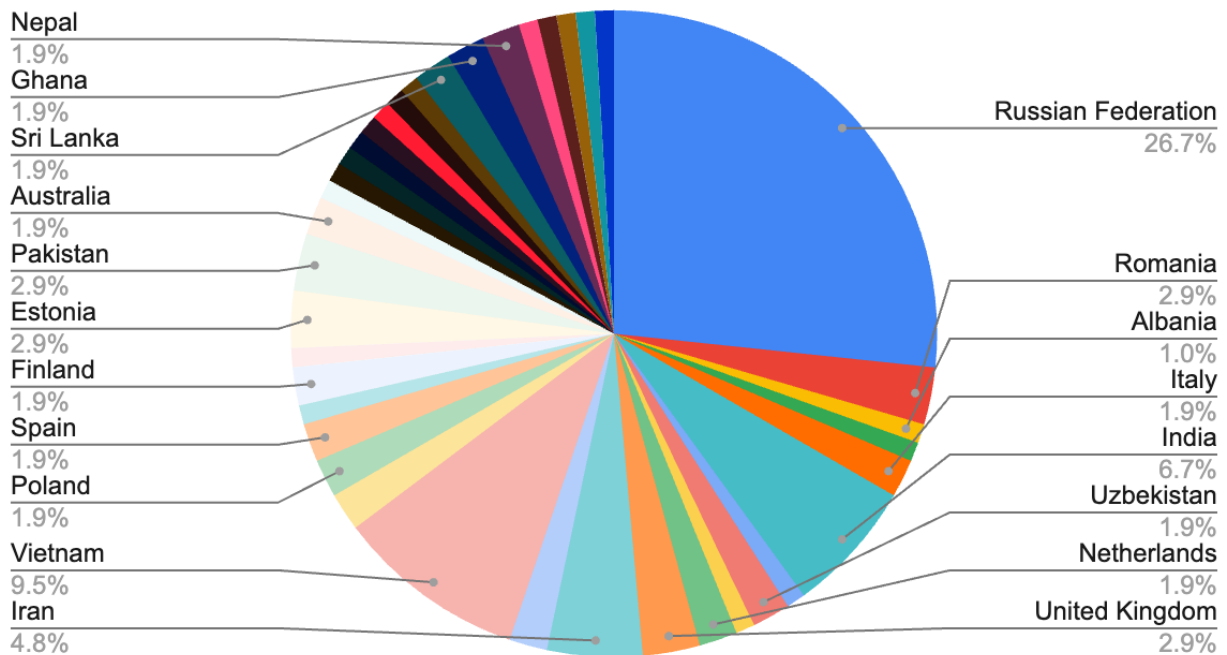


Figure 3. Respondents' nationalities.

As shown in Figure 3, the top three countries that international tech talents originate from are the Russian Federation, Vietnam, and India. Among the surveyed group, these countries play a significant role in the international tech talent landscape.

How old are you?

104 responses

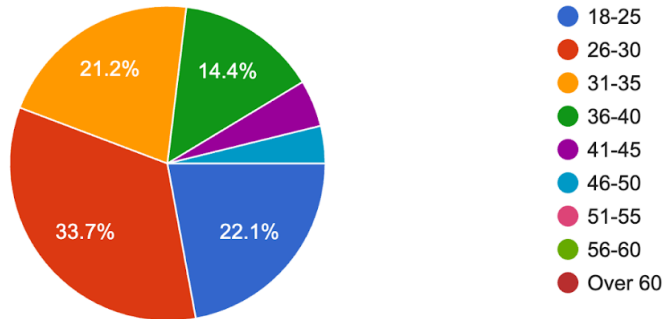


Figure 4. Respondents' age range.

The majority of the respondents are in the age range of 26 to 30 (33.7%), as illustrated in Figure 4. The rest of the other major age range is 18-25 (22.1%) and 31-35 (21.2%). The visual represents that a significant number of the tech talents are young. The acknowledgment emphasises the diverse experiences and viewpoints of personnel.

In my area of expertise, I most closely identify with...

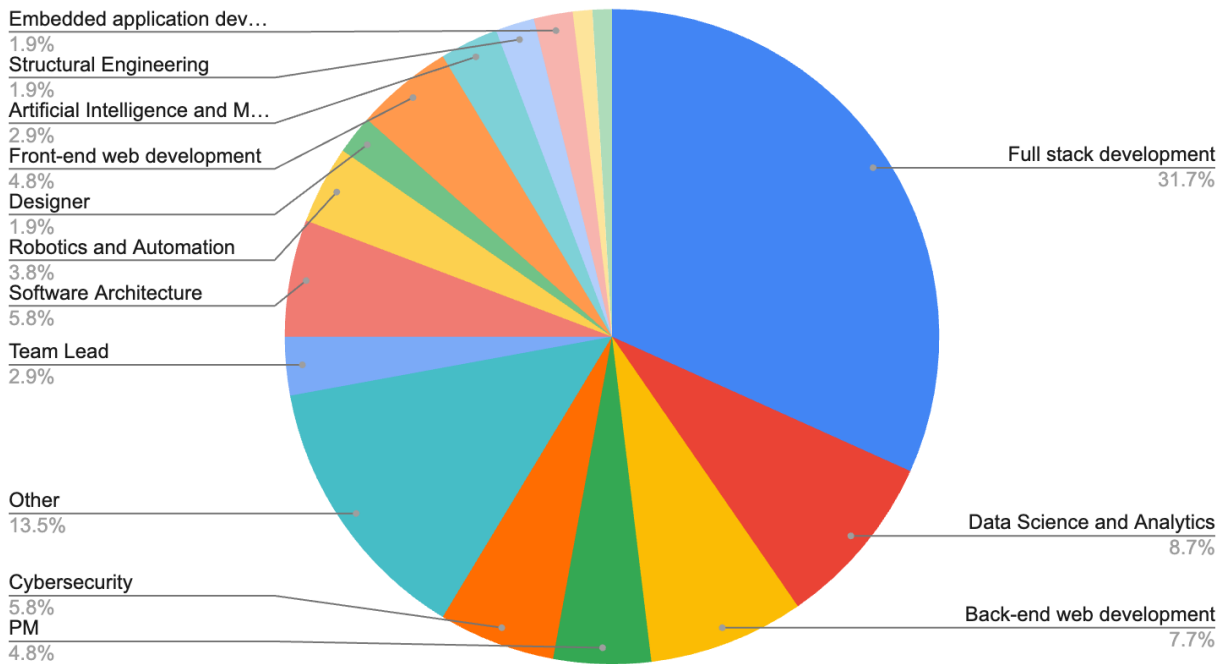


Figure 5. Respondents' occupation in the IT industry.

The occupational background of the respondents is presented in Figure 5. The group of respondents in the survey mostly specialise in Full Stack Development (31.7%), uncategorized (13.5%), and Data Science and Analytics (8.7%). The insight illustrated in Figure 5 represents the skilled workers' expertise and skillset related to technology, job roles, and industry trends in the Finnish tech market.

Reasons and experience living in Finland:

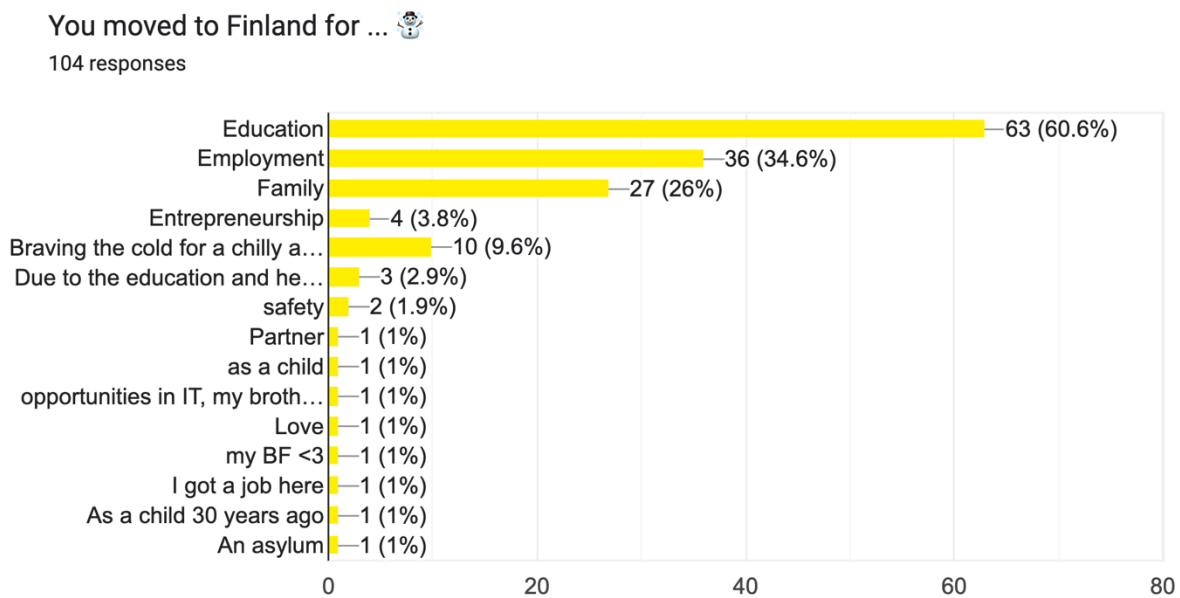


Figure 6. Respondents' motivation to relocate to Finland.

Figure 6 demonstrates that 60.6% of the tech talents moved to Finland to pursue their education. The remaining majority went for employment (34.6%) and family (26%). The results indicate that the majority of tech talents relocated for educational purposes, with a significant portion moving for employment and family reasons. It reveals the underlying desires for migration.

Table 1. Respondents' motivation to choose and to stay in Finland.

Top 3 reasons international tech talent to choose and stay in Finland	
Chose Finland	Stayed in Finland
1.High quality of life (53.8%)	1.High quality of life (53.8%)
2.Safety and wellbeing (43.3%)	2.Safety and wellbeing (43.3%)

3.Quality of education (42.3%)	3.Quality of education (42.3%)
--------------------------------	--------------------------------

Analysis of Table 1 illustrates that the primary motivations for relocation are high quality of life (53,8%), with an emphasis on safety & wellbeing (43.3%) as well as the third motivation being referred as education (42.3%). The motivational factors for settlement in Finland are high quality of life (53.8%), safety and wellbeing (43.3%), and quality of education (42.3%). In summary, tech talents prefer Finland because of the following factors: lifestyle, safety, and education.

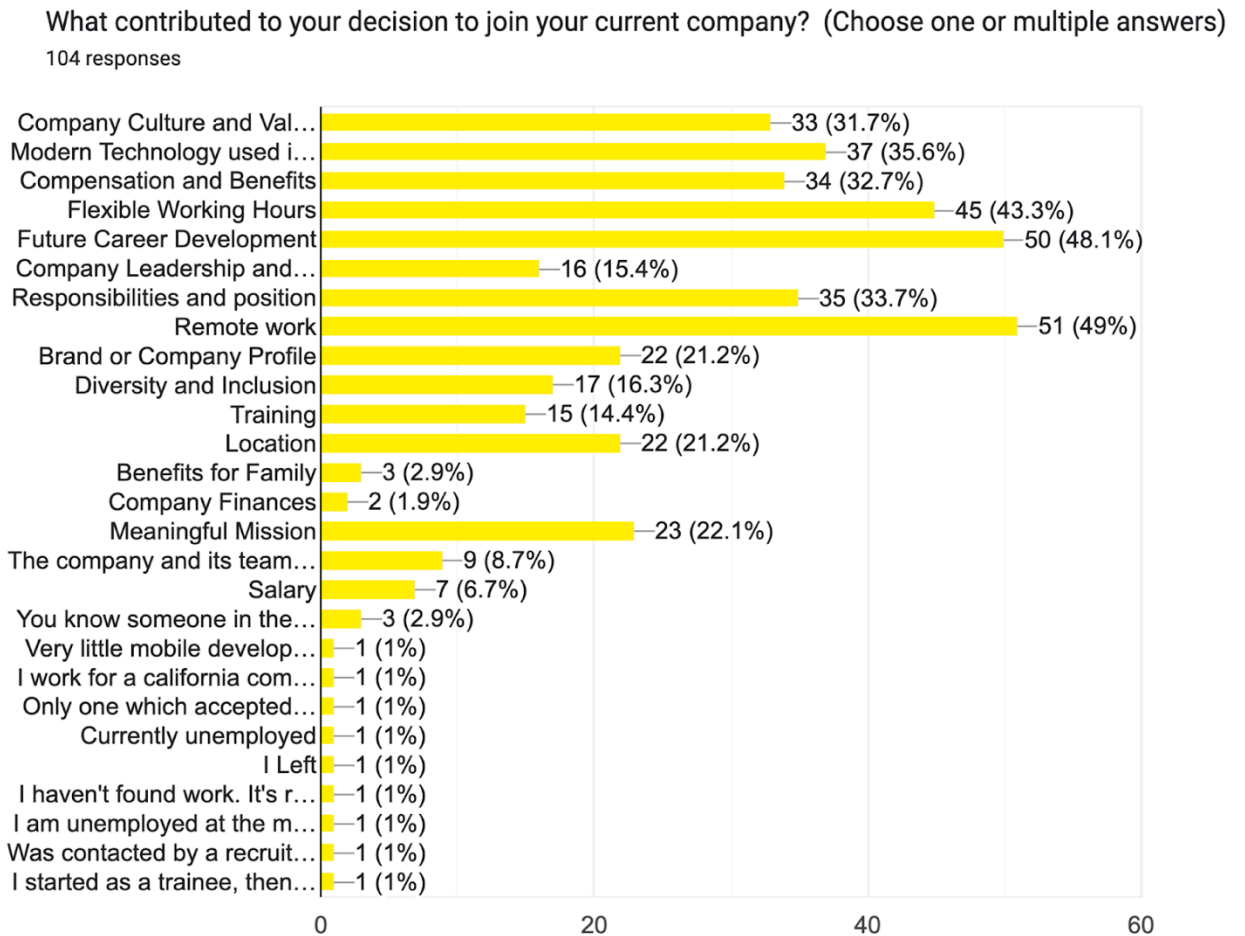


Figure 7. Respondents' motivation to choose the current employer.

Figure 7 reveals that the factors affecting tech talents' decisions to join companies were primarily remote work opportunities (49%), future career development prospects (48.1%), and flexible work hours (43.3%). These numbers provides insight into the underlying factors as to why tech talents chose their current positions.

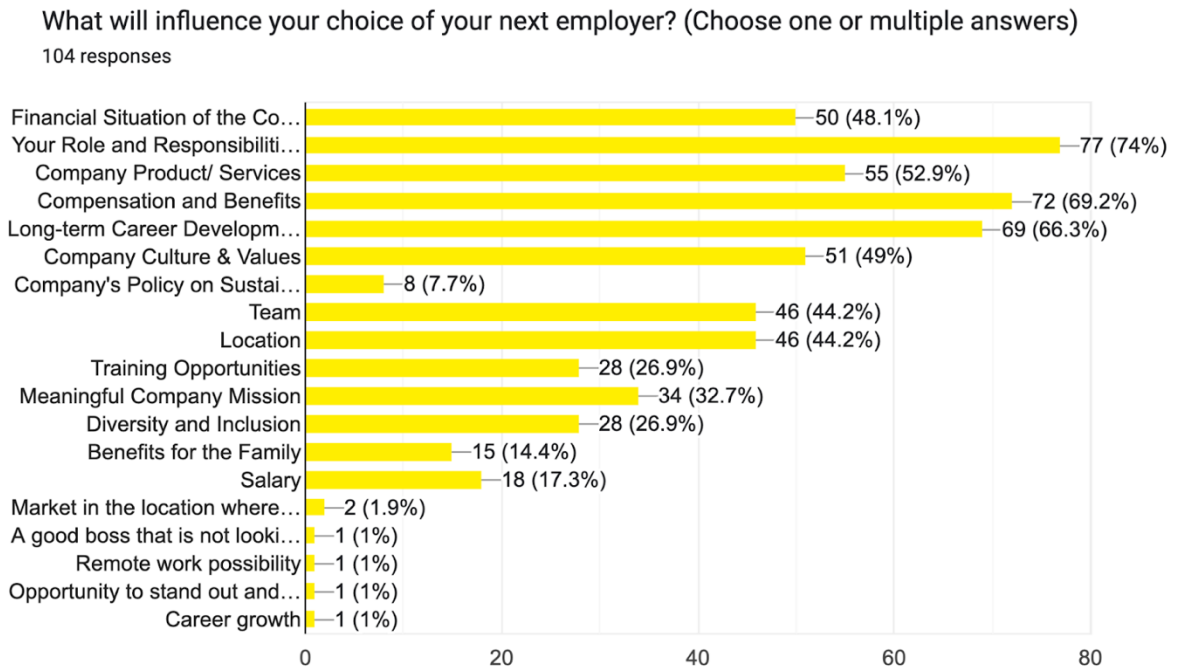


Figure 8. Respondents' motivation to choose the next employer.

As indicated in Figure 8, the key factors influencing the choice of the next employer are role and responsibility (74%), compensation and benefits (69.2%), and long-term career development (66.3%). In summary, tech talents prioritise job roles/responsibilities, pay, and career growth when choosing their next employers.

Do you feel that your current salary is competitive within the local job market for your role and experience?

104 responses

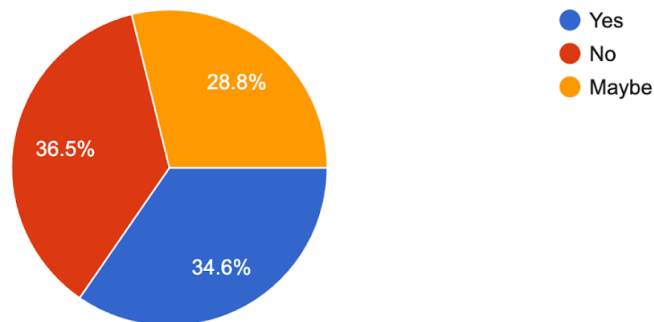


Figure 9. Respondents' salary competitiveness in the market.

34.6% of respondents strongly believe that their current salary is competitive, as per Figure 9. However, around 36.5% are dissatisfied that the salary is lower compared to the job market. The rest of 28.8% remain uncertain. This diversity in responses reflects varying perceptions among participants.

Do you feel that your current salary is on par with that of your Finnish-speaking colleagues?
104 responses

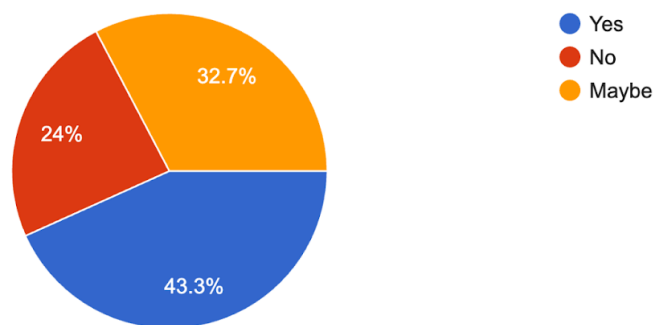


Figure 10. Respondents' current salary to their Finnish-speaking colleagues.

Figure 10 demonstrates that 43.3% of responses demonstrate that the current salaries are on par with their Finnish-speaking colleagues. On the other hand, 24% believe that it does not align. The rest of 32.7% remain uncertain.

Have you faced discrimination while looking for a job in Finland?
104 responses

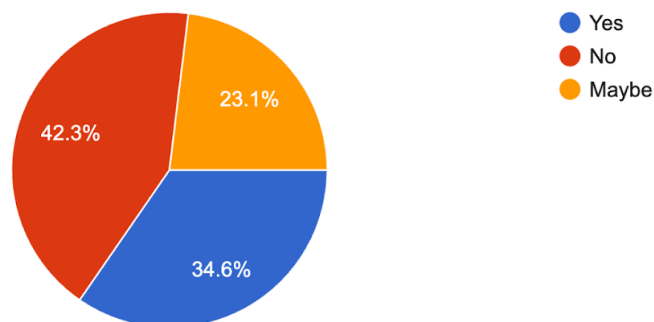


Figure 11. Respondents who faced the discrimination.

34.6% acknowledged facing discrimination in the job search, according to Figure 11. 42.3% reported not facing discrimination. 23.1% are uncertain.

Do you see yourself living in Finland in the next 5 years?

104 responses

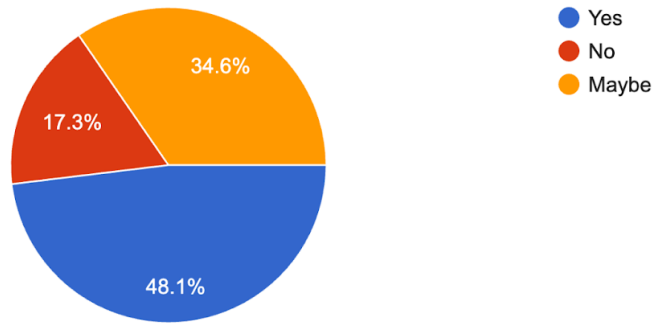


Figure 12. Respondents who plan to stay in Finland.

The results in Figure 12 show that a majority of 48.1% answered positively, with 34.6% indicating a possibility and 17.3% responding negatively.

The desired tech companies noted in the free section question are represented by the ranking from the most to least mentioned:

Table 2. The ranking from the highest mention number to the lowest.

International Tech Talent's Top 10 Preferred Employers		
Rank	Company	Mentions
1	Wolt	37
2	Supercell	33
3	Nokia	28
4	Kone	25
5	Microsoft	21
6	Reaktor	18
7	ABB	17
8	Nordea	16
9	Amazon	15
10	Metacore Games Oy	5

As demonstrated in Table 2, Wolt, Supercell, and Nokia are the for runners, attributed to factors such as innovative work culture. Wolt offers the opportunity for the employee to work at the time of their choosing and offer flexibility in terms of not needing to learn the local language, which is Finnish (Wolt 2023). Career development opportunities as in the case of Supercell, its world renowned for its infamous games, making an experience there enriching for ones CV (Supercell). Nokia still is an innovator in the space of Technology and an established giant in the tech world (Nokia).

4.2 Survey Results: the Netherlands

Similarly, the survey is divided into three parts: the demographic and background of the respondents, different types of questions related to the international tech talent experience, and a call-to-action prompting to leave the email address for future surveys. The first part determinants the respondent’s origin, the range of age, and his/her specialisation. This structure is designed to provide backgrounds, and experiences with potential engagement in future activities. The number of responses recorded was 49.

The demographic and background part:

Where do you come from?

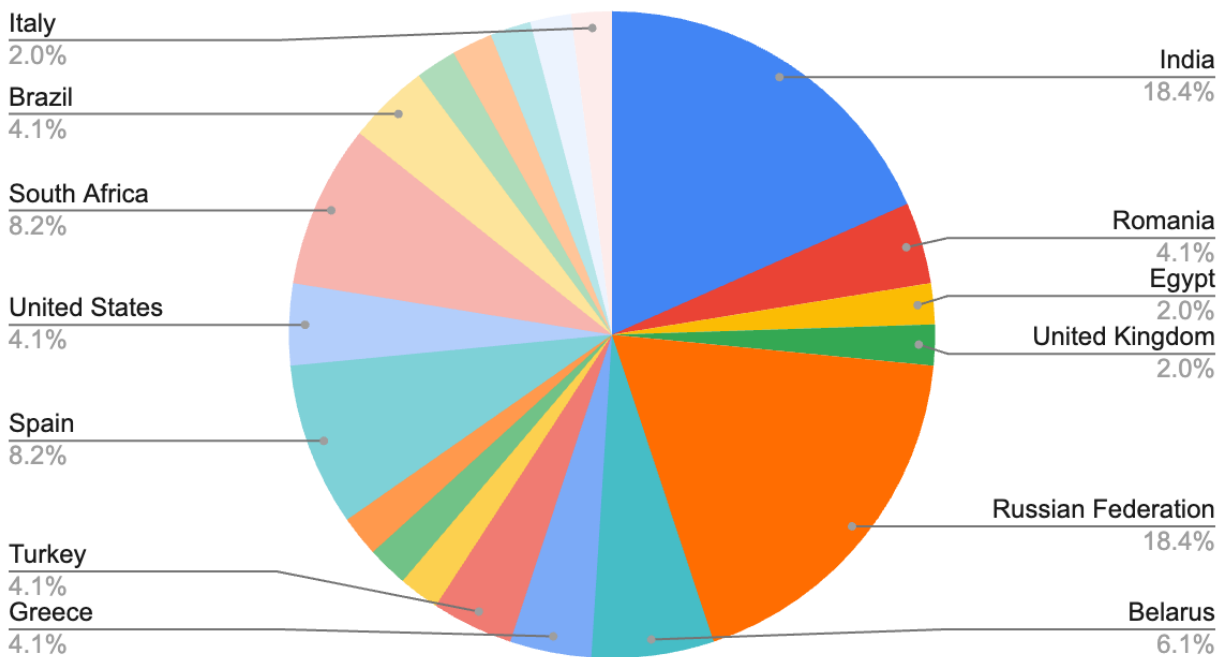


Figure 13. Respondents' nationalities.

Figure 13 shows the top three countries of origin are India, the Russian Federation, and South Africa. Among respondents, these three countries have a crucial impact on the international tech talent landscape.

How old are you?
49 responses

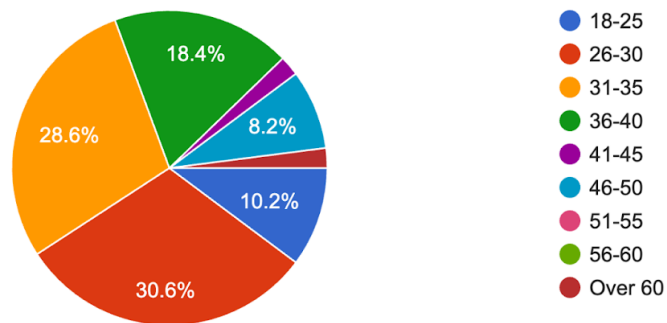


Figure 14. Respondents' age range.

The tech talent survey results for the Netherlands, demonstrated in Figure 14, indicate the age groups of the participants are as follows: 26-30 years (30.6%), 31-35 years (28.6%), and 36-40 years (18.4%). The population of international professionals are diverse in the scale of age group.

In my area of expertise, I most closely identify with...

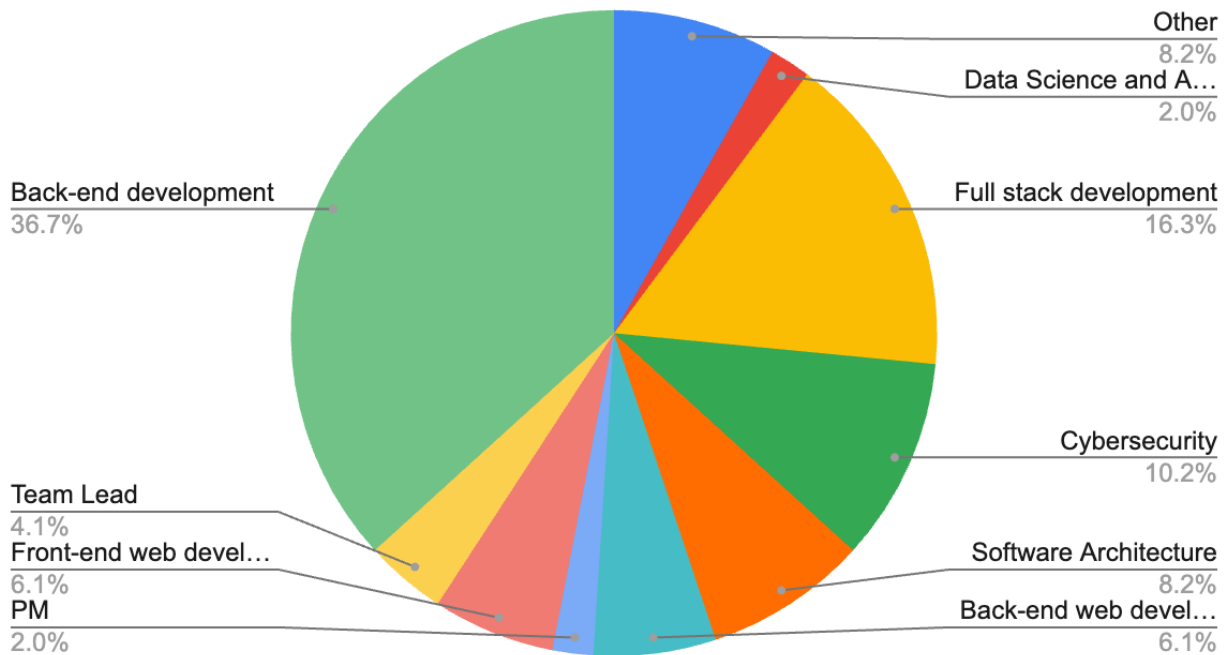


Figure 15. Respondents' occupation in the IT industry.

In the surveyed area of expertise, the talents closely identify with the following: 36.7% identify with Back-End Development, 16.3% with Full Stack Development, and 8.2% with Software Architecture (Figure 15).

Reasons and experience living in the Netherlands:

You moved to the Netherlands for ... 🌸
49 responses

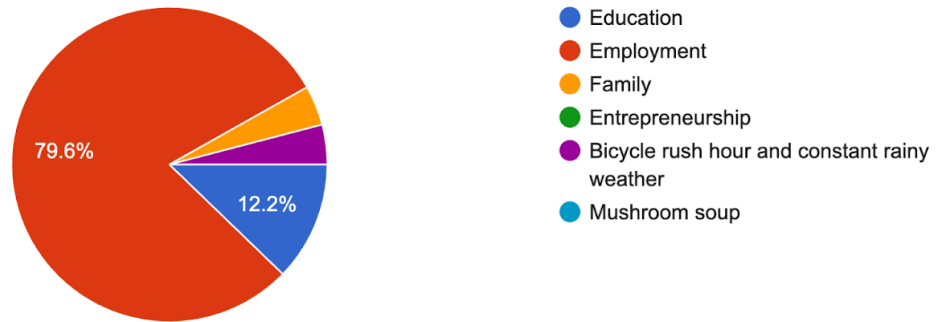


Figure 16. Respondents’ motivation to relocate to the Netherlands.

The main reasons concerning the migration of tech talents to the Netherlands are employment (79.6%), education (12.2%), and family (4.1%). Figure 16 clearly demonstrates that the employability is one of the most influential factors for tech talents to relocate.

Table 3. Respondents’ motivation to choose and to stay in the Netherlands.

Top 3 reasons international tech talent to choose and stay in the Netherlands	
Chose the Netherlands	Stayed in the Netherlands
1.Career Opportunities (63.3%)	1.Work-life balance (75,5%)
2. High Quality of Life (61.2%)	2.High Quality of Life (55,1%)
3.Good Work-life Balance (59.2%).	3. Work Opportunities in English (55,1%)

Table 3 suggests that a substantial majority of respondents prioritize work-life balance, while a significant portion also values the overall quality of life and the availability of work opportunities in the English language. International tech talents appear to have similar reasons to relocate and stay.

What contributed to your decision to join your current company? (Choose one or multiple answers)

49 responses

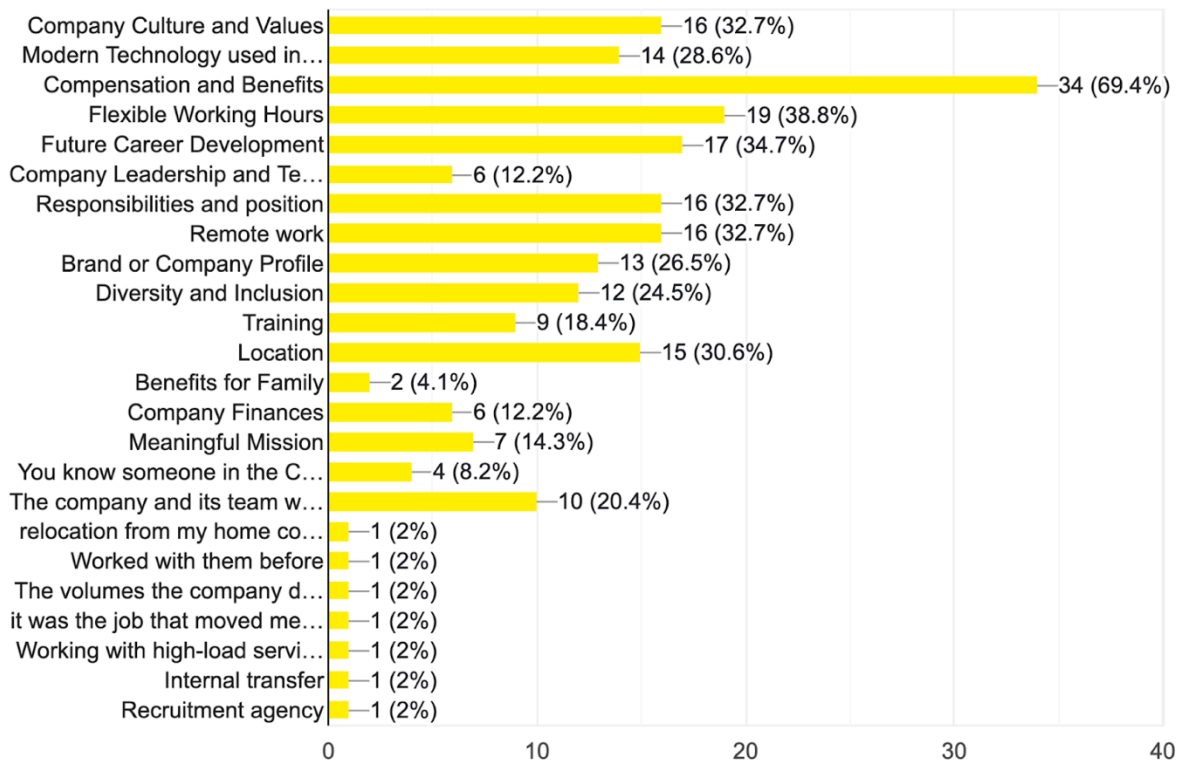


Figure 17. Respondents' motivation to choose the current employer.

Tech talents in the Netherlands choose their current company mainly because of good compensation and benefits (69.4%), flexible working hours (38.8%), and future career development opportunities (38.8%). In summary, Figure 17 indicates that international tech talents priorities compensation packages to work with their current employer.

What will influence your choice of your next employer? (Choose one or multiple answers)

49 responses

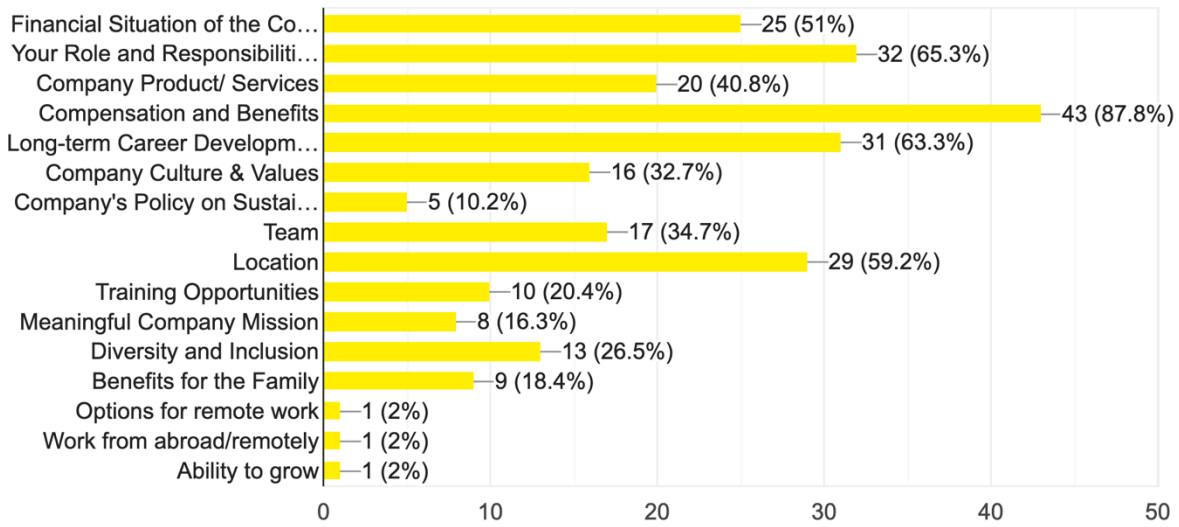


Figure 18. Respondents' motivation to choose the next employer.

Tech talents in the Netherlands will select their next employer mainly because of good compensation and benefits (87.8%), role and responsibility (38.8%), and location (59.2%). Figure 18 underscores the tech talents' focus centred round compensation and benefits.

Do you feel that your current salary is competitive within the local job market for your role and experience?

49 responses

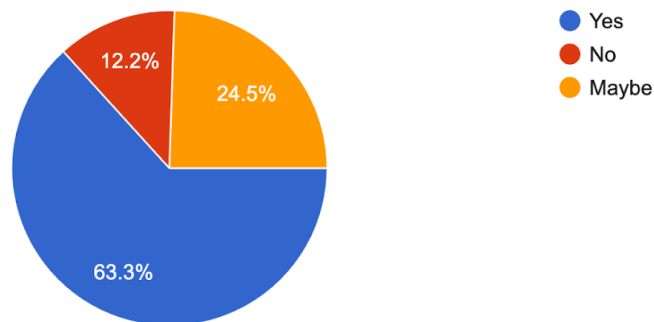


Figure 19. Respondents' salary competitiveness in the market.

Most respondents in Figure 19 believe their current salary is competitive locally (63.3%), while 12.2% disagree, and 24.5% are uncertain. A significant number of individuals see their salary as competitive which could indicate higher satisfaction with their jobs.

Do you feel that your current salary is on par with that of your Dutch-speaking colleagues?

49 responses

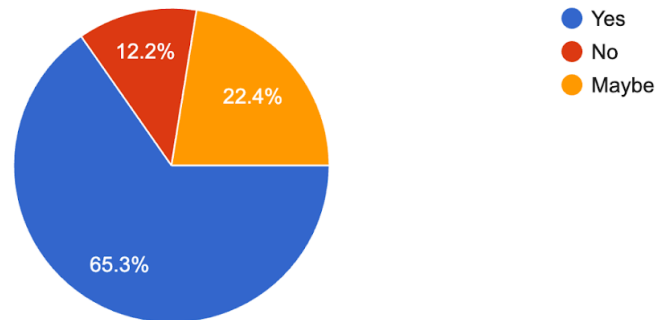


Figure 20. Respondents' current salary to their Dutch-speaking colleagues.

A majority of respondents feel that their current salary is on par with that of their Dutch-speaking colleagues (65.3%), while a smaller percentage answered no (12.2%), and 22.4% are unsure (Figure 20).

Have you faced discrimination while looking for a job in the Netherlands?

49 responses

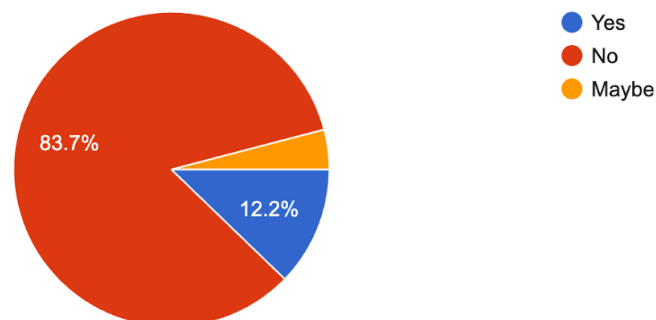


Figure 21. Respondents who faced the discrimination.

Respondents have faced discrimination at workplace (12,2%), according to Figure 21. However, most respondents have never faced discrimination (83,7%). The rest remains uncertain (4,1%). This demonstrates that a considerable portion of surveyed individuals have never faced discrimination at the workplace.

Do you see yourself living in the Netherlands in the next 5 years?

49 responses

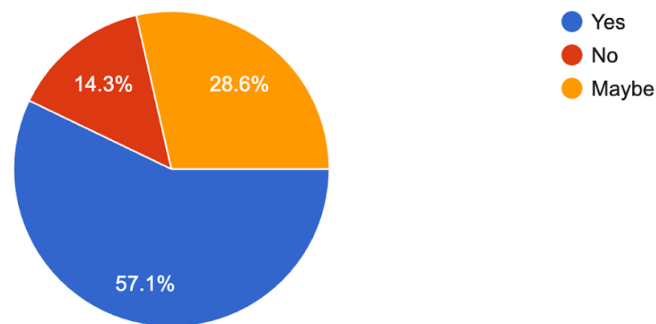


Figure 22. Respondents who plan to stay in the Netherlands.

Figure 22 reveals that 57,1% of respondents are planning to stay in the Netherlands. 28,6% are uncertain. The minor percent of 14,3% plans to leave the country. It indicates the majority of tech talents residing in the Netherlands plan to stay in the next 5 years.

The desired tech companies have been mentioned in the free section. Answers are represented by the ranking from the most to least mentioned:

Table 4. The ranking from the highest mention number to the lowest.

International Tech Talent's Top 10 Preferred Employers		
Rank	Company	Mentions
1	Booking.com	30
2	Uber	14
3	Adyen	13
4	ING	10
5	Rabobank	9
6	Amazon	8

7	Netflix	7
8	Google	7
9	Philips	6
10	Databricks	5

The first ranked employer, according to Table 4, is Booking.com, known for its challenging projects in IT and innovative tech culture (Booking.nl). The second ranked company is Uber offering DEI culture with career growth opportunity (Uber.nl). Adyen is placed after Uber, providing entrepreneurial company culture with the collaboration and creativity (Adyen).

4.3 Country-specific Analysis

4.3.1 Finland

Finland attracts more individuals by providing high quality education. Finland has been known for one of the most modern and progressive education system in the world. It has been ranked the 8th country among well-educated countries in 2023 (World Population Review 2023). 91% of adults at the age of 25 to 64 have a completed high school degree (Organization for Economic Co-operation and Development(OECD)). As a result, Finland's globally recognizable education system plays a major role for a tech talent to relocate to Finland. Furthermore, the emphasis on work-life balance has a sufficient impact on selecting Finland as a country for relocation. Many companies in Finland build work-life balance policies. Usually, full-time employees work 35-40 hours a week according to Work in Finland information. The flexibility offered by firms ensures more productive and balanced life. Promoting work-life balance and flexibility with working hours make Finland an attractive country to immigrate. Moreover, the high quality of life is indicated to be one of the most influential factors. What differentiates Finland in this matter is community, environment, and overall satisfaction of life. The quality of social belonging is high and positively impacted on one's life. The environmental movements towards sustainable and eco-friendly solutions are widely appreciated. People living in Finland can easily access nature without visiting rural areas of the country. Generally speaking, the satisfaction of life is an evaluation of the ones' income, personal belonging and happiness overview. To summaries, the main motivational factors for individual to immigrate to Finland lies on enhancing the satisfaction of life by granting access to education, flexibility at the workplace and better living.

As a part of improvement, addressing the discrimination issues is important. According to the Figure 11, 34.6% acknowledged that they have faced discrimination in the job search. The current dilemma may be concerning and cause anxiety and prolonged stress. As a result, tech talents might

consider resigning from a job or even moving abroad. The consequence of discrimination decreases the retention of IT personnel at the workplace. As a possible outcome, it could negatively contribute the motivation to work and dissatisfaction at work. As per second problem, 36.5% of respondents is dissatisfied that the salary is lower comparing to the local market. A majority of international tech talents participated in the survey may feel unappreciated due to their salary. It demonstrates the possible issues of discouraged personnel, unwillingness to work and the contrary principles of building DEI in the workplace. Consequently, these issues need to be addressed promptly and accordingly to maintain stable and diverse work culture. These areas of improvements could significantly affect Finland as an attractive country to relocate and settle. For Finnish companies as well as for companies operating in Finland the implementation of retention and DEI policies may be beneficial to meet the gap for salary and inclusion in the workplace.

Nevertheless, a substantial number of international tech talents see themselves living in Finland in upcoming five years. Figure 12 illustrates a positive and promising ability to retain personnel. Moreover, skilled workers could benefit from companies that focus on resolving critical issues, such as discrimination and salary expectation. Companies like Wolt, Supercell and Nokia in Table 2 provide a prospective reason for their employees. For this reason, respondents would prefer to be employed in the countries listed in the table.

In conclusion, Finland is globally recognised for its impact on high quality of life, education system as well as the bright impact on the environment. A majority of tech talents see the country as a prospective or permanent settlement. Yet there are some issues like discrimination and salary disproportion comparing to Finnish-speaking individuals. The suggestion for the companies would be to discuss these issues openly and promote more DEI workplace. Open discussions and inclusiveness at the workplace could overcome these challenges. In terms of salary dissatisfaction, the compensation and benefits programme could be considered to increase productivity and employee retention. The implementation of compensation and benefits plan could contribute for retention practices and create meaningful experience for international tech talents to consider Finland as a new home.

4.3.2 The Netherlands

The survey conducted for the Netherlands reveals many insights as the similar survey for Finland. Firstly, the key reasons why international tech talents chose the Netherlands to relocate is employment. The Figure 16 demonstrates that almost 80% of tech talents immigrated to the Netherlands for career opportunities. The results show that the Netherlands appear to be an attractive country to relocate to. As Holland considers to be one of the biggest and leading IT players, it demonstrates a harmonious integration and growing job market (NFIA 2023). Interestingly, there is a

strong emphasis on the compensation and benefits programmes. This suggests that companies operating in the Netherlands offer competitive salary packages positively influencing the local job market. It represents as a motivational factor for IT professionals to work with their current employer. Results oppose the positive statement toward current salary levels. The financial rewards and competitive salary play a crucial role for tech talents to work in the Netherlands. That explain the fact that many skilled workers plan to stay in the next five years. It clearly states that many surveyed IT talents are likely to be satisfied with the work condition and salary opportunities. To sum up, the Netherlands provides enough opportunities for IT talents to consider the Netherlands as a country for relocation. Furthermore, the insights suggest that the company's operation in the Netherlands and Dutch firms positively contribute for the tech market growth. The Netherlands meets the tech talents' needs and expectations. Therefore, it boosts retention of personnel and ability to upskill them within an organization. As the report emphasizes, the country is positioned as one of the leading tech markets reasonably (NFIA 2023). The preferred tech employers like Booking.com, Uber and Adyen provide favorable options for tech talents to integrate and retain. With high satisfaction of living in the Netherlands, it stimulates more long-term. Additionally, it gains the employer branding and becomes more attractive for tech talents to choose the Netherlands over other countries.

4.3.3 Comparative Analysis: Finland and the Netherlands

Finland and the Netherlands are recognized to be one of the leading and progressive countries in Europe. Therefore, it can be clearly observed through the tech talents reasons. Both countries achieve a considerable life-work balance. In Analysis Finland and the Netherlands consider to be an attractive destination to immigrate owing to this reason. In terms of Finland, it promotes high-quality education which earns a positive reputation. As a result, the country is a desirable arrival point for skilled tech talents constantly seeking learning opportunities. Similarly, the Netherlands reaches similar commitment through career opportunities. Round 80% of respondents immigrated to the country due to employability (Figure 16). At this point, the Netherlands positions itself to be an attractive destination for skilled workers looking for career development. Furthermore, the sustainable approach towards eco-friendly solutions is shared between countries. Both countries play a vivid role in environmental sustainability.

On the other hand, Finland faces challenges around discrimination. A considerable number of respondents shared that they have experienced discrimination. Consequently, it might have led to anxiety and mental issues in the job search. A substantial number of tech talents may observe it as a thread and reconsider Finland as an attractive destination. Additionally, there has been an express of unfair salaries comparing to the local market. This may also damage the country's

reputation. On the contrary, the Netherlands has contributed positively on the tech talents experience. One of the most satisfied factors for skilled workers is compensation and benefits. Moreover, an increasing number of respondents believe that their salary is competitive to the Dutch job market.

4.4 Summary

Ensuring long-term retention leads to significant results in the tech industry. As per summary, the summary can be observed both individually and together. Finland has a solid and recognizable education system that already attracts many tech talents for relocation. The focus on continuously promoting high quality education could encourage relocation of other IT professionals. The Netherlands, on the other hand, has a strong job market and employability for skilled workers. The main factor for talents to relocate is not only career opportunities but also compensation and benefits programmes. Additionally, the Dutch job market offers competitive and averagely high salaries for employees. These two factors attract a wide range of tech talents from different countries. Both high quality of living and work-life balance influence many tech talents to settle in the country. Promoting the work-life balance and flexibility allows countries to positively affect the job satisfaction rate. Discrimination as a current dilemma, particularly in the Finnish job search, increases dissatisfaction and may cause many negative long-term consequences of employees. At this point, companies should accordingly discuss the issues and create necessary policies for DEI and retention purposes. Both countries successfully maintain the tech talents within their market. The positive outlook might guarantee retention of many skilled workers. Currently, both countries succeed in remaining IT professionals in the market. To conclude, the long-lasting retention allows an economic growth in the country. By delivering main components indicated in the findings such as education, salary satisfaction and DEI initiatives, both countries could excel the current market need in the IT specialists. More DEI approach, fairly calculated salary based on the market and positive work culture are essential in the tech recruitment strategy for companies.

5 Conclusion

The last chapter of the undergraduate thesis aims to address the research question articulated in Introduction. Along with the RQ and investigative questions, the author targets to acknowledge insights and propose prospective solutions. This chapter provides a summary based on the theoretical review, implementation of the research, and its analysis. Moreover, the chapter discusses the overall relevance of the thesis as well as the author's reflection on the learning. The chapter will provide recommendations for companies located in Finland and in the Netherland. These suggestions could be implemented in the future.

The Research Question states the relevant concerns on implementing retention and growth of highly skilled international talents for companies in Finland and the Netherlands. Also, it is beneficial to investigate the RQ by understanding the key criteria to settle, focus area and the creation of long-lasting retention. Owing to the survey and analysis in the dissertation, the answer can be attained.

5.1 Reflection on Research

The subsection reflects upon an exploration of the findings in the Empirical Research and Analysis chapters. The key insights conclude the knowledge discovered in the research and potential areas of improvements for companies. Chapter 3.1 introduces the tech recruitment agency that assisted the author to define the research, research design and data collection. Company X itself was completed by the author of the undergraduate thesis. Furthermore, the client provided necessary sources and accesses to gather responses for the research. Chapter 3.2 draws an alignment between theoretical and empirical reviews. By implementing the theoretical part of the thesis, it underscores in-depth un comprehension of the topic. The emphasis on terminology, phenomenon and literature provides a reader the background needed to transition to the Empirical Research. The Empirical part focuses more on the relevant questions and challenges in the IT industry. From the perspective of HRM, it addresses a strategic response to tech talent shortage in the Netherlands and Finland. Chapter 3.3 explains the research definition, its design, and methods in the analysis.

Chapter 4 shares survey insights and evaluation upon them. In the subchapters 4.1 and 4.2, the survey results for both the Finland and the Netherlands similarly reviewed and presented. The visual representation in form of pie charts, bar charts and tables enhance readability and clarifies the analysis. The subsections outline a comprehensive view of the survey findings and help making evidence-based decisions. In Analysis section, the evaluation is delivered for both Finland and the

Netherlands. Overall, the study addresses the presents issues in both countries leading to solutions based on the respondents' concerns.

In essence, the sub-chapter summaries each section of the undergraduate thesis, enriched with analysis and conclusions. It offers strategic and efficient solitons in the areas of improvement for companies.

5.2 Recommendations for Companies in Finland

The educational excellence in Finland plays a major role in terms of country selection. The education system serves to attract tech talents to relocate. As a result, IT talents are concentrated in universities, colleges, vocational schools and specialized training centers. Consequently, to ensure long-term retention, firms located in Finland should proactively engage with educational institutions and discover prospective tech talents there.

The winning factor for Finland is the acknowledgment of work-life balance. The flexibility of working and harmony in work and personal life impact the tech talents decision to stay. In this matter, companies should initiate and promote policies that demonstrate the work-life balance in action. International specialists most likely to expect flexible and life-work balance while considering an employer.

The mismatch between the local salaries and international talent income rises a dissatisfaction and, as a result, may affect their decision to seek new country distention. Skilled tech specialists may feel undervalued due to lack of complete salary. The recommendation could be to compare the local salaries with the tech salaries and make necessary changes accordingly. Moreover, considering compensation packages that could align with market standards. It ensures that international specialist feel equal and rewarded.

Inclusive workplace is significant due to integration and adaptive challenges. Relocation for international tech talents is a serious decision. The adaptability and settlement might take time for them. The DEI practice could assist them with smoother integration and positive outlook on the company. This approach could build a sense of belonging and make the international professionals feel respected and valued.

According to the analysis, the current shortage of personnel remains, and skill mismatch approaches promptly as mentioned by Cobbett (2023). For companies retention strategies, considering upskilling programmes could be beneficial due to job market needs. Instead of focusing on recruitment process, HRM department could project pieces of training enriching current text talents at the workplace.

In conclusion, the retention strategy of international tech talents requires a multistep approach. The recommendations might provide some ideas for companies that are unaware where to begin or what to implement. Furthermore, continuous trend observation and survey feedback could ensure effectiveness in the HRM department.

The overview of area of improvements and recommendations are presented for readability purposes in Table 5.

Table 5. Recommendation on areas of improvement for companies in Finland.

Area of Improvement	Recommendation
Educational Excellence	Partnership with Educational Institutions
Work-Life Balance	Promote Work-Life Balance Policy
Competitive Compensation	Compensation Packages and Market-Based Pay
Inclusive Work Culture	Implement DEI Work Culture
Workforce Learning	Upskilling programmes for tech personnel

5.3 Recommendations for Companies in the Netherlands

The employability in the Netherlands is recognized significantly by international tech respondents. The observation demonstrates high potential for companies based in the Netherlands to offer jobs with relocation packages. The recommendation should not only be on the employability but also on offering challenging project and career development opportunities. This enhancement might significantly affect both growth and sustainment.

High quality of life increases the employability in the Netherlands. As a company, it is important to leverage the consistent path to elaborate the work-life balance in the workplace. The policies on lifework and flexibility could contribute to employees mental and physical health. Importantly, it could contribute to long-term retention.

Compensation and Benefits demonstrated in Figure 18 was an important factor for skilled tech personnel to choose their current employer. Consequently, implementing more competitive and fulfilling compensation packages could distinguish in the Dutch job market. This approach could present a company's dedication to financially motivate tech talents and ensures higher standards for IT employees.

Building the work culture on DEI initiatives could not only increase inclusiveness at work but also invest in awareness programs and policies. The programs could be a celebration of cultural awareness, promotion of keynote speakers from diverse and international background. Also, company success stories could be a part of building a solid reputation of a company and attract more talents. This approach could dramatically increase DEI framework for employees' and employer's benefits. Consequently, it might build a strong and mutual connection and sense of belonging for employees.

To sum up, the retention and growth for employees in the workplace allows companies to shape a progressive organizational culture. The recommendations might provide some insights for companies that consider maintaining the retaining policy and clueless where to start. Also, the suggestions might influence companies to enhance their work culture accordingly. Furthermore, HRM departments could monitor current trends through open source or feedback collection to monitor the changes.

The area of improvements and recommendations table is designed to efficiently summaries key recommendations in Table 6.

Table 6. Recommendation on areas of improvement for companies in the Netherlands.

Area of Improvement	Recommendation
Employability	Challenging Projects, Relocation Packages, Career Development Opportunities
High Quality of Life	Work-Life Balance Policy
Compensation and Benefits	Unique and Competitive Compensation Packages
Diversity, Equity, and Inclusion (DEI) Initiatives	DEI Initiatives and Awareness Programs

5.4 Reflection on Learning

The academic paper is relevant for professional development of the author. The researcher specializes in field of HRM, particularly in Talent Acquisition. In collaboration with the tech recruitment agency, research paper has a meaningful impact on further development ideas. Company X accommodated the author with necessary knowledge and tools to support his/her success.

During the research path, the author has built strong resilience in the company context. Working in the professional environment is not only about performing the tasks and duties and deliver results but also building communication skills and participate in negotiations. Moreover, the research has faced with unexpected changes and circumstance during the research work. Usually, the adjustments would occur almost on the daily basis; therefore, the author have maintained a strong resilience in the long-term prospective, benefiting the professional development. In the work

environment, these occasions happen often, and now the research is prepared for them. Expectedly, the author has deepened his/her knowledge in HRM. By conducting research and seeking solutions, there have been many observations and advancements. Currently, the researcher is familiar with relevant, trusted and, most importantly, useful literature and articles. Furthermore, the writer would utilize tools like Google Suite and LinkedIn Recruiter that is valuable for a HR professional. In general, the knowledge and ability to use software tools are highly relevant in the context of any job. LinkedIn Recruiter is a tool that is utilized by many HR professionals for finding personnel. Google Suite is an alternative of cooperate MS 365 suite that is designed for accessible collaboration and sharing information. These tools are beneficial for the author's development in the HR sector.

The bachelor's thesis benefited the research to formulate the actual action items for companies in the Netherlands and Finland. Having discovered and evaluated the current issues, the author had formulated the recommendations that could potentially deliver values to firms. Particularly, the ones who focus on leveraging and implementing the retention strategies for the IT professionals. Importantly, the suggestions were formulated on both theoretical and empirical support.

In conclusion, the reflection upon learning showcases the research's commitment in understanding the HRM process. Also, by having theoretical and practical knowledge of HR, implement them into actions benefiting both a company and professional development. Despite the challenges and minor inconveniences faced during the research, the experience has enriched the author's understanding and, as a result, contributed to the meaningful outcome in a form of the academic research paper. Finally, the bachelor's thesis certainly values the researcher HR portfolio. The dissertation can be demonstrated as a proof of the author's expertise and credibility.

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Appendices

Appendix 1. Survey Questions

1. The demographic and background section in the Netherlands
 - 1.1. Where do you come from?
 - 1.2. How old are you?
 - 1.3. In my area of expertise, I most closely identify with...

2. Motivations and Experiences of Expatriates in the Netherlands
 - 2.1. You moved to the Netherlands for ...
 - 2.2. What initially inspired your decision to relocate to the Netherlands?
 - 2.3. What motivated you to settle down in the Netherlands?
 - 2.4. What contributed to your decision to join your current company?
 - 2.5. From your standpoint, what are the elements that can influence a smooth integration into the workforce as an International Tech Talent?
 - 2.6. What will influence your choice of your next employer?
 - 2.7. Do you feel that your current salary is competitive within the local job market for your role and experience?
 - 2.8. Do you feel that your current salary is on par with that of your Dutch-speaking colleagues?
 - 2.9. Have you faced discrimination while looking for a job in the Netherlands?
 - 2.10. If yes, in what situation?
 - 2.11. List your top five desired employers in the Netherlands in order of your highest to lowest preference.
 - 2.12. Do you see yourself living in the Netherlands in the next 5 years? If no, please share why?

3. Email Marketing Request
 - 3.1. Would you be interested in participating in our future Tech Talent Insight Surveys?
 - 3.2. If yes, please leave your email here so we can contact you in the future.

Appendix 2. Survey Questions

1. The demographic and background section in Finland.
 - 1.1. Where do you come from?
 - 1.2. How old are you?
 - 1.3. In my area of expertise, I most closely identify with...

2. Motivations and Experiences of Expatriates in Finland.
 - 2.1. You moved to Finland for ...
 - 2.2. What initially inspired your decision to relocate to Finland?
 - 2.3. What motivated you to settle down in Finland?
 - 2.4. What contributed to your decision to join your current company?
 - 2.5. From your standpoint, what are the elements that can influence a smooth integration into the workforce as an International Tech Talent?
 - 2.6. What will influence your choice of your next employer?
 - 2.7. Do you feel that your current salary is competitive within the local job market for your role and experience?
 - 2.8. Do you feel that your current salary is on par with that of your Finnish-speaking colleagues?
 - 2.9. Have you faced discrimination while looking for a job in Finland?
 - 2.10. If yes, in what situation?
 - 2.11. List your top five desired employers in Finland in order of your highest to lowest preference.
 - 2.12. Do you see yourself living in Finland in the next 5 years?
 - 2.13. If no, please share why?

3. Email Marketing Request
 - 3.1. Would you be interested in participating in our future Tech Talent Insight Surveys?
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