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**Analysis of solutions to skilled  
labor shortage in international  
projects for Finnish technology  
companies**

DEGREE PROGRAMME IN INDUSTRIAL MANAGEMENT  
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Abstract  This thesis studied the options and their required process and paperwork needed for hiring skilled employees to international projects for Finnish technology companies. In the end of thesis, all the options were analyzed, and suggestive ideas were given. Finnish technology companies are facing skilled labors shortage to work in their international projects. The objective of this thesis was to find solutions to Finnish company's problem.  Methods to find information were mostly information collected in the governmental website or publications, Finnish labor laws and regulations. Based on the knowledge and experience, author gave possible proposals to different options.  There were four possible solutions to this problem. Immigration for the skilled labors, offshore human resource outsourcing, global PEO and umbrella company. These four options are analyzed accordingly.  Each option has its own benefits and disadvantages. Companies would need to consider many aspects to choose the right option which best suit their interest and situation.		
Keywords labor shortage, skilled labor, HRO, PEO, umbrella company		

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## 1 INTRODUCTION

While working for my previous technology company, I have seen the phenomenon of skilled labor shortage for international projects. Technology companies are serving customers globally, same like Finnish companies. The installation and operation of the machines are in customers' locations. It happens very often that projects need supervision and expert help in the different countries at the same time. But unfortunately there are not enough skilled engineers to work for the global projects. This has become common problem for many projects. Project managers are searching for solutions and resources to solve this problem inside the companies. But resource inside companies are limited and could be used in other projects. This is the background for this thesis.

This thesis will focus on the skilled engineers hired by Finnish technology companies. And after that they will be sent to customers' international sites to perform their expertise.

Skilled labor shortage in Finland has increased over the years. According to Yle news, "Three out of four companies are experiencing a shortage or even a severe shortage of skilled labour, according to the results of a survey of member companies conducted by Finland's Chambers of Commerce network" (YLE, 2021). In the survey, around 70 percent of the 1300 companies surveyed in 2021 has reported skilled labor shortage has hindered company development (YLE, 2021).

Skilled labor refers to the people who are higher or specialized educated and experienced in more complicated physical or mental fields. Skilled labor requires broader range of skills and produce more economic value than unskilled labor. (HAYES, 2021.)

## 1.1 Objective

For project work that are operating internationally, Finnish technology companies are struggling to find enough qualified skilled engineers. Recruiting in Finland locally is obviously the primary and straight forward action. But current situation is showing that this primary method is not enough to meet the need of project works. Finnish companies must search for other options other than recruiting locally.

The objective of this thesis is to analyze solutions to solve this problem and most beneficial way of executing solutions on behalf of Finnish companies. We will focus on Finnish technology companies which need skilled engineers to work in international projects to narrow down our research area. And skilled labor for technology companies is specialized in the project operation, mechanical, automation and other fields. Their working titles are mechanical engineer, automation engineer and alike. This research targets to find answers to below research questions:

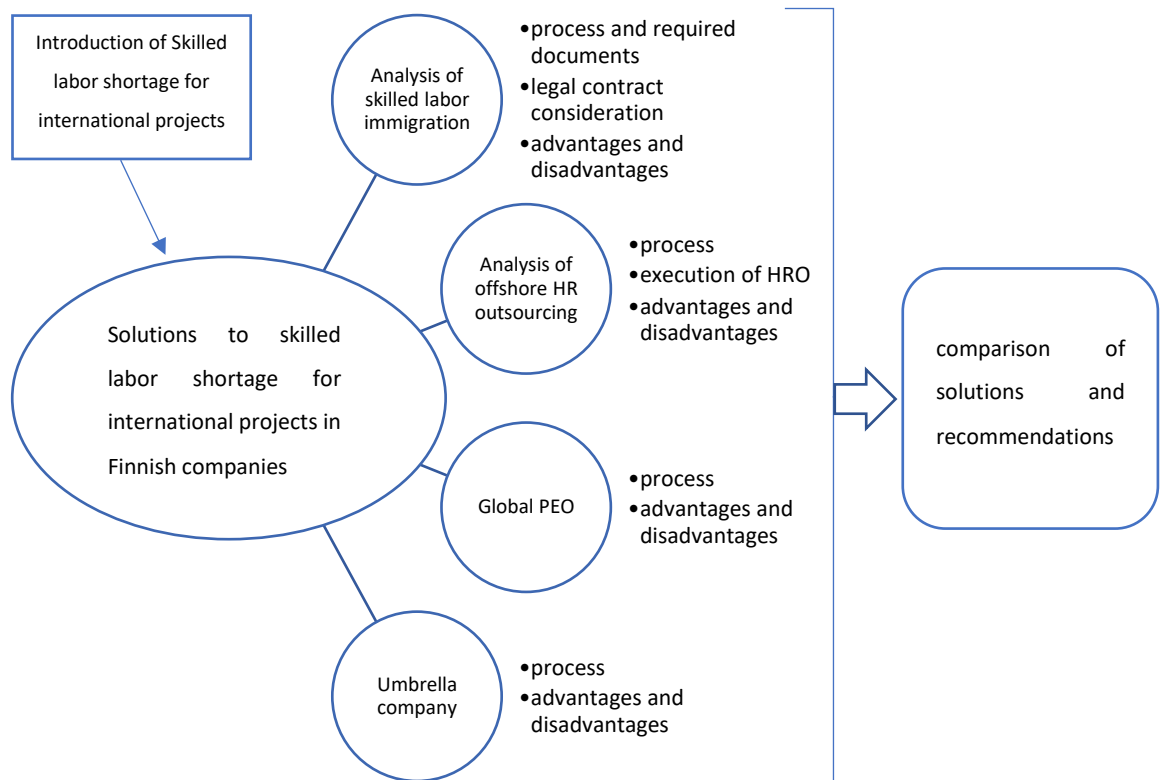
- What are solutions to skilled worker shortage in Finnish technology companies?
- What are the benefits and risks to these solutions?
- What processes and paperwork are needed in general for the solutions?
- What legal issues need to be aware of in these solutions?
- What contract issues need to be aware of in these solutions?

## 1.2 Research methodology

Qualitative method is used in this thesis to explain and analyze the solutions to the research problem. Regulations and laws in Finland are analyzed, worldwide business methods are studied, decoded, and organized to form the solutions. This thesis is descriptive research because it lays out the current situation and solutions; and researchers can only describe but not control over the variables (Kothari, 2004, p. 3). This is applied research since the target is to find solutions to the existing problem which is skilled labor shortage in Finnish companies' projects. As for quantitative or qualitative aspect, qualitative method involving quality phenomenon will be widely used in this research. Unlike conceptual research, which is focusing on developing

new concepts, this thesis is empirical research since it is relying on experience and observation and not intending to develop new theory (Kothari, 2004, p. 5).

### 1.3 Conceptual framework



## 2 ANALYSIS OF SKILLED LABORS IMMIGRATION

Globalization is changing business dramatically. Business can choose cheaper countries to produce their products and take advantages of cheaper labors in developing countries. In the other dimension, skilled labors can freely choose where they would like to work internationally. Quite understandably, skilled labors choose their employer mostly based on the incomes and benefits. Besides the financial

reasons, utmost important considerations for skilled labors are image of public offices and civil servants of the country, safety of the area, communicative working culture, challenging and interesting work, public services, the changes for spouse to work and/or study among others (Raunio, 2005, p. 7). For these aspects, Finland is a nice country to work and live in because infrastructure and safety are top in the world.

So why foreign experts are not staying in Finland to work? Low salary level for educated people comparing to high income countries, taxation and pension practices are main obstacles for Finland to attract foreign experts. According to survey, discrimination to foreign job seekers, lack of Finnish communication language and culture, poor work opportunity for spouses, difficulty to form social relationship and weather are the main disadvantages to retain skilled labors. (Raunio, 2005, p. 15.)

Even though globalization is a norm, governments all over the world must maintain stable livelihood for their residents by trying to protect jobs for them. This is the grounding for the continuous development of the country. All of these are understandable. I think job protection is necessary, same as the leverage of customs fee, for example. Free and uncontrolled flow of goods and manpower is damaging the society in too rapid phase that countries will suffer to handle. In the other angle to see this issue, if manpower and skilled labors are in shortage inside one country, it is not beneficial to follow the same rules. Job protection in this case is only damaging business and slowing down the economic growth. Government should follow the economic situation and make swift changes of the rules. Regulations should be made to adjust to and support the situation, but not the other way around.

In our research, we are trying to find answers for Finnish companies how to get qualified skilled engineer for their projects from other countries and what is the best execution method on behalf of Finnish companies.

## 2.1 Working permit options

In the solution of skilled labor immigration, the first step is to get working permit after right employee is found since this thesis is focusing on the skilled labors outside of EU

zone. Among different types of residence permit in Finland, there are three residence permit options to hire skilled workers for Finnish technology companies: residence permit for specialist, employed person and EU blue card.

- Residence permit for a specialist.  
Finnish immigration service defines a specialist as a person with higher education degree and working with special expertise (Finnish Immigration Service, n.d.). Processing time for residence permit for specialist take around one month for first application (Finnish immigration service, n.d.).
- Residence permit for employed person  
Decision will be done jointly by Employment and Economic Office and Finnish Immigration Service. The total processing time is approximately three months. (Finnish immigration service, n.d.)
- EU blue card  
Processing time is around one to two months for the first permit (Finnish Immigration service, n.d.)
- D visa  
According to latest news on end of March 2022, D visa will be launched by June 2022. This is a special kind of visa specially designed for skilled labors to get an express process to start to work in Finland. The specialty of this kind of visa is that process time is max 14 days if all criteria are met. And after applicant gets this kind of D visa, he or she does not need to wait for the plastic resident permit card but is allowed to directly fly to Finland. (Demokraatti, 2022.) We will not discuss about requirements and process for D visa as details are not published yet when writing this thesis.

Table 1. Requirements for residence permit of specialist, employed person and EU blue card

<b>Requirements for residence permit of specialist</b>	<ul style="list-style-type: none"> <li>• employment contract done before the application</li> <li>• special expertise is required</li> <li>• monthly gross salary should be over Eur 4,929</li> <li>• higher education degree</li> </ul>
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<b>Requirements for residence permit of employed person</b>	<ul style="list-style-type: none"> <li>• employment contract done before the application</li> <li>• employee income more than EUR 1,283 per month in 2022 or collective agreement applies to employment relationship (Finnish Immigration Service, n.d.).</li> <li>• employer should prove the workforce is needed</li> </ul>
<b>Requirements for EU blue card</b>	<ul style="list-style-type: none"> <li>• employment contract done before the application</li> <li>• special expertise is required</li> <li>• minimum gross income EUR 5069 per month (fringe benefits or daily allowances not included)</li> <li>• higher education degree</li> <li>• minimum work duration is one year</li> </ul>

We can see from above table that EU blue card requires highest gross income and residence permit of employed person requires lowest income.

The first residence permit requires all needed documents to allow foreigners to legally work in Finland. The extended residence permit is easier to apply if the situation remains same with the first residence permit. So, we will analyze only the process and paperwork needed for the first residence permit application.

Table 2. Process and paperwork needed for residence permit of specialist (Finnish Immigration service, n.d.)

<b>Application process for residence permit of specialist</b>	<b>Required documents</b>
Step 1: The specialist has found a job.	
Step 2: The specialist submits application online or by paper. Documents need to be translated and legalized if not original documents are not in Finnish, Swedish or English.	<ul style="list-style-type: none"> <li>• Valid passport and color copy of passport information page</li> <li>• Passport photo</li> <li>• Employment contract</li> <li>• Document proves legal residency of country where application is submitted</li> <li>• Certificate of principal terms and condition of employment or consultancy agreement</li> <li>• Job description</li> </ul>

	<ul style="list-style-type: none"> <li>• Certificate of a higher education degree</li> <li>• Form MP_1(if applying in Finland and apply for the first residence permit)</li> <li>• Latest pay certificate (if applying for and extended permit)</li> </ul>
Step 3: The specialist visits service point of Finish Immigration Service in Finland or abroad. Pay for the application online or in service point.	
Step 4: Waiting for decision. If the decision is negative, the specialist can appeal the decision to an administrative court.	

Table 3 process and paperwork needed for residence permit of employed person (Finnish Immigration service, n.d.)

<b>Application process for residence permit of employed person</b>	<b>Required documents</b>
Step 1: The employee has found a job.	
Step 2: The employee submits application. Documents need to be translated and legalized if not original documents are not in Finnish, Swedish or English.	<ul style="list-style-type: none"> <li>• Valid passport and color copy of passport information page</li> <li>• Passport photo</li> <li>• Employment contract</li> <li>• Document proves legal residency of country where application is submitted</li> <li>• Form MP_1(if applying in Finland and apply for the first residence permit)</li> <li>• Employer fills in form TEM 054 and sign it</li> </ul> <p>Documents from employer:</p> <ul style="list-style-type: none"> <li>• Form TEM0.54 filled and signed by employer</li> <li>• Certificate of paid taxes should be no more than 3 months old</li> <li>• Certificates on employer's statutory insurance premiums</li> <li>• Report about company's employee amount</li> </ul>

	<ul style="list-style-type: none"> <li>• Report about employee's distribution from Finland and within the EU/EEA.</li> </ul>
Step 3: The employee visits service point of Finish Immigration Service in Finland or abroad. Pay for the application online or in service point.	
Step 4: Waiting for decision. If the decision is negative, the specialist can appeal the decision to an administrative court.	

Table 4 process and paperwork needed for EU blue card (Finnish Immigration service, n.d.).

<b>Application process for residence permit of employed person</b>	<b>Required documents</b>
Step 1: The employee has found a job.	
Step 2: The employee submits application. Documents need to be translated and legalized if not original documents are not in Finnish, Swedish or English.	<ul style="list-style-type: none"> <li>• Valid passport and color copy of passport information page</li> <li>• Passport photo</li> <li>• Document proves legal residency of country where application is submitted</li> <li>• Form MP_1(if applying in Finland and apply for the first residence permit)</li> <li>• Employment contract indicating job description and salary</li> <li>• Prove of higher education degree</li> <li>• Lasted pay certificate (for extending permit)</li> </ul>
Step 3: The employee visits service point of Finish Immigration Service in Finland or abroad. Pay for the application online or in service point.	
Step 4: Waiting for decision in the same country where application is submitted.	

Comparing the above mentioned four options, a foreign skilled labor (not EU citizen) can use resident permit for specialist, EU blue card and D visa providing this person has specialized expertise because these three options have shortest processing time. If all the requirements are met, I think EU blue card is a better option for companies in need of flexible working in other EU countries. Because, for example, with EU blue

card issued by Finland, this skilled person from non-EU countries can move to other EU countries. They can also move back to Finland if the other EU country did not grant EU blue card there. He or she can legally stay in Finland for three months after the EU blue card is expired. (Finnish Immigration service, n.d.) This flexibility is beneficial for the project works possible needed cross the whole EU. If Finnish companies regard fast process time for the skilled manpower, D visa is the better option if the promised 14 days process time is achieved.

## 2.2 Employment contract consideration

Finnish labor law stated that employment relationship is legitimate if employer “perform work himself on the employer’s behalf and employee work in return for consideration under employ’s supervision” (Äimälä, 2012, p. 15). Employer has obligation to provide a document which contains principal terms of employment relationship. This document could be the provisions of the applicable collective agreement or legal provisions. (Äimälä, 2012, p. 29.)

One important deciding factor of making contract is collective agreement. This is a agreement only binding employers and associations who have signed the agreement( signatory aprties). “Collective agreement is an agreement concluded by competent parties on the terms and condisions of employment.” (Äimälä, 2012, p. 17). Employment contract have to cover many important informations. Job tasks, place, payment and so on. Here we will stand on the company’s point of view and discuss the provisions which will have high impact on the success of project work.

First important consideration is the duration of employment contract. There are only two types of employment contracts with respect to duration in Finnish Labor law: indefinite contract and fixed term contract. An employment contract does not state the ending date is regarded as indefinite contract by default (website of occupational safety and health administration in Finland, 2021). A fixed-term employment contract can only be made for a justified reason, for example the nature of the work, substitution, training, or employee’s own will. (Äimälä, 2012, p. 30.)

When companies are drafting employment contracts, duration of the contract should be based on the project duration and employee's work task. Since we are discussing about hiring skilled labors from international talent pools to work in projects, indefinite contract is not our best option in the beginning. Because work culture differences among countries and areas impact work efficiency greatly. Both employer and employee need time to try the work and environment and see how it goes. Fixed term employment contract meet this requirement and brings many benefits to Finnish companies. If the work would be needed for one year in the project, a fixed term contract will be better bonding for both parties to ensure the work will be accomplished for the project. If the employee's work is satisfactory in trial period or fixed-term and there is future need for his or her work, indefinite contract could be considered afterwards. Benefits and risks are evaluated as show in below table.

Table 4. Benefits and risks of two contract types

	Fixed term contract	Indefinite contract
Benefit	<ul style="list-style-type: none"> <li>• Assurance to cover the work for the fixed term</li> <li>• Contract can not be terminated during the fixed term</li> <li>• Benefit to cover regular employee's leave for a period of time</li> </ul>	<ul style="list-style-type: none"> <li>• Stable and qualified expertise resource can meet requirement and need for future projects</li> <li>• Employees are more committed to business in indefinite contract</li> </ul>
Risk	<ul style="list-style-type: none"> <li>• Financial lost if project ends before the fixed term contract</li> <li>• Not so attractive option for job seekers comparing with indefinite contract</li> <li>• Legal and regulation risks when hiring internationally</li> </ul>	<ul style="list-style-type: none"> <li>• More employer legal obligations (Globalization Partners, n.d.)</li> <li>• International indefinite contract law challenges</li> <li>• Legal and regulation risks when hiring internationally</li> </ul>

Second crucial consideration for Finnish businesses when hiring international skilled labor is about termination clause and notice period. Ending date in the fixed-term contract indicate the last day of employment relationship. Eventhough, both parties can mutually agree on the ending date before the contract ending date if the grounds on the Employment Contract Act is met. Indefinite employment contract is terminated

by giving notice, meaning the employment relationship ends on the last day of the notice period. (Ministry of Economic Affairs and Employment, Finland, 2019, p. 27.)

Grounds for contract termination should be “proper and weighty” according to law, which have two categories:

1. grounds relating to employee’s person misbehavior
2. grounds relating to financial and production. (Äimälä, 2012, p. 155.)

The much more strict and limited conditions are needed for dissolution of employment contract. One example is when employee is absent from work at least seven days without informing the employer, the employer has right to regard the employment contract dissolved from the first day of the absence. (Äimälä, 2012, p. 161.)

Grounds for indefinite contract termination are listed in below table.

Table 5. Grounds for indefinite contract termination and execution (Äimälä, 2012)

Ground	Execution
Absent from work	After 7 days without informing employer, contract can be seen as void.
Deficient work performance	Preceding warning is required.
Refusal to work	Preceding warning is required.
Competing activity	Termination of contract can be done without notice in serious case.
Breach of business and trade secrets	Termination of contract can be done without notice.
Use of intoxicants or appearing intoxicated	Blood test or other employee’s observation can be used as proof. Termination of contract can be done with or without notice.
Criminal activity	Pilferage, embezzlement, forgery are common grounds for contract termination.
Company financial & production-related termination	Company should inform employee as early as possible

According to the Employment Contract Act, maximum notice period is six months and no minimum notice period. If no collective agreement exists, both parties can agree on no notice period in the contract. If notice period is not mentioned in the employment contract nor collective agreement, Employment Contract Act will be followed. As

Employment Contract Act indicates, if the employment relationship duration is less than one year, the notice period is 14 days for both parties. If the employment relationship duration is more than one year and less than four years, the notice period is one month for both parties. (Äimälä, 2012, p. 34.)

### 2.3 Advantages and disadvantages

The first advantage of foreign skilled labor recruitment is providing qualified human resource to satisfy project work needs. Skilled manpower is so important that it offers great value to customers and business success in return. In many project contracts, skilled engineer's supervision work takes big part of project's financial earning.

Second, Globalization is changing the manpower resource to be boundaryless. Companies, especially the ones serving international customers, will have to compete for the human resource internationally. This is an advantage for giant companies which have strong financial status and resources. But this could be disadvantage for smaller companies and countries that are lack of attractive offer and grounds to skilled labors.

Third, International skilled labors bring their unique background, experience, and mindsets to business. Innovation requires people to think out of the box and craft methods differently. Divergent ideas from a group of people holding different perspectives can boost innovation faster than a group of people having same ideas, which is very likely for people growing and learning in the same environment and stimulation. An organization need diversity from talents to thrive.

Fourth, competition is important to Finland in the country level and its economic growth. When there are more skilled labors employed from abroad to Finland, it will impact on local employment. One social phenomenon is skilled labor in Finland will be more valued than immigrated manpower because of language and work culture among other reasons. This will help Finnish skilled labors get better income and social status; this will result in more young people wanting to get better education and income. Income and status difference motivate individuals to improve themselves and increased skilled talents increases country's competitive strength as a result.

There are always two sides of the sword. Disadvantages for skilled labor immigration are existing as well.

First, immigrating foreign skilled labors to Finland will face language, culture, business style, family change and many other challenges. It takes time to orient and settle down newcomers. To retain these skilled labors is even more difficult than recruit them, which need their individual experience to make the decision.

Second, Long residence permit application time hinders the progress of project work. Sometimes target manpower amount and time schedule are not possible to be met due to the postponed application processing time. This is certainly the bottleneck of project progress. This disadvantage can be eliminated by recruiting locally if possible, which is not the easy task.

Third, Recruitment process, contract negotiation and paperworks are time consuming. Contract clauses are crucial to control business risks and obligations especially in the case of international hiring. For example, in the project work, when Finnish company hired employees sent to another country to work, there will be more contractual considerations and complexities. And usually there are not only two parties involved, but there could also be agencies, third party organizations and so on.

Let's imagine the situation after this skilled employee has gotten the Finnish residence permit. What can be the eligible projects for the employee to work within the EU zone? According to Swedish Migration agency, if the work in other EU countries is less than 90 days, this non-EU skilled employee does not need to apply for the resident permit in another EU country. If this person is a permanent employee of a company that operates in another EU/EEA country, and she or he comes to another EU country to perform temporary acquisition or subcontracting tasks as specified in the regulations concerning the freedom to provide service, requirement is valid resident permits in one EU country. (Migrationsverket, 2020.) If the work is more than 90 days, work permit is needed in EU countries.



### 3 ANALYSIS OF OFFSHORE HR OUTSOURCING

Due to the globalization and internationalization, offshore Human resource outsourcing (HRO) has become a normal business practice. 20% significant increase and 40% modest increase of HRO activities has reported over the last five years (Delmotte, 2008, p. 2).

Human-resource outsourcing (HRO) is a process of outsourcing works like recruitment, payroll, training and so on to a third party that is expert in these fields (Seth, 2011, p. 5). It involves redesign job, decomposition and decomposition and changes in the job and relationships. It is not simply moving jobs from one country to another. (Peck, 2017, p. 5.) Operation of offshore outsourcing is a low profile global industry. Little data and information is shared, outsourcing contracts are confidential and most of information are restricted to advisory firms. (Peck, 2017, p. 7.)

Human-resource outsourcing(HRO) can be fully or partial. Full human-resource outsourcing covers all HR functions, which are outsourced to a group of people outside the company. Partial outsourcing has two methods. One is outsourcing permanently one or a few HR management activities, the other method is single HR management activities or parts of them can be outsourced for a short time. (Žitkienė, 2015, p. 6.)

Company can outsource HR service by project, which is the ideal plan for our case. HR firms can provide variable specialized services for companies. Rate for this service depends on project complexity and length. (Seth, 2011, p. 8.)

Finnish companies want to hire skilled engineers for projects is a specific target. Contract length and requirements are based on project. Partial outsourcing is a good option. Holding this objective, Finnish companies can draft partial service contract with HRO service provider. This contract should include specific HR service functions they would like to be outsourced to HRO service provider. In our case, partial HRO service should at least include:

- payroll of this employee and other benefits according to local labor law and regulations.
- Contractual and legal support

There are many benefits for HRO. With the help of HRO, Finnish technology companies can manage to hire skilled labor in the country that is in the customer's country. Hiring process can be more controlled by the Finnish companies. These locally hired skilled people has the same culture and language with customers, which will be a great benefit for the business to execute smoothly. HRO can handle labor payroll and legal issues following local laws and regulations, which saves money and cost for Finnish companies.

Finnish companies can save the complication to set up a new office function in the foreign country and still expanding the market and serve customers.

### 3.1 HRO process

Human-resource outsourcing is a complex process. A management model for the outsourcing of human resources includes three stages: planning and analysis, decision-making and management.

In the planning and analysis phase, companies need to consider benefits and expected targets to achieve. (Žitkienė, 2015, p. 7.) In the decision-making stage, companies should use generic steps to make decisions (de Boer, 2006, p. 444). In the management phase, companies should evaluate the performance of human-resource outsourcing by the criteria that are important factors to decide on outsourcing. Time and criteria are changing with time, so the evaluation and monitoring should update with time. (Žitkienė, 2015, p. 7.)

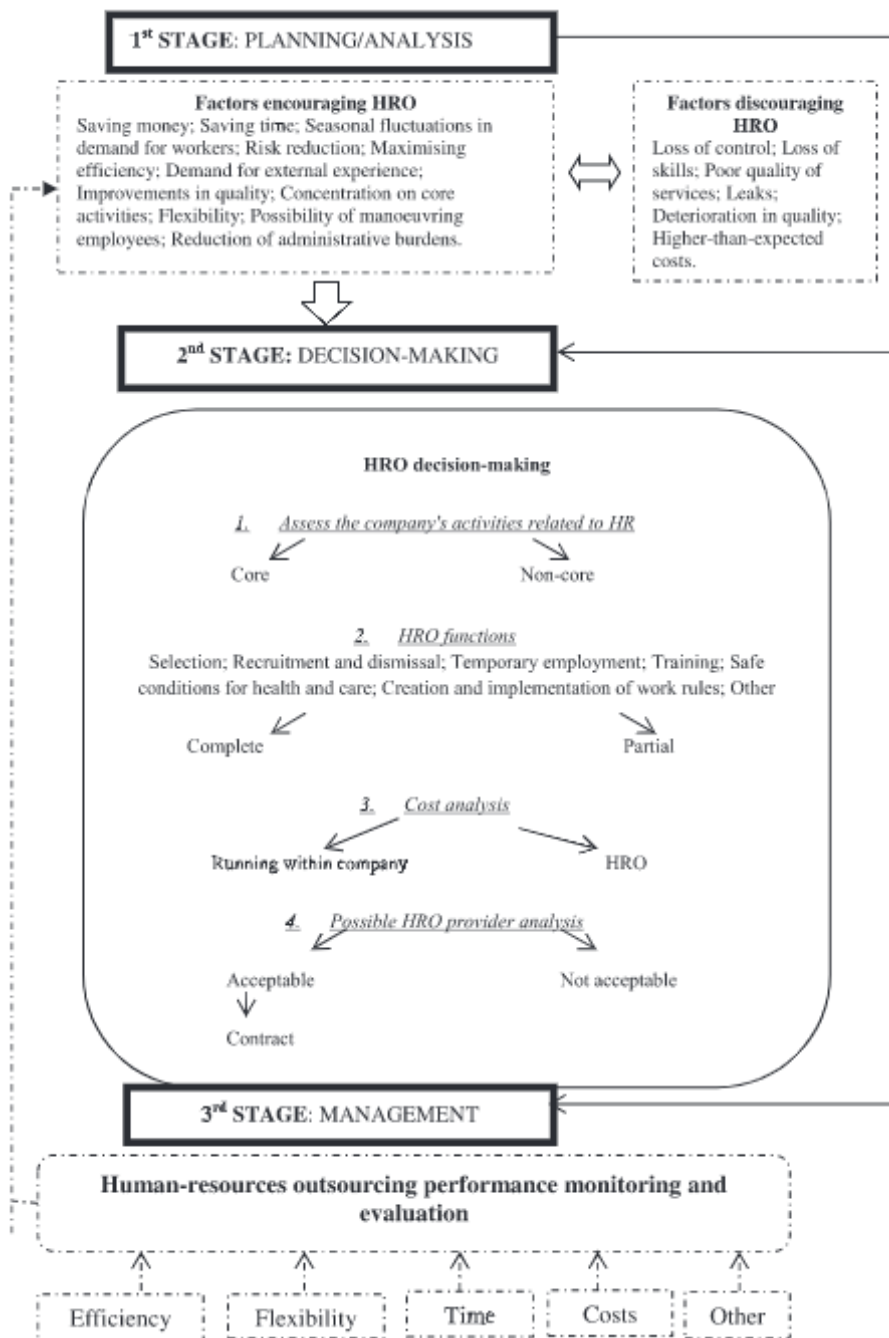


Figure 1 three steps of Human-resource outsourcing. (Žitkienė, 2015)

### 3.2 Execution of HRO

When executing HRO, the important considerations include (Seth, 2011, p. 132):

- Choose outsourced functions carefully
- Choose the right service provider

- Outsourcing contract with service provider should include penalty clauses and incentives to booster accountability
- Set up performance measurement and monitor regularly
- Understand vendor's security protections to ensure information safety

Outsourcing contract is important legal document. According to research by Gartner, 15% of outsourcing contracts in Western European companies were renegotiated within the first twelve months (Seth, 2011, p. 129).

### 3.3 Advantages and disadvantages

According to survey, more than half of the respondents think HRO has helped them to utilize higher strategic role to some extent (Delmotte, 2008, p. 3). Human-resource outsourcing saves money and time for business. When outsourcing this non-core activities to HR service provider, companies can focus and use limited money and resources in its key value activities and win competitiveness in the market. HR service providers are the chosen experts in the field. Companies can get the skilled labor best suit for the project and task and eliminate uneffecient employees easily.

Human-resource outsourcing is an effective way to bypass organizational politics and increase efficiency (Seth, 2011, p. 131). It is not only a tool to decrease cost, it is also a strategic tool to gain more value for business.

Another benefit is that HRO lowers the future recruitmentin cost in differnet countries where projects operate. Abandunt competitive outsourcing service providers provide wider options for business to choose from.

Most important benefit for our point of view as we view in the perspective of Finnish company looking for project engineers, HRO can handle the short-term skilled labor recruitment with greater flexibility and productivitivity and HRO helps business to transfer the risks and uncertainty to service providers. These recruitment specialists are able to use technologies, experience and their networks to find right skilled labors for project in more efficient way. This is important because project work is time-sensitive and manpowers are needed sometimes in a short notice from customers. Regarding to risks of employed skilled labors, HRO can use their strength and legal groups to handle

risks if some accidents and complication occur. Finnish companies can have a peaceful mind that they will not be stuck in the trouble if happens. Their energy and focus can be used in the success of project work and customer satisfaction.

Another benefit of HRO is that technologies HROs are using are bringing extra values to clients, according to market research. For example ADP Total source, which is a HRO company offering full scope HR management service, has award-winning technology to serve clients. Their cloud-based software platform is easy to use and includes all HR functions and can instant integrate with many third party companies. (Getapp, n.d.)

Human-resource outsourcing has potential disadvantages as well. An inadequate HR service provider will bring negative results to business. For example, negative results can be unsatisfactory service quality and company internal conflicts (Seth, 2011, p. 134). Vague(not clear about standards, performance expectation and roles) or rigid contract clauses with service provider can end up in dispute that is money and time consuming. Same like other outsourcing business, products or services, both parties need to have a mutual understanding and communicate in a good manner to achieve a common agreed goal. Information between the two parties should be shared and well communicated. Business partners need to build up the trust by their actions to keep long-term business relationship. Any problem in the HRO company will effect its client companies, so communication, shared information, risk management and change management are important for Finnish companies when dealing with HRO companies.

Outsourced HR functions are not easy to monitor and control as in-house HR generally. In-house HR function can be measured in three aspects:efficiency, effectiveness and impact. Efficiency is measuring how much time and resource are used for one job. For example, cost-per-hire. Effectiveness is checking outcome of the HR job. Impact means the strategic value HR has created. (Lawler, 2015, p. 66.) Outsourced HR function can be measured in the same way, but with the help of the third party service provider. In practical, when Finnish companies outsource part of HR function to HRO company that is located in another country, the easiest way to check the HRO work outcome is to check how fast they manage to hire and prepare

qualified skilled labor to work. The difficulty to control or make changes to the outsourced offshore HR process is existing and unmeasurable.

Cost of offshore HR outsourcing service is a important consideration for all companies. It could be benefical if the cost is lower than keeping own HR department. It can turn to be disadvantage if the cost is greater than in-house HR department and strategic benefits. According to various HRO service providers' websites, the average cost of HRO in 2022 is 53 to 1500 USD per month depending on the service scope. HRO cost models can be a standard fee, paid in regular time intervals, cost per employee per month, hourly cost or percentage of each employee's gross income. Companies can choose the cost model based on their need and situation. (Multiplier, n.d.) Studies about market cost of HRO is listed in below table from many famous service providers.

Table 6 Cost of HRO from some service providers

HRO service providers name	HRO cost	Resource
Paychex Flex	Start from \$60	<a href="https://www.paychex.com/">https://www.paychex.com/</a>
Oasis outsourcing	\$39 to \$500 per month	<a href="https://www.oasisadvantage.com/">https://www.oasisadvantage.com/</a>
Insperty	Start from \$230 per person	<a href="https://www.insperty.com/">https://www.insperty.com/</a>
Trinet	\$80-\$600	<a href="https://www.trinet.com/">https://www.trinet.com/</a>
ADP Total Source	Basic rate \$290/ year	<a href="https://www.adp.com/">https://www.adp.com/</a>
CPEHR	Start from \$50	<a href="https://www.cpehr.com/">https://www.cpehr.com/</a>
Justworks	Basic plan \$49/ month	<a href="https://justworks.com/">https://justworks.com/</a>

There is disadvantage for employee development whening using HRO. Because the employees are signing fix-term contracts for projects, their insecurity feeling can be increased (Seth, 2011, p. 134). Their learning capacity for the work can be disrupted and noncontinuours after the project. Company may not have strong binding instince to train and teach this short-term employee as well.

If businesses rely on one HRO service provider to do the work and no backup and exit strategy, it could backfire quickly if some changes happen to this vendor. Change management and exit strategy are important to prevent the smooth operation of HRO.

(Lawler III, 2004, p. 230.) Businesses should monitor the situation HRO company and make the best prediction for the changes to lower the risks.

## 4 GLOBAL PEO

Professional employer organization (PEO) started to show up in the market in the early 80s in United states (Donnelly, 2022). It has been growing after that all over the world. PEOs have co-employment relationship with their clients by offering various human resource services and place clients' employee on their own payrolls. In this kind of partnership, PEO service provider is the employer of labors for tax and insurance purpose; PEOs and their clients share the management and legal responsibilities. That is why PEO can be also called as co-employers. (Lombardi, 2008, p. 1.)

Businesses are 50% less likely to go out of business and 7-9% more growth than usual if using PEO, according to the National Association of Professional Employer Organization (Multiplier, n.d.). Global PEO can help companies about the challenges while hiring international employees. Global PEO can make sure the initiating and terminating employment contracts are following local laws and regulations and pay employees in the local currency and bank accounts. (Muëller, n.d.)

One example of Finnish PEO, Silta Ltd., mentioned their service includes human resource services, employment services and HR administration. It provides payroll services to employees working in Finland even if the client company is entirely based outside Finland. Silta Ltd. release the client company from tax and social security responsibilities. (Silta, n.d.)

### 4.1 Global PEO process

PEO and its client can initiate the partnership by drafting a contract clarifying which party will take legal and administrative responsibilities of their joint employees. After the contract is activated, PEO does not involve in employee's daily work. PEO does not participate in job interviews and hiring neither. (Lombardi, 2008, p. 4.)



PEO process can be in below steps:

1. First contact with global PEO service provider
2. Sign a PEO contract
3. Client makes final decision of hiring an employee candidate
4. Employees receive and accept the offer
5. PEO service provider prepares employment contract
6. Client approves the employment contract made by PEO
7. Employment contract signed
8. PEO service provider completes the new employee registration
9. Employee starts working and reports to client directly
10. Client pays cost of employee and PEO service fee monthly (Muëller, n.d.)

#### 4.2 Advantages and disadvantages

First advantage is gaining the economies of scale when PEO service providers accumulate clients' need and requirements (Lombardi, 2008, p. 1). Clients having higher risk of work injuries and illnesses are more prone to take PEO service because PEOs can pool and distribute their risk to all the clients; and they can get better insurance and health care contracts (Lombardi, 2008, p. 10). Sending skilled supervisors to clients all over the world to work in clients' sites is risky in respect to the work injuries and health care costs. Partner with PEOs will lower the risk and cost for Finnish companies.

Second advantage is that PEOs can release the burden of increasing administrative cost for their clients. These costs are generated from employment benefits, for example health care, payroll, retirement plan and so on. By offering employ benefit package, clients save their administrative cost and PEOs earn service incomes. (Lombardi, 2008, p. 3.)

The third advantage for business to partner with global PEO is the "shared" legal responsibility. It is very common nowadays when PEO is in charge of certain HR process for the employees, this PEO service provider is responsible for the liabilities concerning these processes under the law. That means if PEO has agreed about taking

the responsibility of employee payroll and benefits, this PEO service provider has also liabilities to its responsibilities, for example, the liability to compensate employee's work injury. (Lombardi, 2008, p. 3.) To choose the right PEO service provider which has well covered insurance for accidents and mistakes can lower the business risks.

There are other benefits to clients internally. After companies move some of their HR functions to PEOs, manpower and energy can be used in more strategic activities. The existing process and operations can be more streamlined and efficient. Besides, companies can consult and utilize experienced humanresource experts from PEO service providers and benefits from it. (Basso, 2009, p. 10.)

The fourth advantage is the flexibility and cost saving comparing with other options when business is exploring new markets. It is very complicated process and costly to set up a new entity in a foreign country. Instead, using the service from PEOs can be a much more flexible and cheaper version of testing the new market. If it does not working well in the new market, stop the service contract with global PEO is much easier than shutting down the newly built company. (VelocityGlobal, 2019.)

For Finnish technology companies, customers and projects can be from every continent. To partner with global PEO is efficient option for international projects especially for small to middle-sized companies. Because they normally lack experts of foreign HR processes and legal issues. For bigger companies global PEO is good choice when the cost and risk of opening a new company or subsidiary in a foreign country is high (Muëller, n.d.) and it does not make sense to keep it running after the project is done. Finnish companies then can focus on their key value activities, get skilled employees and no need to worry about law liabilities. Because global PEO has legal presence and experts in international employment laws all over the world, they can ensure employees receive right amount of compensation or benefits and pay right amount of tax according to local regulations (What is a PEO?, n.d.).

Disadvantages include the lack of control to the outsourced HR function. Companies do not have same levels of administrative power to the PEOs like their own internal functions. The control to PEO HR function can be difficult. The changes in PEO service providers will impact on the clients' employees in the future. For example, the change of insurance coverage and clauses.

PEO service providers have other clients, and their workload is distributed to different clients so the service level and communication level can be fluctuating.

The advantage about shared legal responsibility can be disadvantage as well. Since the PEO and client are co-employer of labors, the mistake made by PEO will be considered as clients' mistake too. Clients are liable to take the responsibility and cost for the mistake. This makes choosing the qualified PEO very crucial. (Stowers, 2022.)

One of the most important concern from companies is seen as disadvantage: the service cost of PEO. Methods of PEO service charge are percentage of each employee's salary or a flat fee for each employee. Fee is from 3 to 15 percent of employees' salary for the first method. Flat rate per employee starts from 49 USD per month for basic services. (Wroten, 2018, p. 11.)

The decision of hiring a PEO or not should be carefully calculated (Wroten, 2018, p. 11): First, we need to list the current employee benefits needed and costs of them. Second, calculate how much resources from the company are spent on the administrative works and HR functions to current employees. Third, ask PEOs and compare the cost and services.

## 5 UMBRELLA COMPANY

Individuals who are not running business can use umbrella companies to invoice customers. We can divide these individuals into two categories: agency workers and consultants. Agency workers are hired by a contracting agency and employed by an umbrella company collectively. Consultants contact and invoice their own client through an umbrella company. (Arvas, 2011, p.3.) Umbrella companies offer individuals social security coverage and administrative functions, while individuals can directly contact their clients and get the job (Ichino, 2018, p. 14).

Umbrella companies are very similar to temporary work agencies. The only difference is that employee in umbrella companies find employer by own will and action while it is employer decide who to hire in work agencies (Westregård, 2020, p. 212).

### 5.1 Process of working with umbrella companies

The process of working with umbrella companies is illustrated by below table:

Table 7 Process and paperwork needed for partnering umbrella companies (Contractor Umbrella, n.d.)

<b>Process of working with umbrella companies</b>	<b>Required documents</b>
Step 1: Foreign company chooses an umbrella company in the local operation and sign the contract.	<ul style="list-style-type: none"> <li>• Business contract</li> </ul>
Step 2: The umbrella company searches qualified employees to work for the foreign company. The umbrella company can search employee through recruiting company.	<ul style="list-style-type: none"> <li>• Service contract with recruiting company.</li> </ul>
Step 3: Qualified employee is found and work directly for the foreign company. The umbrella company is the employer of record.	<ul style="list-style-type: none"> <li>• Employment contract</li> </ul>

Step 4: Employee's work is supervised by local supervisor. Employees give timesheet to recruitment agency and umbrella company.	<ul style="list-style-type: none"> <li>• Working timesheet</li> </ul>
Step 5: The umbrella company invoices the recruitment agency for the employee's cost, along with the reimbursable expenses.	<ul style="list-style-type: none"> <li>• Invoices</li> <li>• Reimbursable expenses</li> </ul>
Step 6: The recruitment agency send invoice to the client (the foreign company)	<ul style="list-style-type: none"> <li>• invoice</li> </ul>
Step 7: The foreign company pay the recruitment agency	
Step 8: The recruitment agency pays the umbrella company	

Process of using umbrella companies are not more complicated than the HRO and PEO.

## 5.2 Advantages and disadvantages

Umbrella companies eliminate the complex and burden of establishing own business and those administrative work for those people who do not want to do so or think those as tedious work. They can focus on their key valuable work and no need to worry about running a business of their own. This is the prime advantage for some people, who are not ready or willing to start a business now.

The second advantage is the umbrella companies will take responsibility during the contract span. In Sweden, umbrella companies employ the performing parties for the time phase of the work and take full responsibility for their employees (Westregård, 2020, p. 204). In collaborative economy, where parties exchange resources to get better benefit, umbrella company is one choice when companies do not see hiring employee as profitable or regard responsibility is riskier than benefits (Westregård, 2020, p. 205).

The cost is the major concern and disadvantage for individuals and businesses to consider umbrella companies. Umbrella companies' existence is based on the service margin charged on the percentage of workers' income. Costs and fees are divided into two types: fixed fee and percentage fee. Fixed fee means the monthly or weekly cost

clients need to pay to umbrella companies. Percentage fee means umbrella company charges a percentage of your invoice value. (Anwar, 2020.)

Second disadvantage is that many contractual terms can be very risky for business with umbrella companies. Tax-efficient payment structures, hidden costs, net fee quote in place of gross fee quote are among the dangerous red flags that companies should avoid of (Guides, 2021). Businesses have to search and study very carefully about the options so that end results are satisfactory.

Third disadvantage for companies using temporary labours is the possibility of umbrella company fraud in the labour supply chain. The result can be financial and reputational damage and employees will lose their entitled income. So business have to get clear understanding who pays your employees and how they get paid. (HM Revenue & Customs, 2021.)

The fourth disadvantage is the fact umbrella company usually work together with recruitment company. This adds up more involving parties and cost. And will lower the control of employee for the business. Umbrella companies are not so good option if business see employee control as very important. (Globalization Partners, 2021.)

## 6 SUMMARY OF SOLUTIONS

Finnish companies need to make decisions which is the best option to acquire skilled employees for their projects. Decision making is complex process, which could be divided into six stages: (Zaraté, 2013, p. 3)

1. Definition. Businesses make clear of the action objective.
2. Information. All useful information needed for the decision will be collected.
3. Analysis. Information will be organized and gathered for analysis
4. Solution. Decision-makers design and actualize the possible outcome of the decision.
5. Determination. Decision-makers make decision about the possible options by measuring and comparing the outcome from different options.
6. Implementation. The chosen option will be further implemented in practical manner. (Zaraté, 2013, p. 3)

Managers and leaders are facing many options and challenges in the business. They need to utilize their skills and thoroughly information to achieve decisions. And very often challenges can be paradoxical and not can be solved by analytical way (Dotlich, 2014, p. 12). People challenges are also involved to make decision making even more complicated.

I think weighted decision matrix is a good tool to calculate the weighted scores and compare the given options. This technique promotes the team discussion, analysis is not too complicated to master (Design., 2001, p. 24). This is a proper technique to help finding the better choice for this case. Below table is showing how I calculate the weighted scores for the options. Weight factor is giver to each criterion. Each option will be given scores based on my judgement. Sum will be added up to get the total score for each option.

Table 8 Decision criteria analysis for all options

<b>Decision factor analysis summary</b>									
		Skilled worker immigration		Offshore HRO		Global PEO		Umbrella company	
<b>Criteria</b>	<b>Weight</b>	<b>Rating</b>	<b>Weighted score</b>	<b>Rating</b>	<b>Weighted score</b>	<b>Rating</b>	<b>Weighted score</b>	<b>Rating</b>	<b>Weighted score</b>
<b>1. Cost</b>	0.2	5	1	3	0.6	2	0.4	1	0.2
<b>2. Partnership benefits</b>	0.15	0	0	4	0.6	4	0.6	4	0.6
<b>3. Convenience of execution</b>	0.1	1	0.1	2	0.2	2	0.2	2	0.2
<b>4. Market benefits</b>	0.05	1	0.05	3	0.15	3	0.15	3	0.15
<b>5. Customer reaction</b>	0.1	4	0.4	3	0.3	3	0.3	4	0.4
<b>6. Risk of execution failure</b>	0.2	1	0.2	2	0.4	2	0.4	3	0.6
<b>7. Employee royalty</b>	0.15	5	0.75	2	0.3	2	0.3	1	0.15
<b>8. Legal risk</b>	0.05	1	0.05	2	0.1	2	0.1	2	0.1
<b>Totals</b>	<b>1</b>		<b>2.55</b>		<b>2.65</b>		<b>2.45</b>		<b>2.4</b>



The offshore HRO and skilled labor immigration get higher score than the other two options. Primarily because the cost factor is high. So Skilled labor immigration is the cheapest way to acquire skilled labors. In respect to partnership benefits, direct skilled labor immigration gets score 0 since it does not have partnership with third party service provider and partnership benefit is irrelevant; offshore HRO gets high score in partnership benefits.

As for the legal risk, skilled labor direct hiring and immigration will take the most risk to Finnish companies comparing with other three options.

Even though scores can be calculated, I would say the option with highest score is not necessarily the best option. Because the scores given are solely based on my understanding and judgement, it could be biased. And companies have different external and internal environments, they have different focus on the choice. For example, cost is the primary consideration for some companies, while legal risk is the critical for others.

That is why this weighted scoring matrix is only for reference. The reality is that so called the best option could be a bad option in a different time and location. Leaders and managers will decide company future accordingly.

John F. Kennedy once said “Change is the law of life. And those who look only to the past or the present are certain to miss the future.” Technology, economy, globalization, and people’s thinking are changing so rapidly. We need to look at labor market issue in the global view and plan change, if cannot predict it. What we are certain about future society is that it will be information-based, and it demands the establishment of opportunities for life-long learning (Halonen, 2021).

This thesis has analyzed four options to get skilled labors to Finnish technology companies with limited resources. In the future, there could be more options to solve this problem. With more problem occurs, new business model could be born as well.

## REFERENCES

- Äimälä, M. Å. (2012). *Finnish labour law in practice*. Talentum Media.
- Anwar, Z. (2020, 8 10). *What are the costs and fees of an umbrella company?* Retrieved from ContractorUK: [https://www.contractoruk.com/umbrella\\_company/what\\_are\\_costs\\_and\\_fees\\_umbrella\\_company.html](https://www.contractoruk.com/umbrella_company/what_are_costs_and_fees_umbrella_company.html)
- Arvas, F. (2011). *Umbrella companies in Europe: A study on their growth behaviors and job creation*. London.: Henley Business School.
- Basso, L. &. (2009). Growing PEO industry continues to raise its standards: Certified public accountant. *The CPA Journal*, 79(10), 10-11. Retrieved from <https://www.proquest.com/scholarly-journals/growing-peo-industry-continues-raise-standards/docview/212257531/se-2?accountid=13708>
- Contractor Umbrella. (n.d.). *How Umbrella Companies work?* Retrieved from Contractor Umbrella: <https://www.contractorumbrella.com/resource/how-umbrella-companies-work/>
- Cooke, F. L. (2001). *Outsourcing maintenance work to increase organizational competitiveness-A study of five plants. In Paper for the Annual Work, Employment and Society Conference.* . UK.: University of Nottingham, .
- Costowl. (n.d.). *How Much Does HR Outsourcing Cost?* Retrieved from Costowl: <https://www.costowl.com/b2b/human-resources-hr-outsourcing-cost.html>
- de Boer, L. G. (2006). A satisficing model of outsourcing. . *Supply Chain Management: An International Journal*.
- Delmotte, J. &. (2008). HR outsourcing: threat or opportunity? *Personnel Review*.
- Demokraatti. (2022, 3 27). *"Huippuosaajista kilpaillaan verisesti ympäri maailman" – D-viisumi käyttöön kesällä: tästä on kyse*. Retrieved from Demokraatti: <https://demokraatti.fi/huippuosaajista-kilpaillaan-verisesti-ympari-maailman-d-viisumi-kayttoon-kesalla-tasta-on-kyse/>
- Design., N. R. (2001). *Theoretical foundations for decision making in engineering design.* . National Academy Press.
- Donnelly, D. (2022, 3 3). *What Is a PEO & How Does It Work?* Retrieved from New Horizons: <https://nhglobalpartners.com/what-is-a-peo/>
- Dotlich, D. L. (2014). *The unfinished leader: Balancing contradictory answers to unsolvable problems (First edition.)*. John Wiley & Sons.

Finnish Immigration Service. (n.d.). *Income requirement for persons who apply for a residence permit on the basis of work*. Retrieved from Finnish Immigration Service: <https://migri.fi/en/working-in-finland/income-requirement>

Finnish immigration service. (n.d.). *Processing Time Checker*. Retrieved from Finnish immigration service: <https://migri.fi/en/check-the-processing-time-of-your-application>

Finnish Immigration service. (n.d.). *Residence permit application for person applying EU Blue Card*. Retrieved from Finnish Immigration service: <https://migri.fi/en/eu-blue-card>

Finnish Immigration Service. (n.d.). *Residence permit application for persons employed as a specialist*. Retrieved from Finnish Immigration Service: <https://migri.fi/en/specialist/en>

Finnish Immigration service. (n.d.). *Working in Finland*. Retrieved from Finnish Immigration service: <https://migri.fi/en/working-in-finland>

Getapp. (n.d.). *ADP TotalSource product overview*. Retrieved from Getapp: <https://www.getapp.com/hr-employee-management-software/a/adp-total-source/>

Globalization Partners. (n.d.). Retrieved from Globalization Partners: <https://www.globalization-partners.com/blog/indefinite-vs-fixed-term-employment/#gref>

Globalization Partners. (2021, 10 5). *Advantages and Disadvantages of Using an Umbrella Company*. Retrieved from Globalization Partners: [https://www.globalization-partners.com/blog/umbrella-company-advantages-and-disadvantages/?utm\\_source=Adwords&utm\\_medium=cpc&utm\\_campaign=Search\\_|\\_Chile\\_-\\_Dynamic\\_\[en\]&utm\\_term=&gclid=Cj0KCQjw\\_4-SBhCgARIsAAlegrXueHEO0HyJZbyYc3hWQGvRr77L-LN8pXTYULqnOgSJSTN](https://www.globalization-partners.com/blog/umbrella-company-advantages-and-disadvantages/?utm_source=Adwords&utm_medium=cpc&utm_campaign=Search_|_Chile_-_Dynamic_[en]&utm_term=&gclid=Cj0KCQjw_4-SBhCgARIsAAlegrXueHEO0HyJZbyYc3hWQGvRr77L-LN8pXTYULqnOgSJSTN)

Guides, K. (2021, 8 1). *Umbrella company fees – the lowdown on costs*. Retrieved from itcontracting: <https://www.itcontracting.com/umbrella-company-fees/>

Halonen, T. &. (2021). *International Labour Organization and global social governance*. Springer Nature.

HAYES, A. (2021, 10 13). *Skilled Labor*. Retrieved from investopedia: <https://www.investopedia.com/terms/s/skilled-labor.asp>

HM Revenue & Customs. (2021, 5 10). *Mini umbrella company fraud*. Retrieved from gov.uk: <https://www.gov.uk/guidance/mini-umbrella-company-fraud>

Ichino, P. (-2. (2018). A new labour law for platform workers and umbrella companies. . *Work Organisation, Labour and Globalisation*, , 12-22.

- Kothari, C. R. (2004). *Research methodology: Methods & techniques (2nd rev. ed.)*. . New Age International (P) Ltd., Publishers.
- Lawler III, E. E.-E. (2004). *Human resources business process outsourcing: Transforming how HR gets its work done*. . John Wiley & Sons.
- Lawler, E. E. (2015). *Global trends in human resource management: A twenty-year analysis*. *Stanford Business Books*, . an imprint of Stanford University Press.
- Lombardi, B. &. (2008). Professional employer organizations: What are they, who uses them, and why should we care? *Economic Perspectives*, 32(4).
- Migrationsverket. (2020, 4 24). *Exemptions from the work permit requirements*. Retrieved from Migrationsverket:  
<https://www.migrationsverket.se/English/Private-individuals/Working-in-Sweden/Employed/Special-rules-for-certain-occupations-and-citizens-of-certain-countries/Exemptions-from-the-work-permit-requirements.html>
- Ministry of Economic Affairs and Employment, Finland. (2019, 2 5). *Employment Contracts Act*. Retrieved from Finlex:  
<https://www.finlex.fi/en/laki/kaannokset/2001/en20010055.pdf>
- Muëller, M. (n.d.). *What is a PEO – Professional Employer Organization*. Retrieved from GlobalPEO: <https://globalpeo.com/insights/what-is-a-peo-professional-employer-organization/>
- Multiplier. (n.d.). *A Comprehensive Guide to HR Outsourcing Prices*. Retrieved from Multiplier: <https://www.usemultiplier.com/blog/hr-outsourcing-prices>
- Peck, J. (2017). *Offshore: Exploring the worlds of global outsourcing*. Oxford University Press.
- Raunio, M. &. (2005). *Highly skilled labor force in the global field of choices: Case Finland*. University of Oxford.
- Riddle, D. I. (2000). Offshore back office operations: Supplying support services to global markets. *United Nations Publications*., 24.
- Seth, M. &. (2011). Human resource outsourcing: Analysis based on literature review. . *International Journal of Innovation, Management and Technology*, , 2(2), 127.
- Silta. (n.d.). *Your local PEO partner in Finland*. Retrieved from Silta:  
<https://www.silta.fi/palvelumme/peo-services>
- Stowers, J. (2022, 2 15). *Are the Benefits of Using a PEO Really Worth It?* Retrieved from business: <https://www.business.com/articles/professional-employer-organization-pros-and-cons/>
- VelocityGlobal. (2019, 9 27). *3 Advantages of Global PEO Services*. Retrieved from <https://velocityglobal.com/blog/3-advantages-of-global-peo-services/>

website of occupational safety and health administration in Finland. (2021, 4 19).  
*Duration of employment contract*. Retrieved from Työsuojelu:  
<https://www.tyosuojelu.fi/web/en/employment-relationship/employment-contract/duration-of-employment-contract>

Westregård, A. (2020). Looking for the (fictitious) employer–Umbrella companies: the Swedish example. . *In Social Law 4.0*, (pp. 203-228).

*What is a PEO?* (n.d.). Retrieved from Globalizaion partners:  
[https://www.globalization-partners.com/what-is-a-professional-employer-organization/?utm\\_source=Adwords&utm\\_medium=cpc&utm\\_campaign=Search\\_|\\_Chile\\_-\\_PEO\\_\[en\]&utm\\_term=global%20peo&gclid=CjwKCAiAl-6PBhBCEiwAc2GOVAtGxTXOiHLFjAtgDnn4XE\\_vCYRjFK\\_GmBNdEZdPoOtk0](https://www.globalization-partners.com/what-is-a-professional-employer-organization/?utm_source=Adwords&utm_medium=cpc&utm_campaign=Search_|_Chile_-_PEO_[en]&utm_term=global%20peo&gclid=CjwKCAiAl-6PBhBCEiwAc2GOVAtGxTXOiHLFjAtgDnn4XE_vCYRjFK_GmBNdEZdPoOtk0)

Wroten, C. O. (2018). How to know if a professional employer organization can help you. *Optometry Times*, 11.

YLE. (2021, 9 2). *Chamber of commerce survey reveals Finland's "alarming" skilled-labour shortage*. Retrieved from YLE: <https://yle.fi/news/3-12082626>

Zarató, P. (2013). *Tools for collaborative decision-making*. John Wiley and Sons Inc.

Žitkienė, R. (2015). The management model for human-resource outsourcing among service companies. . *Intelektinė ekonomika*, 9(1), 80-89.