

Mapping the landscape of online job vacancies

Background report: Finland

Study: Real-time labour market information on skills requirements: Setting up the EU system for online vacancy analysis

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Preface

Over the last decades, online job portals have become important features of the job market. The Internet offers a rich source of live and real-time labour market information for almost all of occupations. It can provide insight on job-specific skills required in particular occupations in different regions, combined with information on the characteristics of the job offered – i.e. much more than is available using conventional sources. However, consistent and comparative information on the use of the internet and online job market by job-seekers and employers in Europe is rather scarce.

To tap the potential of online labour market information, Cedefop started to investigate the possibility to develop a system for gathering and analysing data from online job portals in the EU to complement the centre's toolkit of skills intelligence instruments. While this is feasible, drawing meaningful conclusions from these data requires a good understanding of the features of national online job markets. Therefore, Cedefop has mapped the landscape of the online job market in all EU Member States. This publication presents one of the background country reports developed in the project - 'Real-time labour market information on skills requirements: Setting up the EU system for online vacancy analysis' (AO/DSL/VKVET-GRUSSO/Real-time LMI 2/009/16). Its findings will inform the cross country comparison published in the upcoming synthesis report.

The work was undertaken by a consortium of external contractors: CRISP (Milano/IT), Tabulaex (Milano/IT) and IWAK (Frankfurt/DE) and their network of country experts (see annex 1 for detailed list) and closely supervised by Cedefop. It presents authors' analysis of the landscape of the online job portal market in the country using a methodology developed for the purpose of the project.

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List of Abbreviations

Cedefop	European Centre for the Development of Vocational Training
ELY	Centres for Economic Development, Transport and the Environment (Elinkeino-, liikenne ja ympäristökeskus)
ESCO	European Standard Classification of Occupations
EURES	European Employment Services
HR	Human Resources
HRM	Human Resources Management
ICT	Information and Communication Technology
ISCO	International Standard Classification of Occupations
OJVs	Online Job Vacancies
OSF	Official Statistics of Finland
PES	Public Employment Services
TE	Ministry of Employment and Economy (Työ- ja Elinkeinoministeriö)

Introduction

With the project “Real-time Labour Market Information on Skill Requirements: Setting up the EU System for Online Vacancy Analysis”, Cedefop explores online job-vacancies (OJVs) as a new source of real-time Labour Market Information. By crawling the most important online job-portals of the 28 EU Member States, Cedefop will further its understanding of the changing skills demand in different sectors and occupations. A systematic overview of the online job-portal landscape in each of the 28 EU Member States will identify the most relevant online job-portals and provide context for the data scraped from them. With the Landscaping Activity, Cedefop seeks to acquire insights into the structure of online job-portal markets and the extent to which online job-portals are used in recruitment and job-search. Furthermore, it aims to better understand which factors cause variation in the formats and content of OJVs in different countries.

This Country Report was compiled between April and October 2017 and constitutes a first overview of the online job-portal landscape in Finland. It is based on desk research of available data sources in Finland (e.g. public data, academic research and publications of interest groups) and expert opinions. Chapter 1 describes the methodology used for compiling the report in terms of the relevant search paths and data sources. Chapter 2 gives an overview of the main drivers for the use of online job-portals in recruitment and job-search, while Chapter 3 concentrates on the characteristics of the online job-portal market and lists the most important players. Moreover, it seeks to understand to what extent OJVs published on the online job-portals provide adequate information on the developments in the Finnish labour market in terms of the number of vacancies and representation of sectors/occupations. Furthermore, it elaborates on the legal and regulatory framework guiding the activities of the job-portal owners and employers, highlights the differences between the public versus private online job-portals and delineates their relationships with one another. Chapter 4 covers the use of online job-portals in recruitment and job-search. It focuses on the differences in the behaviour of employers and job-seekers across sectors, occupations, qualification levels and regions. Chapter 5 presents the most important online job-portals in Finland for web-crawling and describes a step by step process of the OJV drafting and posting on select private and public online job portals. Chapter 6 concludes the Country Report by describing the main features of OJVs in Finland in terms of format and content. In particular, it explores to what extent OJVs contain information pertaining to hard and soft skills required for the job, how these skills are characterised and what they reveal about the nature of the job.

1. Methodology

1.1. Search Paths

Desk research was conducted on 10 and 11 May 2017. Google Scholar was used. Four keywords were searched in Finnish and in English ⁽¹⁾. In search in English the word “Finland” was added to the keywords.

Keyword in Finnish (with translation in English)	Google Scholar results
”sähköinen työnhaku” (online job-hunting)	1,830
”Internet rekrytointi” (Internet recruiting)	5,090
”sähköiset työpaikkailmoitukset” (online job vacancies)	672
”työpaikkaportaali” (job-portal)	2

Source: Holopainen (10 and 11 May 2017).

Only the first five pages of the search results in Finnish were relevant to this research. Nearly all relevant papers were student theses, which were not used as a direct source of information, but rather to track their references. Only one academic paper was found through these references, but its data was outdated. Unfortunately, the national research database of the universities was not available for research. As a result, no relevant academic research was found for this landscaping activity.

The interviewed experts were a better source of information. They sent links and papers that they, as experts on the subject, saw as relevant for this report. The information shared by the interviewees are used in this report, and this data tends to support the bigger picture of the OJV markets also emerging from the interviews.

1.2. Data Sources

Relevant stakeholders were first contacted by e-mail, and then by arranging a time for the phone interviews. All interviews were conducted between 11 and 23 May 2017.

In total, six expert interviews were conducted by phone or Skype. The experts represented different organisations engaged with the OJV market, including the PES online job-portal, a private online job-portal, the Statistical Office, the Business Association and the Association of HRM. Also, as a sixth stakeholder, a private coaching and analysis company was interviewed, since it is already conducting web scraping of OJVs, but for different purposes. They were considered to be a very relevant information source for this research. In two of the cases the interview request was re-

⁽¹⁾ Further research was conducted on Google Scholar in English, but no further academic papers were identified as a result.

directed to another person. The Finnish ESSnet member was not the right person for this project, but he directed the request to another person at the Statistical Office. It was also difficult to find the direct contact information of the right person to be interviewed from the PES. The expert from the PES specialises in the development of the new platform, Työmarkkinatori.

The interviews lasted between 30 minutes and one hour, depending on the breadth of the interviewee's expertise. All interviews were relevant to the subject and gave different perspectives on the field of OJVs, but in general, their analysis of the main features and trends of the OJV market was similar.

Based on the assessment in Sections 1.1. and 1.2. as well as Table 1, this Country Report gives a comprehensive picture of the Finnish online job-portal landscape. The experts interviewed were well-selected, and their answers were complementary. The main portals of the current OJV market were easy to identify based on the interviews and the desk research. All interviewees agreed that if it succeeds, the Työmarkkinatori portal will change the Finnish OJV market substantially in the coming years. The main gap of the desk research was the lack of academic research.

Table 1: Overview of the different sources used in the Landscaping Activity

Type of source	Title/year	Provider	Information on			Quality
			Share of existing vacancies on online job-portals (PES/private)	Use of OJVs per sector/occupation/qualification level/ region	Skills requirements in OJVs	
	Regional overview of PES Internet services (2017)	KEHA Centre	Yes	Yes		Excellent
	Labour acquisition at establishments in 2015. (2015)	Finnish Government	Yes	Yes	Yes	Excellent
	The acquirements of new work - survey results (2016)	The Finnish Innovation Fund Sitra		Yes		Good
Source 2: Research/surveys of interest groups	Recruitment study 2016. Recruitment through the eyes of a young professional (2016)	aTalent Recruiting		Yes		Sufficient
	Relevance to recruitment, efficiency in employment. Staffing and training inquiry of Confederation of Finnish Industries (2015) (survey)	Confederation of Finnish Industries		Yes	Yes	Good
	National recruitment survey 2017 (2017)	Duunitori	Yes	Yes	Yes	Good
Source 3: Expert opinions	Expert opinions 2017	Experts 1-6 (see the References for detailed information)	Yes	Yes	Yes	Very good; most of the experts provided information on most of the aspects.

Source:

Holopainen

(2017).

2. Labour Market Dynamics and Impact on the Online Job-portal Market

There is a lot of uncertainty about the future of work in Finland, and many projects and studies are exploring this subject. Megatrends such as digitisation, demographic change, urbanisation, climate change and globalisation are influencing the labour market and ways of working. Digitalisation threatens to automate jobs; ageing populations lead to an unsustainable population dependency ratio, and immigrants need support integrating into working life. On the other hand, cleantech, health technology, the platform economy and many other new phenomena are creating new opportunities, both by increasing the need for labour and by changing the forms of work. (Dufva et al. 2017: 7.)

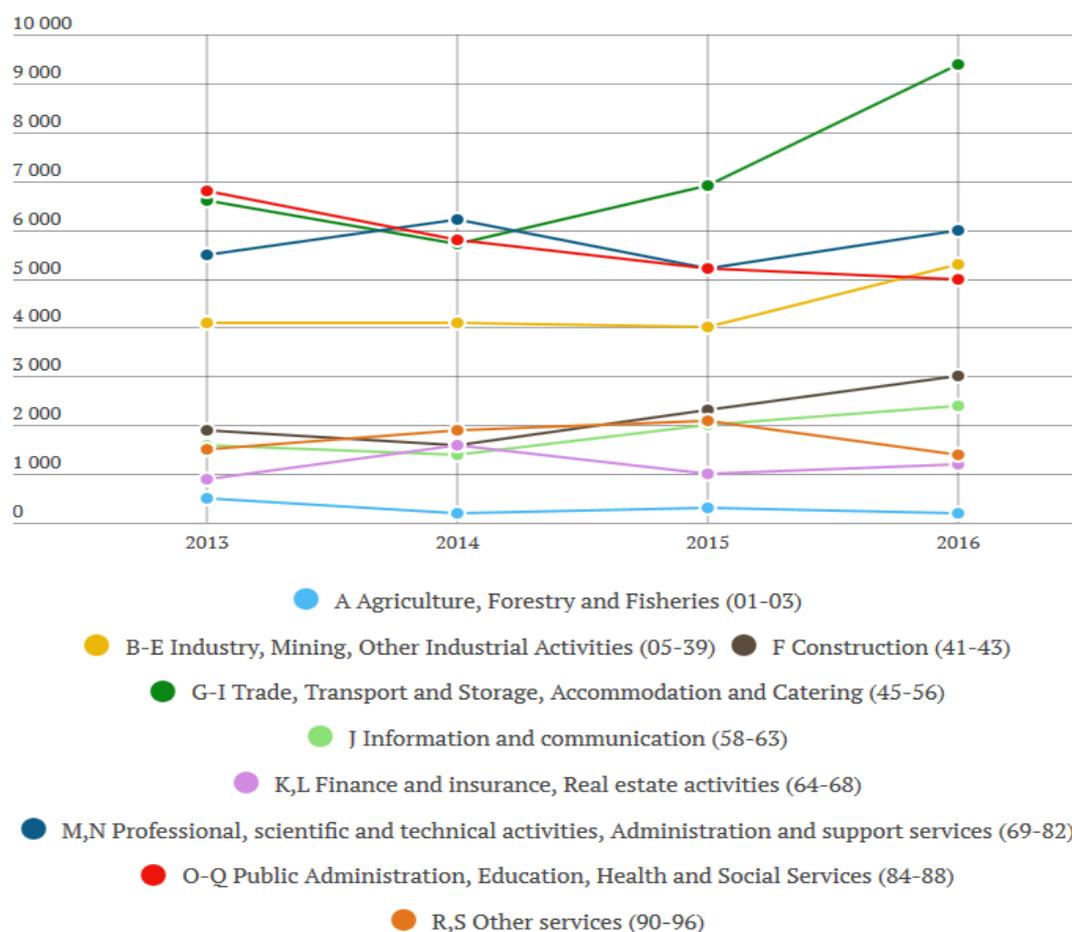
Finland has mostly moved from industrial mass production to the post-industrial age, where the definition of effective, intelligent and value-creating work is changing. From a worker's point of view, there is a realistic alternative to finding a job: the possibility of creating one's own job. While in the industrial age the goal was to make products, in the post-industrial period, the goal is to create customer relationships, and work can be characterised as problem-solving with customers. (Kilpi 2016.)

While the ideal of industrial work was the effective partitioning of the process, for information work the value lies in mutual interaction and creative learning. Thinking together and utilising technological intelligence are the resources that work performance and coping at work require today. There is little repetitive work left at the factories anymore, as much of it has been replaced by automation. Now, the same is happening for white-collar workers; many jobs are being replaced by automation (Kilpi 2016.).

Three new socially significant phenomena are rapidly emerging in the labour market:

- An algorithmic economy that on the one hand automates, and on the other hand enriches people's work;
- A platform economy that creates new network-based business models and a new type of growth (Kilpi 2016b);
- A new type of entrepreneurship that creates small but global service business (Kilpi 2016).

As seen in Figure 1, the vacancies in the service sector have been increasing in recent years in Finland. Other industries with high vacancy rates are the service sector: public administration, education, health and social services (84-88); professional, scientific and technical activities, administration and support service (69-82) and other services (90-96). The rising importance of the service sector has also impacted which occupations have the largest share of employment (Table 2).

Figure 1: Number of vacancies by industry in 2013-2016 in Finland

Source: Official Statistics of Finland (OSF): Job vacancy survey.

Table 2: Occupations with the largest share in employment in 2015 in Finland (%)

No.	ISCO-08		Share
1	53	Personal care workers	6.83 %
2	52	Sales workers	6.71 %
3	33	Business & administration assoc. prof.	6.26 %
4	21	Science & engineering professionals	5.87 %
5	23	Teaching professionals	5.77 %

Source: EU Skills Panorama.

More than a quarter of companies faced recruitment difficulties in 2014, according to the survey by the Confederation of Finnish Industries. Most difficulties occurred in companies in the following sectors: construction, technology, real estate services and business services. Recruitment difficulties affected about 13,400 jobs in total. The same occupations have also had recruiting problems in the last few years (Elinkeinoelämän keskusliitto 2015: 14).

According to the survey, there were many reasons behind the recruiting problems, which varied depending on the industry. In industrial companies, one third of recruitment difficulties were caused by deficiencies in skills or competence. In the technology industry, the skills gap was stronger than in other industries, as more than 40% of the recruitment difficulties were caused by inadequate competences. Technology companies were also looking for workers that had language skills and the ability to work abroad in addition to technical know-how. In the construction sector, suitable applicants were needed in a third of recruitment cases. In the service sector, workplace related factors, such as the location and the convenience of the workplace, pay, and the poor image and reputation of work in industry, caused a quarter of recruitment difficulties. The bad image or reputation of industry also affected the real estate services industry. Transport sector companies reported that up to 27% of their recruitment difficulties were caused by lack of workplace-specific know-how. The transport sector also emphasised the lack of work experience of job applicants (Elinkeinoelämän keskusliitto 2015: 16).

According to another survey conducted annually by Statistics Finland, 27% of the companies that had searched for labour faced recruitment problems. The share grew by two percentage points compared to a year earlier. The most frequently mentioned causes of recruitment problems were related to the job seeker's lack of competence (education, work experience, social skills, language skills and other work required skills). In 2015, recruitment problems were most common in the healthcare and social sectors, in the housing and catering sectors and in the construction sector. The fields of 'other services', agriculture and forestry, commerce and public services and education were least likely to experience recruitment problems (Maunu 2016: 4).

Approximately 40,000 companies (26%) filled a vacancy during the three months before the 2015 survey. The largest shares of filled vacancies were in the branches of healthcare and social services and public services and education. The branches with the lowest recruitment were agriculture and forestry and transport and warehousing (Maunu 2016: 4).

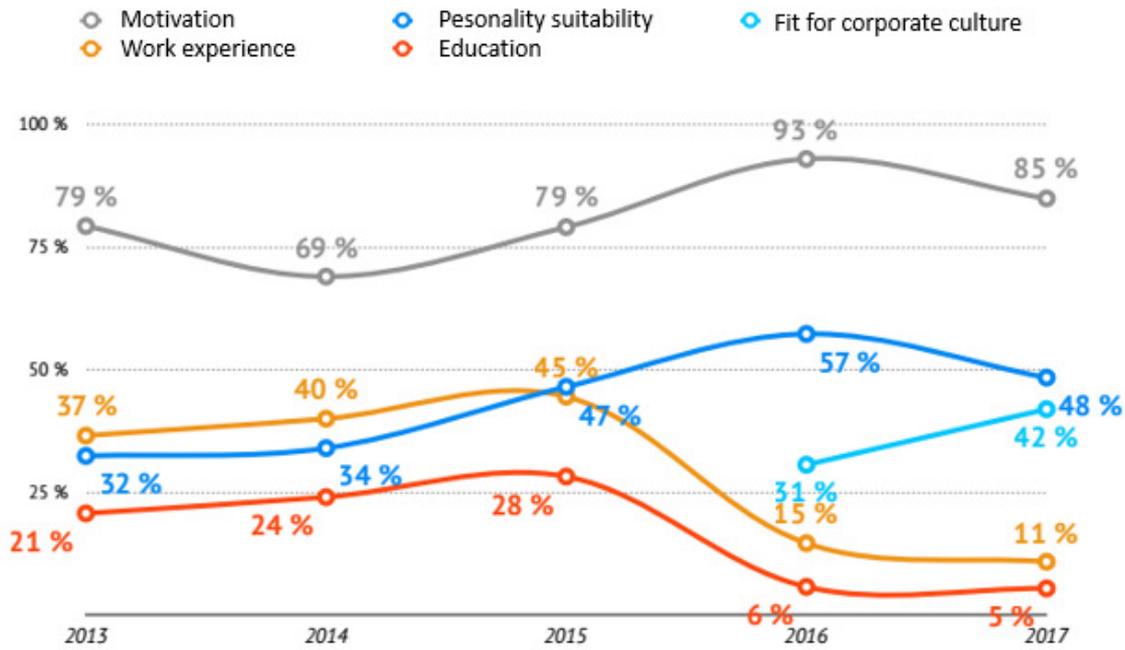
In the private sector nearly half of recruitments were based on new job creation. In the municipal sector, more than half of hires were for newly created jobs, whereas in the public sector, nearly half of all recruitments represented replacement demand (Maunu 2016: 4).

The weakened economic and employment situation in recent years is reflected in the recruitment difficulties reported by companies. Approximately one third of companies have encountered recruitment difficulties, because the types of jobs do not match the skills and qualifications of available workers. There is a need to find new ways to foster the matching process and speed up recruitment processes in Finland (Elinkeinoelämän keskusliitto 2015: 14).

The national recruitment survey in 2017 shows that 63% of companies experienced difficulties in finding competent applicants in the previous year, and 54% experienced difficulties in recruiting specialists. However, 37% of companies say that it is becoming easier to recruit recent graduates and young people (Duunitori 2017: 4).

Another interesting trend affecting OJVs is the changing extent to which other factors are taken into consideration during the recruitment process. As seen in Figure 2, the motivation and personality of the job applicant are most important, whereas work experience and education have become less important in recent years (Duunitori 2017: 7).

Figure 2: Important factors in making the recruitment decision



Source: Duunitori (2017: 7).

3.Context and Characteristics of the Online Job-portal Market

3.1. PES Online Job-portal

3.1.1. Legal/Regulatory Framework

The act on public employment and business services regulates the framework of the PES. The public employment and business services are based on the needs of industry and the labour market and the anticipation of change. The PES and its clients jointly evaluate customer service needs to provide public employment and business services that best ensure the availability of a skilled workforce, promote placement in the open labour market and promote business start-ups or development. Next to public employment and business services, the PES also offers services for the self-employed and personal services (Finlex (1)).

The public employment and business services are free of charge for job seekers. Also, the labour exchange services provided to employers are free of charge. The law also regulates that the public employment and business services respect fairness and impartiality. Furthermore, when providing, developing and disseminating public employment and business services, equality between women and men in the labour market must be actively promoted (Finlex (1)).

The act also regulates that the PES must offer equal access to its public employment and business services and must present job and training options, job vacancies and job-seekers, so that private clients have the same opportunities for job search, professional development and training. (Finlex (1)).

3.1.2. Organisational Structure of the PES Online Job-portal

The Finnish PES Online job-portal TE-palvelut.fi is part of the employment services of the PES (TE Offices²). In Finland there are 15 TE Offices that are part of the regional Centres for Economic Development, Transport and the Environment (ELY)³. The ELY Centres are responsible for the regional implementation and development tasks of the central government and steer and supervise the activities of the Employment and Economic Development Offices (TE Offices). ELY Centres operate under the administrative branch of the Ministry of Employment and the Economy.

TE-palvelut.fi-portal is used nationwide in all of the TE Offices, but it is operating under the KEHA Centre⁴. The KEHA Centre is a nationwide, geographically diversified operating model and a network-based agency for the development and administration of ELY Centres and TE Offices. KEHA Centres are also responsible for the development of the new Työmarkkinatori-portal.

² In Finnish “Työ- ja Elinkeinoministeriö”.

³ In Finnish “Elinkeino-, liikenne ja ympäristökeskus”.

⁴ These are customer service centres for ELY Centres and TE Offices.

3.1.3. Focus of the PES Online Job-portal

The PES have the obligation to guarantee equal support for all job-seekers, for example for the long-term unemployed, and to offer personal services for them and others that do not have access to the Internet or who lack the ability to use it.

The public employment services are the most widely used channel for recruitment after unofficial channels, although the use of public employment services fell one percentage point, to 43%, from the previous year (Maunu 2016: 4).

There are some differences between how different employers use PES services. Some differences relate to the region in which the employer is located. For example, in North Savo, more than half (56%) of the companies have used the PES for recruiting, but in Satakunta region only about one third (32%) have done so. The use of the PES differs by sector. In the private sector 40% of employers use the PES, while in government 46% use the PES, in NGO's 48% use the PES and in the municipality sector 49% of employers use the PES. The use of PES also differs between industries. It is most popular in the other services sector (58%) and in public services and education (57%). It is less used in construction (26%), information and media (29 %) and in transport and storage (29%) (Maunu 2016: 11).

The PES is most relevant for the companies that use multiple recruitment channels (preferred by 35% of these companies). The reason is that the PES reaches a large number of people and is widely known, which helps in finding the right person for a vacancy (Maunu 2016: 11).

The more employees a company has, the more often a vacancy will be reported to the PES: 33% of companies with one to four employees have used the PES compared to 52% of companies with more than 50 employees (Maunu 2016: 11).

3.1.4. Outreach of the PES Online Job-portal(s)

The public employment services (PES) dominate online recruiting with about 19,000 job vacancies and 150,000-200,000 users per day on their online job-portal, TE-palvelut.fi (previously Mol.fi). Almost all vacancies reported to the PES are posted online to be seen by everyone. Over three months, from January to March 2017, 174,982 jobs were reported to the TE-palvelut.fi portal, with 97% of posted jobs visible for everyone and with 85% of vacancies posted to the platform through the Internet. At the same time, 77% of job-seekers started their job search online, while 23% conducted their job search either personally or by telephone (KEHA-keskus 2017: 3ff.).

3.1.5. Posting of PES Vacancies on EURES

All vacancies posted to the PES job-portal are automatically fed to the EURES platform through the web services interface. However, there is no translation of the ads from Finnish to English. When the representatives of the HR and Confederation of Finnish Industries were asked, they responded that the EURES platform is not seen as an important recruitment channel, and is used relatively little. The expert interviewed from the PES noted that companies do not mind that their vacancies are also posted automatically in EURES platform. He also estimates that the EURES platform will have wider use in the future.

3.2. Private Online Job-portals

3.2.1. Legal/Regulatory Framework

The act on public employment and business services also regulates the private sector. The providers of private employment services may not charge a fee from a private customer for services providing information and advice on job placement, job vacancies, job search or registering as jobseekers (Finlex (1)).

3.2.2. Dominant Online Job-Portals and Their Business Models

The private portals seek big companies as customers, since for the job-seeker, the services are free of charge. Business models for private portals vary. For example, Duunitori.fi offers companies the option to post free announcements or to select a notification campaign with different price ranges depending on the branding, viewing times, visibility, image, social media visibility, focus group targeting and headhunting. Another private portal, Oikotie.fi, does not offer any free announcements. Their price range varies depending on the amount, style and location of the vacancy announcements.

Many private companies operate either by scraping job ads from other portals (especially from the PES), by collecting their own online job vacancies in a database or through a mixture of these two approaches. Many recruitment companies have their own OJV portals, usually for specific fields, and large organisations also have their own online portals to collect a database of job-seekers. In Finland, new OJV companies are emerging all the time, and recently, novel job-portals have started to appear, for example portals that operate regionally or portals for freelance or short project-based work, such as #Duueri, Upwork and GoWorkaBit. Social media, especially LinkedIn, Facebook and Twitter, have a strong and rising impact on recruiting and job search. This diversity also causes problems for job seekers, since they do not necessarily know the best possible channels for finding a job.

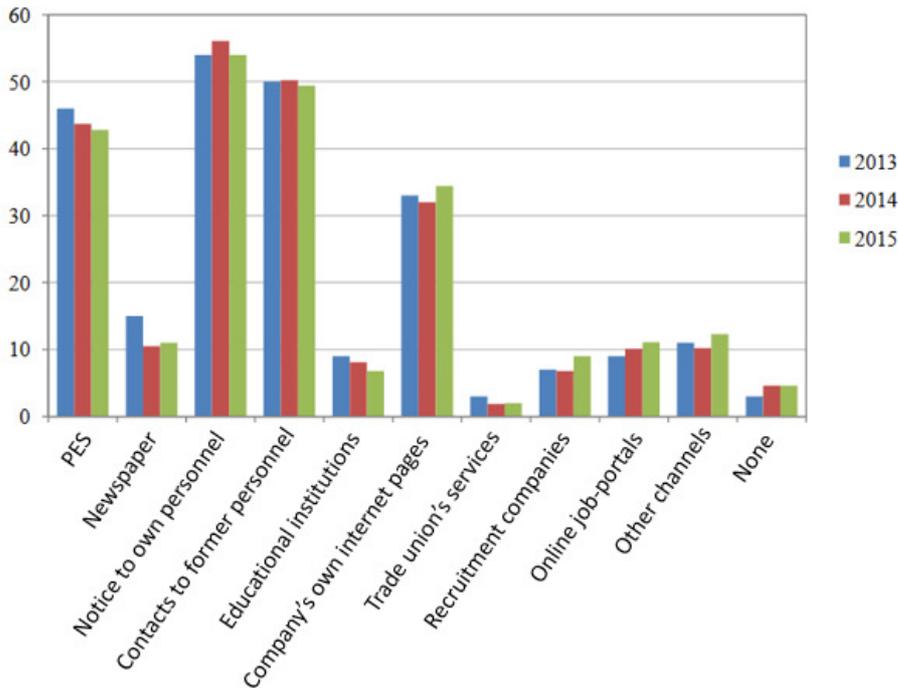
3.2.3. Focus of the Private Online Job-portals

The private online job-portals offer their services to all types of employers and all types of job-seekers. Some of the private/partly public online job-portals are focused on particular occupational fields (e.g. work in the municipal or governmental sector), while some of the private portals are focused on temporary labour.

3.2.4. Outreach of the Private Online Job-portals

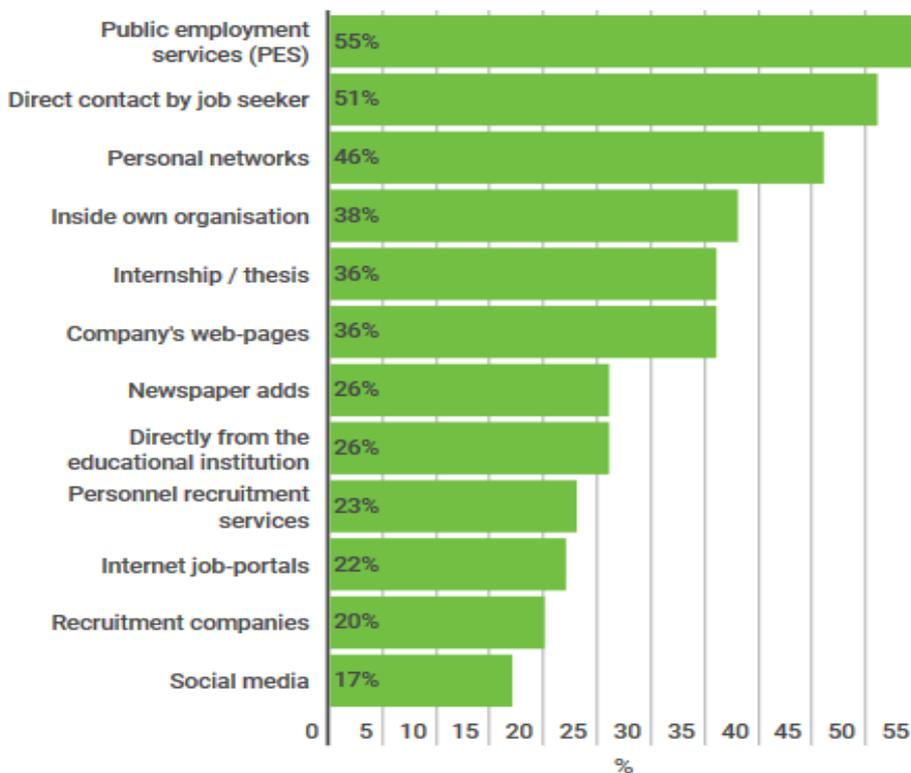
According to the surveys of Statistics Finland (Figure 3) and the Confederation of Finnish Industries (Figure 4), the share of companies that publish OJVs on the private online job-portals varies between 12% (for all companies) and 22% (for companies involved in Finnish industry).

Figure 3: Recruitment channels of Finnish companies 2013-2015



Source: Maunu (2016: 11).

Figure 4: Recruitment channels by member companies of Confederation of Finnish Industries in 2014



Source: Elinkeinoelämän keskusliitto (2015: 5).

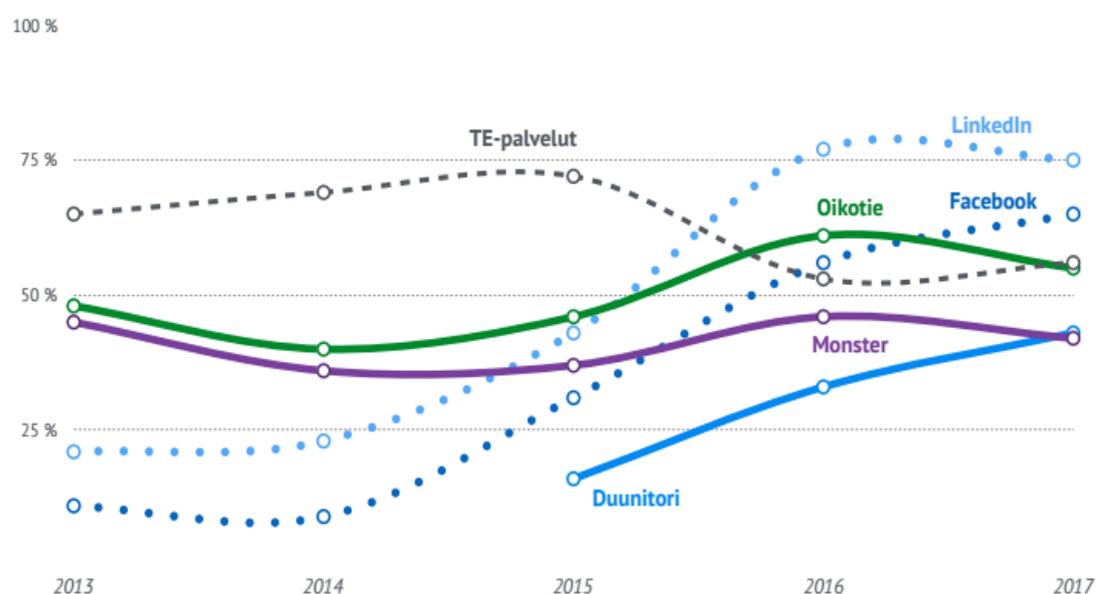
3.3. Co-operation between Public and Private Online Job-portals

In Finland, the most used job-portals for recruiting are TE-palvelut (PES), Oikotie, Monster and Duunitori. There are also popular job-portals for vacancies in the municipal or state sector (Kuntarekry.fi and Valtiolle.fi), but vacancies posted on these portals are often also posted to the PES. Besides the different business/profit models, the main difference between the PES and private companies is that the PES aims to decrease unemployment. The aim for the private companies is to find the right person for the vacancy, regardless of whether that person is already employed.

According to the survey by the Confederation of Finnish Industries among their member companies the most used recruitment channel is the TE-palvelut portal of the PES. Companies saw great importance in the wide visibility of their OJVs on the TE-palvelut portal (Elinkeinoelämän keskusliitto 2015: 6). Although, according to the interviewed experts, not all companies want to be visible on the TE-palvelut job-portal. Some prefer to use the internal services of the PES when seeking candidates. In that case, companies can use a service whereby PES employees look for candidates among individuals registered to the PES and then presents suitable candidates to the employer without publishing the vacancy to the PES portal. Candidates are, in this case, selected from the CV database.

The national recruitment survey shows that TE-palvelut (PES) is the most important channel in recruiting after the Oikotie job portal. Other important portals are Duunitori and Monster (Figure 5) (Duunitori, 2017: 11).

Figure 5: The most important recruiting channels in 2013-2017 in Finland



Source: Duunitori (2017: 11).

The links between the private and public sources of vacancies are strong, especially between the major private portals and the PES. The national private portals, which have more than 10,000 job ads, always scrape the vacancies from the PES portal. Those companies are for example Duuni-

tori.fi, Avointyöpaikka.fi and Jobilla.fi. Oikotie and Monster are primary job portals that do not scrape ads from other portals.

3.4. Role of other Recruitment and Job-search Channels

In 2015, according to the survey conducted by Statistics Finland, the most common means of recruiting were announcements to incumbent personnel and direct contacts to former employees or to people who had previously applied for a job in the company, followed by the PES (Maunu 2016: 4). By contrast, the 2014 Survey by the Confederation of Finnish Industries shows that for this category of employers the PES is the most-used recruitment channel, followed by direct applications and personal networks. Internal recruitment is the fourth most common recruitment channel and is used by 38% of the member companies of the Confederation of Finnish Industries.

According to the interviewed experts, many of the vacancies at management level and for special experts are not posted online. These vacancies are filled through network recommendations, word of mouth or personal contacts. LinkedIn is used as a recruitment channel by academics, but the estimate is that only 10-20% of Finns use LinkedIn.

When companies recruit personnel for expert roles or leadership positions, other recruitment channels are used. Personal networks and newspaper advertisements play important roles in recruiting for these higher level and specialised roles. When recruiting experts, white-collar workers or supervisors, private online job portals are also important, especially Oikotie and Monster. When recruiting managers, the most used channel is private recruitment (Elinkeinoelämän keskusliitto 2015: 12).

In some fields, such as media, academics, special experts and company leaders vacancies are posted to other recruitment channels, but these sectors represent a minority of vacancies. All of the experts had similar opinions about the OJV market in Finland. They stated that OJVs are the next biggest channel of labour recruiting after informal channels (e.g. word of mouth, network recommendations). However, they also saw that different types of social media are becoming more and more important in the near future.

3.5. Expected Trends in the Online Job-portal Market

In the coming years there will be substantial changes in the market for OJVs in Finland, assuming the national digitalisation key project, Työmarkkinatori, is launched as planned. The development of the labour exchange is one of Prime Minister Juha Sipilä's key projects. In addition, because of the regional reform in 2020, the public employment services will be combined with business services under the title "growth services", which will then be opened to outside competition. This means that in the future, services will be provided in a multi-stakeholder environment, by municipalities and the private sector. The aim of this project is to facilitate the problem of mismatches in the labour market through digitalisation and by collecting all vacancies and job-seekers together across different online portals into one platform (Työmarkkinatori 2017).

As a digital service platform, Työmarkkinatori will combine public and private service providers by providing a common digital service platform. It will be an ecosystem where information is common

and available to all actors and where information exchange is based on partnership and cooperation. Currently discussions are ongoing on the operating and business model that would best serve both the public and private organisations to cooperate on this platform rather than to be in a competitive position against private companies. Työmarkkinatori will be an agile meeting point for job-seekers, entrepreneurs and employers, students, educational institutions, job brokers and recruiting companies. It will be based on machine learning and open data, where the aim is to match job-seekers to vacancies based on skills assessment. At the moment, the project is testing if the ESCO-classification would be an appropriate base for assessment or if there would be a need for wider assessment criteria. In addition, the matching instruments of the platform are being tested. Another aim is to feed all the vacancies and CVs from Työmarkkinatori directly to the EURES platform (Työmarkkinatori 2017).

Työmarkkinatori will be built step by step in 2017 and 2018. During the years 2018 and 2019, job-seeker and employer services will be renewed to meet the realisation of the growth of regional services. The Työmarkkinatori's first pilot phase ended in May 2017, and the second phase – testing the ESCO classification – ended in June 2017. The first part of the Työmarkkinatori is scheduled to launch early 2018. A job-seeker who has been registered to the service may complete a job profile on which the Työmarkkinatori will automatically propose suitable job vacancies. The proposals are based on the skills and competences contained in the user profile, not on the job titles he/she has previously held. The goal is that the production version will be available in autumn 2018. After the introduction of the first production version containing basic services, the development of the Työmarkkinatori will continue (Työmarkkinatori 2017).

4. Use OJVs in Recruitment and Job Search

4.1. Use of OJVs in the Recruitment of Labour

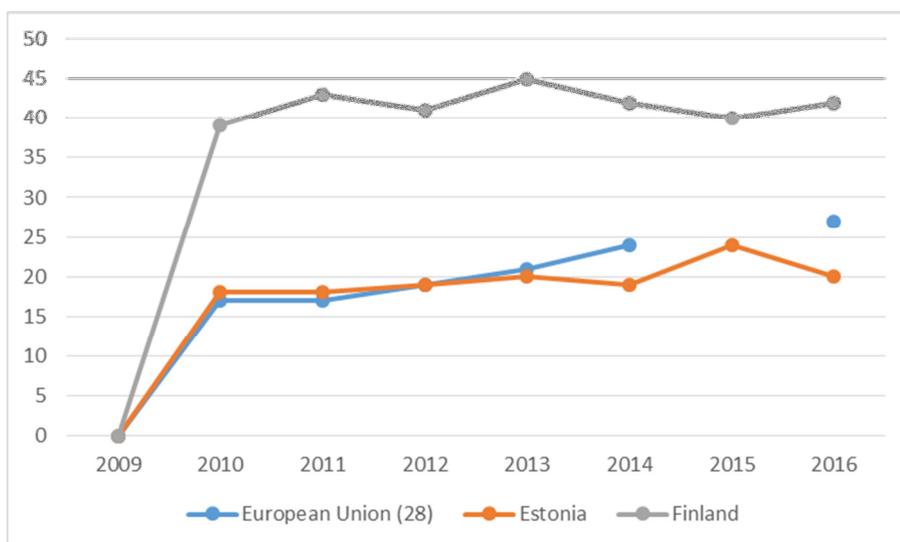
In the survey by the Confederation of Finnish Industries among their member companies, digitalisation was seen as the most important recruitment trend for different fields, as so much of recruiting has moved to internet and mobile-based services. And the Internet was seen as the main meeting place for the open vacancies and the jobs seekers (Figure 4). In recruiting, social media was used by less than 20% of the interviewed companies. Vacancies for specific fields, such as information technology and media, were mainly posted to social media. Recruitment companies were seen as important channels in the field of trade, electronics, electricity, energy and machine and metal industry. Traditional paper advertisements were popular in the fields of finance, education and construction, especially outside of Helsinki (Elinkeinoelämän keskusliitto 2015: 6).

The use of certain recruitment channels depends on the type of vacancy for which the company is recruiting. The larger the company, the more likely it will place emphasis on different recruitment channels for different staff groups. Almost 80% of companies with more than 250 employees choose a recruitment channel on the basis of the employee's position. The corresponding figure is 68% in companies of 150-249 employees and 57% in companies of 30-149 employees. Among small companies employing less than 30 people, less than one third of companies emphasises different recruitment channels for different personnel groups (Elinkeinoelämän keskusliitto 2015: 12.)

More than 40% of Finnish companies also post their vacancies on their company website, in addition to other recruitment channels. This is much higher than in other EU countries (See Figure 6).

In the public sector and education 56.7% of the vacancies were posted on the PES Services, 40,2 % on their own web page and 12.4% on Internet services. In the health and social sector 48% were posted on PES Services, 35.8 % on their own web pages and 7.4 % on Internet services (Maunu, 2016: 17.)

Figure 6: Enterprises where the company website contains vacancy information (in %)



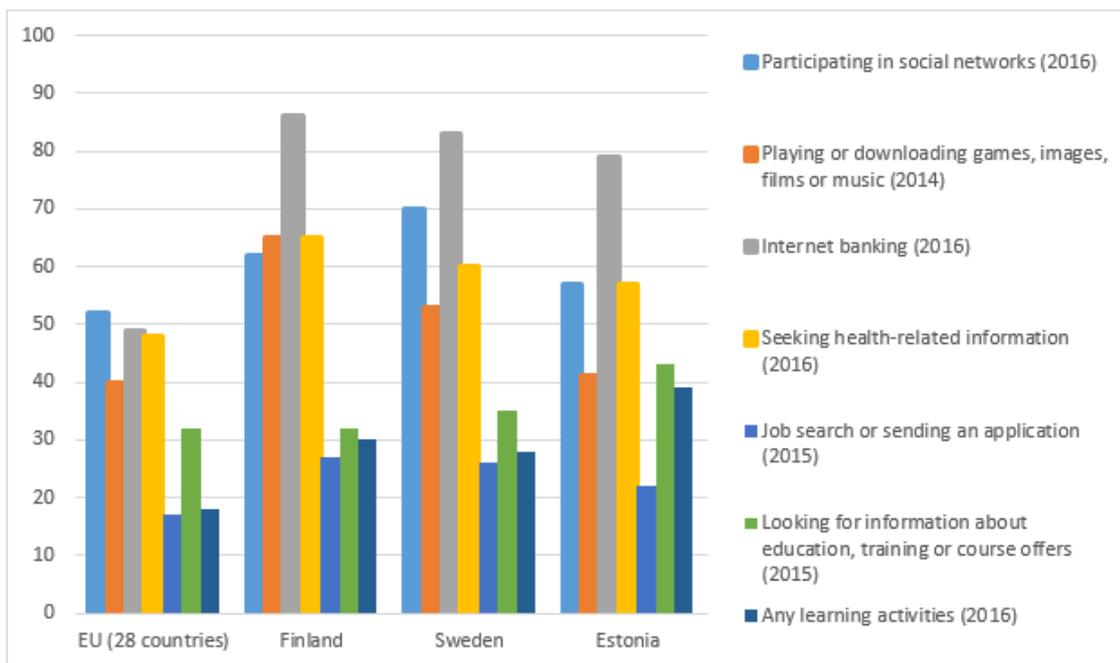
Source: EUROSTAT ICT survey of Households and Individuals (3).

4.2. Use of OJVs in Job-search

According to the research conducted by the Finnish Innovation Fund, Sitra, only one in four Finns have found employment through public vacancies. Also, less than 10% have found their current job through public employment services, but that only includes the personal services of PES, not their online platform, while 20% found their job by actively approaching the employer and 20% were offered their current position (Sitra, 2016).

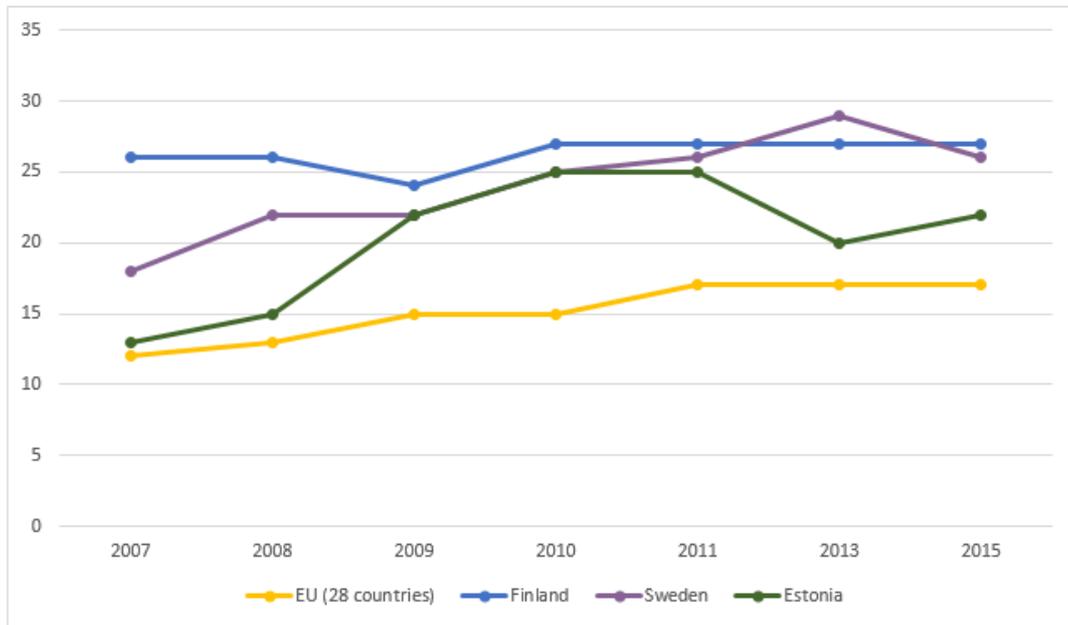
According to Eurostat, only 30% of Finns use the internet for job search or sending an application (Figure 7). The share of internet use for job search or sending an application is much higher than the average in other EU countries (Figure 8). As can be seen in Figure 9, the younger the job seeker, the more likely the person will use the Internet to search for a job or send a job application.

Figure 7: Internet use of individuals by purpose (in %)



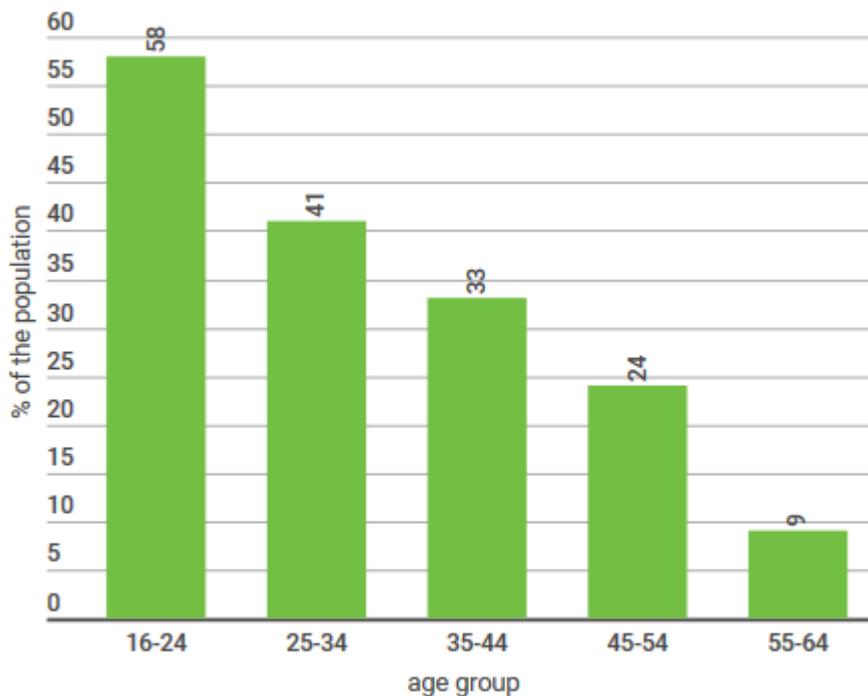
Source: EUROSTAT ICT Survey of Households and Individuals (1).

Figure 8: Internet use for job search or sending an application, all individuals (in %)



Source: EUROSTAT ICT Survey of Households and Individuals (2).

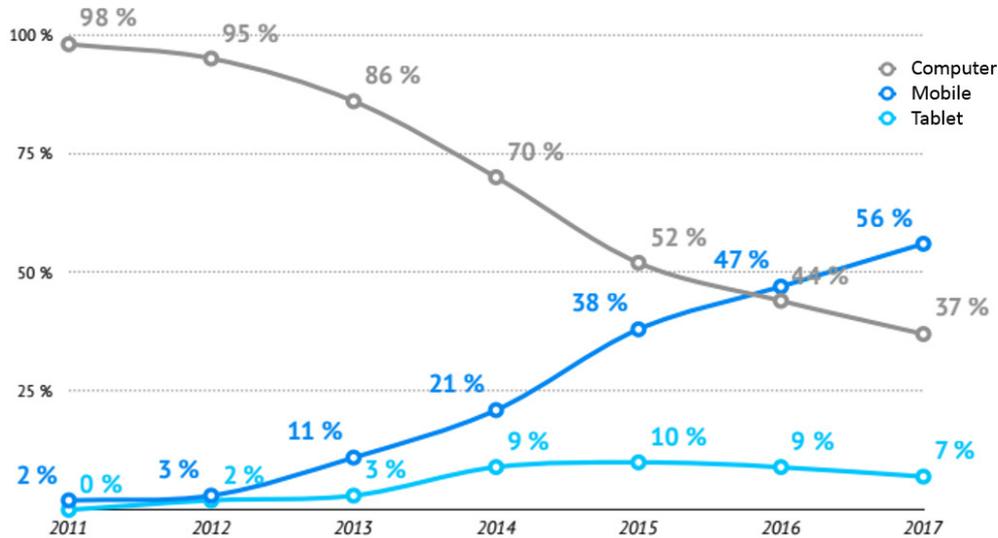
Figure 9: The use of Internet for searching for a job or sending job application in last three months



Source: Official Statistics of Finland (OSF): Use of information and communications technology by individuals.

Besides using computers for searching and browsing online vacancies, job-seekers are increasingly using mobile devices (Figure 10). This means that in the near future, job ads will likely be more mobile friendly.

Figure 10: Devices used by the job seekers



Source: Duunitori (2017: 8).

4.3. Expected Trends in the Use of OJVs in Recruitment and Job-search

Job-hunting trends are moving online and increasingly to social media. A survey conducted among young professional indicates that the most popular job-seeking channels are social media, personal networks, online job-portals, recruiting companies' webpages and TE-palvelut portal. The most popular social media channels for job-hunting are Facebook (31%), LinkedIn (47%) and Twitter (7%). Only 11% of the people surveyed did not use social media for job-hunting. In general, job hunting was seen as quite difficult because of the many different channels. Young people preferred social media, where job-hunting is perceived as easy and information is considered up to date (aTalent Recruiting 2016: 15).

According to the national recruitment survey, 81% of respondents agreed that social media is a very effective way to job search or recruit, and 85% agreed that recruitment will become increasingly digitalised and is likely to change significantly in the next ten years. According to 66% of the respondents, in five years most job-hunting will be done with mobile devices (Duunitori 2017: 19). All the interviewees in the landscaping activity said that online recruiting and different e-services are growing rapidly alongside the use of social media.

5. Identifying Online Job-portals for Web-crawling

5.1. Documentation of the Job-portal Research Process

5.1.1. Identifying the Online Job-portals Through Google Search

Table 3: Grid for documenting the Google search for job-portals

Search 1	Search term avoin työpaikka (in Finnish)	English translation open vacancy
	Number of results per search term	635,000
Search 2	Search term avoimet työpaikat (in Finnish)	English translation open vacancies
	Number of results per search term	3,050,000
Search 3	Search term työpaikkoja (in Finnish)	English translation jobs
	Number of results per search term	15,400,000
Search 4	Search term työtä (in Finnish)	English translation work
	Number of results per search term	12,100,000

Source: Holopainen (2017).

Based on the Google search, the most important job-portals in Finland are the following:

- TE-palvelut.fi (PES) (primary, cross sectoral and most known and used);
- Duunitori (aggregator, cross sectoral, also uses social media and is taking part in the development of Työmarkkinatori);
- Monster (primary, cross sectoral and known, also includes other vacancies than TE palvelut);
- Kuntarekry (primary, sectoral with municipal vacancies).

Unfortunately, there is no research available that would enable us to detail the share of vacancies that are posted as OJVs on these portals.

5.1.2. Identifying the Online Job-portals Through Expert Interviews

The experts described the OJV market in Finland as quite fragmented but clearly dominated by the TE-palvelut-platform of the PES. Other large private job-portals mentioned were Oikotie, Monster, Duunitori and Jobilla. Job-portals focused on government jobs (Valtiolle.fi) and municipal jobs (Kuntarekry.fi) are also seen as important recruitment channels, but for only for their respective sectors. Because of the fragmented nature of the OJV market, the formats and contents of the OJVs differ according to the job portal. However, the format and content of the OJVs on the TE-palvelut.fi-portal are seen as user friendly and informative. TE-palvelut.fi-portal also uses classifications that are well suited to the statistical system of Statistics Finland and therefore easy to use in data collection and analysis.

A Finnish company called Foredata Oy, has its own portal (Foreammatti.fi), where it scrapes information from online vacancies. They then analyse the skills needs and employment needs in different regions and make predictions about the future labour force needs. In their scraping activities they use TE-palvelut.fi and Oikotie.fi online portals. They have observed that those two portals are the best options for their scraping activities. When interviewed, they advised that TE-palvelut.fi would be the best option for the scraping activity in our project.

The experts did not share common views on the forthcoming changes in Finnish OJV market. But, all are eagerly awaiting the new platform, Työmarkkinatori, and speculating as to how it will affect their operations in the future.

5.1.3. Validating the Selection of Online Job-portals

When considering the best portals for the scraping activity, TE-palvelut.fi is probably the best currently available option. According to the interviews, it is the most widely used portal, its network system is user-friendly, and its system contains compulsory features in more detail than other portals. Also, all the vacancies posted to the TE-palvelut.fi -portal go directly to the EURES platform, and their classification system of occupations is compatible with Statistics Finland. Although if using, for example, Duunitori.fi as the main portal, it is also possible to collect the job ads posted by their paying customers.

Based on the expert interviews, the future of OJVs in Finland is not yet clear, making it difficult to suggest any current portals for the scraping activity. The big changes going on in the field of online vacancies at the moment will change the whole OJV landscape. If and when the Työmarkkinatori-portal starts becomes fully operational, it would most likely be the best-suited portal for scraping information, since it then would include all PES and commercial OJVs in Finland. The aim of the Työmarkkinatori was that the first production version of the service would be available at the end of 2017, but current estimates are that the search service will be available early 2018.

We recommend waiting for the launch of Työmarkkinatori, so that it can be used for the scraping activity. After Työmarkkinatori is successfully launched, the TE-palvelut.fi-portal will be shut down. Currently TE-palvelut.fi is the best option for scraping, because it has the best coverage of the OJV market in Finland, and it is the most informative of the portals. Another option in the meantime is to concentrate the scraping activity on the EURES-portal, where all current OJVs of TE-palvelut.fi-portal are automatically posted. This function will also continue after Työmarkkinatori launches. Yet another option is to concentrate the scraping activity on one of the private portals, such as Duunitori.fi, which scrapes OJVs from the TE-palvelut.fi-portal and other portals. One problem with this option might be that it promotes paid OJVs more than others, and also, this portal's operations might change in the future, as Duunitori is also involved in piloting Työmarkkinatori. The final selection of the Finnish portals for the scraping activity will depend on the aims and timetable of this project and the development of the Työmarkkinatori-portal.

5.2. Conditions for Drafting and Posting OJVs in the Selected Job-portals

5.2.1. Drafting and Posting an OJV on the PES Online Job-portal

The workflow of drafting an OJV: It is advisable to announce vacancies online to the PES. There are different methods for doing so. If the company is registered to the PES services, the employer needs to register and log into “My Services”. In “My Services”, companies can publish a job vacancy announcement quickly and, if needed, to the EURES service. Companies can save a job announcement template, change or delete a job posting. They can also track the status of their job announcement in real-time at the PES office and see job-seekers’ profiles and applications for their vacancies. Logging into “My Services” is done by using the Katso Identification provided by the Finnish Tax Administration, which allows companies to access all the benefits of “My Services” and the other e-services. Also, using the CV-Net search requires identification by Katso.

The second method is to report job vacancy information by telephone or an open web form to a local PES. After reporting the vacancy, the PES office will contact the company and discuss the details of the assignment.

When filling in the open web form, the company can decide if the vacancy should only be submitted to the PES Office internal information system or if it should be posted to the TE-palvelut.fi internet service of OJVs, which will also post it automatically to the EURES portal as well.

The characteristics of the OJV template: Fields to be filled in (mandatory fields are marked with an asterisk):

Information about the employer:

- Company name* (text field);
- Business ID (text field);
- Personal identification number (text field);
- Address (text field);
- Zip code and post office* (text field);
- Country* (selection from the list);
- Contact person* (text field);
- Phone number* (text field);
- E-mail address (text field).

Job description:

- Date of publication of workplace (dd/mm/yyyy) (please give release date if you want to post this job in the future) (text field);
- Location or other details (text field);
- Employer’s reference (text field);
- Occupational code and title (in accordance with the ISCO classification)* →directs to another page where to search for the code, text field for the title;
- Skills and qualifications (multiple selection from the list);
- Work experience (selection list: none/one year/one to five years/more than five years);
- Number of persons employed* (text field);
- Limit of job offers (text field);
- Beginning date of work* (text field) and more information (text field);

- Duration of work (selection list: less than 11 days/11 days to one month/one to three months/three to six months/six to twelve months/more than twelve months) and more information (text field);
- Summer job (tick box);
- Working hours* (selection list: full time/two-shift work/three-shift work/four to five-shift work/night work/part-time job/other part-time/evening work/weekend work) daily working hours (text field);
- Salary* (text field);
- Type of employment* (selection list: wage work, commission, entrepreneur);
- Apprenticeship (tick box);
- Rental work (tick box);
- Recruitment mandate (tick box), name of the contractor company, such as a temporary work agency or head hunter (text field), name will be displayed online or name only for the PES office (selection tick box);
- Housing opportunity (tick box);
- Job description (the text must not have special characters or formatting) (large text box).

Job location and contact information:

- work at multiple addresses or teleworking (tick box)
- address and contact information is the same as the employer's (tick box)
- address (text field)
- zip code* (text field) and post office* (text field) (can be shown on the map)
- country* (selection from the list)
- additional locations (multiple selection from the list on municipalities)
- contact persons, phone, email, etc.* (large text box)

Information about the application procedure (link to another page):

- Last day to apply (dd/mm/yyyy) (text field), (hh/mm) (text field);
- Address where the applications should be sent to (text box, max 400 characters);
- The Internet address of the job search form (text field).

Information on the vacancy:

- PES Office presents a job in a personal employment service. I also want to place a job advertisement on the Internet at the "Job Vacancies" page of the TE-palvelut.fi-portal (tick box: yes/no);
- I am interested in hiring a person from another country. A blue flag will be added to the notice on the EURES-portal (tick box).

Translation of the vacancy: If you would like to make a translation also in Swedish, do it here (link to the translation page).

The workflow of posting an OJV: the open web form service is open to all, free of charge, and it is available anywhere and at any time. Since the service is not based on identification, the PES Office needs to verify the sender of the OJV before publishing it. Prior to the publication of the vacancy, the details of the publicity and other measures related to filling in the workplace will be discussed with the PES Office. OJVs posted through "My Services" are published in real-time. Filling in the open web form must be completed within 60 minutes, after which the connection to the information system is switched off for security reasons.

The open form for OJVs of the TE-palvelut -platform is comprehensive and very versatile. The form is easy to access, and it is free to post the OJV. The same template is used for different posts.

5.2.2. Drafting and Posting an OJV on a Private Online Job-portal

The workflow of drafting an OJV: posting an OJV to the Duunitori.fi-portal has three steps: the ad, the scope and publication. The service displays job postings in a map view and in a traditional list view. Compared to the TE-palvelut.fi-portal, Duunitori does not guarantee the accuracy or reliability of the information contained in the OJVs. Job descriptions as well as any other material on the web service are published without any confirmation of their validity.

Companies can post a free announcement or select an advertisement campaign. With the paid campaign, companies can better ensure that a job advertisement is displayed where the most potential job-seekers will see it (e.g. in social media). The same ad template is used for different posts and also in different advertisement campaigns.

The characteristics of the OJV template: filling a vacancy ad includes the following information (everything is mandatory except a logo and a picture):

- The title of the notification: a position to apply (text field);
- Name of the employer (text field);
- Logo to be downloaded from the computer, Dropbox or Google Drive (this is a small image to be displayed in the ad and in the listings; width preferably at least 400 pixels);
- Picture to be downloaded from the computer, Dropbox or Google Drive (this is a large image to be displayed in the ad; width at least 1600 pixels);
- The ad text: about a more precise job description (large text box);
- Applications to the address (text field);
- Last day to apply: maximum validity 30 days (calendar to choose the day);
- Location: work address (text field, places also the address on the Google Maps);
- E-mail address (not shown in the ad, only used for correspondence) (text field);
- I agree to the terms of use (tick box).

The workflow of posting an OJV: the different choices of OJVs on the Duunitori.fi-portal are:

- **Free:** average of 20 readings, job announcement at Duunitori, two to four weeks of visibility, stylish look, limited visibility in Duunitori's network, price: free;
- **Highlighted:** average of 100 readings, includes all features of the "Free Ad" plus highlighted job search results, visibility in Duunitori's Social Media Network (more than 350,000 followers in Finland), price: €200;
- **Campaign:** average of 500 readings, includes all features of the "Highlighted Ad" plus active campaigning in Duunitori's network, additional visibility outside the Duunitori network, reaching 15,000 passive job seekers, price: €650;
- **Power Campaign:** Average of 900 readings, includes all features in the "Campaign Ad" plus visibility on Duunitori's home page, 400 views more, reaching 30,000 passive job seekers, price: €900.

Companies can order an announcement campaign by reporting a vacancy via form or by contacting Duunitori's sales team by sending them an ad text, company logo and a picture that reflects the atmosphere of the company. There are also available ad campaign packages with reduced prices depending on the number of ads.

5.3. Contacting the Online Job-portal Owners

All of the online job-portal owners have been contacted by e-mail. Only two of them have responded, and they asked for more detailed information about what it would mean to take part in the planned scraping activities. For now there have not been any promises of cooperation, but it seems likely that they will agree to cooperate when the scraping stage of the project takes place.

6. Format and Content of OJVs

6.1. Legal/Regulatory Framework

There are no legal frameworks or guidelines that regulate the design of OJVs in Finland. In certain professions there are legal requirements regarding how the recruitment process should be handled, and this also includes frameworks for the vacancy ads. It is a legal requirement that job vacancies are publicly posted, but they do not need to necessarily be posted to the PES.

6.2. Format of OJVs

There are different factors that influence the formats of OJVs in terms of used categories and design. For example, when recruiting state administration managers and experts, the OJV (or any other kind of ad) must describe the duties and eligibility requirements of the post, the end date (and time) of the application period and the authority to which the application must be addressed. The OJV should also state whether the post has been set up in a particular unit or is for the whole office. Also, other eligibility criteria should be mentioned, such as language requirements for Finnish and Swedish (Finlex (2)). The recruitment of the municipal official requires a public application procedure. The application period must be at least 14 calendar days from the date of publication of the job ad (Finlex (3)). When recruiting for specific professions, there is usually a need for specific education requirements to be described in the job ad (e.g. doctors, nurses, psychologists, electrical engineers).

There are general guidelines for proper vacancy ads, but they are informal standards. The job announcement should clearly indicate the eligibility criteria and the things that are considered important for the selection decision, since in general the recruitment decision should be based on the criteria in the job vacancy ad. The job assignments and job advertisements should promote equal access for both genders. The announcement should also indicate other issues affecting the selection (health status, criminal records, hygiene requirements, etc.). In the case of work involving children, the job ad must also mention the obligation to submit a criminal record. It is also advisable to mention if there is a probation period, but there is no need to report wages in the job announcement (Kouvola kaupunki 2015: 9.)

The main language used in online vacancies is Finnish. The PES job-portal also uses Swedish, which is another official language in Finland. Especially large international companies searching for employees often post job ads in English. In many job-portals, it is possible to additionally post the job ad in English or Swedish, but this is not done very often. There could be a need to be able to post OJVs to the TE-palvelut portal in the indigenous Sami language as well.

6.3. Content of OJVs

According to the interviewed experts, the formats and factors responsible for variation in the content depend on the recruiting employer. They can decide what kind of information to include in the

ad and the level of detail to use to describe the vacancy. When posting the OJV to some private platforms, companies do not need to follow the standard classification of occupations and can instead use novel job titles that are difficult to classify. The contents of the OJVs vary: sometimes job ads seem to be more like business ads, describing mainly the company itself and giving only the contact information or web address for the vacancy.

According to the interviewed experts, when a company has a shortage of skilled labour or a need for a workforce with special skills, it is more likely that they will use multiple channels of recruitment. In these cases, the company will often use private recruitment companies or the paid services of the private online portals to find the right employees.

The interviewed experts also explained that when there is a lot of competition for skilled employees, the companies also must present themselves as interesting and attractive places to work. It affects the contents of the OJVs and also highlights the career possibilities in the company, not only the needed skills of the employee. When the company has an international focus, the PES expert explained that the company is more likely to use the EURES platform.

It is not possible to see yet how the Työmarkkinatori, the new national online platform under development, will be structured. At the moment it guides the job-seeker to the different private service providers' web pages depending on the type of employment: full-time, part-time, gig job or project work. The platform guides the company to post their job ad to two different private service providers. It is not clear yet how the final structure will work.

The experts agreed that OJVs are focusing increasingly on the competencies needed for a job. Especially when there are shortages of an available, skilled workforce, for example waitresses during the tourist season, companies focus on finding a good worker or a person with a good attitude for the job in the hopes that the right perspective from an applicant is enough, and they are willing to train him/her on the job. According to the interviewed experts, in the future, the ESCO classification (European Skills, Competences, Qualifications and Occupations) will probably be introduced more widely. ESCO classification is an important deliverable that supports the Europe 2020 strategy and the New Skills Agenda for Europe. It identifies and categorises skills, competences, qualifications and occupations relevant for the EU labour market and education and training. It also shows the relationships between the different concepts. (European Union Open Data Portal) ESCO is structured in three pillars occupations, skills and competences and qualifications that are structured hierarchically and interrelated with each other (ESCO). It is very likely that ESCO will be included to the assessment criteria in the Työmarkkinatori-platform.

The aim of the Työmarkkinatori is that, as a platform based on machine learning and open data, it will match job-seekers to vacancies based on a skills assessment. Therefore, the wider perspective on the competencies, skills and even the personality traits of an applicant will be brought into use in OJVs. They are even planning to introduce a possibility for the job-seekers to post video clips of their personality and skills to their online CVs. At the moment the project is testing if the ESCO classification would be an appropriate base for the assessment or if there would be a need to include wider assessment criteria on Työmarkkinatori.

There is a growing need to find the right employee based on his/her competencies. A person's education or previous work experience are not the most important features in the selection criteria anymore (See Figure 2). Particularly in the sectors that are looking for very specific skills (e.g. information technology), the required skills in the job ad can be quite exact.

OJVs are not allowed to discriminate in a negative way. Sometimes there can be positive discrimination, for example by mentioning that women are encouraged to apply, especially when the workplace is male dominated. According to the Non-Discrimination Act, no one should be discriminated against on the ground of age, origin, nationality, language, religion, belief, opinion, political activity, trade union, family relationship, health status, disability, sexual orientation or any other related cause. Although the positive special treatment aimed at promoting equality or preventing or eliminating disadvantages caused by discrimination is not considered discrimination (Finlex (4)).

After conducting a brief study of around 40 OJVs of different occupations on the TE-palvelut.fi-platform, we determined the most common non-skill words used in the OJVs: team player, team work skills, flexible, reliable, good attitude, creative, eager to learn, networking skills, interaction skills, cooperation skills, pressure/stress tolerance, ability to work independently, problem solving skills, effective, active attitude/approach to work, spontaneous, genuine interest for the work, passion for the work, results-oriented, comfortable simultaneously working on several tasks, good people skills, "can do spirit", consistent at work, takes responsibility, organizational skills, travel readiness and customer-oriented.

6.4. Main Differences between the Public and Private Online Job-portals

Different job portals have their own formats for the contents of the OJVs on their platform. For example, the PES uses a detailed form, but Duunitori's form includes only the following fields: headline of the OJV, name of the company, vacancy description, application address, last day to apply and location of the workplace. On other popular private job portals (Oikotie, Jobilla, Monster, Avointyöpaikka), employers must register or buy OJV advertisement packages before entering information onto the OJV forms. The main difference between the public and private job-portals is that private companies have to generate revenue by charging the companies for different (extra) services in the recruitment process. Therefore, the OJV formats and contents differ from one job portal to another. Also, many secondary job-portals offer only short descriptions about the vacancy and then guide the job-seeker to the original job ad on the company or PES web page through a link, where the more detailed vacancy description can be found.

The PES uses a very informative OJV form to be filled in on the TE-palvelut-portal. According to their instructions for the companies, the aim of recruitment is to be as fast, reliable and productive as possible for both employers and job-seekers. That is why the job announcement must be informative, high-quality and realistic. The job must be clearly described and a good job announcement should contain the following information (TE-palvelut (1)):

- Company name and employer name;
- Professional title;
- Description of the task;
- Special skills;
- Education requirements as required;
- Working hours;
- The beginning date of work and the duration of the employment;
- Location of the workplace;
- Salary.

The mandatory information for posting the OJVs on the TE-palvelut -platform are the company name and address, contact person and phone number, location of the workplace, occupational code and title (in accordance with the ISCO classification), number of persons employed, the beginning date of work, duration of the employment, working hours, salary, type of employment and job description. (TE-palvelut (2).) The mandatory information of the OJVs on the TE-palvelut portal is more detailed than on the OJVs of the private companies.

6.5. Expected Trends in the Format and Content of OJVs

One expected trend in the field of job-portal developments concerning the format and the content of the OJVs, is that the OJVs will likely become more optimised for mobile use, as more job-seekers are using mobile devices to search for OJVs (Duunitori 2017: 8).

There are going to be big changes in the OJV market in Finland. Because of the regional reform 2019 and national aim for developing a new digital platform for matching job seekers to vacancies, the field of OJVs will look totally different in few years. The future of the OJVs in Finland will depend on how the Työmarkkinatori-platform is structured and how widely it will be introduced and adopted by different actors. It is expected to change the whole OJV market in Finland in the next two years. Työmarkkinatori, is now in its beta version. All the experts interviewed, have high expectations of this new platform, but they are still quite uncertain what kind of form the platform will take and how well it will succeed in combining the public and private service providers through a common digital service platform based on machine learning and open data.

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Expert Interviews

Name of organisation	Type of organisation	Expert's position	Interview date
HRM Association	Association for HRM	Executive Director	11 May 2017
Private online job-portal and HR organisation	Provider of labour market intermediation services	CEO	12 May 2017
Statistics Finland	Statistical Office	Senior Actuary	16 May 2017
Provider of HMR services	Career coaching and analysis	Founder & CEO	17 May 2017
Confederation of Finnish Industries	Business association	Senior Adviser	19 May 2017
PES/KEHA-Centre	PES	Expert	23 May 2017