

Mapping the landscape of online job vacancies

Background report: United Kingdom

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

CBI	Confederation of British Industry
Cedefop	European Centre for the Development of Vocational Training
CIPD	Chartered Institute of Personnel and Development
CRISP	Centro di ricerca interuniversitario per i servizi di pubblica utilità, University of Milano-Bicocca
DWP	Department for Work and Pensions
EHRC	Equality and Human Rights Commission
EURES	European Employment Services
HR	Human Resources
ICT	Information and Communication Technology
LFS	Labour Force Survey
NHS	National Health Service
OJVs	Online Job Vacancies
ONS	Office for National Statistics
PES	Public Employment Services

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 the UK. It is based on desk research of available data sources in the UK (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 UK 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 the UK 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 the UK 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

This study seeks to assess how relevant Online Job Vacancies (OJVs) are in the UK through desk research and analysis and four in-depth interviews. The research began with analysis of a number of resources of which the author was already aware:

- The Job Board Doctor: an information platform for online recruitment services¹;
- SocialTalent: employment consultancy offering also advice on recruitment²;
- Personnel Today: an online source containing HR news, guidance and jobs³;
- Chartered Institute of Personnel and Development (CIPD)⁴.

We also engaged in a lengthy literature review/research exercise to explore the OJV market in the UK. The significant desk research phase was carried out via Google between 27 April and 25 May 2017. In doing this we searched many terms and had the most results under three terms:

Search 1	Job search	
	Number of results per search term	About 1,210,000,000 results (0.62 seconds)
Search 2	Job advert	
	Number of results per search term	About 18,000,000 results (0.65 seconds)
Search 3	Job vacancy	
	Number of results per search term	About 921,000,000 results (0.61 seconds)

Source: Dean (27 April to 25 May 2017).

In our continued search for information and understanding on the subject we also searched Google and Google Scholar using the terms "job portals", "online vacancies", "job boards" and "trends in job portals".

1.1.1. Public Data/Academic Research

However, there is a skew towards industry writing rather than academic publications, with surprisingly little published research within major publications, and most reports and articles are less academic. It seems that online jobs vacancy is not an area that has exercised considerable academic research in the UK, as it is seen more as a vehicle for obtaining information on related subjects such as labour market trends and skills forecasting.

¹ <https://www.jobboarddoctor.com/>.

² Of particular interest is the blog: <https://www.socialtalent.co/blog/top-10-uk-job-boards-in-2016-infographic>.

³ <http://www.personneltoday.com/hr/five-recruitment-tech-trends-to-keep-on-top-of/>.

⁴ <https://www.cipd.co.uk/knowledge/strategy/resourcing/surveys>.

1.1.2. Research/Surveys of Interest Groups

The information obtained via desk research is up-to-date and industry relevant and enables to give a differentiated view on the field of online job-portals (see Table 1, Source 2 for an overview of the sources and the information on the different aspects of OJV use that they contain.

1.1.3. Expert Opinions

Interviewees were selected based on their active engagement with OJVs and include representatives of government, private sector and recruiter/employer. The Confederation of British Industry (CBI) were chosen as they cover almost all of the large employers in the UK and the interviewee had personal experience in the use of OJVs. ONS are the national statistical office, and we spoke with the individual leading the ESSnet project that has a number of parallels with our work. We spoke with an OJV expert with Adzuna who also supports the ESSnet work as well as with a policy manager at the PES in the UK, who was selected by the PES as the person most able to support this work theme. ONS and PES had less experience concerning the content of OJVs and job portal business models. As we were unable to establish contact with a job board operator, we were fortunate that our interviewee at Adzuna has significant expertise on the subject of job boards.

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	
Source 1: Public data/ academic research	ESSNet web scraping	ESSNet	Excellent	no	no	Good
	ESSNet Survey	ESSNet	Excellent	no	no	Good
Source 2: Research/surveys of interest groups	Job Board Trends: Global, Spring 2013	JobBoardDoctor	No	Excellent	Excellent	Excellent (unfortunately no follow-up for this survey)
	JobsOutlook (2016)	Recruitment & Employment Confederation (REC)	Good	Good	Excellent	Good
	Resourcing and Talent Planning (2015)	CIPD	OK	Good	Excellent	Good
Source 3: Expert opinions⁵	Expert Interviews 1-6	CBI	Excellent	Excellent	Excellent	High
		ONS (ESSNet)	Good	Good	Good	High
		ADZUNA	Excellent	Excellent	Excellent	High
		DWP (PES)	Excellent	Average	Good	Good

Source:

Dean

(2017).

⁵ As the quality of the expert interviews varied, differentiated information is provided here for single interviews.

2. Labour Market Dynamics and Impact on the OJV Market

National labour markets are shaped by different drivers of change, such as technological change/digitalisation, globalisation, shifts in the economic structure (from goods production to service jobs), environmental change and ageing societies. They evolve differently under various conditions, changing the labour market dynamics and the structure of the labour force. For example, rapid technological change and demographic change can lead to skills mismatch or skills shortages in certain occupations/sectors.

The UK employment rate remains high compared to EU averages, and national forecasts suggest an additional 1.9 million jobs will be created in the decade 2012-22, primarily in the business and other services sector. Particular growth is anticipated in high-skilled occupations, such as managers, professionals and associate professionals, as well as caring and personal services. Skills shortages are increasing, especially in areas such as science, technology, engineering and maths (STEM) and qualified technicians; half of UK employers report skill under-use.⁶

Looking towards 2030, longer-term growth is anticipated due to the “convergence of technologies,” such as the blurring of boundaries between natural sciences and informatics. These are important areas for the UK, with its “strong dependence on sectors like the life sciences” and the potential to harness significant growth in areas such as bioinformatics, an area that is forecast to experience double-digit growth annually in terms of its global market.⁷

Three main drivers of change have influenced the labour market in the last three years, affecting the demand for labour and the utilisation of skills in the workplace:

- Digitalisation and the need for digital competencies (and STEM);
- Continued growth in white collar (often service economy) jobs;
- The interplay between services, technology and media.

All three factors impact the OJV market. Many businesses require recruitment at relatively low cost, so job boards and online recruitment are popular and well established. The relatively liberal market economy of the UK has led to a proliferation of non-permanent contract types, particularly self-employment and fixed-term contracts, as employers pass risk to the employees. With high turnover, the use of cheaper recruitment tools has grown in importance.

The trend towards more highly-skilled white collar occupations in the UK is expected to continue over the next decade, with two million more managers, professionals and associate professionals jobs are forecasted by 2022. This is complemented by some increases in lower-skilled jobs, especially in caring, personal and other service occupations.

The sectors expected to have the strongest employment change over the period 2015-2025 in United Kingdom are all white collar professions (see Table 2).

⁶ EU Skills Panorama, UK Analytical Highlights 2015.

⁷ HM Government (2014), Industrial strategy – Government and industry in partnership: Progress report.

Table 2: Sectors expected to have the strongest employment change over 2015-2025

Occupations	Change in %
1 Real estate, professional & related activities	25.68 %
2 Administrative & support activities	25.28 %
3 Human health & social work activities	11.84 %
4 Accommodation & food service activities	11.13 %
5 Education	10.17 %

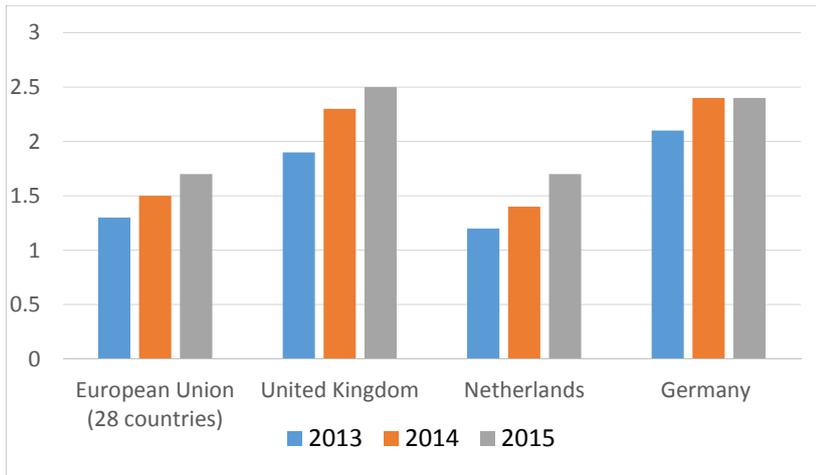
Source: EU Skills Panorama (downloaded on 20 January 2017).

Qualification levels required for most occupations are also rising. It is unclear if increasing qualifications reflect a change in the nature of jobs, or simply that the supply of highly-qualified people is forecast to grow faster than demand. As a result, skills shortages are a pressing issue for the UK labour market, particularly for STEM-qualified fields. Although UK employers reported 12% more vacancies in 2013 than in 2011, indicative of general economic recovery, around three in ten of those vacancies were considered “hard-to-fill”, due to skills shortages or an inability to find people with the appropriate qualifications or experience. Vacancies for roles in which there were known to be shortages represented 22% of all vacancies in 2013 (Winterbotham et al. 2014). The challenge in filling many of these positions is attributed to skills shortages. The percentage of vacancies that are hard-to-fill due to skills shortages has risen from 16% in 2011 to 22% in 2013. Because of the inability to fill new vacancies with qualified individuals, the progress of the economic recovery is hampered.

Job vacancy rates in the UK remain rather high compared to most countries (See Figure 1). The Chartered Institute of Personnel and Development (CIPD) in the UK (Resourcing and Talent Planning 2015, CIPD)⁸ identified that, “over three-quarters of employers experienced recruitment difficulties last year.” An increasing proportion reported difficulties recruiting across all staff categories, although, as in previous years, managers and professionals/ specialists” and technical staff were the most difficult staff categories to fill, followed by senior managers/directors (See Figure 2).

⁸ https://www.cipd.co.uk/knowledge/strategy/resourcing/surveys_

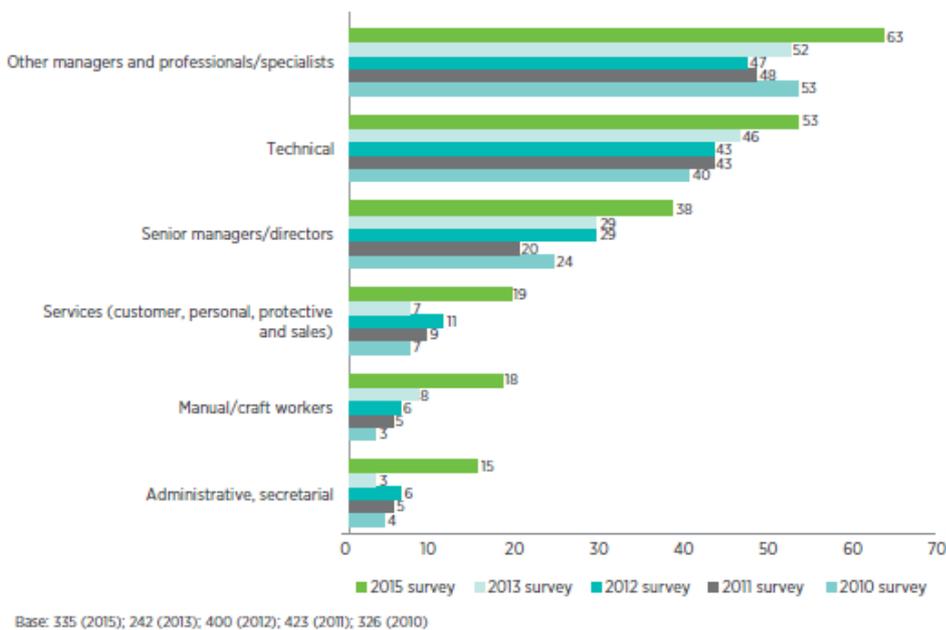
Figure 1: Job Vacancy Rates for year and country, 2013-2015 percentage variation



Source: CRISP (2016): Preliminary Study on the 28 involved European countries (unpublished Annex of Cedefop report).

A lack of candidates with specialist skills or technical skills and/or lack of sector/ industry experience or general experience were common reasons for recruitment difficulties. A fifth of employers who have difficulty recruiting administrative or manual workers report that pay is the main hurdle. Some of the most common approaches that employers use to manage recruiting challenges are sponsoring relevant professional qualifications, up-skilling existing employees and recruiting candidates from different sectors or industries.

Figure 2: Roles that have proven difficult to recruit



Source: Resourcing and Talent Planning 2015, CIPD.⁹

⁹ <https://www.cipd.co.uk/knowledge/strategy/resourcing/surveys..>

Brexit is expected to have a particularly strong impact on high-skilled employment. There has been much discussion that banks may consider moving staff from London to locations within the EU, and similar discussions are taking place within the technology sector. As the UK is home to 50% of all headquarters of MNCs in the EU, the potential for job relocation and disruption among large employers is immense. In a survey of the UK's Institute of Directors (IoD), 25% indicated plans to freeze recruitment in the wake of the Brexit vote, and an additional 5% indicated plans to cut jobs (Shetty 2017). Different sectors have different levels of dependence on non-UK workforces, and therefore the potential loss of workforce in the absence of EU free movement could disproportionately affect industries such as food and drink manufacturing, consumer goods manufacturing and automotive as well as transport and logistic. Temporary employment in both high-skilled fields seeking short-term experts as well as in low-skilled work such as agriculture could also be affected by the reduced ability to recruit outside the UK (KPMG 2017). It is yet to be seen how these potential changes in sector strength and employment may impact OJVs.

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

3.1 PES Online Job-portal(s)

3.1.1. Legal/Regulatory Framework

There are some regulations that have an impact on the governing OJVs and their portals, although these pieces of legislation are not aimed at the sector directly, rather parts of other acts impact OJVs due to their links with employment and workplace rights. Through the PES, the Government has a role in recruitment agency registration and monitoring, but only in a very broad sense; the PES can monitor if they think a practices poses a risk to individuals or if vacancy information is un-savoury or inappropriate.

3.1.2. Organisational Structure of the PES Online Job-portal(s)

The PES online job-portal, Universal JobMatch, was developed by the international portal brand Monster as part of a stand-alone sub-contract with the Department for Work and Pensions (DWP). Universal JobMatch replaced the JobCentre Plus' Job Search Tool and Employer Services Direct, which were part of the Directgov online system set up in the UK's New Deal employment system. The service was introduced as part of a Government campaign to assist the DWP in monitoring clients' job-search activities directly, and as part of the "Digital By Default" agenda to motivate more British citizens to subscribe to an online process when claiming benefits (both unemployment benefit and In Work) (Universal Credit benefit).

Parallel to launching Universal JobMatch, the DWP closed its existing system of job search and employer services, migrating its customers to the new system. By February 2013 there were some two million registered users, conducting over 6 million searches per day with 460,000 employers posting jobs to the new portal.

3.1.3. Focus of the PES Online Job-portal(s)

The PES emphasises that it posts "real jobs" – confirmed open vacancies offered by verified employers. As the primary purpose of the PES is to reactivate people into the labour market, there is a perception that the OJVs on the PES portal, Universal JobMatch, primarily focus on lower skilled and lower experience positions. However, as it is run by Monster and includes jobs spanning all sectors and levels of the labour market, the OJVs should be similar to those found on other job boards and job aggregators. As an example, a search for "sales" generates as many hits as one for "manager". Again, given the intended audience, there is a slight bias towards UK-based jobs and employers. There is no particular focus on a specific age range or demographic profile.

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

Universal JobMatch has changed in recent months. It was reported that the PES stopped accepting listings from private job boards and portals on 27 May 2017. From that date on the PES has only published OJVs when they are posted directly to the PES website by employers. This was expected to reduce the volume of OJVs on the PES and could also impact the type of OJVs that ap-

pear on the portal, as employers may choose to post high-skilled and niche/specialist roles elsewhere. The number of vacancies has dropped considerably. Whereas there were over 600,000 OJVs in early 2017, by October 2017, the number had dropped to 155,278 vacancies. Indeed, by contrast, had 642,086 OJVs in October 2017.

The type of job seeker using the PES may also re-focus to individuals with lower skills, lower qualifications, and the unemployed. Overall, the PES is less incentivised to have a large number of OJVs, as posting and using the portal are free.

PES vacancy data from Universal JobMatch is also made available to *LMI for All*, an open data project and portal that collects and re-uses government data sets. Other sources of data for the *LMI for All* portal include the Office for National Statistics and the UK Commission for Employment and Skills. Data aggregated on the portal uses the Standard Occupational Classification (SOC) code, and can be freely used for any purpose, including commercial use (Mörtberg and Tanaka 2014).

3.1.5. Posting of PES Vacancies on EURES

Employers have the option to send OJVs to EURES when they are posting to the PES. For many employers EURES has little relevance, but in sectors with high migrant numbers (e.g. hospitality, etc.) it is used regularly. As discussed in the EURES Report (Cylus, Rand and Larsen 2017), the UK previously made all Universal JobMatch jobs available on the EURES portal through daily web services synchronisation. However, in recent years the policy has changed, and now employers must opt in if they would like to have their vacancy posted on the portal. In connection with the overall drop in the number of vacancies posted on Universal JobMatch (see Section 3.1.4), this has also lowered the total number of OJVs from the UK that are available on EURES.

3.2. Private Online Job-portals

3.2.1. Legal/Regulatory Framework

Private online job-portals in the UK are minimally affected by regulations- However, there are key pieces of legislation that affect the recruitment process. The Equality Act of 2010 prevents discrimination based on so-called “protected characteristics” including age, disability, gender reassignment, race, sex, sexual orientation, marriage and civil partnership, and pregnancy and maternity. The Equality and Human Rights Commission (EHRC) enforces legislation to protect people on the basis of gender, race, disability, health, age, religion, sexual orientation and transgender status. The Rehabilitation of Offenders Act protects individuals who have been convicted of a crime from experiencing labour market discrimination, while requiring criminal record checks for roles that involve working with vulnerable groups (e.g. minors, people within mental health issues, in clinical environments). The Safeguarding Vulnerable Groups Act established the framework for a vetting system for hiring in environments working with the aforementioned vulnerable populations. The Immigration, Asylum and Nationality Act prevents the employment of illegal migrants. Finally, the Data Protection Act restricts an employer’s ability to collect and use “sensitive data” during the recruitment process (University of Sheffield).

3.2.2. Dominant Online Job-Portals and Their Business Models

SocialTalent¹⁰, a platform that provides recruitment solutions, describes the changes in the job-portal landscape between 2015 and 2016. They report:

“No change at the very top for *Indeed* who claim the top spot for the third year running since they’ve been compiling this list. However, *Reed* has relinquished second place to newcomer *Directgov*, the official UK job center website, meaning that both *TotalJobs* and *CV-Library* also got nudged down a place. *Jobsite.co.uk* climbs one place to number 6, overtaking *Monster* – the second year running that *Monster* has dropped in the rankings. The most noticeable drop in the rankings however, is *Fiverr.com* (used by freelancers) which, after entering the list with a bang at number 4 last year, fell to 9th place in 2016. We welcomed one newcomer onto the list this year in *jobs.ac.uk*, the leading international job board for careers in academic, research, science and related professions. Meanwhile, *TES.co.uk*, and *CWJobs.co.uk* dropped out of the Top 10 completely. Other job boards that didn’t make this year’s Top 10 included: *Fish4.co.uk*, *Careerbuilder.co.uk*, *Caterer.com* (hospitality), *RetailChoice.com* (retail), *jobs.co.uk* and *LondonJobs.co.uk*.”

We have included all of the job-portals listed by SocialTalent apart from Fiverr.com as we already have a larger sectoral site. Portals tended to dominate for a number of reasons:

- Huge coverage and established in the market;
- Reputation amongst users;
- Whether the type of information and content fits with users’ needs (for instance CBI felt that one major newspaper site was not sufficiently “inclusive” and would not give a wide enough range of applicants;
- Cost.

Historically the main UK online job-portals have been:

- REED;
- Total jobs;
- Monster;
- Jobsite;
- CV Library.

The traditional job aggregators are:

- Indeed;
- Adzuna.

Job aggregators collect OJVs from different online sources via data-feeds with a commercial arrangement. They make money by accessing large volumes of data sources from smaller niche portals, companies and recruitment agencies - the more sites they scrape and collect, the better.

3.2.3. Focus of the Private Online Job-portals

Private Online Job-portals come in many shapes and sizes with a number of specialist portals focussed on specific sectors such as Higher Education and Healthcare. Market penetration is very high among the large, international job board companies (e.g. Adzuna and Indeed), as these portals are used by the majority of employers. Second-hand use (by recruitment agencies) is standard in all sectors. Use of portals by small companies is slightly lower in sectors where recruitment can take place via an advert in the shop doorway, but on the whole almost all sectors use job portals either directly or via a recruitment agency. Company ownership (local/foreign) makes no noticeable

¹⁰ <https://www.socialtalent.co/blog/top-10-uk-job-boards-in-2016-infographic>.

difference. Some portals will aim at particular categories of job-seekers – typically by sector or experience level (e.g. “executive” or managerial level).

3.2.4. Outreach of the Private Online Job-portals

According to our expert interviews, approximately 80% of all jobs are posted on private job portals covering all levels of employment. The only noticeable gaps are in low-skilled work, where some traditional recruitment methods are still used (e.g. newspaper, shop doorways, etc.) and at the most senior level, where people are recruited through agencies, and the adverts are not made public.

Corporate websites are particularly popular in the public and not-for-profit sectors, as are national and local newspapers and specialist journals/trade press. The private sector is more likely to favour recruitment consultants (particularly manufacturing and production organisations) and professional networking sites. Private services organisations are most likely to favour professional referral schemes, while manufacturing and production organisations are most likely to rank speculative applications/word of mouth among their most effective methods for attracting manual workers.

In 2015, CIPD found that organisations are increasingly combining in-house and outsourced approaches to recruiting – 28% in 2013, 40% in 2015 and 44% in 2017. The proportion of companies that conduct all recruitment activity in-house had dropped from 69% in 2013 to 58% in 2014. As of 2017, only around 54% of companies conducted all recruitment in-house (CIPD 2017). Also, organisations are developing closer ties with recruitment partners. While a third of respondents have reduced their use of recruitment partners over the last year, twice as many as in previous years report they have formed a closer partnership with them and consider them integral to attracting top talent. Organisations are increasingly using technology to recruit – although not as rapidly as anticipated. Corporate websites are among the most effective methods for attracting all employee groups – search and recruitment consultants are also among the most effective methods, particularly for more senior roles.

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

The UK PES was designed by Monster and therefore has the appearance and functionality of a private online Job Portal. By October 2017, approximately 25% of the total number of vacancies available privately were posted through Universal JobMatch.

As mentioned in Section 3.1.3., there are perceived differences between the types of jobs available via the PES versus through private portals. In reality, the private and public job-portals are actually very similar, but the PES is more structured as it seeks to gather information that can also be used for policy analysis.

As discussed in Section 3.1.4., the PES no longer post jobs from private job boards and portals.

3.4. Role of other Recruitment and Job-search Channels

The Office for National Statistics noted greater use of recruiting through social media and use of platforms that allow users to set alerts for OJVs matching set a set of individualised search parameters. In this sense, job search is becoming more personalised. In some ways LinkedIn is an early

form of this trend. Company websites remain key sources of advertising for larger and medium-sized employers, but this is typically in conjunction with other advertising channels. Other routes, such as word-of-mouth and personal contacts are more common in lower-skilled roles. Social networks including LinkedIn are important but typically in partnership with job portals not as alternatives.

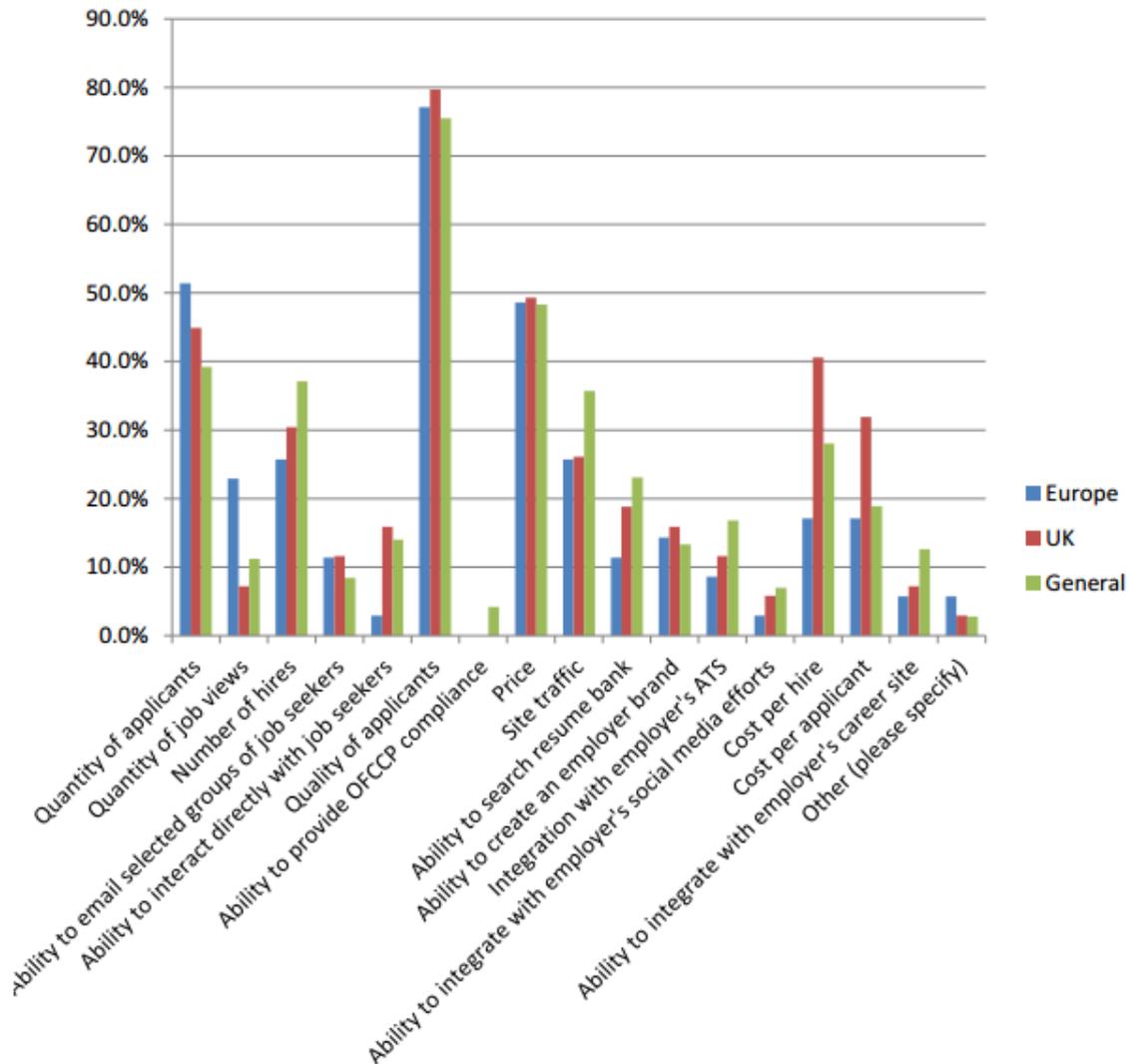
As the industry matures, the employers and individuals using the sites are increasingly aware of which sites get coverage in particular sectors and types of roles and which offer the best value for employers. Sector differences are likely to persist somewhat, for instance IT jobs are always online, whilst retail may be more print advertising (newspapers etc.).

The private sector experts anticipate more “pay per click” or “pay by results” business models. They also recognise that jobseekers want to be able to provide limited details and be notified when a company is interested. The sector is open to this kind of innovation. Financially it makes sense for employers to try advertising via a job board, as the cost is generally far less than working with a recruiting agency.

The Government is aware and indeed concerned that those furthest from the labour market tend to be least likely to use online approaches– and this is important to consider when looking at aspects of demographic change, ageing society and disability.

JobBoardDoctor’s survey (2016) found that in terms of the use of organic and pay per click vacancies UK recruiters tended to use both services more than their counterparts elsewhere in the world. Figure 3 illustrates clearly that cost and price are of greater significance in the UK job market than in Europe or other comparable countries.

Figure 3: Most important criteria for renewing online job-portal contracts



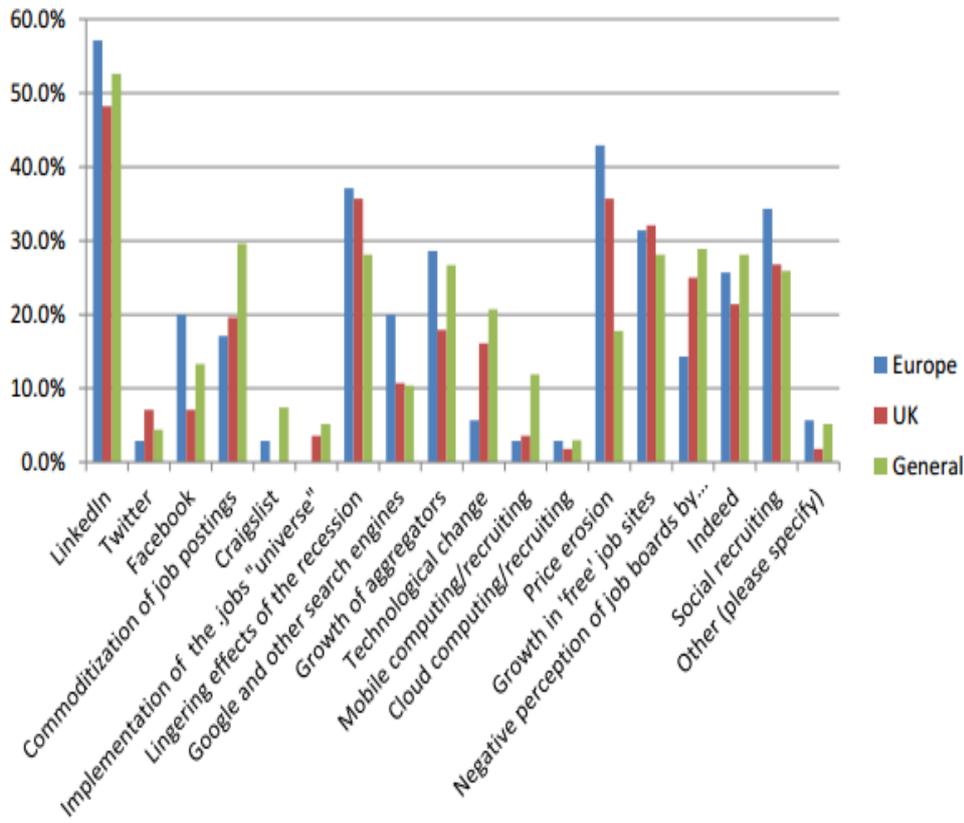
Source: JobBoardDoctor (2013).¹¹

When asked about the most significant threats to their job boards in the next two years, respondents from around the world cite similar concerns (Figure 4):

- LinkedIn;
- Economic impacts/recession;
- Price erosion;
- Growth of “free” services;
- Negative public perception of job boards;
- Social recruiting.

¹¹ General represents survey participants outside of Europe.

Figure 4: Most significant threats to online job-portals in the next 12-24 months

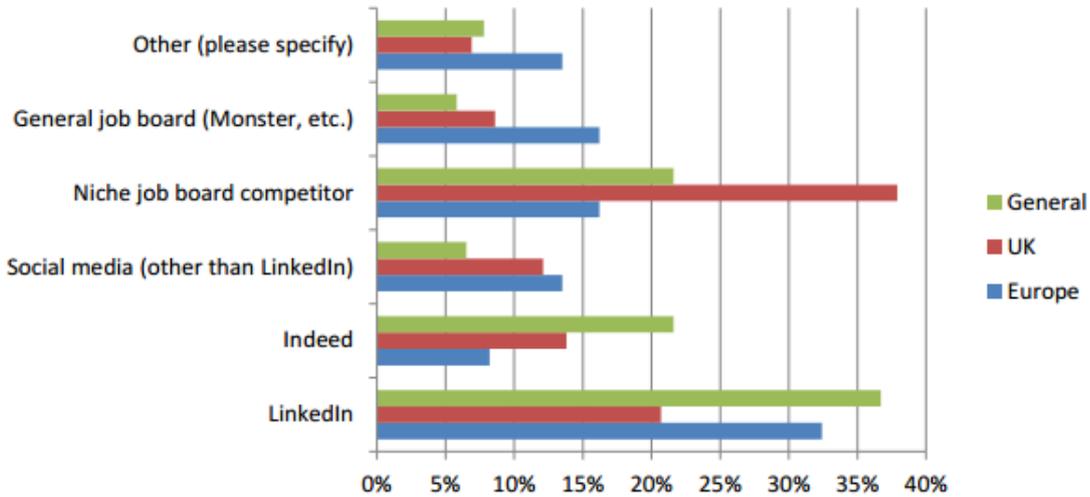


Source: JobBoardDoctor (2013).¹²

In the next 12 months, compared to other markets, the UK is more concerned about the impact of niche job board competitors (Figure 5).

¹² General represents survey participants outside of Europe.

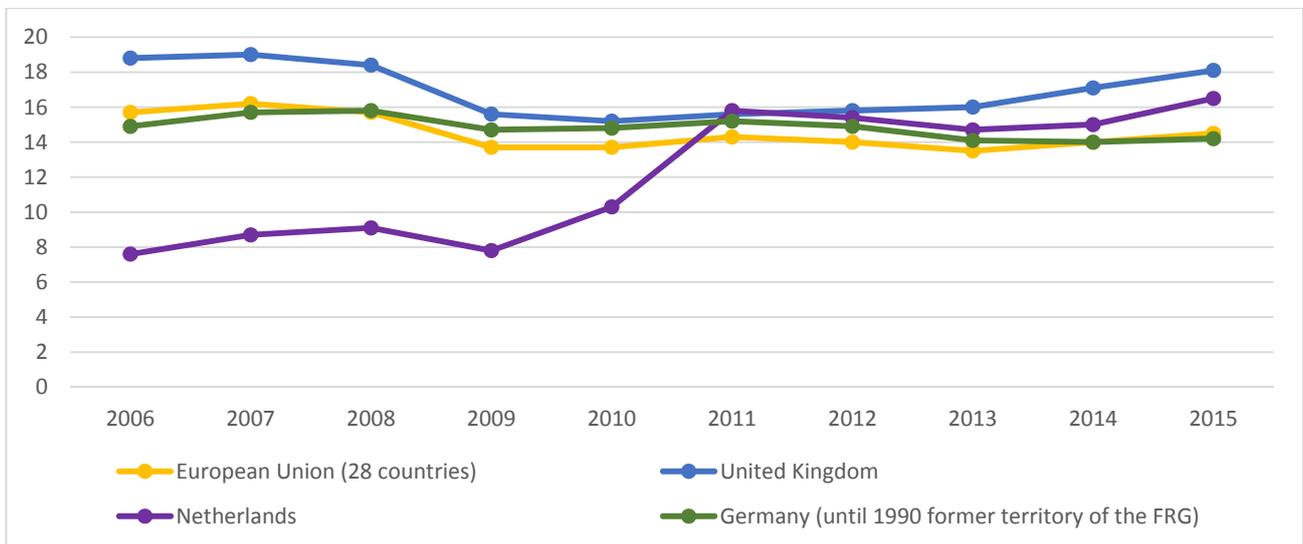
Figure 5: Biggest threats to online job-portals in the next 12 months



Source: JobBoardDoctor (2013).¹³

The UK experiences more frequent “churn” on the labour market, individuals changing jobs frequently, than other EU countries (See Figure 6). The share of people in their current job for 12 months or less is relatively high. That more individuals are changing jobs with more regularity can boost the extent to which people in the UK use OJVs.

Figure 6: Newly employed (share of people in current job for 12 months or less, in total employment); employed persons in % by country



Source: EUROSTAT Labour Force Survey (LFS) [lfsa_ewnasn].

¹³ General represents survey participants outside of Europe.

3.5. Expected Trends in the Online Job-portal Market

Organisations are increasingly turning to external agencies to assist with certain elements of recruitment, particularly for attracting top talent. The use of new media/technology to recruit is also increasing. Corporate websites are considered one of the most effective methods of attracting candidates and more organisations are conducting interviews through telephone or video/Skype, as well as face-to-face. While the majority of candidates arrive promptly for interviews, behave with sincerity and provide accurate CVs, employers noted that candidates for public sector organisations are more likely to cancel interviews with little or no notice compared with candidates in the not-for-profit or private sectors (CIPD 2017).

As noted in Section 3.2.4., the CIPD (2015) noted that there has been a fall in the proportion of employers that conduct all recruitment activities in-house and a rise in the proportion of employers that combine in-house and outsourced approaches. This increase is observed in all sectors except the public sector, where 70% of employers still conduct all recruitment activity in-house. Manufacturing and production organisations are least likely to conduct all recruitment activity in-house (38% compared with 59% of private sector services, 62% of not-for-profits). Organisations may be more selective in their use of recruitment partners because of limited budgets. Collaborative relationships with partners are more likely to achieve positive results, as they help foster a solid understanding of the organisation and its needs. The most common factors that influence choice of recruitment partners are access to highly skilled candidates (64%) and cost (60%, rising to 87% of the public sector). More than half also prioritise specialist knowledge (56%) and existing relationships (52%).

Commercial job boards are among the top methods for recruiting middle managers, specialists/technical/professional employees and team members/administrative employees. In addition, a quarter or more employers include professional networking sites (such as LinkedIn) among their top methods of attracting higher-level candidates. Social networking sites (such as Facebook) are seen to be less effective.

Table 3: Most effective methods for attracting applicants

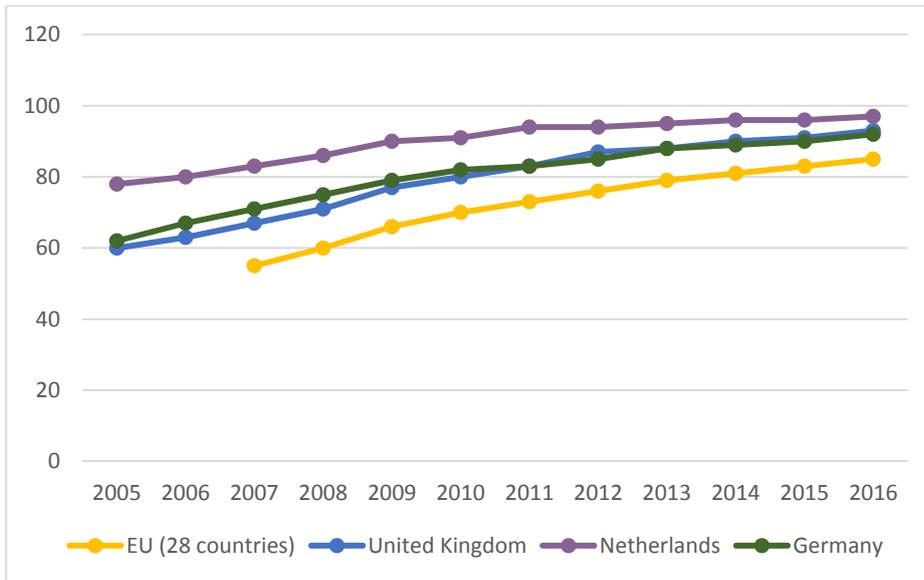
	Strategic business leaders (senior managers/directors) Base 272	Operational team leaders (middle management/team leaders) Base 252	Specialist/technical/professional employees Base 237	Team members/administration/secretarial employees Base 250	Manual operations/shop floor employees Base 183
Search consultants	43	10	9	2	2
Recruitment consultants	39	46	46	31	21
Own corporate website	36	52	48	58	54
Professional networking sites, for example LinkedIn	28	27	23	12	7
Specialist journals/trade press	17	14	23	1	1
National newspaper	17	7	7	4	3
Commercial job boards	13	29	31	33	21
Professional referral schemes	9	9	8	8	7
Encourage speculative applications/word of mouth	8	8	9	14	25
Alumni (previous employees)	4	4	2	2	1
Secondments	4	6	4	4	2
Social networking sites, for example Facebook	3	4	7	10	7
Local newspaper	2	10	8	22	33
Links with local organisations making redundancies	2	2	3	2	3
Jobcentre Plus	1	1	4	13	21
Apprenticeships	0	0	2	8	11
Local Employment Partnership (LEP)	0	0	0	0	1
Links with schools/colleges/universities	0	1	5	6	8

Source: CIPD (2015).¹⁴

The overall level of Internet access among households in the UK is reasonably high and above the EU average (Figure 7). This indicates high access to OJV portals across most income and education levels.

¹⁴ Search consultants are proactive head hunters, whereas recruitment consultants are more reactive and screen CVs.

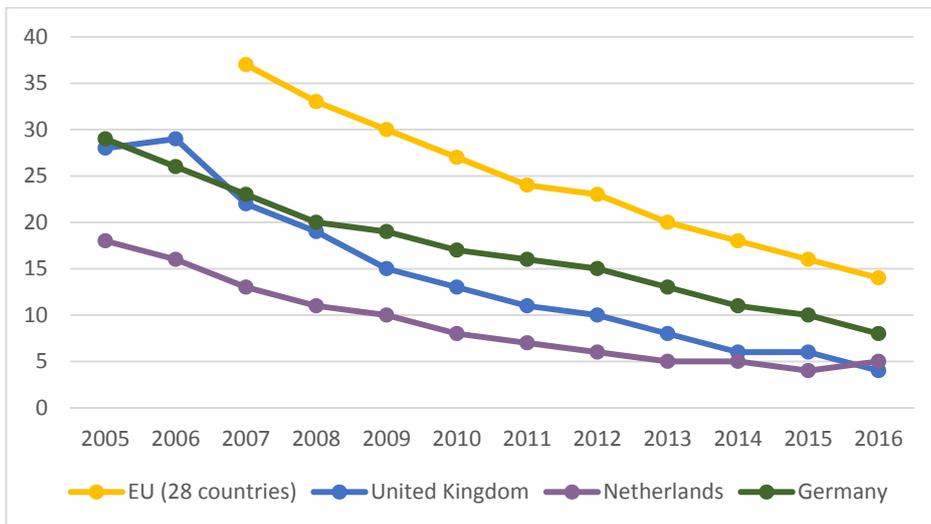
Figure 7: Household access to the Internet



Source: EUROSTAT ICT Survey of Households and Individuals [tin00134].

The UK also has very low levels of people who have never used the Internet, well below the EU average (see Figure 8).

Figure 8: Individuals who have never used the Internet



Source: EUROSTAT ICT Survey of Households and Individuals [tin00093].

4. Use OJVs in Recruitment and Job-search

4.1. Use of OJVs in the Recruitment of Labour

Companies have been slow to adopt standardised layout of OJVs or to enable swift listing and recruiting. Online is still the leading means of recruitment and is replacing more traditional channels such as newspaper advertising. Interviews with HR professionals indicate a preference for using more than one recruitment channel while maintaining an awareness of cost. Some sites can be very expensive, whereas job aggregators, such as Indeed, tend to be relatively cheap and employers can halt any further expenses once they have gathered sufficient applications.

Various factors determine where employers post OJVs:

- Cost;
- Potential to attract suitable applications;
- Sector and other industrial coverage;
- Speed of recruitment;
- Benefits vs using other recruitment such as Recruitment Agencies.

Many companies use recruitment agencies, which also post OJVs to job-portals unless staff are needed quickly and suitable candidates are available within the agency's pool of contacts.

4.2. Use of OJVs in Job-search

The Internet is the primary search tool for job seekers in the UK, regardless of whether the job seeker is look for high-skilled, low-skilled or specialist positions, however employers make careful considerations of where they choose to post their vacancies. Given the cost of advertising, it is unsurprising that many employers, particularly large companies, make significant use of their company websites. Social media, while important, has yet to break into the mainstream. Sites like LinkedIn are most used to fill specialist jobs within a practitioner community. HR professionals use social media to develop applicant pools and for branding. IT and ICT professionals in less skilled roles and very senior managers are often recruited without job portals.

The Global Job Seeker Survey conducted by the JobBoardDoctor (2016) analysed candidate behaviour in the U.S., the UK, and Germany. The survey was administered to a random, gender-balanced survey audience provided by Survey Sampling International. The survey was delivered in English for the U.S. and UK, and in German for Germany. The survey included 18 questions covering the following subjects:

- Respondent demographics
- Preferences for different job search tools
- Usage preferences for technology platforms

Important factors for the job board use survey responses were collected in July 2016. A total of 2,042 responses were received from job seekers: 1,018 in the U.S., 508 in the U.K., and 516 in Germany. There were many similarities between job seekers in the U.S., UK, and Germany – but also some significant differences (JobBoardDoctor 2016):

- Almost 3/4 of the respondents in all 3 nations were employed: U.S. 75%, UK 69%, and Germany 68%;

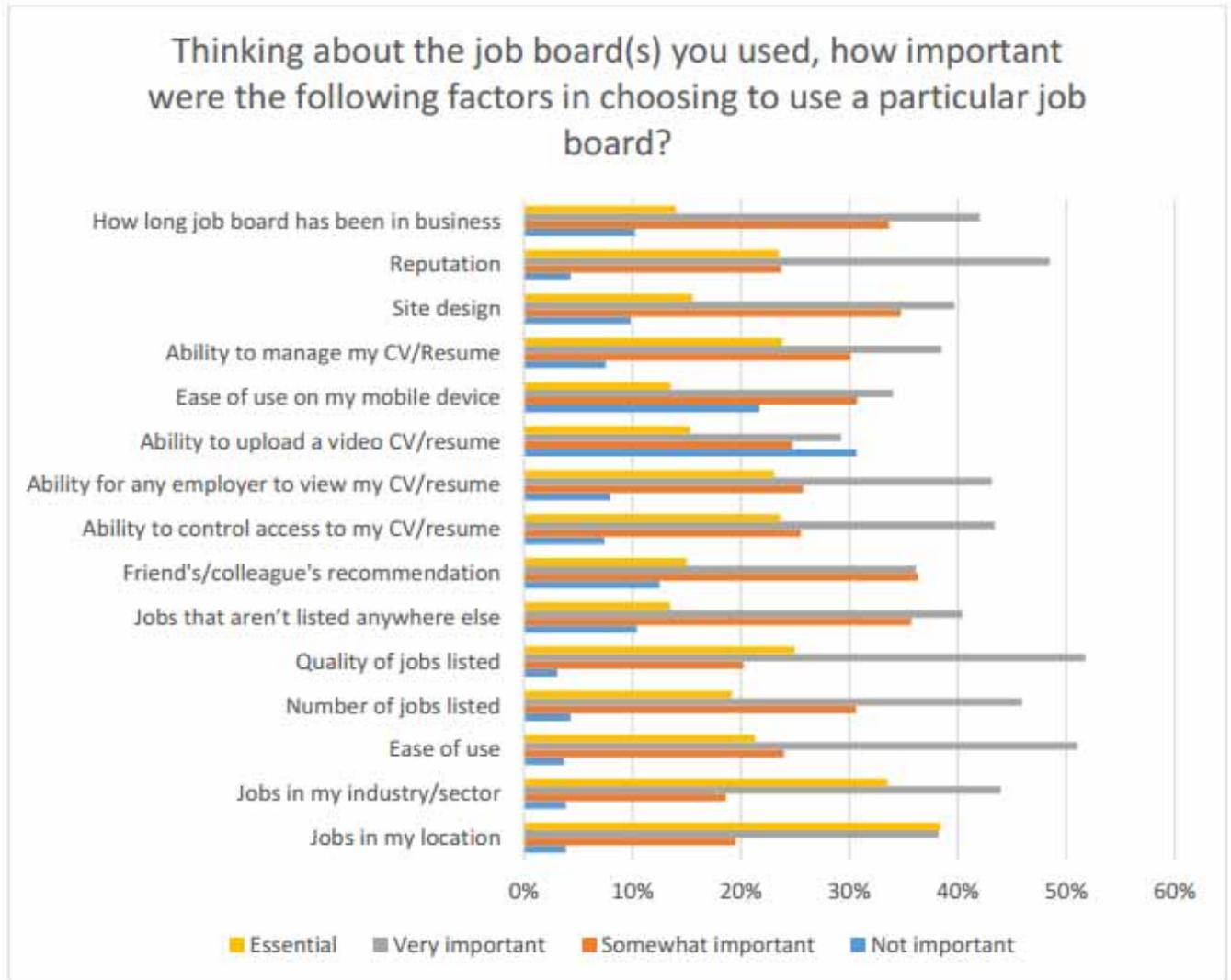
- Germans relied on newspaper ads as their primary method for finding jobs (57%), while U.S. and UK job seekers relied on job search engines (49% and 57%, respectively);
- When rating which job search tools provide the most value, U.S. job seekers chose referrals (74%), while German job seekers chose newspaper ads and referrals (both 66%); UK job seekers chose job search engines (61%);
- Few respondents across all three countries found it useful to upload a video CV/resume;
- The most critical factors in choosing a job search tool for all three countries were “Jobs in my location & Jobs in my industry/sector”;
- The top uses of job boards for job seekers in all three countries were:
 - Locate jobs and apply on the employer’s site;
 - Research jobs;
 - Identify employers.

Among UK respondents the most significant findings were the following:

- 81% of respondents are looking for full-time work, vs. 23% looking for part-time;
- The top employment sectors for respondents are education (13%), office/clerical (12%), and retail (10%);
- Top four methods for finding jobs were job search engines (57%), general job-portals; (46%), general search engines (39%), and recruitment/staffing agencies (35%);
- Desktops & laptops are the most commonly used technology platform for finding work (94%);
- Less than 11% of respondents use tablets or mobile devices to apply for jobs;
- 64% always submit a cover letter with an application;
- 38% of respondents felt that having jobs in their location was essential for a job board;
- 52% use job boards to locate jobs, then apply for those jobs on company career sites;
- Out of date and irrelevant jobs top the list of most frustrating aspects of job boards;
- 70% of respondents are more likely to apply if salary information is included.

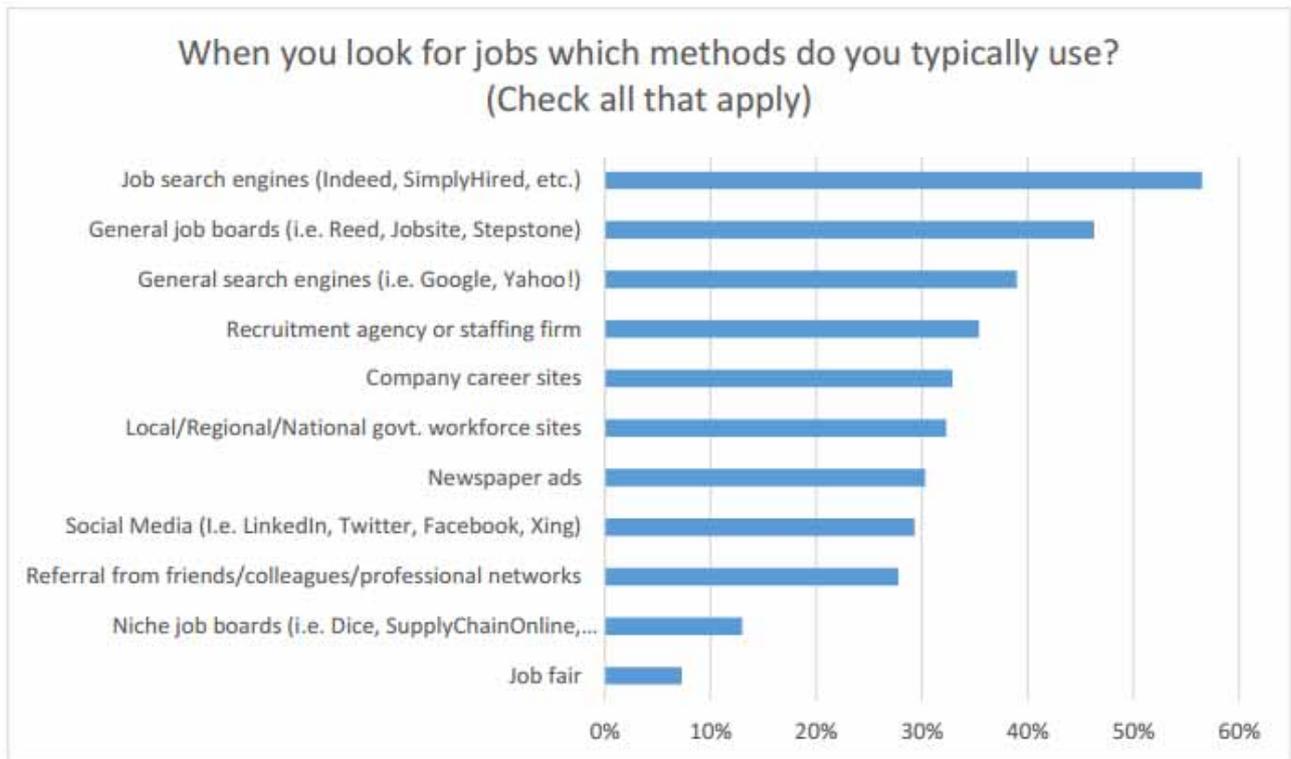
The JobBoardDoctor survey (2016) considered the factors that job seekers consider when choosing a job board (see Figure 9). Job-seekers cited the location of vacancies and presence of OJVs for specific sectors as more important factors than online job-portal reputation.

Figure 9: Factors influencing choice of online job-portal



Source: JobBoardDoctor (2016).

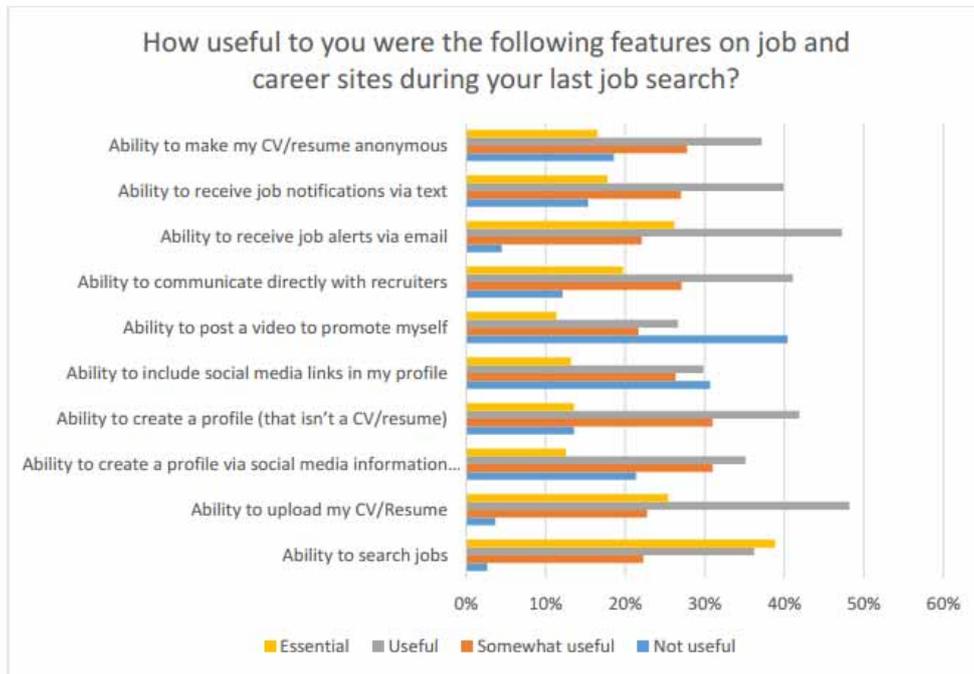
The survey also asked which methods job seekers typically used to look for jobs. The results (See Figure 10) place job search engines and job boards at the top of the list, but an interesting trend to note is that nearly 40% of people simply enter search terms for jobs into Google. PES sites were ranked below the main portals and below recruitment agencies and company sites.

Figure 10: Job seeker preferences for job-search

Source: Source: JobBoardDoctor (2016).

The survey results also showed that the most essential features of career and job boards are the ability to search for jobs, upload CVs and receive job alerts. The inclusion of social media and video into the posts were not regarded as important.

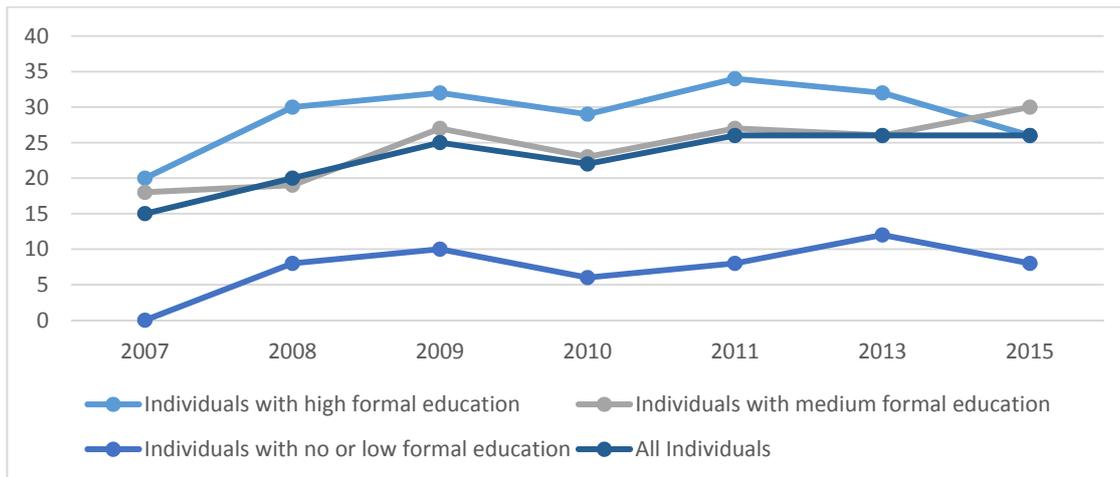
Figure 11: Job search feature preferences



Source: Source: JobBoardDoctor (2016).

The use of the internet for job search remains significantly higher among individuals with higher levels of formal education (See Figure 12). Interestingly individuals with medium levels of formal education show a slightly higher use of the internet for job search compared to individuals with high formal education. This could be related to the use of recruitment agencies for executive level roles.

Figure 12: Internet use for job search or sending an application in United Kingdom by education level



Source: EUROSTAT ICT Survey of Households and Individuals [isoc_ci_ac_i].

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

Some elements of job search were perceived as a little archaic and likely to change in the coming years. CBI mentioned the use of the CV as a little out-of-date and felt that Generation Y may use a more technologically-driven method of self-presentation. Recruitment for executive roles will probably be the only type of role that will be driven primarily through recruitment agencies. The finance sector will lead the way toward more “slick” and advert-type recruitment, which will likely spread to other sectors. Inclusivity is absolutely key to the future of the recruitment market in the UK.

The business models that are growing at the moment seem to be the ones that offer added-value and even gimmicks. As such, the PES system will be less significant over time. The Office for National Statistics anticipates greater use of social media and alert-driven job-search functions as job searching becomes more personalised.

The UK Government is stressing the importance of moving towards digitalisation and automation, and this will be a major factor in what jobs are advertised and possibly how.

Industry experts noted a trend between online job-portals and search-engines. Adzuna and Indeed currently charge the employer/client on a “cost per click” basis. In comparison, most job boards set a fixed fee to post an OJV for a specific length of time. The trend is moving towards the “cost per click” model, so employers pay more for OJVs that garner more attention from job seekers.

Industry experts anticipated some changes to recruitment models but not huge ones. Email and text alerts will continue to grow as will searching through Google rather than through specific sites. This trend reflects a disaggregated job market with little brand loyalty. The concept of a “best job site” does not really have traction as many job apps having already come and gone. There will also be more models that resemble the functionality of Tinder (swipe left or right – if interested or not), but as of yet there has been no breakthrough in this market area.

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

Our work in the UK complements the work being done by ESSNet, which recently looked at UK online job-portals, ranking the top 10. Therefore, in our work we have used the portals identified by ESSNet for consistency and re-run the search to identify:

- The number of vacancies on 15/05/2017;
- Any portals now in the Top 10 not looked at by ESSNet.

There are a number of business models used to post OJVs:

- Online job-portals that are purely “scraped” from other websites and portals;
- Online job-portals with vacancies placed directly by employers and recruitment agencies;
- Combinations of the first and second bullet points;
- Portals representing a specific niche or sector;
- Portals associated with national newspapers;
- Employers’ own job portals.

The most significant portals, in terms of the numbers of OJVs available, are typically the first three ones on the list. However, we have included examples from all six models for completeness. Our example of an employer’s own job portal is the National Health Service (NHS) recruitment system. The job-portals included in the scraping activity based on the expert interviews are shown in Table 4.

Table 4: Most significant job-portals based on the number of vacancies

Website name	Coverage	No. of OJVs as of 15 May 2017	URL
Adzuna	General	1,155,666	https://www.adzuna.co.uk/
Indeed	General	912,617	https://www.indeed.co.uk/
Universal job match	(PES) General	693,803	https://jobsearch.direct.gov.uk/JobSearch/
Reed	General	262,420	http://www.reed.co.uk/
Totaljobs	General	140,550	http://www.totaljobs.com/
cv-library	General	117,162	http://www.cv-library.co.uk/
Careerbuilder	General	64,691	http://www.careerbuilder.co.uk/
Top jobs	General	59,407	http://www.topjobs.co.uk/
Jobsite	General	57,356	http://www.jobsite.co.uk/
fish4jobs	General	45,753	http://www.fish4.co.uk/jobs/

Careers4a	General	35,765	http://www.careers4a.com/
NHS Jobs	Health sector	14,188	https://www.jobs.nhs.uk/
Guardian Jobs	General	10,378	https://jobs.theguardian.com/
Jobs.ac.uk	Higher Education	5,224	http://www.jobs.ac.uk/
Monster*	General	1,000	https://www.monster.co.uk/

*Monster does not provide “total” OJV numbers, just an indication of >1,000.

Source: Dean (May 2017).

5.1.2. Identifying the Online Job-portals Through Expert Interviews;

The portals listed in Table 4 were validated during the expert interviews.

5.1.3. Validating the Selection of Online Job-portals

The ESSNet contact agreed with the list but suggested two additional sites that might be useful for any future work in this area:

- Careerjet
- Brick7.

We excluded these two portals as they did not come up in conversation with any of the other experts and did not appear as relevant based on our Google search results.

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

To post an OJV to the PES portal, Universal JobMatch, an employer must first create an account by providing the following information:

- A valid Email Address;
- Company Name;
- Company Postcode.

Once the account has been created, the employer is instructed to provide information about the company and the account user including the company name address (including city and region), company contact (email and mobile phone) as well as the name and contact information of the account user. The site also requests information about the type of business (drop-down menu), number of employees (drop-down menu), the trading name and the company website. All users are also required to register for a Government Gateway account, which can be done by providing a first and last name and an email address. The first step to post an OJV is to fill out a page titled “Job Information”, which includes the following elements:

- Job title (required);
- Whether the posting is for one’s company or a client (required);
- The location of the job (with option to post for an overseas address), including postcode, city, region (drop-down list) (required);
- Type of contracts (drop-down list; required);

- Salary/wage (optional);
- Other salary information including pensions, bonuses, commissions, etc. (free text; optional);
- Years of experience (drop-down list; optional);
- Career level (drop-down list; optional);
- Education level (drop-down list; optional);
- Reference code (optional);
- Number of jobs available for this vacancy (required).

The next page is the “Job Description”. The user has three options to create a job description. Either the employer can enter a common occupation title and search for a standard job description to help inform the content of the description, or the employer can upload a pre-written job description. The third option is to type a job description directly into the text box. The free text option requires a minimum of 200 characters. The Company Information page automatically generates the company name, based on the account data. It provides an optional drop-down list to select the industry in which the company works.

Next, the employer provides contact information including:

- Email address (required);
- Apply method with three options (required):
 - Apply online and manage with Government Gateway account;
 - Apply online using a custom URL;
 - None of the above;
- Contact method (email, phone, fax, post; optional).

There is also an Additional Information page, which is optional. This page includes the option to select “advertise in Europe”. If this box is checked the job will be posted to the European Public Employment Services (EURES) jobs portal. The Additional Information page also includes an “Exemptions” section, in which employers must check a box to confirm that the posting reflects a job that pays at least the minimum wage. At this stage, users can choose to “Save” the job details for later use or review the OJV and proceed.

The next step is the “Search Options” section. In this section, the employer selects the start and finish dates of the OJV (maximum 30 days). If no dates are selected, the OJV will automatically expire after 30 days. Then, the employer selects the occupation from a drop-down list or free text (required). Finally, the employer can select up to five keywords, which will help job seekers search for the OJV.

For first-time users, the completed posting is reviewed and then becomes active on the site within 24 business hours. Future postings take up to two hours to become active. Occasionally, jobs may need further approval and may take longer than the standard two hours.

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

In this section we explore the drafting and posting process for two private job-portals, Jobsite and Indeed.

To post a job to the private portal Jobsite, users first determine how many OJVs they want to purchase. The more OJVs posted, the cheaper they become. Purchasing one OJV costs GBP 149, but purchasing at least five drops the price to GBP 110 per OJV.

To complete the purchase, the user must create an account with the following information:

- Email address;

- Full name;
- Company name;
- Phone number.

After creating the account and purchasing OJVs, the user has up to 12 months to post.

Typically the OJV then includes the following information:

- Job title;
- Date of posting;
- Location;
- Salary;
- Contract type: (temporary/permanent);
- Other information (free text).

When posting a job to the Indeed portal, an account must also be created. Before posting the OJV, the employer selects from a series of drop-down lists regarding information such as the type of job (e.g. full-time, part-time, temporary, contract, internship, etc.) and the salary range. The majority of the OJV is free text divided into sections such as “Outline the responsibilities of the job”, “Desired work experience”, and “Education and skills”. Then the employer is required to contact details, how candidates should apply and whether they should submit a CV. There are then a series of prompt questions concerning language, experience, location, license and experience but these are not compulsory. Employers are invited to review the posting before it is published.

As can be seen above, private portals use a mix of simple templates and text. Pricing models differ between different portals, but as will be further described in Section 6, most private portals request similar types of information and are trending towards similar formatting as well. Contacting the Online Job-portal Owners

We contacted job-portal owners to inform them about the planned scraping activities, but it was difficult to get responses from them. The contact details and links available on the portal websites tended to be for people who are not concerned with the research side of the work, and there was no appropriate person to reach out to (e.g. HR manager data manager, etc.). This will make it difficult to get permission to access and crawl the sites – although industry contacts (ADZUNA for instance) may have contacts at similar portals. Unfortunately we did not have any responses to our outreach.

6. Format and Content of OJVs

6.1. Format of OJVs

Regulations and laws have little impact on the portal and vacancy formats other than in framing the types of jobs (permanent, full-time, etc.) that are possible as drop down/tick boxes. The languages used on all the sites is almost exclusively English.

It is critical to remember that the OJV market is not one of fixed models that compete against one another in a traditional sense. Job aggregators are dependent on relationships with job boards and recruiters and vice versa. In the UK, this is further complicated by the PES, which is managed by a private job aggregator/portal – Monster – and which to date has also scraped other websites for vacancies, although one of our industry experts indicated that this may soon change. As a result, there has been a trend towards a more consistent “model” for OJVs. Standardisation of OJVs makes posting easier for the employers (who are paying) and recruiters, as well as for aggregators and others platforms combining the data. Recruiters and HR staff prefer simple OJV models that they can easily sift through to find the right candidates. As a result, OJVs tend to focus on the following key elements:

- Location;
- Job title;
- Salary;
- Contract and Hours;
- Description of role and skills needed.

While they suit the interests of the entities paying for OJVs, standardised OJVs are not necessarily the best for people carrying out a job search. The current model of OJVs often includes limited information about required skills and competences or about the employer. The most useful information is normally restricted to the “Job description” section, which is generally free text, and therefore the least standardised.

The following elements are not perceived to be as significant in impacting the structure of the OJV:

- Specific/rare skills sets;
- National/international focus of the company;
- Size of the company;
- Sectoral agreements.

In addition to the simplicity preferred by employers and recruiters, other forces also dictate the simplicity and consistency of OJVs. The relatively informal nature of the UK labour market reduces the prevalence of references to specific qualifications and occupation levels. Business models of the job-portals also determine formatting, as mass portals with lots of secondary posts tend to prefer simpler formats and less information via structured reporting so that the portal appears more user-friendly and consistent.

Our interview with an Adzuna representative confirmed that structurally there is an industry standard – a common format that has become accepted by different portals and employers. Interestingly the emergence of this model may place limitations on future innovation and flexibility as all portals seek to share one another’s vacancies.

6.2. Content of OJVs

The business models of the portal companies inevitably affect the content. Specialist job boards tend to require more detailed information compared to the likes of Indeed. Consequently, the cheaper sites will sometimes accept far less information, whereas the more premium sites will encourage a greater level of information with more neutral, simple descriptions of tasks.

Role descriptions are incredibly varied. Often there is little information on the company itself, especially among larger companies, but lots of information on what is expected to be done in the role and about the kinds of skills and competencies needed. References to particular qualifications are less frequently found. The job descriptions do not appear to be framed as an opportunity for the applicant to develop his/her career.

The CBI stressed that the language used is key to attracting applicants, and that they were concerned with encouraging inclusive language to ensure a diverse applicant pool. This requires using very neutral language. Structurally, they preferred concise, short and punchy descriptions to get an applicant's attention.

Some interview respondents felt that salary information is less frequently included in OJVs in the UK for cultural reasons.

OJVs today look like well-designed adverts with lots of elements of design and quick punchy messages about the recruiter and the job.

Preferred recruitment models vary depending on a number of factors such as demographics, geography and sector. In the Higher Education sector, for example, Jobs.ac.uk is still critical. At the senior executive level, recruitment is still likely to be via "head-hunters", who are expensive but will cover the ground necessary. Most other recruiters want to be able to access the people they need through job boards and their own websites. Often agency fees can be very high if turnover is high - with one researched company spending 5% of turnover on recruitment fees, not including the resources devoted to sifting through applications.

There are still some primary job portals and the main UK Government Portal – run currently by Monster – Universal JobMatch may be switching to this model (personal comment) after criticism that not all jobs it advertises are "real". In our work we also included the Higher Education portal as a good model for a primary sectoral portal as well as a national newspaper (The Guardian) site, which is highly regarded and used a lot).

Information on skills, competencies and personality traits are normally in the written descriptions of OJVs, if they are to be found anywhere. The most likely elements are those relating directly to the job itself, although references to skills are often made indirectly through non-skill terms such as "flexibility" and "assertiveness". The CBI cited that sections on "skills" are also often left out of OJVs, but that there is a growing trend of listing "behaviours" such as "collaborative" and "agile". The CBI are moving away from a CV-based application to a competency-based application form that focuses on core skills plus behaviours like "teamwork".

DWP has observed that private sector employers are not as interested in "competence", rather they are looking for candidates with specific experience levels and qualifications. They are seeking people step into a role quickly. This leads to OJVs using more glamorous or exciting terminology to try to sell the opportunity to join an organisation.

When competencies are listed, they are generally within the "description" sections of OJVs, because these are the most flexible elements of the OJVs. Some OJVs omit competencies and skills

altogether, opting for short and to the point ads with a link to a webpage where additional information is located.

Competencies can be straightforward, such as a full driving licence or possession of certain certificates and qualifications, or they can be related to soft skills and demonstrable experience. Skills tend to fall into one of three categories:

- Generic and core employability skills (e.g. good communicator, flexible, team-worker, agile (meaning largely the same as flexible), resilient, works under-pressure, goals-oriented, problem-solving etc.);
- Leadership and management type skills (e.g. responsible, leader, persuasive, coordination, self-management, prioritise etc.);
- Job specific skills (e.g. driver, database, equipment expertise etc.).

Overall there is not a noticeable use of “hidden code words” in UK OJVs due to the prevalence of anti-discriminatory legislation and the liberal labour market that allows employers considerable freedoms in “hiring and firing”. However, some coded language is used to indicate aspects of the job expectations based on the type of personality traits requested in the OJV.

In 2013, The Guardian and Adzuna analysed which personality traits UK employers request in OJVs (The Guardian 2013). They identified the ten most requested “buzz words” and decoded their meanings:

- **Organised** (appears in 99,862 job adverts according to Adzuna): *this role will be labour intensive and a lot will be thrown at the person, so they need to have strong prioritisation and time management skills;*
- **Communication skills** (appears in 68,064 job adverts according to Adzuna): *this may refer to a job in which a person will be expected to make many presentations or it may mean that the job requires “social skills” and “emotional intelligence” or the ability to handle different types of personalities;*
- **Motivated** (appears in 65,011 job adverts according to Adzuna): *this may be a warning that the role requires a lot of independent work or that the employee will have to generate his/her own tasks and needs to be a self-starter;*
- **Qualified** (appears in 58,955 job adverts according to Adzuna): *while this sounds like a straightforward term, it may question an applicant’s experience more than his/her certificates and training;*
- **Flexible** (appears in 56,551 job adverts according to Adzuna): *this word is becoming more common in a society in which people often have mismatched skills for their roles. It implies that the employee may have to do things outside his/her level and area of competence;*
- **Degree** (appears in 54,049 job adverts according to Adzuna): *as most applicants for a job can tell if the role requires a University degree, this is likely a tool for recruiters to sift through applications.*
- **Commitment** (appears in 49,686 job adverts according to Adzuna, +10% since 2012): *this may mean an employee will be expected to work long hours and do less enjoyable tasks. It may also reference how long the employer wants the new hire to stay and that the job is not a stepping stone role;*
- **Passionate** (appears in 47,971 job adverts according to Adzuna): *similar to commitment and motivated, this term can mean that the job does not pay very well, and so they are looking for someone who cares about the work;*
- **Track record** (appears in 40,471 job adverts according to Adzuna): *often associated with high salary roles, this term means that the employer will have high expectations that the new hire can get a certain job done, otherwise they will not last in the position;*

- **Innovative** (appears in 36,581 job adverts according to Adzuna): *asking for innovation may mean they are looking for a problem solver and that the role comes with a set of issues and challenges.*

Task descriptions and language within UK job adverts tends to be extremely neutral. Tasks are described and listed and the advert may go on to describe the kinds of skills and experience the individual they are looking for will possess. A trend is that we are seeing a move to OJVs where they are more of an advert rather than just a vacancy listing. This recognises the cost of recruitment – in the UK this can be a lot – and turnover in some jobs and companies can also be very high.

Discrimination is the element of OJVs where the government is most likely to step in. Adverts are therefore very neutral and clients looking for particular types of staff must be able to justify their requirements. Some OJVs will occasionally use phrases such as “enthusiastic” to try and recruit a younger demographic or “very experienced” for an older demographic. There is some discrimination in the way employers perceive applicants through the PES. Certainly, there will be virtually no adverts discriminating in gender/sexual orientation/colour/religion etc.

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

Increasingly OJVs posted within the PES system tend to come directly from the employer rather than through recruitment agencies. The process of posting is more complicated than for many private OJVs, but the support for the posting is better and importantly, there is often support for the candidate in the application process and even in early stages of employment. This is driven by the lack of labour in a tight labour market and the priority of assisting and re-activating “hard to place” unemployed people who often need additional support. Nonetheless, in practical terms the type of information gathered is the same as for a private job board, although with more compulsory elements around contract types to help inform PES policy and monitoring.

6.4. Expected Trends in the Format and Content of OJVs

Experts predict that competition in the labour market will move OJVs away from formats that only suit the needs of employers to models that also accommodate the interests of those searching for a job. Closing dates will become less important as jobs will be posted until enough applicants are found. Furthermore, industry experts anticipate a reduction in the numbers of recruitment consultants and more machine-learning techniques to map people to jobs over the next five to ten years.

The Recruitment & Employment Confederation’s (REC) JobsOutlook (2016) asked how recruitment approaches and technologies are adapting to support employers. The director of technology and candidate solutions at TalentBrew replied that employers are making a more concerted effort to, “focus on those that aren’t looking for a career move or in most cases aware of the organisation as a potential employer.”

This means that the way organisations communicate with potential candidates is becoming more like the way they might attract new customers. Technology such as VE Interactive’s re-engagement software captures jobseekers as they go through the “attraction” process – whether that is clicking on a job ad, beginning an online application – and if they fall away it aims to bring them back, for example through overlays asking, “Can we help?” or a follow-up email providing

contact details for further assistance. This is similar to what one might see when browsing products online as a consumer.

Aligned with this more consumer-led approach to attracting candidates, job search features are becoming more tailored to individuals as well. Just as programmatic advertising uses customers' browsing data to deliver specific messages to different audiences in the consumer world, it is possible to create algorithms from candidate data to better target the job ads they see.

The JobsOutlook report (2016) cites that companies such as the employer review site Glassdoor are already offering employers the chance to using candidate tailoring to their advantage by allowing clients to post advertisements on a competitor's profile page or to adjust where their OJVs appear in search results. Using data in this way, recruiters could also create micro sites or landing pages for specific roles or campaigns, making potential candidates far more likely to connect with those roles.

JobsOutlook (2016) also reports that the shift towards mobile job seeking will continue and that employers who do not optimise their sites and processes are likely to lose market shares. A key element of attracting candidates via mobile is branding via social media including more "immediate" messaging and chat applications such as Snapchat and WhatsApp. They also predict innovation in the use of apps to attract potential candidates – whether that's as a gateway to a careers site, or assessment and gamification.

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Expert Interviews

Name of organisation	Type of organisation	Expert's position	Interview date
CBI	Business Representative Network (larger businesses)	Recruitment Business Partner	5 May 2017
ONS and ESSnet	National Statistical Office	Principal Methodologist – Big Data	8 May 2017
Private online job-portal	Labour market intermediary	Head of Data Science	9 May 2017
DWP	PES	Policy Manager	12 May 2017