Skills intelligence: Addressing skills shortages and helping migrants to find employment

A new approach

Skills intelligence can initiate distribution that is more effective and match migrants on the labour market by identifying regions experiencing labour shortages. It involves sharing information on key trends and demands in the labour market between different stakeholders, to support guidance and counselling, recruitment processes, provision of education and training, and career paths. Skills intelligence instruments, such as the SkillsOVATE tool, identify skills needed in the labour market that could be filled by migrants; not only migrants from outside the EU but also migrants already living in other EU countries. They can also address skills mismatches in the EU workforce, ultimately increasing economic growth and social inclusion across the EU (Cedefop, 2019a, 28).

> **Skills intelligence can answer the following questions:**
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> - For which occupations is demand increasing most? In which sectors or regions?
> - What profiles are employers seeking to recruit in these 'top jobs'? What new types of job are emerging? For which types of jobs and skills are employers facing recruitment difficulties?
> - What are employers' demands for specific skills in specific jobs? How does this differ across countries, regions or sectors? Which new skills are employers demanding? In which jobs?
> - Considering the core set of skills required in different jobs, what possible career moves are there for jobseekers? Which jobs, although different, require a similar set of skills?

In today's dynamic labour markets, identifying skills needs is challenging. Policy makers at EU, national and regional level, the research community, employment services, guidance practitioners, education and training providers, employers and even individuals (i.e. young people; job seekers) can all benefit from skills intelligence, and its added value is outlined accordingly in both the European Skills Agenda (DG EMPL; see info box below) and in the Talent Partnerships initiative (DG HOME).

Cedefop's 'big-data' powered SkillsOVATE (Online Vacancy Analysis Tool for Europe) tool offers detailed, granular information on trends in occupations, sectors and skills in real time. It enables better understanding of the skills most demanded by employers and gives insight into national and regional skill trends. Exploration is currently being carried out into which types of Cedefop skills intelligence could feed into Europass. Additionally, the Blueprints for Sectoral Skills Cooperation have been exploring skills needs in key sectors. In the future, skills intelligence data will enable assessments of how the demand for skills in occupations changes over time, identifying policy relevant skills and technologies that are in need of specific attention. Finally, the work of Cedefop on designing a complementary pathway that takes VET, skills and qualifications into account as a way of supporting the legal mobility of refugees (Cedefop, 2019c) proves useful in linking skills demand to supply and to increasing labour market integration.

SkillsOVATE offers detailed information on the jobs and skills employers demand based on online job advertisements (OJAs) in 27 European countries. Information from millions of OJAs is collected from thousands of online sources for the platform, including private job portals, public employment service portals, recruitment agencies, newspapers and corporate websites. The platform is updated four times annually, presenting data for the last four available quarters. Yearly averages for key variables are also available, via Skills Panorama - Cedefop's dedicated skills intelligence platform.[1]

> **Within Action 2 of the European Skills Agenda the European Commission commits to:**
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> - deepening skills intelligence, including at regional and sectoral levels;
> - centralising skills intelligence through the Pact for Skills, in synergy with the European Research Area;
> - promoting social partner participation in labour market projections and the identification of training needs (to develop skills intelligence);
> - encouraging public and private employment services to promote early identification of skills shortages and trends to better draw on the potential of intra-EU mobility and migration from third countries;
> - present skills intelligence information tailored to individuals' needs in Europass.

Across the EU

According to the OECD's Programme for the International Assessment of Adult Competencies (PIAAC), 20% of the EU's adult population have low literacy and numeracy skills (EAEA, 2018, 3), putting them at high risk of unemployment, poverty and social exclusion (Eurostat, 2016). Recent Eurostat data show that 14 324 million Europeans are unemployed (Eurostat, 2021), and more than half of Europe's unemployed population is low skilled (Eurostat, 2016). Further, skills gaps and mismatches are common, and many people across Europe work in jobs that do not match their talents or level of skill, while at the same time 40% of European employers struggle to find people with the skills they need (Eurofound, 2017). According to an economic survey by Eurochambres in 2019, a lack of skilled workers is one of the biggest challenges faced by European companies, and Europe is heading towards a skills-shortage crisis (Eurochambres, 2019, 7).

According to Cedefop, the share of vacancies published online in the EU ranges from under 50% in Denmark, Greece and Romania to almost 100% in Estonia, Finland and Sweden, and there are also differences between regions within countries. With some countries reporting annual growth rates in online job markets of more than 10%, coverage is likely to increase rapidly in the near future (ILO, 2020, 6).

The online job market is also structured differently across countries: in Denmark, Finland and Malta it is dominated by a few leading portals and public services tend to be influential players, while Greece, Ireland and Italy have more job portals with similar market power and public employment services are less influential compared with private actors. Previously, OJA platforms targeted predominantly highly skilled workers, but today many advertise jobs for almost all occupations and

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[1] Although these tools are a very rich source of information, there may be limitations in their practical use for migrants. For certain countries, regions or occupations there may be less information available.

skill levels. Skills intelligence platforms can therefore be essential to jobseekers across all sectors and with varying experience.

Figure 1: Proportions of job vacancies published online in EU countries, 2017 (%)

Note: AT = Austria; BE = Belgium; BG = Bulgaria; CY = Cyprus; CZ = Czech Republic; DE = Germany; DK = Denmark; EE = Estonia; EL = Greece; ES = Spain; FI = Finland; FR = France; HR = Croatia; HU = Hungary; IE = Ireland; IT = Italy; LT = Lithuania; LU = Luxembourg; LV = Latvia; MT = Malta; NL = Netherlands; PO = Poland; PT = Portugal; RO = Romania; SE = Sweden; SK = Slovakia; UK = United Kingdom. Data for Lithuania and Slovenia not available. In Slovenia expert assessment states that online job announcements is a "prevailing" method.

Source: Cedefop, Konstantinos Pouliakas and Jasper Van Loo ([Chapter 1.1](#) in *The feasibility of using big data in anticipating and matching skills needs*, ILO, 2020*)*

Challenges and solutions

COVID-19
The COVID-19 pandemic has caused unprecedented disruption in labour markets worldwide: millions of people in the EU have become unemployed, and many now need to acquire new skills or change sectors. There is increased focus now on such questions as which skills are needed and where, which reskilling measures deserve budgetary allocations, which active labour market measures should be prioritised and how those who have lost their jobs should now be advised about possible career prospects. (ILO, 2020, v). Skills intelligence can be used to answer many of these questions, particularly as tools such as SkillsOVATE become more widely used and increasingly accurate, and as more job vacancies are posted online in the wake of the pandemic.

Obstacles to employment
Another challenge is the complexity of the application and moving process for migrants living in one EU country who attempt to take up a job in another EU country. Individuals often face delays and issues with work and residence permits or with the recognition of their skills and qualifications in their destination country, or find themselves unable to apply for a job in the first place because the job posting lists possession of a certain permit at the time of application as a requirement. DG Home is in the process of exploring ways to overcome these obstacles.

Guiding questions for the workshop:

1. How can the full potential of cross-country information on skills needs best be used by migrants and services supporting migrants?
2. Using online job advertisements for analysis of skills needs: how can privacy concerns be overcome and which other ethical/legal considerations must be taken into account?
3. How can migrants be better supported to apply for and take up a vacancy abroad? What are the services that need to be offered?

List of resources

Cedefop (2019a*). Online job vacancies and skills analysis: a Cedefop pan-European approac*h. Luxembourg: Publications Office. Accessed via: http://data.europa.eu/doi/10.2801/097022

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Eurochambres (2019). *Eurochambres Economic Survey 2019: Report.* Brussels: Association of European Chambers of Commerce and Industry. Accessed via: https://issuu.com/eurochambres/docs/ees_2019_report_3.0

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Eurostat (2021). *Euro area unemployment at 7.4%.* Euroindicators: 125/21. Eurostat Press Office. Accessed via: https://ec.europa.eu/eurostat/documents/2995521/11563355/3-03112021-AP-EN.pdf/8841353c-11f6-7fab-efef-0e768ab13bfd?t=1635931825200

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International Labour Organization (2020). *The feasibility of using big data in anticipating and matching skills needs*. International Labour Office – Geneva. Accessed via: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_759330.pdf

Vincent, J (2019). *Un nouvel outil pour cartographier les compétences recherchées,* Centre Inffo [online]. Accessed via: https://www.centre-inffo.fr/site-europe-international-formation/actualites-europe/un-nouvel-outil-europeen-pour-cartographier-les-competences-recherchees

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