

Big Data for Labour Market Intelligence

Focus on job vacancies posted online

We live in 'datified societies'. Digitalisation of services, businesses, and social interactions generate a growing mass of data across the globe. Digital and online information on employment and education opportunities, demand for skills, occupations and qualifications has increased globally, and this vast internet data can be harnessed to improve and add value to Labour Market Information and skills anticipation systems.

The [European Training Foundation](#) (ETF) started the project "Big Data for Labour Market Intelligence" in 2019, targeting development of an innovative data system for analysis of skills demand. The system is based on online job vacancies (advertisements), collected from web sources. In the first phase (2019-2021) the project achieved tangible results, notably the establishment of the databases and online visualisation platforms (dashboards) in three countries (Ukraine, Tunisia, Georgia). In 2022 the project started a new phase, marked by the inclusion of additional countries in the data system (Egypt and Kenya), upgrade of data quality and exploration of new themes and data sources. ETF works with a specialised consortium of data scientists and researchers (*LightCast and CRISP – University Milano Bicocca*).

Every year the project carries out regular capacity development programmes, and all resources and learning materials are accessible online for any interested institution. In the dedicated [YouTube channel](#) you find over 40 videos covering different aspects of the concepts, methodology, analysis and use cases.

Key outcomes of ETF project "Big Data for LMI," including the data dashboards, training programmes, methodological handbook and analytical reports are accessible online:

- Data Dashboards accessible using credentials: <https://solutions.lightcast.io/>; User: training@etf.com; Password: **ETF_training_2022**
- Open Space webpage: [LMI in transformation – Focus on Big Data](#)
- Brief methodological handbook (English) "[Big Data for labour market intelligence: an introductory guide](#)" (2019). Brief Methodological Handbook, 2019 [Russian](#) and in [French](#)
- Training programmes with learning resources:
 - [YouTube channel: over 40 videos](#)
 - A specific [training programme](#) for data analysts and experts, November 2019
 - [Webpage of webinar on Big Data for LMIS](#), 10 December 2020
 - [Online training programme on Job vacancy analysis](#), 8, 10 and 15 June 2021
 - [Online training programme "What's new with Big Data for LMI?"](#): 22-24 November 2021
 - [Online training programme 2022](#): 6 webinars in November-December 2022
- Report: [Feasibility study OJV sources](#): methodology and two case studies (Morocco and Tunisia), 2019
- Report: [Big Data for LMI, Web Labour Market Landscaping Ukraine](#), 2020.
- Report: [Big Data for LMI in Ukraine: analytical report](#), 2020.

Green and digital skills analysis: in addition to the analysis of demand by occupations, skills, sectors and educational level, the databases of OJV in ETF project can be queried for many other angles of analysis and variables ("Let the data speak"). The analysis of green and digital skills has been introduced in the ETF OJV data system of Egypt in March 2023. A first generation of green skills analysis was piloted with the OJV data of Ukraine, Tunisia and Georgia (since end 2021). Results and methodology underpinnings will be shared at the webinar of 5th April 2023 with the Experts Network of the Skills Hub.

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