

# AGENDA

## EVENT NAME

Webinar: Big Data for Labour Market Intelligence (LMI) – building the system with Online Job Vacancy data of two countries (Tunisia and Ukraine)

## LOCATION

Webinar link:  
<https://global.gotomeeting.com/join/947394645>  
Meeting ID: **947-394-645**  
**You can also dial in using your phone.**  
Italy: [+39 0 247 92 13 01](tel:+390247921301)  
Pin: 0000

## DATE

**2 June 2020,**  
14.00-16.00 (Turin, Brussels time), 15.00-17.00  
(Kiev, Chisinau); 16.00-18.00 (Baku, Tbilisi, Yerevan)



## OBJECTIVE

The “Make it Match Network” continues its activities, under the auspices of the Eastern Partnership Platform 4. Humankind is living an unprecedented historical event – the Coronavirus Pandemic tries our ability to cope now, to acknowledge our serious issues, and to shape again our future.

This is the first Webinar of the new phase (2020) of ETF project “Big Data for Labour Market Intelligence”. **This is the practical application phase – to create the Online Job Vacancy analysis system, operational with data analysed and classified, and results presented using visual analytics tools.**

Governments and socio-economic partners in ETF partner countries are unanimous on the need to develop and better use information on labour market and skills dynamics to improve the performance of education and training and the availability of qualifications and skills for the society. Today, this implies engaging in innovation to improve labour market intelligence (LMI).

Big Data analytics offer new possibilities to add value to LMI and deliver real-time and fine-grained skills analysis and insights for users. Big Data is all around us. Big Data is characterised by volume, variety, velocity and eventually - value. Machine learning and artificial intelligence (AI) algorithms, combined with vast computing power anytime and anywhere allow data science to exploit certain Big Data sources, which have large potential to supplement and enrich conventional LMI: it is the case of **online job vacancies** (OJVs) managed by a large variety of online job vacancy portals and boards.

ETF partner countries have seen a growing use of digital tools and online portals – public and private - to post and manage job vacancies. In this context ETF started in 2018 an initiative aimed at exploring the potential for application of Big Data analytics for LMI in ETF partner countries, focused on data from job vacancies announced online.

- **Phase 1:** (June 2018-2019) was dedicated to creating a specific [methodological guidance](#) and [disseminate](#) it among data analysts, national statistical offices and labour market institutions.

A key output of this phase is a short [handbook](#) published in June 2019: *“Big Data for Labour Market Intelligence – a brief introductory guide”*<sup>1</sup>. Two training workshops were conducted in 2019 to present and discuss the methodology. The thematic materials of the in-depth training workshop of November 2019 are available [online](#).

The introductory guide is aimed at statisticians, researchers, policy analysts and decision-makers in the ETF’s partner countries. This short handbook addresses key conceptual, methodological and organisational aspects in using Big Data for labour market intelligence. It clarifies how Big Data can be used to go beyond the frontiers of conventional approaches to LMIS and add value to established statistics.

1. **Phase 2** was dedicated to start the practical application of the approach (KDD) defined in the above-mentioned short handbook. The first step of the approach was tested in two countries (Tunisia and Morocco), with a feasibility study focused on the identification, analysis, and ranking of web job vacancy sources. This analysis covered 16 OJV websites in Tunisia and 15 in Morocco. Based on the results of this feasibility analysis, ETF decided to continue the analysis of online job vacancies in Tunisia (2019-2020) and add one country (2020) to the project.

The report of the feasibility study focused on step 1 of the KDD approach in Tunisia and Morocco is not published, but can be shared with the interested organisations. This report focused on selection of data sources (OJV websites). Each internet source was evaluated and ranked in terms of the reliability of the information. This analysis took into account the vacancy publication date, the website’s update frequency, the presence of structured data, and any downloading restrictions. The outcome of step 1 is the ranking of reliable web sources.

2. **Phase 3:** 2020 – application in two countries (Tunisia and Ukraine)

To structure the process of analysing OJVs, ETF project follows the approach, conceptual framework and steps proposed in the above-mentioned [guide](#). Cedefop applied the same process for the [Skills-OVATE: Skills Online Vacancy Analysis Tool for Europe](#).

Participants of this Webinar are:

- Members of the Eastern Partnership “Make it Match Network”
- Researchers and analysts from other ETF Partner Countries (Tunisia)
- Team of the ETF Big Data LMI project (Alessandro Vaccarino, Mario Mezzanzanica, Mongi Boughzala, Vladimir Sarioglo, Aleksandr Cymbal, Eduarda Castel-Branco)
- ETF staff

<sup>1</sup> Authors: Mario Mezzanzanica and Fabio Mercurio from University Milano-Bicocca. Available at: <https://www.etf.europa.eu/sites/default/files/2019-06/Big%20data%20for%20LMI.pdf>

## Sessions and themes

14:00 – 14.10	<p><b>Session 1: Introduction, welcome, objectives. Brief overview of the current state of play of the process.</b></p> <p><b>Speaker:</b> <i>Euarda Castel-Branco (ETF)</i></p>
14.10 – 14.25	<p><b>Session 2: Moving ahead: building the system of Big Data for LMI. The overall methodology - a brief reminder of the main steps and their interconnections.</b></p> <p><b>Speakers:</b> <i>Alessandro Vaccarino (Tabulaex)</i></p>
14.25 – 14.45	<p><b>Session 3:</b></p> <p><b>Presenting the first version of the Dashboard with data and analysis (Tunisia and Ukraine).</b></p> <p><b>Speakers:</b> <i>Alessandro Vaccarino (Tabulaex)</i></p>
14.45 – 14.55	<p><b>Session 4:</b></p> <p><b>Web Labour Market Tunisia - overview and findings of the landscaping activity and report.</b></p> <p><b>Speakers:</b> <i>Mongi Boughzala (national expert)</i></p>
14.55 – 15.05	<p><b>Session 5:</b></p> <p><b>Web Labour Market Ukraine - overview and findings of the landscaping activity and report.</b></p> <p><b>Speakers:</b> <i>V. Sarioglo and A. Cymbal (national experts)</i></p>
15.05 – 15.35	<p><b>Session 6:</b></p> <p><b>A glimpse at concrete applications of Big Data analysis for novel approaches to LMI: 3 case</b></p> <p><b>Case 1:</b> Real time Labour Market analyses during the Covid-19 Pandemic – based on insights from ongoing studies conducted by <a href="#">CRISP</a></p> <p><b>Case 2:</b> Web Labour Market Data for Educational and Vocational Training, presenting:</p> <ul style="list-style-type: none"> <li>• <i>WollyEdu</i>, the platform used by several Universities to compare labour market needs and their specific educational offer</li> <li>• <i>Wolly4Formatemp</i>: project focused on major Italian training institution for temporary workers</li> </ul> <p><b>Case 3:</b> Digital skills and occupations – evolution. Example of the Italian Observatory of Digital Competence (<a href="https://competenzedigitali.org/">https://competenzedigitali.org/</a>), based on Tabulaex data and CRISP analyses</p> <p><b>Speakers:</b> <i>Alessandro Vaccarino (Tabulaex), Mario Mezzanzanica (University Milano-Bicocca, CRISP).</i></p>
15.35 – 15.55	<p><b>Session 7: Questions, discussion.</b></p> <p><i>All participants.</i></p> <p><i>Facilitation: Euarda and Alessandro</i></p>
15.55 – 16.00	<p><b>Conclusions, next steps.</b></p> <p><i>Euarda Castel-Branco, Alessandro Vaccarino, Mario Mezzanzanica</i></p>