



Inform the public about labour market trends and provide education/career advice

Automation technologies can have strong impacts on employment levels, threatening displacement of some jobs and giving rise to new types of occupations/jobs. In addition, these impacts change over time and vary across geographies, industries, occupations, and population groups. Technologies also affect the nature of work, including tasks that need to be performed and the demand for skills.¹ In view of this, it is critical to ensure that citizens are well-informed about the labour market trends to make intelligent decisions about their education/training and career choices.

Ensure collection and accessibility of data on labour market trends

The data on labour market trends, including skills demand, and emerging and declining occupations, need to be monitored, collected, stored, and presented on a publicly accessible platform. By storing information online, it can be accessed by most population groups at a preferred time, across years and supplemented by additional information in an efficient manner. In areas with limited internet access, alternative solutions should be found, such as disseminating information in local government organisations, community centres, public employment offices and other public organisations, such as schools.

Select communication channels to raise awareness of data sources on labour market trends

There are many publicly accessible data sources on labour market trends, such as the websites of the International Labour Office, the European Centre for the Development of Vocational Training (CEDEFOP), various public and private job portals.^{2,3} Nevertheless, the public typically underutilizes these sources, mostly due to lack of awareness about them and their utility. Besides providing platforms that enable access to data, policymakers should identify communication channels that would reach the public and raise awareness about useful data sources. Given diverse population groups, the communication channels should be carefully selected. For example, social media might be effective in attracting attention of youth, the local government or public employment services may inform unemployed

¹ European Semester: Thematic factsheet – Active labour market policies. (2017). Retrieved 2022, from https://commission.europa.eu/content/thematic-factsheets/labour-markets-and-skills_en.

² Skills forecast. CEDEFOP. (2021, December 1). Retrieved December 20, 2022, from <https://www.cedefop.europa.eu/en/tools/skills-forecast>

³ Skills-ovate. CEDEFOP. (2021, November 10). Retrieved December 20, 2022, from <https://www.cedefop.europa.eu/en/tools/skills-online-vacancies>



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individuals, while information campaigns and traditional media channels can be helpful to inform the public.

Provide data on labour market trends in a user-friendly, tailored format

User-friendliness of data has a significant impact on the use and absorption of information. Therefore, it is important to ensure easy access to relevant information and quick interpretation/understanding. Typically, visual presentations of data are appreciated by the public, such as dashboards, charts, pictures. In addition, information should be tailored to specific user groups by, for example, installing filters or mechanisms to sort/prioritise, highlight information. A short, user-friendly guidance note should accompany information on the data platform.⁴ To ensure that data is truly user-friendly, it is advisable to collect feedback from users.

Encourage the public to learn about labour market trends

The public should realise the scale and significance of impacts of automation technologies on the labour market now and in the future. To achieve this, the public should be encouraged to access data on these impacts and make informed decisions about education and career choices. Policymakers can use several methods to promote learning/accessing data on labour market trends, such as dissemination of information via media channels, public organisations, including public employment services, and encouraging experts and teachers to highlight importance of this data for employability.

Provide education/career advice

Once members of the public are informed about the labour market trends and realise the need for upskilling/reskilling or changing their career trajectory, they should be provided advice on how to do this effectively. For this purpose, it is advisable that any data source that informed the public about these trends also points them to the institutions that can provide advice. Such institutions could include public employment services, education/training institutions, and private career counsellors.

Consider the following PILLARS and external resources to inform the public about labour market trends and provide education/career advice:

| <i>Title and weblink</i> | <i>Authors and year</i> | <i>Description</i> |
|-----------------------------|-------------------------|--|
| <u>OSKA</u> | OSKA, 2023 | OSKA stands for "Occupational Skills, Competences and Qualifications" and it's an entity in Estonia that is used to analyse labour market needs and predict future skill requirements. OSKA provides a comprehensive overview of |

⁴ ETF, CEDEFOP, and ILO, Using Labour Market Information: Guide to Anticipating and Matching Skills and Jobs (2016). Publications Office of the European Union. Retrieved 2022, from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_534314.pdf.



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| | | the current situation in various economic sectors, offering information about skills, competencies, and qualifications demanded by the labour market. This analysis helps in developing educational and training programs that align with the needs of different industries and sectors, thereby improving the match between skills and employment opportunities. |
| <u>Labour Market Information Systems (LMIS)</u> | ILO, 2023 | The primary goal of LMIS (Labour Market Information Systems) is to generate data and analyses intended for policymakers and various labour market participants. Establishing institutional frameworks is crucial to ensure broad access to information and analyses, offering labour market stakeholders the chance to shape the LMIS agenda. On this page there are various listed links that offer manuals relating to LMS. |
| <u>A Guide To Multi-Channel Communication For Local Government</u> | Whispir, 2021 | This guide was developed for U.S. local governments but can still provide a lot of insights. The guide discusses which communication tools and technology best fit different situations. |
| <u>Effective Communications Between The Public Service And The Media</u> | OECD, 1996 | In November 1995, SIGMA and the Hungarian Ministry of Interior co-hosted a seminar titled "The Civil Service and Communication." This event, partially funded by the European Union Phare National Programme, convened around thirty government officials in charge of press and information across ministries, along with Hungarian journalists. Its aim was to explore the establishment and operation of a governmental information office, fostering effective communication between public servants and the media, and improving media coverage of public administration reform. This publication contains six papers delivered at the seminar by five communication experts, including three from Western European and Canadian public administrations, along with two Budapest-based journalists. Preceding these papers is a background issues document that sets the context for seminar discussions, while the annexes include sample codes of ethics for both journalists and government communicators. |
| <u>Heterogeneous Adjustments of Labor Markets to Automation Technologies</u> | Fabien Petit, Florencia Jaccoud and Tommaso Ciarli, 2023 (PILLARS REPORT) | This research paper explores the labour market adaptations to four automation technologies—robots, communication technology, information technology, and software/database—across 227 regions in 22 European countries from 1995 to 2017. Utilising a metric for technology integration, the researchers estimate shifts in regional employment and wages influenced by these |



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| | | <p>automation technologies, investigating the redistribution of the workforce across sectors. The findings reveal distinct labour market adjustments to automation technologies based on: i) the specific technology, ii) the penetrated sector, iii) the regional sectoral composition, and iv) the technological capacities of the region. Notably, these adjustments predominantly arise from the redistribution of lower-paid workers among sectors.</p> |
| <p><u>Zur Zukunft des Homeoffice</u></p> | <p>Alipour J.V., Langer. C, and O'Kane L, 2022 (PILLARS REPORT)</p> | <p>Examining the prevalence of remote work in Germany, our study delves into over 35 million online job postings from 2014 to 2021. Before the onset of the coronavirus crisis, the inclusion of work-from-home (WfH) options in job ads was uncommon, but the pandemic drastically altered this landscape, leading to a surge in such opportunities. Interestingly, during this period, disparities based on regions, occupations, and sectors regarding access to WfH have notably diminished. Furthermore, our analysis highlights heightened demand for digital skills, teamwork, and adaptability within job postings offering WfH options. Concluding our study, we offer insights into the prospective trajectory of WfH in the future.</p> |
| <p><u>Thinking Strategically About Informing The Public On Complex Issues:</u></p> | <p>Knight Foundation</p> | <p>The report discusses why high-quality evidence is sometimes underutilized or ignored and what can be done about it. It also highlights the type of information that should be available to people, identified challenges in communicating facts, and offers possible solutions to communicating complex facts effectively.</p> |
| <p><u>Labour Market Information (LMI) Toolkit</u></p> | <p>CEDEFOP, 2023</p> | <p>This toolkit focuses on integrating labour market information (LMI) into lifelong guidance through ICT tools, emphasizing their significance and offering practical insights and resources. It's designed for career practitioners engaged in lifelong guidance in the EU and others interested in this field, aiming to enhance the overall quality of lifelong guidance. Feedback from readers is encouraged to further refine and improve the toolkit's effectiveness.</p> |
| <p><u>What Is the Future Of Automation? Using Semantic Analysis to Identify Emerging Technologies</u></p> | <p>Sugat Chaturvedi, Ekaterina Prytkova, Tommaso Ciarli and Önder Nomaler, 2023 (PILLARS REPORT)</p> | <p>This study delves into the impact of emerging digital automation technologies on work, labour demand, and business organisation by analysing extensive databases like Derwent, PATSTAT, and OpenAlex. Utilising a blend of machine learning and computational linguistics, it identifies these technologies by pinpointing groundbreaking patents and publications, clustering them based on similarity, and assessing their impact over the past decade. The resulting</p> |



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| | <p>dataset provides key insights for professionals and policymakers, outlining forthcoming technologies and their implications for labour markets and society.</p> |
| <p><u>Public Employment Services: Diagnostic Tool and Guide</u></p> | <p>ILO, 2021</p> <p>Enhancing PES effectiveness involves a complex balance between policy-making and operational improvements, often posing challenges in aligning conflicting priorities within constrained budgets. By employing these guides and tools, PES entities can assess current capacities and identify areas for enhancement to meet performance expectations. Utilizing a cluster-based framework mirroring global labor standards, the diagnostic method gathers evidence through surveys and interviews to support strategic planning for a more responsive PES system, providing an action plan to address identified gaps in capabilities, resources, and service delivery.</p> |