Christa Larsen, Sigrid Rand, Alfons Schmid, Mario Mezzanzanica, Silvia Dusi (Eds.)

Big Data and the Complexity of Labour Market Policies:

New Approaches in Regional and Local Labour Market Monitoring for Reducing Skills Mismatches

CONTENTS

FOREWORD	
Joachim James Calleja	5
INTRODUCTION	
Christa Larsen and Sigrid Rand	11
BIG DATA AS A NEW DATA SOURCE FOR IMPROVED REGIONAL AND LOCAL LABOUR MARKET MONITORING	
1.1. Big Data for Measuring Demand	
Big Data Meets Web Job Vacancies: Trends, Challenges and Development Directions	
Silvia Dusi, Fabio Mercorio and Mario Mezzanzanica	31
Monitoring of Internet Job Vacancies in the Czech Republic	
Marta Salavová	45
Big Data in Russian Sociology: First Steps Towards Understanding and Co-operation	
Svetlana Varlamova and Natalia Sedova	57
Analysing of the Labour Demand and Supply Using Web Mining and Data Mining in Romania	
Claudiu Brândaș and Ciprian Pânzaru	71
Examples of Applying Big Data in Labour Market Analysis: The Małopolska R	egion
Katarzyna Antończak-Świder and Maria Leńczuk	87

1.2. Big Data for Measuring Supply

Monthly Unemployment Rate Prediction with Google Trends Data:	
Does Google Search Data Improve the Nowcast of the Italian Labour Market?	
Monthly Unemployment Rate Prediction with Google Trends Data	
Andrea Fasulo, Michele D'Alò and Stefano Falorsi	99
The Value of Big Data in the Job Recruiting Process: New Opportunities for the Italian Labour Market?	
Renato Fontana, Vera D'Antonio, Martina Ferrucci and Carmine Piscopo	115
The Use of Social Media in Human Resource Management: Evidences from a Sample of Italian Companies	
Mattia Martini	139
The Use of Big Data: Challenges and Perspectives in Russia	
Nina Oding	153
2. BIG DATA APPROACH IN PRACTICE	
2.1. Integrated Systems for Information Management in Regions	
Planning Vocational Training for Employment in the Basque Country Using a System of Indicators Combining Statistical Operations and Administrative Registers with Information on the Labour Market	
Javier Ramos Salazar	165
Applying Big Data in Adult Education in Bosnia and Herzegovina	
Željko Rajić, Siniša Veselinović and Zvjezdana Jelić	175

Development of Knowledge about the Labour Market in the Context of the Functioning of Big Data in Poland	
Marta Sosnowska	193
2.2. Dissemination and User Groups	
Interactive Visualisation of Bottleneck Vacancies: Introducing a New Tool for Administrative Data Using Berlin as an Example	
Britta Lüdeke	209
Lessons for Regional and Local Skills Forecasting Arising from the Work of the European Network on Regional Labour Market Monitoring Andrew Dean and Sigrid Rand	223
3. METHODOLOGICAL AND LEGAL CHALLENGES IN THE APPLICATION OF BIG DATA	
3.1. Ownership and Individual Rights	
Using Big Data from Multiple Sources in the Social Domain	
Harry Piepers	235
3.2. Quality of Big Data	
The PES Job Portal as a Labour Demand Indicator	
Andreas Mångs	247
Assessing Data Collection and Data Quality for Labour Market Monitoring	
Moreno Baruffini	255

4.	INTERNATIONAL PERSPECTIVE ON THE APPLICATION OF BIG DATA
	IN REGIONAL AND LOCAL LABOUR MARKET MONITORING

The United Nations and Big Data in	the Strategy for	Global Sustainable
Development		

Marco Diazori	275
Marco Ricceri	275

INFORMATION ON AUTHORS 291