Perspectives on Economic Political and Social Integration

Journal for Mental Changes

SPECIAL EDITON

Non-Research-Intensive Industries in the Knowledge Economy

Eds. Gerd BENDER, David IACOBSON, Paul L. ROBERTSON

Volume XI 2005 No 1-2

Towarzystwo Naukowe KUL

SPECIAL EDITON

Non-Research-Intensive Industries in the Knowledge Economy

GUEST EDITORS

Gerd Bender (Germany) David Jacobson (Cyprus) Paul L. Robertson (Australia)

EDITORIAL BOARD

Adam Biela (Poland) – Chief Editor Zbigniew Zaleski (Poland) – Associate Editor

Krzysztof Markowski (Poland) – Secretary

ADVISORY COMMITTEE

Jan Ferjencik (Slovakia) Vladas Gaidys (Lithuania) John Raven (Great Britain) Hartmut Hirsch-Kreinsen (Germany) Tadeusz Borkowski (Poland)

It is co-financed by the European Commission within Framework Programme 5 Key Action "Improving the Socio-economic Knowledge Base" (HPSE-CT-2002-00112)

© Copyright by Towarzystwo Naukowe KUL 2005

ISSN 1233-6009

TOWARZYSTWO NAUKOWE KATOLICKIEGO UNIWERSYTETU LUBELSKIEGO ul. Gliniana 21, 20-616 Lublin 1, skr. poczt. 123 tel. 0 81 525 01 93, tel./fax 0 81 524 31 77 e-mail: tnkul@kul.lublin.pl http://tn.kul.lublin.pl Dział Marketingu i Kolportażu tel. 0 81 524 51 71

Drukarnia "Tekst" s.j., ul. Wspólna 19, 20-344 Lublin (400 egz.)

Contents

From the Editors	5
NON-RESEARCH-INTENSIVE INDUSTRIES IN THE KNOWLEDGE ECONOMY	
Introduction	11
Heiko Prange-Gstöhl, Preface	15
Hartmut Hirsch-Kreinsen, Low-Tech Industries: Innovativeness and Development Perspectives	19
Aris Kaloudis, Tore Sandven & Keith Smith, Structural change, growth and innovation: The roles of medium and low tech industries, 1980-2002	49
Staffan Laestadius, Trond Einar Pedersen & Tore Sandven, Towards a new understanding of innovativeness – and of innovation based indicators	75
Gerd Bender & Staffan Laestadius, Non-science based innovativeness. On capabilities relevant to generate profitable	123
TEO COLEM	140

Klaus Schmierl & Holm-Detlev Köhler, Organisational learning: Knowledge management and training in low-tech and medium low-tech companies
James Wickham, High tech fantasies and the European social model. Some comments on Schmierl & Köhler 'Organisational learning'
Francesco Garibaldo & David Jacobson, <i>The role of company and social networks in low-tech industries</i> 233
Paul L. Robertson & Parimal R. Patel, New wine in old bottles. Technological diffusion in developed economies 271
Tadeusz Borkowski & Aleksander Marcinkowski, <i>Dilemmas of policy on LMT industries. The Polish case</i>
David Jacobson & Kevin Heanue, <i>Policy conclusions</i> and recommendations
Zbigniew Zaleski & Krzysztof Markowski, Developmental perspectives on SMEs on the borders of the European Union: The case of the Lublin region
List of Contributors
Perspectives on Economic, Political and Social Integration. Journal for Mental Changes. Contents (Vol. I-X)
Call for Papers
Acknowledgments

From the Editors

PERSPECTIVES ON ECONOMIC, POLITICAL AND SOCIAL INTEGRA-TION is a continuation of the Journal for Mental Changes, Perspectives of Economic, Political and Social Integration issued permanently since 1995. The intention to change the title was strengthening directly the issue of integration and its factor which build a multidimensional infrastructure and environmental climate for peace, social stability and sustainable development. The Journal is an interdisciplinary forum for research and application concerning social, economic, political, environmental and religious issues related with macrosystem transformations. Rapid changes in Central and Eastern Europe since 1989 are so intense that coping with them brings along many desired and undesired consequences. Mental schemes must be broken through, habits, biased perception and evaluations changed in order to learn economic behavior better suited to the market environment.

On its way to integration after the collapse of communism, Europe encounters stressful events such as civil wars, regional conflicts, ethnic problems, poverty, increasing unemployment, closing down of many medium and large enterprises, etc. Ordinary citizens do not know how to be more constructive or how to arrive at social, economic and political consensus in the new situation. Neither do university academics posses any sure

in 3-year project PILOT, sponsored by the European Commission. We are glad to present this special edition of the Journal for readers interested in innovation within small enterprises.

The Editors

List of Contributors

Gerd Bender, PD PhD, is Senior Lecturer and Researcher at the University of Dortmund, Chair for Industrial and Economic Sociology, Germany

Tadeusz Borkowski, PhD, is Professor of Sociology of Organization and Management at the Institute of Economics and Management at Jagiellonian University, Krakow, Poland

Francesco Garibaldo is Director of the Institute for Labour in Bologna, Italy

Kevin Heanue is lecturer and researcher at Dublin City University, Ireland

Hartmut Hirsch-Kreinsen, PhD, is Professor of Industrial and Economic Sociology at the University of Dortmund, Germany

David Jacobson, PhD, is Professor of Economics and Dean of the School of Economic Sciences and Administration at Frederick Institute of Technology, Cyprus

Aris Kaloudis is Programme Director at NIFU STEP in Oslo, Norway

Holm-Detlev Köhler, PhD, is Professor of Sociology at the Foundation University of Oviedo, Spain

Staffan Laestadius, PhD, is Professor of Industrial Dynamics at the Royal Institute of Technology, Stockholm, Sweden

Alexander Marcinkowski, PhD, is a Senior Lecturer at the Institute of Economics and Management, Jagiellonian University, Krakow, Poland

Krzysztof Markowski, PhD, is a Senior Lecturer at the Management and Marketing Institute, The John Paul II Catholic University of Lublin, Poland

Parimal Patel is a Senior Fellow at the Science Policy Research Unit (SPRU) of the University of Sussex, England

Trond Einar Pedersen, PhD, is a Senior Researcher at NIFU STEP, Oslo, Norway

Heiko Prange-Gstöhl, PhD, is Scientific Officer at the European Commission, Directorate-General for Research, Directorate K, Unit K.3 "Social and Human Sciences Research"

Paul L. Robertson, PhD, is a former professor of management at Griffith University and the University of Wollongong, Australia

Tore Sandven is a Senior Researcher at NIFU STEP Oslo, Norway

Klaus Schmierl, PhD, is a Senior Researcher at the Institute for Social Research Munich, Germany

Keith Smith, is Professor in the School of Management of the University of Tasmania, Hobart, Australia.

James Wickham, PhD, is Director of the Employment Research Centre and Jean Monnet Professor of European Labour Market Studies in the Department of Sociology at Trinity College Dublin, Ireland

Zbigniew Zaleski, PhD, is Professor of Psychology at The John Paul II Catholic University of Lublin, Poland