### Varazdin Development and Entrepreneurship Agency and Medimurje University of Applied Sciences in Cakovec in cooperation with

GOVCOPP - University of Aveiro, Portugal
Faculty of Management University of Warsaw
Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat
ENCGT - Ecole Nationale de Commerce et de Gestion de Tanger - Abdelmalek Essaadi University



### **Economic and Social Development**

109<sup>th</sup> International Scientific Conference on Economic and Social Development – "Green Economy & Sustainable Development"

### **Book of Abstracts**

**Editors:** 

Brian O'Hara, Mustapha Machrafi, Abdelhamid Nechad



### Varazdin Development and Entrepreneurship Agency and Medimurje University of Applied Sciences in Cakovec in cooperation with

GOVCOPP - University of Aveiro, Portugal
Faculty of Management University of Warsaw
Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat
ENCGT - Ecole Nationale de Commerce et de Gestion de Tanger - Abdelmalek Essaadi University

#### **Editors:**

Brian O'Hara, Metropolitan State University of Denver, United States of America Mustapha Machrafi, Mohammed V University in Rabat, Morocco Abdelhamid Nechad, ESCA Management School, Morocco

### **Economic and Social Development**

109<sup>th</sup> International Scientific Conference on Economic and Social Development – "Green Economy & Sustainable Development"

### **Book of Abstracts**

This esd Conference is part of the project "Centar održivog razvoja"/"Center of sustainable development", co-financed by the European Union from the European regional development fund and implemented within Operational Programme Competitiveness and Cohesion 2014 – 2023 of the Republic of Croatia, based on the call "Investing in Organizational Reform and Infrastructure in the Research, Development and Innovation Sector".











Title ■ Economic and Social Development (Book of Abstracts), 109<sup>th</sup> International Scientific Conference on Economic and Social Development - "Green Economy & Sustainable Development"

Editors ■ Brian O'Hara, Mustapha Machrafi, Abdelhamid Nechad

Scientific Committee / Programski Odbor 
Marijan Cingula (President), University of Zagreb, Croatia; Sannur Aliyev, Azerbaijan State University of Economics, Azerbaijan; Ayuba A. Aminu, University of Maiduguri, Nigeria; Anona Armstrong, Victoria University, Australia; Gouri Sankar Bandyopadhyay, The University of Burdwan, Rajbati Bardhaman, India; Haimanti Banerji, Indian Institute of Technology, Kharagpur, India; Victor Beker, University of Buenos Aires, Argentina; Asmae Benthami, Mohammed V University, Morocco; Alla Bobyleva, The Lomonosov Moscow State University, Russia; Leonid K. Bobrov, State University of Economics and Management, Novosibirsk, Russia; Rado Bohinc, University of Ljubljana, Slovenia; Marlene Paula Castro Amorim, University of Aveiro, Portugal; Adnan Celik, Selcuk University, Konya, Turkey; Angelo Maia Cister, Federal University of Rio de Janeiro, Brasil; Mirela Cristea, University of Craiova, Romania; Amelia Cristina Ferreira da Silva, Polytechnic of Porto, Portugal; Taoufik Daghri, Mohammed V University, Morocco; Oguz Demir, Istanbul Commerce University, Turkey; T.S. Devaraja, University of Mysore, India; Onur Dogan, Dokuz Eylul University, Turkey; Darko Dukic, University of Osijek, Croatia; Gordana Dukic, University of Osijek, Croatia; Alba Dumi, Vlora University, Vlore, Albania; Galina Pavlovna Gagarinskaya, Samara State University, Russia; Mirjana Gligoric, Faculty of Economics - Belgrade University, Serbia; Maria Jose Angelico Goncalves, Porto Accounting and Business School - P.Porto, Portugal; Mehmet Emre Gorgulu, Afyon Kocatepe University, Turkey; Klodiana Gorica, University of Tirana, Albania; Aleksandra Grobelna, Gdynia Maritime University, Poland; Liudmila Guzikova, Peter the Great Saint-Petersburg Polytechnic University, Russia; Anica Hunjet, University North, Koprivnica, Croatia; Khalid Hammes, Mohammed V University, Morocco; Oxana Ivanova, Ulyanovsk State University, Ulyanovsk, Russia; Irena Jankovic, Faculty of Economics, Belgrade University, Serbia; Myrl Jones, Radford University, USA; Hacer Simay Karaalp, Pamukkale University, Turkey; Dafna Kariv, The College of Management Academic Studies, Rishon Le Zion, Israel; Hilal Yildirir Keser, Uludag University, Bursa, Turkey; Sophia Khalimova, Institute of Economics and Industrial Engineering of Siberian Branch of Russian Academy of Science, Novosibirsk, Russia; Marina Klacmer Calopa, University of Zagreb, Croatia; Igor Klopotan, Medimurje University of Applied Sciences in Cakovec, Croatia; Vladimir Kovsca, University of Zagreb, Croatia; Goran Kozina, University North, Koprivnica, Croatia; Dzenan Kulovic, University of Zenica, Bosnia and Herzegovina; Petar Kurecic, University North, Croatia; Robert Lewis, Les Roches Gruyere University of Applied Sciences, Bulle, Switzerland; Ladislav Lukas, Univ. of West Bohemia, Faculty of Economics, Czech Republic; Mustapha Machrafi, Mohammed V University, Morocco; Joao Jose Lourenco Marques, University of Aveiro, Portugal; Pascal Marty, University of La Rochelle, France; Vaidotas Matutis, Vilnius University, Lithuania; Daniel Francois Meyer, North West University, South Africa; Marin Milkovic, University North, Koprivnica, Croatia; Abdelhamid Nechad, ENCGT- Abdelmalek Essaadi University, Morocco; Gratiela Georgiana Noja, West University of Timisoara, Romania; Zsuzsanna Novak, Corvinus University of Budapest, Hungary; Tomasz Ochinowski, University of Warsaw, Poland; Barbara Herceg Paksic, University of Osijek, Croatia; Vera Palea, Universita degli Studi di Torino, Italy; Dusko Pavlovic, Libertas International University, Zagreb, Croatia; Igor Pihir, University of Zagreb, Croatia; Damir Piplica, Split University-Department of Forensic Sciences, Croatia; Dmitri Pletnev, Chelyabinsk State University, Russian Federation; Miroslaw Przygoda, University of Warsaw, Poland; Karlis Purmalis, University of Latvia, Latvia; Nicholas Recker, Metropolitan State University of Denver, USA; Kerry Redican, Virginia Tech, Blacksburg, USA; Douglas Rhein, Mahidol University International College, Thailand; Humberto Ribeiro, University of Aveiro, Portugal; Robert Rybnicek, University of Graz, Austria; Tomasz Studzieniecki, Academia Europa Nostra, Poland; Elzbieta Szymanska, Bialystok University of Technology, Poland; Katarzyna Szymanska, The State Higher School of Vocational Education in Ciechanow, Poland; Ilaria Tutore, University of Naples Parthenope, Italy; Sandra Raquel Alves, Polytechnic of Leiria, Portugal; Joanna Stawska, University of Lodz, Poland; Ilko Vrankic, University of Zagreb, Croatia; Stanislaw Walukiewicz, Bialystok University of Technology, Poland; Thomas Will, Agnes Scott College, USA; Li Yongqiang, Victoria University, Australia; Peter Zabielskis, University of Macau, China; Silvija Zeman, Medimurje University of Applied Sciences in Cakovec, Croatia; Tao Zeng, Wilfrid Laurier University, Waterloo, Canada; Snezana Zivkovic, University of Nis, Serbia.

Review Committee / Recenzentski Odbor Marina Klacmer Calopa (President); Ana Aleksic; Sandra Raquel Alves; Ayuba Aminu; Mihovil Andjelinovic; Josip Arneric; Lidija Bagaric; Tomislav Bakovic; Sanja Blazevic; Leonid Bobrov; Ruzica Brecic; Anita Ceh Casni; Iryna Chernysh; Mirela Cristea; Oguz Demir; Stjepan Dvorski; Robert Fabac; Ivica Filipovic; Sinisa Franjic; Fran Galetic; Mirjana Gligoric; Tomislav Globan; Anita Goltnik Urnaut; Tomislav Herceg; Irena Jankovic; Emina Jerkovic; Dafna Kariv; Oliver Kesar; Hilal Yildirir Keser; Martina Dragija Kostic; Tatjana Kovac; Vladimir Kovsca; Angelo Maia Cister; Katarina Marosevic; Vaidotas Matutis; Marjana Merkac Skok; Daniel Francois Meyer; Natanya Meyer; Josip Mikulic; Ljubica Milanovic Glavan; Petar Misevic; Guenter Mueller; Ivana Nacinovic Braje; Zlatko Nedelko; Gratiela Georgiana Noja; Zsuzsanna Novak; Alka Obadic; Claudia Ogrean; Igor Pihir; Najla Podrug; Vojko Potocan; Dinko Primorac; Zeljka Primorac; Sanda Renko; Humberto Ribeiro; Vlasta Roska; Souhaila Said; Armando Javier Sanchez Diaz; Tomislav Sekur; Lorena Skuflic; Mirko Smoljic; Petar Soric; Mario Spremic; Matjaz Stor; Tomasz Studzieniecki; Marko Sundov; Lejla Tijanic; Daniel Tomic; Boris Tusek; Rebeka Daniela Vlahov; Ilko Vrankic; Thomas Will; Zoran Wittine; Tao Zeng; Grzegorz Zimon; Snezana Zivkovic; Berislav Zmuk.

Organizing Committee / Organizacijski Odbor Domagoj Cingula (President); Djani Bunja; Marina Klacmer Calopa; Spomenko Kesina; Erlino Koscak; Ivana Miklosevic; Tomasz Ochinowski; Miroslaw Przygoda; Michael Stefulj; Tomasz Studzieniecki; Rebeka Danijela Vlahov; Sime Vucetic.

Publishing Editor ■ Spomenko Kesina, Domagoj Cingula

Publisher ■ Design ■ Print ■ Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia / Medimurje University of Applied Sciences in Cakovec, Cakovec, Croatia / GOVCOPP - University of Aveiro, Aveiro, Portugal / Faculty of Management University of Warsaw, Warsaw, Poland / Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco / ENCGT - Ecole Nationale de Commerce et de Gestion de Tanger - Abdelmalek Essaadi University, Tangier, Morocco

**Printing** ■ Online Edition

#### ISSN 1849-7543

The Book is open access and double-blind peer reviewed.

Our past Books are indexed and abstracted by ProQuest, EconBIZ, CPCI (Web of Science) and EconLit databases and available for download in a PDF format from the Economic and Social Development Conference website: http://www.esd-conference.com

© 2024 Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia; Medimurje University of Applied Sciences in Cakovec, Cakovec, Croatia; GOVCOPP - University of Aveiro, Aveiro, Portugal; Faculty of Management University of Warsaw, Warsaw, Poland; Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco; ENCGT - Ecole Nationale de Commerce et de Gestion de Tanger - Abdelmalek Essaadi University, Tangier, Morocco. All rights reserved. Authors are responsible for the linguistic and technical accuracy of their contributions. Authors keep their copyrights for further publishing.

### **CONTENTS**

| ENTERPRISES: CONCEPTUALIZATION OF A RESEARCH MODEL   |
|--|
| Dunja Skalamera-Alilovic, Marijana Jakopic Ganic   |
| ECONOMIC AND LEGAL ANALYSIS OF THE POSITION OF MINORS IN CONSUMER BANKRUPTCY PROCEEDINGS: HOW TO REGULATE THE UNREGULATED? |
| Dejan Bodul, Pavle Jakovac, Marko Tomljanovic  |
| THE RELATIONSHIP AND CONCEPTUAL LINKS AMONG JOB ROTATION SENSEMAKING AND TERMINUS TECHNICUS                                |
| THE DEVELOPMENT OF HIGHER EDUCATION IN BULGARIA AND THI EMERGING CRISES  |
| Venelin Terziev  |
| CULTURAL IDENTITY AND THE GLOBAL WORLD   |
| <b>DEVELOPMENT OF THE TRANSPORT NETWORK OF VARAŽDIN COUNTY</b> Melita Srpak, Goran Slavinec, Predrag Brlek, Darko Pavlovic |
| WOW - WAYS OF WORKING - NEW LEADERSHIP IN THE HYBRID CORPORATI<br>REALITY  |
| ADVANCING AND STRATEGIZING MARITIME ENVIRONMENTAL PROTECTION: A PATH TOWARDS A MORE SUSTAINABLE FUTURE                     |
| MEDIA CONSUMPTION AND MEDIA USING HABITS OF STUDENTS IN THE 2NI YEAR OF COMPUTER SCIENCES AT THE MEÐIMURJE UNIVERSITY      |
| THE INFLUENCE OF VIDEO GAMES ON THE STUDENT LIFE OF MENTIONENTS  |
| Filip Hren, Tin Tkalcevic, Nikola Novak, Irena Popovic   |
| RELATIONSHIP OF INDIVIDUALS TO SUPERIOR AND SUBORDINATE  |
| INSHURTECH: BIBLIOMETRIC ANALYSIS USING VOSVIEWER 10 Valentina Ninova, Nikolay Ninov                                       |
| BALANCED SCORECARD AS A MANAGEMENT IMPROVEMENT TOOL 10 Venelin Terziev   |

| TOWARDS SUSTAINABLE ENERGY: AZERBAIJAN IN A QLOBAL CONTEXT.11 Zahid Farrux Mamedov, Sadiq Qurbanov                                       |
|--|
| ECONOMIC GROWTH, ENVIRONMENT AND GREEN ECONOMY 12 Jarmila Vidova   |
| SDG8 - ANALYSIS OF SELECTED EU COUNTRIES   |
| MODERN BANKING REGULATIONS REGARDING CLIMATE RISKS 13 Jelena Basaric   |
| AUGMENTED REALITY EXPERIENTIAL MARKETING IN TOURISM: LITERATURE REVIEW, CONCEPTUALIZATION, KEY DIMENSIONS AND FUTURE RESEARCH DIRECTIONS |
| MGSC PLANNING WITH THEORY RELATIVITY   |
| THE ROLE OF INTELLIGENT TECHNOLOGIES IN CONSTRUCTION COMPANIES IN SLOVAKIA   |
| INSURTECH BETWEEN THE FOURTH INDUSTRIAL REVOLUTION AND THE FUTURE OF THE INSURANCE INDUSTRY  |
| TRANSFORMING SOCIAL SYSTEMS AND STRUCTURES IN CONDITIONS OF DYNAMIC CRISES   |
| LEARNING WEB DEVELOPMENT TROUGH GAMIFIED APPLICATIONS 18 Domagoj Trojko  |
| INTELLECTUAL CAPITAL AND FIRM PERFORMANCE: DOES BOARD SIZE MATTER? A MACHINE LEARNING APPROACH   |

### CONTEXTUAL FACTORS SUPPORTING KNOWLEDGE SHARING IN ENTERPRISES: CONCEPTUALIZATION OF A RESEARCH MODEL

#### **Dunja Skalamera-Alilovic**

Faculty of Economics and Business, University of Rijeka, Republic of Croatia dunja.skalamera-alilovic@efri.uniri.hr

#### Marijana Jakopic Ganic

University of Applied Sciences Rijeka, Republic of Croatia mjakopic@veleri.hr

#### **ABSTRACT**

The new millennium brought many challenges for enterprises. Physical resources have become increasingly scarce, while human (intellectual) capital is once again becoming a crucial corporate asset. Efficient management of corporate knowledge requires that additional efforts are invested in knowledge sharing activities, which require planning, organizing and implementing an organizational environment that supports knowledge sharing. After a thorough review of the relevant research on knowledge sharing and its antecedents, this paper proposes a synergistic combination of three contextual factors that support knowledge sharing: Organizational culture, ICT and Top management support. Organisational culture that promotes knowledge sharing includes: a corporate mission statement that emphasizes the importance of knowledge sharing, employee empowerment and continuous learning. Implementing ICT that facilitates knowledge sharing requires investing in ICT for knowledge sharing, using ICT tools to scan and discover new business opportunities in the market, and using ICT to improve communication between employees. Top management support for knowledge sharing requires managers to be open to employees' ideas and suggestions, to develop mutual trust and to mentor employees. The main contribution of this paper is that it provides a new tool for monitoring and evaluating contextual factors relevant to knowledge sharing. Although previous research offers a plethora of antecedents for knowledge sharing, a clear systematization of these factors seems to be lacking. Conceptualizing a research model that describes the contextual factors of knowledge sharing could help both managers and researchers to assess, improve, and further explore the organizational context that supports knowledge sharing.

**Keywords:** ICT, knowledge sharing, organizational culture, research model, top management support

# ECONOMIC AND LEGAL ANALYSIS OF THE POSITION OF MINORS IN CONSUMER BANKRUPTCY PROCEEDINGS: HOW TO REGULATE THE UNREGULATED?

#### **Dejan Bodul**

Associate professor at University of Rijeka, Faculty of Law Hahlić 6, 51000 Rijeka, Croatia dbodul@pravri.hr

#### Pavle Jakovac

Associate professor at University of Rijeka, Faculty of Economics and Business Ivana Filipovića 4, 51000 Rijeka, Croatia pavle.jakovac@efri.hr

#### Marko Tomljanovic

Assistant professor at University of Rijeka, Faculty of Economics and Business Ivana Filipovića 4, 51000 Rijeka, Croatia marko.tomljanovic@efri.hr

#### **ABSTRACT**

The purpose of this paper is to analyse the position of minors in consumer bankruptcy proceedings. In this sense, this paper intends to point out the indeterminacy of the existing solutions and try to direct the reflection on this problem towards certain de lege ferenda solutions. The complexity of the research and the tasks set determined the choice of methods, so that the normative-legal, comparative-legal and statistical approaches were primarily used in this paper. Since the provisions of the Consumer Bankruptcy Act do not explicitly regulate the protection of minors, but the positive obligation to protect all rights is regulated, it is obvious that minors have no special procedural status in the proceedings. This analysis has theoretical-methodological and practical significance. Theoretically, the position of minors in consumer insolvency proceedings has a particular structure that needs to be identified and scientifically investigated and explained. The practical goal is to identify (scientifically and objectively) the measures and procedures that should be taken to avoid a conflict situation between the minor population and their position in consumer insolvency proceedings. Ultimately, the aim is to provide a systematic overview of the most important issues and to formulate recommendations for the upcoming reform of the Consumer Bankruptcy Act.

**Keywords:** consumer bankruptcy, minors, potential problems

# THE RELATIONSHIP AND CONCEPTUAL LINKS AMONG JOB ROTATION, SENSEMAKING AND TERMINUS TECHNICUS

#### Gabor Gubicza

SzEEDS Doctoral Program in Business Administration, Széchenyi István University, Hungary

#### Sandor Remsei

Kautz Gyula Faculty of Economics, Széchenyi István University, Hungary

#### **ABSTRACT**

This paper provides a thorough analysis of job rotation definitions, objectives, advantages and disadvantages, furthermore a deep dive into the terminus technicuses and sense-making. Job rotation, defined by the systematic reassignment of employees to varied roles across departments, is posited as a pivotal strategy for enhancing workforce adaptability, skill diversity, and overall employee satisfaction. The research underscores the integration of job rotation with key concepts such as terminus technicus (technical terminology), sensemaking, and organizational behavior, elucidating its role in broadening employees' professional lexicon, fostering a comprehensive understanding of organizational operations, and promoting a culture of continuous learning and innovation. The study methodically explores the tangible benefits and inherent challenges of job rotation through empirical examples from Toyo Kogyo (Mazda) and Intel Corporation, showcasing the efficacy of job rotation in creating an efficient, versatile workforce. Additionally, the paper articulates the objectives of job rotation, its benefits and drawbacks, and its implications for fostering a dynamic, skilled, and adaptable workforce, thereby contributing to organizational success and sustainability.

**Keywords:** Job rotation, sensemaking, terminus technicus, management, organizational behavior

\*\*\*\*\*

### THE DEVELOPMENT OF HIGHER EDUCATION IN BULGARIA AND THE EMERGING CRISES

#### **Venelin Terziev**

Black Sea Institute, Bourgas, Bulgaria vkterziev@gmail.com

#### **ABSTRACT**

The article is an overview of the monographs "Higher education system and labour market policies in Bulgaria in COVID-19 Crisis and post-crisis periods" and "COVID-19 Pandemics and its impact on Bulgarian universities in the context of the new challenges to the social system and labour market policies" by Venelin Terziev. The monographs address the changing social processes in the pandemic situation that has occurred around the world. The studies present analyses of the labour market situation in Bulgaria during the pandemic crisis and some solutions to new challenges to the higher education system. Special emphasis is put on the differentiated effect on higher education institutions, depending on the field in which universities carry out teaching and research activities, as well as on the peculiarities of the university business model in the changing environment for development of the higher education institutions.

An attempt was made to analyze the emerging critical processes in the labour market, the prospects for action, and the post-crisis measures, as well as to forecast future actions.

**Keywords:** Higher education, Development, Labour market, Emerging crises, Monograph, Bulgaria

\*\*\*\*\*

#### CULTURAL IDENTITY AND THE GLOBAL WORLD

#### Venelin Terziev

Black Sea Institute, Bourgas, Bulgaria vkterziev@gmail.com

#### Iliyana Krasteva

St. St. Cyril and Method High School, Bregovo, Bulgaria krusteva.iliana@abv.bg

#### **ABSTRACT**

The current development tries to find good examples of realized socio-cultural identity in the conditions of the emerging rules of the global world. He tries to outline one such example in a Bulgarian school and points out the practical implementation of "cultural corridors", which are brought into real visual implementation. The possible connection between the implementation of the educational and educational process is sought. A brief analysis of the ongoing processes in the small settlements of Bulgaria was made, with the example of the municipality of Bregovo, which is located in the Don border with two other countries, given as an example.

Keywords: Cultural identity, Cultural corridors, Global world, Bulgarian school, Bregovo

# DEVELOPMENT OF THE TRANSPORT NETWORK OF VARAŽDIN COUNTY

#### Melita Srpak

Varazdin County - Department of Physical Planning, Croatia melita.srpak@gmail.com

#### **Goran Slavinec**

University North, Croatia slavinec1984@gmail.com

#### **Predrag Brlek**

University North, Croatia pbrlek@unin.hr

#### **Darko Pavlovic**

Polytechnic of Međimurje in Čakovec, Croatia pad.pavlovic@gmail.com

#### **ABSTRACT**

Traffic serves as the bloodstream of modern society, shaping, connecting and defining space and its functions. Varaždin County, with the features of its historical, cultural and geographical position, stands out as a natural key in the regional and European transport. The aim of this work is based on the analysis of the transport network of Varaždin County, with a focus on the geo-traffic position of Varaždin County and the existing transport infrastructure. The purpose of this paper is defined by the theoretical framework, that is, the geotraffic position of the region, which includes state and local roads, the railway network, and bicycle routes that reveal the dynamics and potential of sustainable mobility. Methodologically, this paper relies on a combination of previous research and fresh empirical data, collected through a survey that covered a wide spectrum of Varaždin County's population. This integrated analytical matrix enables a deeper understanding of the traffic dynamics of the region, with special reference to cycling as a symbol of the transformation and modernization of traffic paradigms. In conclusion, this paper not only offers a visualization of the current state of the transport infrastructure of Varaždin County, but it also lays the foundations for any and all visionary planning of the future. A crucial part of this vision is the promotion of sustainability, innovation and integration, ensuring that Varaždin County remains a vital and respected point on the traffic map of Europe. The road infrastructure of Varaždin County not only reflects its key geographical position as the intersection of international traffic arteries, but also the deeprooted multifunctionality of the region. This combination of geographic and socio-economic dynamics makes Varaždin County the epicenter of activities, interactions and exchanges in a wide range of sectors.

**Keywords:** cycling routes, master plan, transport networks, railway infrastructure, Varaždin County

### WOW - WAYS OF WORKING - NEW LEADERSHIP IN THE HYBRID CORPORATE REALITY

#### Brigitta Banhidi

Széchenyi István University, Hungary banhidi.brigitta@sze.hu

#### **ABSTRACT**

Accelerated technological breakthroughs of the past decades have resulted in a new paradigm of work; it may now be performed at any time, in any physical location, or via technology. The virtual world and its many communication tools have established a new framework for leadership and cooperation. As the COVID-19 pandemic passed, hybrid working arrangements became widespread, and several companies tended to mix on-site and remote working, seeking to take advantage of both. A growing ratio of employees prefer to prioritize their own needs ahead of the business growth of their employer, which all together has led to a need for managers and leaders to understand the unprecedented implications of such hybrid setups. This paper serves as a critical literature review that aims to explore the way leadership can operate in this 'new normal' of a working environment. The study focuses on three aspects of the problem at hand and thus intends to: (a) identify the social and economic changes that led to having hybrid teams; (b) discuss the new ways of working that have been implied by such changes; and (c) debate the findings of the literature review about the different scenarios of leadership behaviors that managers of hybrid teams may follow to ensure the desired productivity level is met by their teams. First and foremost, as a widely accepted conclusion, managers might consider re-inventing the workplace in close discussions with their colleagues in order to integrate private preferences. Furthermore, enhanced people management skills and an increased EQ level might help leaders be more effective. It is perceived that the focus of leadership shifts from decision-making to relationship management in the post-pandemic era. That relationship is best maintained by one-on-one leader-subordinate discussions.

Keywords: COVID-19, EQ, Hybrid working environment, Leadership, People management

\*\*\*\*\*

# ADVANCING AND STRATEGIZING MARITIME ENVIRONMENTAL PROTECTION: A PATH TOWARDS A MORE SUSTAINABLE FUTURE

#### Irina Pecsvary

Libertas International University
Trg John F. Kennedy 6B, 10000, Zagreb, Croatia
ira\_pecsvary@live.com

#### **ABSTRACT**

The maritime sector, which handles more than 90% of global transactions, plays a key role in international trade, but contributes only about 3% of global greenhouse gas emissions. Although economically significant, its relatively smaller share in total emissions puts it in the context of an important, but not the main, source of air and water pollution. This report presents a detailed examination of the marine sector's journey towards sustainability and environmental stewardship. This analysis underscores the significant influence of maritime operations on

ecosystems, specifically drawing attention to the emission of detrimental substances and the ecological ramifications of shipping activities. To address these difficulties, the industry has launched green shipping initiatives with the goal of improving maritime safety and fostering the integration of environmental, economic, and social factors. The study examines the function of international and regulatory organizations, such as the International Maritime Organization (IMO), in enforcing environmental regulations and promoting the industry's shift towards sustainable practices. This entails a transition in emphasis towards the control of atmospheric contaminants, human influences, and technology progress to alleviate maritime mishaps. Moreover, the article investigates the industry's endeavors to embrace alternative fuels such as hydrogen, ammonia, biofuels, and methanol in order to attain maximum carbon efficiency. The text delves into the technological, economic, and regulatory obstacles associated with the adoption of alternative fuels. It emphasizes the significance of engaging stakeholders and the policy implications in advancing sustainable practices. The study explores the important role of ports as vital economic and logistical centers, their impact on coastal pollution, and the adoption of sustainable practices at container terminals. The document showcases case studies that illustrate successful waste management and recycling initiatives, highlighting the industry's dedication to reducing its impact on the environment. The article underlines the maritime industry's essential role in combining economic expansion with ecological sustainability. To secure the industry's role in a resilient and ecologically sensitive future, it necessitates ongoing innovation, international collaboration, and an unwavering dedication to sustainable practices.

**Keywords:** maritime industry, environmental sustainability, green shipping, alternative fuels, waste management

\*\*\*\*\*

# MEDIA CONSUMPTION AND MEDIA USING HABITS OF STUDENTS IN THE 2ND YEAR OF COMPUTER SCIENCES AT THE MEÐIMURJE UNIVERSITY

#### Risek Maja

Međimursko veleučilište u Čakovcu, Croatia risek.maja@student.mev.hr

#### Radicev Stjepan

Međimursko veleučilište u Čakovcu, Croatia radicev.stjepan@student.mev.hr

#### Vrlec Mirko

Međimursko veleučilište u Čakovcu, Croatia mirko.vrlec@student.mev.hr

#### Irena Popovic

Međimursko veleučilište u Čakovcu, Croatia ipopovic245@gmail.com

#### **ABSTRACT**

The media, in their diversity, play a key role in modern society, shaping our understanding of the world and events. Traditional forms such as newspapers and television have now been overtaken by digital transformation, where the Internet, forums and social networks are becoming key sources of information. This rapid development opens the door to new challenges, including fake news and the need for media literacy. Digital transformation also brings changes in the way news are consumed, providing us with the possibility of accessing information in real time, but at the same time raises the question of authenticity and reliability. Students spend a significant part of their time on social networks. The paper analyzes what kind of content second-year computer science students follow and how much time they spend on the Internet. Furthermore, the work brings into relation the time spent on the Internet and the quality of sleep, the reduction of physical activity. Monitoring of video content, of influencers, partly affect the shopping habits of students. The paper also questions whether students form opinions under the influence of the media and how many students have the habit of watching documentary programs.

**Keywords:** digital transformation, social networks, communication, media, students

\*\*\*\*\*

### THE INFLUENCE OF VIDEO GAMES ON THE STUDENT LIFE OF MEV STUDENTS

#### Filip Hren

Međimursko veleučilište u Čakovcu, Croatia filiphren7@gmail.com

#### **Tin Tkalcevic**

Međimursko veleučilište u Čakovcu, Croatia tin.tkalcevic@student.mev.hr

#### Nikola Novak

Međimursko veleučilište u Čakovcu, Croatia nikola.novak@student.mev.hr

#### Irena Popovic

Međimursko veleučilište u Čakovcu, Croatia ipopovic245@gmail.com

#### **ABSTRACT**

In today's digital world, video games have become an indispensable part of the daily life of many people, and as such represent a significant consumption of time, especially among young people, including students who live in the fast-paced environment of higher education. While some see video games as an unwarranted distraction, others find them a way to relax, challenge and socialize. By analyzing the data obtained by surveying students in all three years of computer science, the paper examines the impact of video games on various aspects of life, including academic success, emotional state, social interactions and the balance between the virtual and real world. The goal of the work is a deeper understanding of the impact of video games on the lives of students themselves, taking into account their attitudes, experiences and habits. The paper analyzes the amount of time that students spend playing video games and investigates the connection between playing video games and communication, distinguishing singleplayer and multiplayer games because the latter are played with other participants and this can strengthen communication between students.

Also, video game playing habits are monitored during the week when students have responsibilities at the Polytechnic and during the weekend when they have more free time. **Keywords:** digital world, communication, multiplayer, singleplayer, video games

\*\*\*\*\*

### RELATIONSHIP OF INDIVIDUALS TO SUPERIOR AND SUBORDINATE

#### Ian Paska

Međimursko veleučilište u Čakovcu, Hrvatska ian.paska@student.mev.hr

#### **Marko Francic**

Međimursko veleučilište u Čakovcu, Hrvatska marko.francic@student.mev.hr

#### Petar Canadi

Međimursko veleučilište u Čakovcu, Hrvatska petar.canadi@student.mev.hr

#### Irena Popovic

Međimursko veleučilište u Čakovcu, Hrvatska ipopovic245@gmail.com

#### **ABSTRACT**

The paper deals with the topic of the individual's relationship with his superiors and subordinates. The attitude of an individual towards himself, superiors and subordinates is an important topic that affects the quality of life and work. The starting point is the question how people behave in different situations at the workplace and whether age affects the way they relate to work and people with different authority if is it higher or lower than theirs, and whether this has an impact on motivation and efficiency. The paper compares whether an individual has a more negative attitude towards subordinates and a more positive attitude towards superiors, and whether young workers have less willingness to work and understanding towards older colleagues. The comparison will be made using the scientific method of observation. The sample is made up of 15 people who work at three different workplaces – coffee shop, hotel and shop. Each person had one or more superiors and subordinates. Their verbal and non-verbal communication signals were observed in two different situations: when they were talking to a superior and when they were talking to a subordinate.

**Keywords:** communication, motivation, superiors, subordinates, workplace

#### INSHURTECH: BIBLIOMETRIC ANALYSIS USING VOSVIEWER

#### Valentina Ninova

Tsenov Academy of Economics, 5250 Svishtov, Bulgaria v.ninova@uni-svishtov.bg

#### Nikolay Ninov

Tsenov Academy of Economics, 5250 Svishtov, Bulgaria n.ninov@uni-svishtov.bg

#### **ABSTRACT**

This study aims to identify current trends in the scholarly literature on the topic of InshurTech. It was carried out by applying a bibliometric review of documents published in the Web of ScienceTM Core Collection database. The focus of this study is mainly on co-authorship analysis and co-occurrence analysis of terms based on textual data. In this regard, 83 publications were identified on the InshurTech topic based on keywords and the "Title field" option was selected to create a map. The study was done by data visualization using the VOSviewer software application. In the process of data processing, standard bibliometric indicators were applied: year of publication, document type, source type, source title, language, research area, keyword analysis and authorship. The dating of publications on InshurTech from the Web of Science database started in 2017, and after this year there has been a significant increase in the number of publications on the topic. Also presented are the top ten most frequent terms in InsurTech publications and co-occurrences in the Web of Science database. In addition, the countries/regions whose authors have contributed to the development of the InshurTech topic are analysed, using Microsoft Excel. In the process of the research, it was found that the leading countries, which are a kind of engine of research dedicated to the mentioned topic, are headed by Spain, followed by the People's Republic of China and the USA. Keywords: Bibliometric Analysis, Insurance, Insurance Technology, InsurTech, FinTech, VOSviewer, Web of Science

\*\*\*\*\*

### BALANCED SCORECARD AS A MANAGEMENT IMPROVEMENT TOOL

#### Venelin Terziev

Black Sea Institute, Bourgas, Bulgaria vkterziev@gmail.com

#### **ABSTRACT**

The article is an overview of the monograph "Balanced Scorecard as a management improvement tool" by Marin Georgiev. The aim of this study is to gather sufficient evidence and arguments in order to prove to society that during the process of change in thinking and especially of effective practical implementation of management models such as the balanced scorecard model, high levels of efficiency can be achieved on all hierarchical levels in systems key for the society and the state. The author explore opportunities for the effective implementation of the model and trialling it in different systems and levels of management. **Keywords:** Balanced Scorecard (BSC), Management, Education, Monograph, Review

### TOWARDS SUSTAINABLE ENERGY: AZERBAIJAN IN A QLOBAL CONTEXT

#### **Zahid Farrux Mamedov**

Director of Organization and Management of Scientific Activity Department, Azerbaijan State University of Economics (UNEC; "Institute of Control Systems") İstiqlaliyyat 6, Baku, Azerbaijan zahid.mamed@gmail.com

#### **Sadiq Qurbanov**

Assistant Professor at Azerbaijan State Economic University (UNEC), Baku, Azerbaijan sadiq.kamal1310@gmail.com

#### **ABSTRACT**

Energy as the most important sphere of human life support is interconnected with world politics, climate, economic, environmental and technological development. It responds to all external challenges, often exerting a decisive influence on them. Azerbaijan is an important oil and gas producing country and plays an important role as an exporter of energy resources. Now there is a lot of talk about the energy transition, that in connection with this, Azerbaijan needs a new energy strategy. In the modern world, the production of environmentally friendly energy has become relevant. Azerbaijan has the potential for renewable energy production as well as CO2 capture and storage (CCS), which can be used to export low-carbon hydrogen. The geographical position of Azerbaijan and its growing transport and logistics role open up wide opportunities for the exchange of experience and cooperation in the field of decarbonization and the creation of export routes for low-carbohydrate energy carriers with European countries. The development of alternative energy sources against the backdrop of more frequent worldwide natural disasters is a vital and irrefutable demand of the times. The energy policy of Azerbaijan fully meets these trends. is influenced by a huge number of very different, often multidirectional factors. Azerbaijan also has great potential for the production of green energy and Azerbaijan plays an important role in ensuring the energy security of Europe. Natural gas exported from Azerbaijan fully meets the needs of a number of European countries. Today, a secure and sustainable energy supply is shaping a new global energy landscape based on the diversification of sources and routes, including the development of green energy. Azerbaijan is entering a new stage with initiatives that will strengthen its strategic position in ensuring energy security at the regional and European levels. Azerbaijan has already started producing alternative energy using new technologies. Along with the extraction and export of oil and gas, Azerbaijan will pay great attention to the production and export of "green" energy, which will increase its role in ensuring the energy security of Europe. **Keywords:** sustainable energy, energy policy of Azerbaijan, energy security of Europe, alternative energy, energy sector of Azerbaijan

#### ECONOMIC GROWTH, ENVIRONMENT AND GREEN ECONOMY

#### Jarmila Vidova

University of Economics in Bratislava Bratislava, Dolnozemská cesta 1, Slovakia jarmila.vidova@euba.sk

#### **ABSTRACT**

Permanent efforts to maximize production, economic growth, have had a positive impact on population growth, raising the standard of living, and reducing poverty. In the global environment, maintaining a balance between economic development and the use of the world's resources is an important fact. Just as the gross domestic product and the income situation developed positively, the consumption of natural resources also grew over the years, which was reflected in the growth of the global material footprint, domestic material consumption and material footprint. In the paper, we will focus on investigating the relationship between economic growth, well-being and the material footprint. Based on data from the World Bank, since 1960 the global GDP has increased from 10.94 billion dollars, to 87.95 billion dollars in 2022. Over the past nearly fifty years, the growth of world population and global GDP has necessitated an escalation in demand for natural resources. The use of natural resources in the form of material extraction has tripled since 1970, far beyond what industrial ecologists consider a sustainable limit. The concept of separating economic growth and resource use, or separating economic growth and environmental impacts, is gaining momentum globally. An essential prerequisite for maintaining sustainability is the efficient use of natural resources. This means supporting the efficient use of energy and resources, investing in renewable energy sources, supporting waste reduction and increasing recycling efforts, or encouraging technological innovation. The solution is sustainable production and consumption and the transition from a linear economy to a circular economy as much as possible.

Keywords: Economic growth, Ecological transformation, Environment, Green economy

\*\*\*\*\*

#### SDG8 - ANALYSIS OF SELECTED EU COUNTRIES

#### Perica Vojinic

University of Dubrovnik, Lapadska obala 7, 20000 Dubrovnik, Croatia perica.vojinic@unidu.hr

#### **ABSTRACT**

Economic transformation and the leading strategies of contemporary global society are founded on sustainable development, i.e. on encouraging continuous economic and social progress, without endangering natural resources and environment crucial for human activity in the future. The eighth goal of the UN Sustainable Development Program (SDG 8) states the promotion of inclusive and sustainable economic growth, full employment and decent work for all. Sustainable development and the labour market are closely intertwined concepts that focus on creating a better future for society while ensuring economic stability and employment opportunities for all people. The aim of the paper is to reveal the state of individual CEECs in their attempt to align with the SDG8. For this purpose, we analyse the indicators that are important for achieving the conditions for decent work and calculate the mutual relationship

of the countries, using the average values for the European Union (EU27) as a reference. The analysis was made for the ten-year period from 2012 to 2022. The results of the analysis suggest that these countries have created the preconditions for achieving the eighth UN goal of sustainable development, while their mutual relationship is relatively stable.

Keywords: decent work, CEEC, labour market trends, SDG 8

\*\*\*\*\*

#### MODERN BANKING REGULATIONS REGARDING CLIMATE RISKS

#### Jelena Basaric

National Bank of Serbia, Belgrade, Serbia jelena.r.basaric@gmail.com

#### **ABSTRACT**

Climate change is one of the main challenges the world is facing today. As climate-related risks represent sources of financial risks, central banks and supervisors are obliged to ensure the resilience of financial systems to these risks. In order to assess their impact, stress tests were conducted by individual central banks, and the results indicate that the mentioned risks have a significant impact on financial stability. The aim of this paper is to show the importance of environmental and climate risks for the financial stability, as well as to provide an overview of the banking sector regulation in order to mitigate and better manage financial risks associated with climate change.

**Keywords:** climate risks, financial stability, scenario analysis, stress tests, NGFS, Basel Committee on Banking Supervision, ECB

### AUGMENTED REALITY EXPERIENTIAL MARKETING IN TOURISM: LITERATURE REVIEW, CONCEPTUALIZATION, KEY DIMENSIONS AND FUTURE RESEARCH DIRECTIONS

#### Andrijana Kos Kavran

Međimurje University of Applied Sciences Bana Josipa Jelačića 22a, 40000 Čakovec, Croatia akos@mev.hr

#### **Jasmina Dlacic**

Faculty of Economics and Business, University of Rijeka Ivana Filipovića 4, 51000 Rijeka, Croatia jasmina.dlacic@efri.uniri.hr

#### Dina Loncaric<sup>†</sup>

Faculty of Tourism and Hospitality Management, University of Rijeka Primorska 46, 51410 Opatija, Croatia

#### **ABSTRACT**

This paper aims to introduce the concept of augmented reality experiential marketing in tourism in the phase of a tourist's stay at a destination. The paper aims to explore how the tourism experience, augmented reality, and experiential marketing can be conceptualized based on previous research and to identify future research directions in this research area. This paper presents a systematic literature review using predetermined keywords in the Web of Science, Scopus, ScienceDirect, and DOAJ scientific databases. It considers the most significant research published in this field from 2010 to the present. Three elements have gained attention in recent research: experiential marketing, augmented reality, and the use of augmented reality in tourism. This paper uses the experiential marketing concept created by Schmitt (1999, 2010) and places augmented reality in the role of experience provider, resulting in a conceptualization of augmented reality experiential marketing in tourism. The paper offers new insights into the topic by creating a concept of augmented reality experiential marketing in tourism. It highlights the importance of using technology in creating a tourism experience. **Keywords:** augmented reality, experience, experiential marketing, technology, tourism

\*\*\*\*\*

-

<sup>†</sup> Passed away Spetember 19, 2023

#### MGSC PLANNING WITH THEORY RELATIVITY

#### **Vladimir Krizaic**

Polytechnic of Međimurje in Čakovec, Croatia vkrizaic@mev.hr

#### Valentino Skvorc

Općina Mala Subotica, Croatia vskvorc@mev.hr

#### Drazen Hrani

IPC, Croatia dhranj@mev.hr

#### Nikolina Krizaic

Student of PMF in Zagreb, Croatia krizaicn@gmail.com

#### **ABSTRACT**

Optimizing the planning and management of process-oriented systems is a trend towards continuous improvement of production in the organizational business system. Today, smart and other various methods are being developed, which are implemented with algorithms in computer simulations of building models. The biggest management problem is the planning function. First, the obsolescence of standards and the rapid development of 4 industrial technologies that, despite their digital advantages, do not contribute to higher productivity of business systems. The creation of vectorial or parametric standards provides an entry point to today's digital simulation tools, but for them to be perfect, iteration loops must be found that simplify the algorithms for computer technologies. Thus, the MGSC planning method was developed using the financial S-curve, which operates under the assumption that the future is a function of the past. While the improvement of this theory can be identified with the theory of relativity and improves the planning of MGSC with a differential addition based on the relativity of effect.

**Keywords:** process systems, Smart systems, norm vector, MGSC, theory of effect relativity

### THE ROLE OF INTELLIGENT TECHNOLOGIES IN CONSTRUCTION COMPANIES IN SLOVAKIA

#### **Patrik Richnak**

Faculty of Business Management, University of Economics in Bratislava, Slovak Republic patrik.richnak@euba.sk

#### **Peter Drabik**

Faculty of Commerce, University of Economics in Bratislava, Slovak Republic peter.drabik@euba.sk

#### Eva Hanulakova

Faculty of Commerce, University of Economics in Bratislava, Slovak Republic eva.hanulakova@euba.sk

#### **Robert Rehak**

Faculty of Commerce, University of Economics in Bratislava, Slovak Republic robert.rehak@euba.sk

#### **ABSTRACT**

In the construction sector, the application of intelligent technologies boosts process control and expedites decision-making. The foundation for digitising the building process is the integration of technologies such as blockchain, robust IT systems, cloud platforms, Internet of Things solutions, robotic devices, additive technologies, and robots. Intelligent technologies present a chance to establish a digital ecosystem in the construction sector that encourages cooperative innovation between business alliances. The main objective of the presented paper was based on a literature review to determine and explicate the terms that identify intelligent technologies in the construction industry and at the same time to interpret the results of research that analyse the current state of the ongoing digital transformation in the construction industry in Slovakia. From the results of the research, we conclude that more than 3/5 of companies in the construction industry partially perceive digital transformation in construction processes. In the surveyed companies, the strategy — Construction 4.0 — is currently in the planning process. Among the selected intelligent technologies, construction companies in Slovakia mainly use RFID and robotics.

**Keywords:** digitalisation transformation, intelligent technologies, construction 4.0, construction industry

### INSURTECH BETWEEN THE FOURTH INDUSTRIAL REVOLUTION AND THE FUTURE OF THE INSURANCE INDUSTRY

#### Nikolay Ninov

Tsenov Academy of Economics, 5250 Svishtov, Bulgaria n.ninov@uni-svishtov.bg

#### Valentina Ninova

Tsenov Academy of Economics, 5250 Svishtov, Bulgaria v.ninova@uni-svishtov.bg

#### **ABSTRACT**

The purpose of this research is to derive a cause-and-effect relationship between the Fourth Industrial Revolution, in particular the emergence of InsurTech, and the initiated transformation of the insurance industry worldwide. The research object is InsurTech and its subject is InsurTech innovation. In the framework of the exhibition, the focus is placed on several issues related to the nature of InsurTech, as a category that emerged as a result of separation from FinTech; how the same InsurTech innovations are impacting current insurance business models; the demands they place on the insurance industry; the behaviour and number of emerging and traditional insurance companies - market participants. The development also defines the dimensions of the "InsurTech" paradigm within which the InsurTech revolution is expected to continue, completing the complete transformation of the insurance business.

**Keywords:** FinTech, InsurTech, The Fourth Industrial Revolution, Omnichannel Trade, Internet of Things, InsurTech Ecosystems, Regulation

\*\*\*\*\*

## TRANSFORMING SOCIAL SYSTEMS AND STRUCTURES IN CONDITIONS OF DYNAMIC CRISES

#### **Venelin Terziev**

Black Sea Institute, Bourgas, Bulgaria vkterziev@gmail.com

#### **ABSTRACT**

In this publication we set an objectively complicated task to analyse the opportunities of strategic decision-making during crisis by attempting to make a partial analysis of the ongoing crisis caused by the COVID 19 pandemic and the emerged military conflict between the Russian Federation and Ukraine. Crisis circumstances require societies to quickly rethink and develop adequate strategies and respectively to formulate strategic goals and plan processes. In many cases preliminary analysis and assessment are practically impossible /especially when it comes to natural disasters or crises/ and this requires a different operational order of problem solving, which includes formulating new unconventional goals and then implementing planning not objectified by a particular and accurate analysis. All this puts whole systems and societies to the test, and those who are empowered to manage the process – under high pressure from unforeseen circumstances and not always objective judgments. Which, in turn, creates a number of subsequent critical issues in the management process. The role of socially dominant leaders is of particular importance in societies, as well as in making various decisions. Their role in strategic decision-making is also examined.

Social systems and social structures are subject to various impacts and overcoming them is becoming increasingly difficult. An attempt has been made for a brief analysis and historical retrospective of the transformations of social systems and the ongoing processes of transformation.

**Keywords:** Social systems, Management, Global crisis, Strategies, Management process

\*\*\*\*\*

# LEARNING WEB DEVELOPMENT TROUGH GAMIFIED APPLICATIONS

#### Domagoj Trojko

Graditeljska škola Čakovec, Croatia dtrojko@gmail.com

#### **ABSTRACT**

The human species has an inherit need for playing games that has been shown in all technological advances. A couple of mechanism in the human body activate while playing, and one of the more important ones is immersion, a complete dive into something virtually created. Gamification is also a term closely related to games which tries to use the process of immersion to teach complex things. As have, through the last decade, technologies related to the internet marked a strong growth, there developed a need for creative was to learn new possibilities of HTML, CSS and JavaScript. A part of web developers took the opportunity and developed web applications that teach new possibilities through implementing gamification. In this paper 5 applications of this kind were analysed through 5 questions.

**Keywords:** game, immersion, gamification, internet, application, CSS, flexbox, grid, JavaScript

\*\*\*\*\*

## INTELLECTUAL CAPITAL AND FIRM PERFORMANCE: DOES BOARD SIZE MATTER? A MACHINE LEARNING APPROACH

#### Giacomo Gotti

Sapienza University of Rome, Italy giacomo.gotti@uniroma1.it

#### Carla Morrone

Sapienza University of Rome, Italy carla.morrone@uniroma1.it

#### Salvatore Ferri

Sapienza University of Rome, Italy salvatore.ferri@uniroma1.it

#### **ABSTRACT**

In a knowledge-based economy, intellectual capital (IC) becomes a value creation driver for companies, especially for highly innovative ones. As pointed out by previous research, Board of Directors' (BoD) size plays a relevant role in leveraging intellectual resources and affecting

economic-financial performance. This study aims to explore the relationship between IC efficiency and firm's performance (FP), considering the moderation role of BoD size. Even though literature has widely explored the relationship between BoD size and FP, findings are still inconclusive. From a resource-based view, large BoD may bring diverse experience, backgrounds and knowledge. However, according to Agency Theory, the presence of numerous directors in the boardroom can lead to communication and coordination costs, resulting in slower and less efficient decision-making. A quantitative analysis is carried out on a sample of Italian Innovative Small and Medium Enterprises (ISMEs). Ordinary least squares and lasso regression are performed considering ROE as dependent variable and VAIC as the explanatory one. Board size is comprised in the moderation term and a set of variables is included to control for firm's profitability. Findings show a significant effect of IC on FP, displaying a significant moderation role played by BoD size. Both Lasso and OLS regression displays consistent evidence. This study has several practical implications for managers and practitioners regarding the optimal BoD composition and the need for acquiring intellectual resources. Yet, it is not free from limitations. As an instance, the sample is limited to Italian ISMEs and the analysis is focus on one year. Future research could investigate a wider type of entities, covering multiple countries, as well as increase the years of investigation.

**Keywords:** Board size, Intellectual capital, Firm performance, Machine learning, OLS















