



UDC 004:005:3 DOI: https://doi.org/10.31341/jios

ISSN 1846-3312 e-ISSN 1846-9418

Journal of Information and Organizational Sciences



UDC 004:005:3 ISSN 1846-3312 e-ISSN 1846-9418 DOI: https://doi.org/10.31341/jios

Publisher

Faculty of Organization and Informatics, University of Zagreb, Varaždin, Croatia

Editor

Alen Lovrenčić, Faculty of Organization and Informatics, University of Zagreb, Varaždin, Croatia

Editorial Secretary

Goran Hajdin, Faculty of Organization and Informatics, University of Zagreb, Varaždin, Croatia

Editorial Board

Igor Balaban, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia Nina Begičević Ređep, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia Michael Bosnjak, University of Trier, Germany Leo Budin, University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia Ivica Crnković, Mälardalen University, Sweden Blaženka Divjak, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia María José Escalona, University of Seville, Spain Joaquim Filipe, Polytechnic Institute of Setúbal, School of Technology of Setúbal, Portugal Mirta Galesic, Santa Fe Institute, United States Matjaž Gams, Jozef Stefan Institute, Department of Intelligent Systems, Slovenia Veljko Jeremić, University of Belgrade, Faculty of **Organizational Sciences**

Mike Joy, University of Warwick, United Kingdom Dragutin Kermek, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia Božidar Kliček, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia

Douwe Korff, London Metropolitan University, United Kingdom

Michael Lang, National University of Ireland - Galway, Ireland

Pavle Mogin, Victoria University of Wellington, School

Editor-in-Chief

Nina Begičević Ređep, Faculty of Organization and Informatics, University of Zagreb, Varaždin, Croatia

Advisory Board

Goran Bubaš, University of Zagreb, Croatia Marina Klačmer Čalopa, University of Zagreb, Croatia Ivan Magdalenić, University of Zagreb, Croatia Neven Vrček, University of Zagreb, Croatia

of Mathematics, Statistics, and Computer Science, New Zealand

Dirk Neumann, University of Freiburg, Germany Dijana Oreški, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia Ján Paralič, Technical University Kosice, Slovakia Algirdas Pakstas, London Metropolitan University, United Kingdom

Rimantas Petrauskas, Mykolas Romeris University, Lithuania

Roman Povalej, Institute AIFB, University of Karlsruhe (TH), Germany

Wolf Rauch, University of Vienna, Austria Slobodan Ribarić, University of Zagreb, Faculty of Electrical Engineering, Croatia

Markus Schatten, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia William Steingartner, Technical University of Kosice, Slovakia

Diana Šimić, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia Vjeran Strahonja, University of Zagreb, Faculty of Organization and Informatics, Varaždin, Croatia József K. Tar, Institute of Intelligent Engineering Systems, John von Neumann Faculty of Informatics, Budapest Tech, Hungary

Polona Tominc, University of Maribor, Faculty of Economics and Business, Slovenia

Publishing Board

Darko Grabar, Mladen Konecki, Bernarda Kos



Contact

Alen Lovrenčić

Faculty of Organization and Informatics

University of Zagreb

Pavlinska 2, HR-42000 Varaždin, Croatia

Tel.: +385 42 390 866 Fax: +385 42 213 413

E-mail: alen.lovrencic@foi.unizg.hr E-mail: jios@foi.hr (Corespondence Mail)

jios-pub@foi.hr (Publishing Board)

URL: www.iios.foi.hr

JIOS is indexed in the following repositories and portals

Academic Journals Database Academic Resource Index

BASE

Central and Eastern European Online Library (CEEOL)

CORE

CWTS Journal Indicators

Dimensions

Directory of Open Access Scholarly Resources(ROAD)

Directory of Open Access Journals (DOAJ)
Directory of Research Journals Indexing (DRJI)

ERIH PLUS

EuroPub — Directory of Academic and Scientific Journals

Genamics JournalSeek

Google Scholar

HRČAK - Central portal of Croatian scientific journals

Index Copernicus

Information Matrix for the Analysis of Journals (MIAR)

International Journal Impact Factor (IJIFACTOR)

J-Gate

JournalTOCs

LENS.ORG

Microsoft Academic

OAlster

Open AIRE

Open Academic Journals Index (OAJI.net)

PRADEC

Scientific Indexing Services (SIS)

Scilit

Ulrich's Periodicals Directory

VINITI RAN

World Journal Clout Index Report (WJCI)

WorldCat

www.jios.foi.hr

Proofreading

Authors

Copyeditor and Computer Type Set

Goran Hajdin Mladen Konecki

Cover and Layout Design

ri mo dizajn

Printing

Printera Grupa d.o.o., Sveta Nedelja, Croatia

JIOS is published with financial support of the Ministry of Science and Education of the Republic of Croatia.

JIOS is indexed in the following databases

SCOPUS

Emerging Sources Citation Index (ESCI) - WoS

Aerospace Database — ProOuest

Civil Engineering Abstracts – ProQuest

Central & Eastern European Academic Source (CEEAS) -

EBSCO

Communication Abstracts - ProQuest

INSPEC

Library & Information Science Source (EBSCO)

Library and Information Science Abstracts (LISA) - ProQuest

Library Literature & Information Science — EBSCO

Metadex – ProOuest

Subscription Information

JIOS is published twice per year.

Printed in 100 copies.

Subscription rate per volume for the printed edition is 100 HRK (15€).

To subscribe for a printed copy, please contact the publisher at jios-pub@foi.hr.

Access to JIOS is free of charge through following sources:

Journal of Information and Organizational Sciences Hrčak - central portal of Croatian scientific journals Directory of Open Access Journals (DOAJ) OAlster



Creative Commons Licence

Journal of Information and Organizational Sciences by Faculty

of Organization and Informatics is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. http://creativecommons.org/licenses/by-nc-nd/4.0/





CONTENTS

From the Editor	III
Tarig Mohamed Ahmed: A Novel Classification Model for Employees Turnover Using Neural Network to Enhance Job Satisfaction in Organizations Original Scientific Paper	361-374
Cidália Oliveira, Carmem Leal, António Pinho: Existing Differences Between SMEs That Apply BSC and Those That Do Not Original Scientific Paper	375-397
Yuriy Golchevskiy, Andrei Yermolenko: Implementation of Feedback as an Important Element of Modern Corporate Websites Preliminary Communication	399-409
Armen E. Petrosyan: From Discord to Concord and Back Again (Managing the Formation, Transformation, and Fission of Organizational Culture) Original Scientific Paper	411-434
Vladyslav Yaloveha, Daria Hlavcheva, Andrii Podorozhniak: Spectral Indexes Evaluation for Satellite Images Classification using CNN Original Scientific Paper	435-449
Maria Jakovljevic, Nkopodi Nkopodi: A Framework of Social Networks Control in Higher Educational Contexts Survey Paper	451-471
Tamara Ređep, Goran Hajdin: Use of Augmented Reality with Game Elements in Education - Literature Review Survey Paper	473-494
Kiril Kirilov: Inverted Discriminant Sparsity Preserving Projection for Face Recognition Original Scientific Paper	495-511
Sonja Nidogon Višnjić, Neven Vrček: Digital Transformation of Public Services of Student Services in the Republic of Croatia Survey Paper	513-533
Desabandhu Parasuraman, Sathiyamoorthy Elumalai: Hybrid Recommendation Using Temporal Data for Accuracy Improvement in Item Recommendation Original Scientific Paper	535-551
Andrej Šorgo, Mateja Ploj Virtič, Kosta Dolenc: Differences in Personal Innovativeness in the Domain of Information Technology Among University Students and Teachers Survey Paper	553-565
Mahsa Fidanboy, Kerim Ozcan, Cemalettin Ocal Fidanboy: A Complex Adaptive Systems (CAS) Approach to Measuring Organizational Adaptation in Organizations and Investigating its Relationship with R&D Performance Original Scientific Paper	567-578
Damir Dobrinić, Iva Gregurec, Dunja Dobrinić: Attitudes of Croatian Consumers About Mobile Messenger Chatbots Original Scientific Paper	579-599
Robertina Zdjelar, Nikolina Žajdela Hrustek: Digital Divide and E-Inclusion as Challenges of the Information Society – Research Review Preliminary Communication	601-638
Publication Ethics; List of Reviewers; Instructions for Authors	639-648