

Informācijas  
Sistēmu  
Menedžmenta  
Augstskola



**ISMA**  
**University**

---

***Information Technologies,  
Management and Society***

**2017, Volume 10, No.1**

Rīga, 2017

## EDITORIAL BOARD:

**Prof. Yuri Shunin** (Chairman of the Board), *ISMA University, Latvia*;  
**Prof. Victor Gopeyenko** (Editor-in-Chief), *ISMA University, Latvia*;  
**Prof. Igor Kabashkin**, *Transport & Telecommunication Institute, Latvia*;  
**Prof. Kurt Schwartz**, *GSI, Darmstadt, Germany*;  
**Prof. Martin Stanton**, *Birmingham College of UK, United Kingdom*;  
**Prof. Arnold Kiv**, *Ben-Gurion University of the Negev, Israel*;  
**As. Prof. Alutis Gruodis**, *Vilnius University, Lithuania*;  
**Prof. Vladimir Soloviev**, *Cherkassy National University, Ukraine*;  
**Prof. Irina Kalenyuk**, *Institute of Economics and Law, Ukraine*;

**Technical editor:** Nataly Burlutskaya, *ISMA University, Latvia*

**Host Organization:** ISMA University, Latvia

**Roman Dyackon**, ISMA University President;  
**Deniss Dyackon**, Rector

THE JOURNAL IS DESIGNED FOR PUBLISHING PAPERS CONCERNING THE FOLLOWING FIELDS OF RESEARCH:

- mathematical and computer modelling
- mathematical methods in natural and engineering sciences
- physical and technical sciences
- computer sciences and technologies
- nanotechnologies and nanodevices
- electronics and telecommunication
- logistics, telematics and transport technologies
- economics and management
- nanomanagement and nanothinking
- social sciences

Articles can be presented in journal in English. All articles are reviewed.

### EDITORIAL CORRESPONDENCE

ISMA University / Informācijas sistēmu menedžmenta augstskola  
1 Lomonosova Str., Bld. 6, LV-1019, Riga, Latvia. Phone: +371 67100593. Fax: +371 67241591.  
E-mail: [isma@isma.lv](mailto:isma@isma.lv), <http://www.isma.lv>

Scientific and research journal of ISMA University (Riga, Latvia)  
The journal is being published since 2008.

**ISSN 1691-2489**  
**ISSN 2255-9345**

Copyright©isma2017

**Information Technologies, Management and Society. 2017,**  
**Volume 10, No.1.**

Editors Yu.N. Shunin & V.I. Gopeyenko.  
Information Systems Management Institute, Riga, 2017  
Lomonosova 1, Bld. 6, LV-1019, Riga, e-mail: [isma@isma.lv](mailto:isma@isma.lv),  
on-line: [www.isma.lv](http://www.isma.lv)