

Preface by the EEKM'2020 Organisers

The XXIII International Conference on "Enterprise Engineering and Knowledge management" (EEKM-2020) took place from 8 to 9 December 2020 in the Plekhanov Russian University of Economics (Moscow). By tradition, EEKM conference is planned as a multidisciplinary forum of researchers and practitioners from various domains, promoting cooperation and exchange of ideas in different areas. The objectives of the EEKM-2020 scientific conference were: analysis and development of promising approaches, methods and tools to improve the efficiency of enterprise digital transformation (based on modern Artificial Intelligence technologies), risk management, BPMS-based business process management tools, service-oriented architecture and knowledge management. The EEKM conference is more focused on specific models, technologies and their effectiveness, in addition to great attention to the correct interpretation of the concepts.

The main themes of the conference were:

1. Enterprise architecture based on end-to-end digital technologies
2. BPMS and business process management in the context of dynamic changes in business processes and enterprise architectures
3. Analysis of the requirements for new Artificial Intelligence and social networking technologies, considering new ways of communication in the enterprise and its ecosystem
4. System analysis and integrated architectural modeling of enterprises
5. Analysis and design of means of intellectual support for the activities and development of enterprises, taking into account their value and economic aspects
6. Models and methods for determining the effectiveness and efficiency of intelligent / "smart" technologies
7. Cognitive decision-making technologies
8. Knowledge management in a dynamic business environment and ontological engineering
9. Multimedia information systems and Semantic Web.
10. Service-oriented enterprise architectures and information systems.
11. Multi-agent systems of teamwork and decision making
12. Dynamic creation of digital, virtual and SMART enterprises
13. Big Data Processing Technologies and Machine Learning
14. The creation and management of the information and educational space of universities

Tracks of the conference:

- Cognitive and intelligent decision-making technologies
- Knowledge management and enterprises ontological engineering
- Digital enterprise transformation, architecture and transformation risk management
- Modeling and of business processes management in the digital economy
- Formation of new professions and educational programs in the digital economy
- Student section
- Student Research Competition
- All-Russian Student Olympiad "APPLIED INFORMATICS" for undergraduate students
- Meeting of the Methodological Council on the "Applied Informatics" of the Federal Training and Methodological Association in the direction 09.00.00 "Computer science and computing".

The overall number of works presented at the conference was 61 plus 21 works at the student section. Most of the presentations are dedicated to the results of researches conducted in the organizations located on the territory of the Russian Federation including Moscow, St. Petersburg, Novosibirsk, Ulianovsk, Ekaterinburg, Kazan, Tomsk, Tver, as well as abroad: Kiel, Hamburg and Coburg (Germany), Sofia (Bulgaria), Thohoyandou (South Africa). The conference Program Committee has reviewed 61 submissions and selected 29 papers, rejecting 32.

The EEKM'2020 Programme Committee

Chair

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| Vitaly Minashkin | Dr., professor, Vice-Rector for Research, Plekhanov Russian University of Economics, Russia |
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Deputy of the program committee

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| Valery Titov | Dr., professor, Director of the Faculty "Institute of digital economics and information technologies", Plekhanov Russian University of Economics, Russia |
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| Yuri Telnov | Dr., professor, chair of Applied Informatics, Faculty "Institute of digital economics and information technologies", Plekhanov Russian University of Economics, member of the board of Russian Association of Artificial Intelligence, Russia |
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| Yevgeny Zinder | Chairman of the Board, Foundation for the Support of system design, standardization and project management, Russia |
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Members of the program committee

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| Alexander Averkin | PhD., Associate Professor, Plekhanov Russian University of Economics, member of the board of Russian Association of Artificial Intelligence, Russia |
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| Marina Anshina | President, Foundation for the Support of system design, standardization and project management, Head of the Committee on Standards in the Union of IT Directors of Russia, Russia |
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| Alexander Boitchenko | PhD., Director of NII "Strategic Information Technologies" Plekhanov Russian University of Economics, Russia |
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| Tatyana Gavrilova | Dr., professor, chair IT in Management, High school of Management, St. Petersburg State University, member of the board of Russian Association of Artificial Intelligence, Russia |
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| Eduard Gerhardt | Dr., prof. Coburg University of Applied Sciences and Art, Coburg, Germany |
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| Vladimir Golenkov | Dr., professor, Belorussian State University of Informatics and Radioelectronics, member of the board of Russian Association of Artificial Intelligence, Belarus |
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| Alexander Danchul | Dr., professor, chair IT in Management, Moscow City University of Management, Russia |
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| Ludmil Duridanov | Dr. Digital Humanities / New Bulgarian University, Sofia, Bulgaria |
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| Hannu Jaakkola | Dr. prof. Emeritus TU/Tampere, Finland |
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| Armstrong Kadyamatimba | PhD., professor University of Venda, Thohoyandou, South Africa |
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| Georgy Kalyanov | Dr., professor, Trapeznikov Institute of Control Sciences, Russian Academy of Sciences, Russia |
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| Olga Kitova | Dr., professor, chair of Business Informatics, Plekhanov Russian University of Economics, Russia |
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| Alexander Kulinich | PhD., Trapeznikov Institute of Control Sciences, Russian Academy of Sciences, member of the board of Russian Association of Artificial Intelligence, Russia |
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| Mikhail Lugachov | Dr., professor, chair of Economics in Informatics, Lomonosov Moscow State University, Russia |
| Ludmila Massel | Dr., professor, Melentiev Energy Systems Institute, Siberian Branch of Russian Academy of Science, Russia |
| Ochara Nixon Muganda | DR.,Dr., professor, University of the Witwatersrand, Johannesburg, South Africa |
| Piotr Pashkov | Dr., professor, Novosibirsk State University of Economics and Management, Russia |
| Boris Pozin | Dr., professor, Tikhonov Moscow Institute of Electronics and Mathematics / Department of Information and Analytical Systems, Russia |
| Galina Rybina | Dr., professor, National Research Nuclear University, member of the board of Russian Association of Artificial Intelligence, Russia |
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| Arnold Sternharz | Technical University of Berlin, Germany |
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| Valery Tarasov | PhD., Associate Professor, Bauman Moscow State Technical University, member of the board of Russian Association of Artificial Intelligence, Russia |
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| Igor Fiodorov | Dr., professor, Plekhanov Russian University of Economics, Russia |
| Oleg Fediaev | PhD., Associate Professor, chair Software Engineering, Donetsk State Technical University |
| Arnold Sternharz | PhD., Technical University of Berlin, Germany |
| Elena Zubareva | PhD., Associate Professor, Lomonosov Moscow State University, Russia |

Sponsors

- Plekhanov Russian University of Economics, Moscow, Russia
- Russian Association on Artificial Intelligence, Moscow, Russia
- Foundation for the Support of System Design, Standardization and Project Management, Moscow, Russia
- Methodological Council on the "Applied Informatics" of the Federal Training and Methodological Association in the direction 09.00.00 "Computer science and computing", Moscow, Russia
- Fund for Promotion of Internet media, IT education, and Human development "League Internet Media", Moscow, Russia