INVITED SESSION SUMMARY

Title of Session:
Harnessing AI in Knowledge and Intelligent Systems for Business Innovation

Name, Title and Affiliation of Chair:
Chair:
Prof. Celina Olszak
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Co-Chaired by
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Co- Chaired by
Dr Barbara Probierz,
Łukasiewicz Research Network – Institute of Artificial Intelligence and Cybersecurity

Co- Chaired by
Dr Przemysław Juszczuk
University of Economics in Katowice, Poland

Details of Session (including aim and scope):

Artificial Intelligence (AI) is rapidly transforming the way businesses operate, innovate, and compete in the global marketplace. This invited session aims to explore the latest advancements in AI-driven knowledge systems and intelligent technologies that empower organizations to achieve sustainable growth, operational excellence, and innovation. The session will provide a platform for researchers, practitioners, and thought leaders to present and discuss cutting-edge research, methodological developments, and practical applications of AI in diverse business ecosystems. Particular emphasis will be placed on AI-enabled decision support, knowledge management, intelligent automation, and data-driven strategies that shape the future of enterprise competitiveness and digital transformation.

Session Objectives:
- To showcase innovative AI technologies that enhance knowledge management and decision making in businesses;
- To identify and address challenges in implementing AI-driven intelligent systems for real-world business scenarios;
- To foster interdisciplinary collaboration between AI researchers and business experts;
- To inspire new research directions by exploring the intersection of AI, knowledge systems, and business innovation;
- To examine strategies for mitigating bias and ensuring fairness in AI-driven business applications.

Topics of Interest (but not limited to):
- AI-based knowledge representation, reasoning, and management in business environments;
- Intelligent systems for decision support, forecasting, and strategic planning;
- Machine learning and data-driven insights for innovation and competitive advantage.
- AI-enhanced collaboration, creativity, and innovation processes;
- Ethical, legal, and social implications of deploying AI in business contexts;
- Bias mitigation and fairness assurance in AI-driven business decision-making;
- Case studies and applications of AI in diverse industries, including finance, healthcare, retail, and manufacturing;
- The role of explainable AI (XAI) in improving trust and adoption of intelligent systems in businesses;
- Trust and transparency frameworks for AI adoption in business environments;

- AI for business process optimization, automation, and transformation;
- Human-AI collaboration in knowledge-intensive industries;
- Human-centered design principles for developing effective business AI solutions;
- Generative AI applications for fostering innovation and enhancing business creativity;

We encourage authors to submit high-quality, original research papers, and case studies that contribute to advancing knowledge in this critical field. This session provides an excellent opportunity to share insights, network with leading experts, and inspire new ideas in leveraging AI for transformative business innovation.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

- University of Economics in Katowice, Poland
- Łukasiewicz Research Network – Institute of Artificial Intelligence and Cybersecurity, Poland
- Silesian University of Technology, Poland
- King Abdullah University of Science and Technology, Saudi Arabia
- Silesian Centre for Legal Engineering, Technology and Digital Competence Cyber Science, Poland
- VSB - Technical University of Ostrava, Czech Republic
- University of Economics in Bratislava, Slovakia
- Kaunas University of Technology, Lithuania
- University of Belgrade, Serbia

Website URL of Call for Papers (if any):

Email & Contact Details:

Corresponding session chair: prof. Celina Olszak, PhD, Eng., University of Economics in Katowice, Poland; celina.olszak@ue.katowice.pl and prof. Jan Kozak, University of Economics in Katowice, Poland; jan.kozak@ue.katowice.pl