### **EXCELLENCE IN HUMAN-CENTERED LOGISTICS 4.0**

Grant Agreement Number: 101159664



### D6.2 – Organized events of ESRs reporting

Work Package WP6

Deliverable Submission Date 31.10.2025

Dissemination Level PU

Lead Beneficiary VILNIUS TECH



## **Document Control Sheet**

Project acronym	X-HuLog4.0
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	involvement of new generation of researchers
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Program	Widera Work Programme
Topic	HORIZON-WIDERA-2023-ACCESS-02-01
Rights to the Report	X-HuLog4.0 Consortium

### 1. New project outcome: increased teaching competencies

The lecture material entitled "Framework for Strategic Decision Making in the Application of Digital Technologies" is prepared for ETLOG (European Trainer) certification and includes 6 content topics and 2 topics dedicated to revising learning outcomes. The topics are listed below:

- 1. Strategic decision making frameworks
- 2. Developed integrated framework
- 3. Assessment of technology implementation
- 4. Assessment of technology implementation: case study
- 5. Estimates before technology implementation
- 6. Estimates after technology implementation
- 7. Test from lecture material
- 8. Lecture summary.

The material was presented to VILNIUS TECH students and the auditors from the European Logistics Association on April 28th at 14:30 Vilnius time at S3 713 auditorium by Prof. Dr. A. Burinskiene. Further, the accreditation results was uploaded to Dropbox:

https://www.dropbox.com/home/Implementation/WP6/Task%20coordination

# 2. 15th International Scientific Conference "Business and Management '2025"

On May 15<sup>th</sup> and 16<sup>th</sup>, the project was disseminated at the 15th International Scientific Conference "Business and Management 2025", which was held at VILNIUS GEDIMINAS TECHNICAL UNIVERSITY (Sauletekio Ave. 11, Vilnius). Responsible for the conference was the Faculty of Business Management.

#### **CONFERENCE PROGRAMME**

#### May 15, 2025, Sauletekio ave. 11, Vilnius

9:45 - 10:30 – registration and welcome coffee (Central Building, 2 floor)

10:30 - 12:00 - plenary meeting (Central Building, 1 floor)

Ms Teams: <a href="https://bit.ly/4ixVunD">https://bit.ly/4ixVunD</a>

Prof Dr Vida Davidavičienė (Dean of the Faculty of Business Management) – Welcome speech

Prof Dr Tsai-Chi Kuo (National Taiwan University of Science and Technology, Taiwan) — Towards sustainability through the power of Al-enabled carbon management Prof Dr Indrė Lapinskaitė (Vilnius Gediminas Technical University, Lithuania) - ESG Value Disconnect: Why Sustainability Still Struggles to Deliver in Financial Institutions?

Asst Prof Dr Ferhat Çitak (Hitit University, Turkey) – Policy Uncertainty and Environmental Degradation in the USA: Does It Hurt or Help?

13:00 – 16:30 - presentations in sessions (S3 Building)

#### May 16, 2025, Sauletekio ave. 11, Vilnius

11:30 - 13:30 – Panel discussion "The Importance of MNEs in Strengthening Economic Resilience" (Central Building, 6 floor)

#### **DETAILED PROGRAMME**

Advanced Technologies and Human-Centered Logistics

(Project 101159664 X-HuLog4.0 HORIZON-WIDERA-2023-ACCESS-02-01) – (room 108, S3 building)

Ms Teams: <a href="https://bit.ly/4ivPv21">https://bit.ly/4ivPv21</a>

Chairperson: Prof Dr Aurelija Burinskienė (aurelija.burinskiene@vilniustech.lt)

13:00 –13:30 presentation "FRAMEWORK OF DIGITAL TWIN WITH AGENT LLM IN LOGISTICS 4.0 FOR EMPLOYEE TRAINING", Valentas GRUZAUSKAS, Aurelija BURINSKIENĖ

13:30 – 14:00 Researchers' afternoon, solutions for Lithuanian logistics companies:

ACITOOL <a href="https://youtu.be/0W50zWko3gg">https://youtu.be/0W50zWko3gg</a> and JUNGHEINRICH:

https://www.jungheinrich.com.sg/systems/driverless-transport-systems/automated-guided-vehicles; https://www.youtube.com/watch?v=bcLFkVsXSKs

14:00 – 14:30 presentation "APPLICATION OF ARTIFICIAL INTELLIGENCE IN ACADEMIC RESEARCH," provided by Valentas Gružauskas

14:30 – 16:30 "Systematic Literature Reviews in Production and Logistics Management" Training session offered by the X-HuLog4.0 team.

#### Presentations:

- "THE IMPACT OF THE TWIN TRANSITION ON SMES IN RURAL AREAS", Jolanta NALIVAIKE, Zivile GEDMINAITĖ-RAUDONĖ
- "FRAMEWORK FOR DECISION MAKING IN THE APPLICATION OF DIGITAL TECHNOLOGIES FOR PROVIDING LOGISTIC SERVICES", Diana DAŠKEVIČ
- "ASSESSING THE APPLICATION OF ENVIRONMENTALLY FRIENDLY TECHNOLOGIES TO IMPROVE BUSINESS COMPETITIVENESS", Gintarė BYČENKAITĖ, Aurelija BURINSKIENĖ
- "HUMAN-CENTRIC COLLABORATION IN HUMAN-ROBOT SYSTEMS FOR WAREHOUSING", A. Zare
- "NATIONAL CULTURE AND SUSTAINABILITY IMPACT ON MNE MANAGEMENT", Edita LEONAVIČIENĖ.

#### **Conference certificates are attached as Annex**













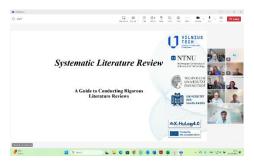








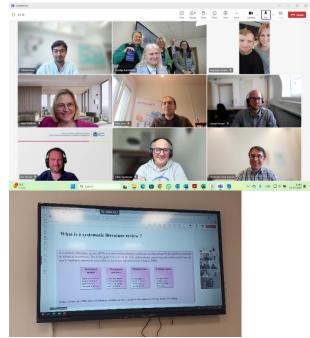
































#### Post on LinkedIn:

https://www.linkedin.com/posts/christoph-glock-078065216\_it-was-a-great-pleasure-to-host-a-workshop-activity-7329094452336078848-

ymSn?utm\_source=share&utm\_medium=member\_desktop&rcm=ACoAAADYqK8BWIETCN9bB5AHgoDv GV7sdlTXPac

For the research afternoon, three solutions from Lithuanian logistics companies were presented:

ACITOOL https://youtu.be/0W5OzWko3gg

JUNGHEINRICH: <a href="https://www.jungheinrich.com.sg/systems/driverless-transport-systems/automated-guided-vehicles">https://www.jungheinrich.com.sg/systems/driverless-transport-systems/automated-guided-vehicles</a>; <a href="https://www.youtube.com/watch?v=bcLFkVsXSKs">https://www.youtube.com/watch?v=bcLFkVsXSKs</a>

# 3. 11<sup>th</sup> IFAC Conference on Manufacturing Modelling, Management and Control

Trondheim, Norway, 30 June – 3 July 2025

Participants: Professor dr. Aurelija Burinskiene, Assoc. prof. dr. Olga Lingaitienė, Phd student Edita Leonavičienė, Phd student Diana Daškevič, Senior researcher dr. Arūnas Burinskas, Prof. Dr. Christoph Glock, Prof. Dr. Eric Grosse, Prof. Dr. Fabio Sgarbossa, Dr. Ting Zheng, Phd student Michael Bauer, Phd student Thilini Ranasinghe, Phd student Amir Zare, Assoc. prof. Dr. Sotirios Panagou

The agenda of the conference is available:

https://ifac.papercept.net/conferences/conferences/MIM25/program/

#### Agenda:

1. Monday June 30, 2025, 10:00 – 17:00

The 2<sup>nd</sup> Doctoral Workshop on "Advances in Manufacturing and Logistics Management and Control Problems" for PhD students was held at the MIM 2025 Conference on June 30. Two VILNIUSTECH Doctoral students participated in this workshop. The participants had an opportunity to share their research with other students and experts in the field, hold group sessions with the chance to receive feedback and recommendations on the topics from other doctoral students and an expert.

Chair: Battini Dari, University of Padua

Co-Chair: Hind Bril El-Haouzi, University of Lorraine















- Tuesday July 01, 2025, 10:40 11:00, (code: TuOS), Room: Cosmos 1-2
   Opening Ceremony Welcome to IFAC MIM2025 Be the Impact! Make a Better
   Chair: Sgarbossa Fabio, Norwegian University of Science and Technology NTNU
   Co-Chair: Ivanov Dmitry, Berlin School of Economic and Law
- 3. Tuesday July 01, 2025, 10:40 11:00, (special session code: TuAT1), Room: Cosmos 1-2 Special Session "Industry 5.0 Human-Centered Production and Logistics System I" There is a part of the Horizon Europe project X-HuLog4.0! On July 1, 2024, the European Unionfunded research project "Excellence in Human-Centered Logistics 4.0" (X-HuLog4.0) was launched under the HORIZON-CSA program.

Chair: Grosse Eric, Saarland University

Co-Chair: Glock Christoph, Technische Universität Darmstadt

#### Special Session presentations:

 "SUSTAINED SUCCESS OR FADING SPARK? — LONG-TERM ASSESSMENT OF PARTICIPATORY ORDER ASSIGNMENTS IN A WAREHOUSE ENVIRONMENT (I)", De Lombaert Thomas, Braekers Kris, De Koster Rene B.M., Ramaekers Katrien;

- "DISTRIBUTION LOGISTICS TECHNOLOGIES APPLIED IN THE MANAGEMENT OF LOGISTICS OPERATION TO INCREASE BUSINESS COMPETITIVENESS", Diana Daškevič, Aurelija Burinskienė;
- "INTEGRATION OF LEAN 5.0 PRINCIPLES WITH TOYOTA KATA: ADVANCEMENT OF HUMAN-CENTRIC AND SUSTAINABLE PRACTICES IN ASSEMBLY LINE OPERATIONS (I)", Odebrecht de Souza Raphael, Ribeiro Danilo Ribamar Sa, Bonamigo Andrei, Forcellini Fernando Antonio;
- "ASSESSING OPERATORS' WORKLOAD IN COLLABORATIVE LOGISTICS 5.0: A CASE APPLICATION WITH AMR (I)", Cimini Chiara, Piffari Claudia, Lagorio Alexandra;
- "EMPIRICAL ANALYSIS OF FACTORS CONTRIBUTING TO DEVIATIONS FROM ROUTING GUIDELINES IN ORDER PICKING: A CASE STUDY (I)", Leroy Aicha, Caris An, Depair Benoit, Van Gils Teu, Braekers Kris.
- 4. Tuesday July 01, 2025, 22.30 23.15, (Special Session code: TuPL), Room: Andromeda Night session entitled "Sunset of the Human-Only Era: A New Dawn for Human-Al Industry and Evening Dialogue on the Evolution of Roles, Intellingence, and Trust in the Future of Human-Al Co-Driven Manufacturing and Logistics" was held on July 1 from 22.30 to 23.15 at NTNU in Room: Andromeda. The session was an open discussion, very interactive 45 mins, with no dedicated panelists and audience, but more with moderators among the participants.

Chair: Sgarbossa Fabio, Norwegian University of Science and Technology – NTNU Co-Chair: Panagou Sotirios, NTNU

5. Wednesday July 02, 2025, 10:20 – 12:00, (Session code: WeAT1), Room: Cosmos 1-2 Session "Meet the Editors: Part 1: AI & Ethics; Part 2: How to Be a Geat Researcher, by Several Editors Participation to IFAC MIM 2025" was held on July 2 at Cosmos 1-2 Hall. Chair: Ivanov Dmitry, Berlin School of Economic and Law

Co-Chair: Dolgui Alexandre, IMT Atlantique



6. Wednesday July 02, 2025, 10:20 – 12:00, (special session code: WeAT9), Room: Andromeda A special session on the project theme "Resilient Workforce, Successful Transformation: Human Factors in the Digital Shift" was held on Wednesday, 2nd of July 2025, at 10:20 at Andromeda Hall. Chair: Bauer Michael C., Saarland University

Co-Chair: Grosse Eric, Saarland University

#### Special Session presentations:

- "PSYCHOSOCIAL CHALLENGES OF OLDER WORKERS IN THE AGE OF TECHNOLOGICAL ADVANCEMENT (I)", Nedeljko Mihael, Vidnar Nataša, Kaučič Boris Miha;
- "RESPONSIBLE DIGITAL TRANSFORMATION: EXPLORING ETHICAL DIMENSIONS IN OPERATOR 4.0, 5.0, AND HUMAN DIGITAL TWINS (I)", Renasinghe Thilini, Grosse Eric, MacDonald Chris, Neumann W. Patrick;
- "A HUMAN-CENTRIC EVALUATION OF ROBOTIC SOLUTIONS IN PRODUCTION AND INTRALOGISTICS (I)", Zare Amir, Degirmencioglu Demiralay Yuksel, Panagou Sotirios, Sgarbossa Fabio;
- "FROM SENSORS TO DECISIONS: A SCOPING REVIEW ON EMG AND ECG APPLICATIONS
  IN INTRALOGISTICS WORKER MONITORING (I)", Ranasinghe Thilini, Grosse Eric, Morana
  Stefan, Neumann w. Patrick;
- "COACHING AS A HUMAN-CENTERED STRATEGY FOR SUCCESSFUL DIGITAL TRANSFORMATION (I)", Bauer Michael C., Grosse Eric











7. Wednesday July 02, 2025, 10:20 – 12:00, (Invited Session code: WeAT15), Room: Comet An Invited Session "Innovationn in Engineering Academic Environment - I" was held on July 2 at Comet Hall, at 10:20 at Comet Hall. at 13:30 at Comet Hall.

Chair: Temeljotov Salaj Alenka, Norwegian University of Science and Technology Co-Chair: Salomo Soren, TU Berlin

#### Invited Session presentations:

- "NECESSITY OR INEVITABILITY OF INNOVATION IN THE LOGISTICS SECTOR: IMPACT ANALYSIS ON SMES (I)", Lingaitienė Olga, Burinskienė Aurelija;
- "SEEDS OF SUCCESS? INVESTIGATING HOW PUBLIC INVESTOR CHARACTERISTICS INFLUENCE FUTURE FUNDRAISING PROSPECTS OF STARTUPS (I)", Mbitse Yanick Akili Christian, Noak Nicolas Victor, Salomo Soren;

- "NECESSITY OR INEVITABILITY OF INNOVATION IN THE LOGISTICS SECTOR: IMPACT ANALYSIS ON LOGISTICS COMAPANIES (I)", Lingaitienė Olga, Burinskienė Aurelija;
- "ENHANCING ENGINEERING INNOVATION THROUGH DOCTORAL TRAINING: A CASE STUDY OF NTNU'S IFEL 8001 COURSE (I)", Lohne Jardar, Skjølsvik Kjell Olav.
- 8. Wednesday July 02, 2025, 13:30 15:10, (Invited Session code: WeBT15), Room: Comet.

  An Invited Session "Innovation in Engineering Academic Environment II" was held on Wednesday, 2nd of July 2025, at 13:30 at Comet Hall.

Chair: Diaconu Mara-Gabriela, Norwegian University of Science and Technology Co-Chair: Temeljotov Salaj Alenka, Norwegian University of Science and Technology

#### Invited Session presentations:

- "FOSTERING INNOVATION COMPETENCIES IN ENGINEERING EDUCATION: CROSS-CUTTING INSIGHTS FROM THE INNOVATION PILOTS PROGRAM AT NORWEGIAN UNIVERSITY (I)", Diaconu Mara-Gabriela, Temeljotov Salaj Alenka;
- "INNOVATION IN ENGINEERING ACADEMIC ENVIRONMENT STRATEGY, PROCESS, PROGRESS AND IMPLICATION (I)", Temeljotov Salaj Alenka, Diaconu Mara-Gabriela, Vigtil Astrid;
- "DESCRIPTION OF INNOVATION IN TYPICAL RESEARCH PROJECTS AT THE DEPARTMENT OF STRUCTURAL ENGINEERING (I)", Myrdal Roar, He Jianying;
- "DYNAMIC RELATIONSHIPS BETWEEN PRODUCTIVITY, GROWTH, AND ROI IN ESTONIA'S LOGISTICS SECTOR: A PANEL DATA ANALYSIS (I)", Arūnas Burinskas, Aurelija Burinskienė.
- 9. Wednesday July 03, 2025, 13:30 15:10, (Special Session code: ThBT11), Room: Sirius A Special Session "Sustainable and Climate-Adaptive Logistics & Manufacturing for Just and Inclusive NetZero Transitions" was held on Thuesday, 3rd July 2025, at 10:20 at Sirius Hall. Chair: Sanchez Rodrigues Vasco, Cardiff University Co-Chair: Mogale Dnyaneshwar, Cardiff University

#### Special Session presentations:

- "OPTIMISING SUSTAINABLE LOGISTICS NETWORKS FOR REUSABLE CONTAINERS IN THE PHARMACEUTICAL SUPPLY CHAIN: A MULTI-OBJECTIVE APPROACH (I)", Mogale Dnyaneshwar, Fakhraldin Mohamed, Harris Irina, Naim Mohamed Mojamed, Robinson Natalie;
- "SUSTAINABLE PREPROCESSING FOR AI REPAIRABILITY ASSESSMENT", Bystrov Aleksandr, Mayer Ole, Kott Fabian, Saemann Karin, Maat Achim, Dawel Lisa;
- "ENHANCING COFFEE SUSTAINABILITY: REDUCING FERTILISER EMISSIONS IN THE COLOMBIAN COFFEE SUPPLY CHAIN (I)", Mogale Dnyaneshwar, Sanchez Rodrigues Vasco, Riano Jeisson Alonso;
- "ASSESSMENT OF THE APPLICATION OF ENVIRONMENTALLY FRIENDLY TECHNOLOGIES
   TO ENHANCE BUSINESS COMPETITIVENESS IN MANUFACTURING SECTOR (I)", Byčenkaitė
   Gintarė, Burinskienė Aurelija;
- "GREEN-JIT<sup>2</sup> JUST-IN-TIME ORGANIZATION METHOD FOR SUSTAINABLE AND INTEGRATED PRODUCTION AND DELIVERY SCHEDULING", Ben Chabane Rachida, Caillard Simon, Nouinou Hajar, Zghal Mourad.
- 10. Friday July 04, 2025, 10:00 15:00

#### Industrial visit to NTNU Logistics 4.0 Lab was held at:

Department of Mechanical and Industrial Engineering NTNU – Norwegian University of Science and Technology Richard Birkelands vei 2B, 7034 Trondheim

The workshop "Human-robot collaboration in logistics" organized by Production Management Research Group at NTNU had the following **agenda**:

- 10.00-10.15: Welcome to the department
- 10.15-11.15: Human-robot collaboration in logistics by NTNU
- 11.15-12.15: Logistics 4.0 Lab visit
- 12.15-13.15: Lunch
- 13.15-14.30: Workshop on Human-robot collaboration in logistics
- 14.30-15.00: Closing and takeaways

#### **Logistics 4.0 Lab visit,** 11.15 – 12.15

About the Logistics 4.0 Lab: Logistics 4.0 Lab is a dynamic testbed for the future of production and logistics systems. It integrates cutting-edge technologies including:

- Assembly workstations, storage, and material handling systems
- Indoor positioning and motion capture and other smart sensors and exoskeletons
- Augmented and immersive reality
- 3D mapping, and real-time simulation
- Smart visual tools for operators and managers
- Assistive technologies for assembly and picking
- Mobile robots, autonomous wheels (wheel.me).









#### The workshop "Human-robot collaboration in logistics", 13.15 – 15.00

This workshop "Human-robot collaboration in logistics" was part of the ongoing efforts within the X-HuLog4.0 project (https://x-hulog4.eu/), and it focused on enhancing human-centric approaches in logistics through the integration of robotics and automation, prioritizing worker well-being and safety in future production systems.

Through open discussions and collaborative exploration, we aimed to challenge assumptions, generate ideas, and work toward insights.



















# 4. Workshops in Germany held on 29<sup>th</sup> of September – 2<sup>nd</sup> of October 2025

The project team recently participated in the thematic workshop on **Human-Centered and Technology-Driven Decision Support in Logistics**, jointly organized by the Technical University of Darmstadt and Saarland University. The workshop took place in two parts: the first at Saarland University on September 29–30, 2025, and the second at TU Darmstadt on October 1–2, 2025. The event brought together early-career researchers, industry professionals, and M.Sc. and Ph.D. students to explore the integration of

human factors in decision support models and the role of advanced technologies in assisting logistics operators.

The thematic workshop was disseminated by the Center for Digital Transformation and the Institute of Production and Supply Chain Management on LinkedIn. The posts first announced the workshop and then reported about its outcomes; see:

https://www.linkedin.com/posts/prod-tu-darmstadt\_xhulog40-logistics-supplychainmanagement-activity-7381565253521657856-

<u>25Jx?utm\_source=share&utm\_medium=member\_desktop&rcm=ACoAADZ4KBwBepuEMlaMa0XGnXH5h\_n34GzIOU7I\_</u>

https://www.linkedin.com/posts/center-for-digital-transformation\_exchange-collaboration-perspectives-activity-7379445841553489920-

grQK?utm\_source=share&utm\_medium=member\_desktop&rcm=ACoAADZ4KBwBepuEMlaMa0XGnXH5 hn34GzlOU7I

https://www.linkedin.com/posts/center-for-digital-transformation\_captiv-xhulog40-industry5-ugcPost-7378753564288110592-

BmPl?utm\_source=share&utm\_medium=member\_desktop&rcm=ACoAADZ4KBwBepuEMlaMa0XGnXH5 hn34GzlOU7I



During the Saarland University sessions, the focus was on **Advanced Technologies for Assisting Logistics Operators**, highlighting the applications of AI, automation, human-technology integration, and digital innovations in improving logistics operations and decision-making. Participants engaged in discussions on how technology can enhance operational efficiency while maintaining a human-centered approach.

The first workshop part at Saarland University was held on September 29–30, 2025 at Saarland University. Day 1, September 29 had the following **agenda**:

- 09.00-09.15: welcome & intro to seminar goals
- 09.15-10.00: Behavioral Insights and Optimization in Operations Management
- 10.00-10.45: Motion Capture System
- 11.00-11.45: Wearable Sensors for Monitoring Operator Fatigue and Stress
- 11.45-12.30: Hands-On: Microsoft HoloLens for Applications in Logistics

- 13.30-14.15: Human-Centered Research for Sustainable Warehousing
- 14.15-15.00: Strategion's approach for tackling real world problems
- 15.15-16.15: Workshop: Designing Research Projects in Real World Environments
- 16.15-16.45: Workshop II: Presentation of Research Projects & Best Idea Award
- 16.45-17.00: Summary & Group Photo

#### Day 2, September 30 had the following agenda:

- 09.00-10.00: Panel: Barriers & Enablers in Implementing Tech in Logistics Ops
- 10.00-10.45: ChangeBots for supporting human aspects of transformational projects
- 11.00-11.45: German Bionic Exoskeleton
- 11.45-12.30: Editors' note: Responsible Use of AI in academic work
- 13.30-14.15: Human Robot Interaction and Ageing
- 14.15-15.00: Enhancing Work Environments by Motion Tracking
- 15.00-15.30: Summary and farewell









At TU Darmstadt, the sessions concentrated on integrating human factors in decision support models for logistics, where participants explored the influence of human cognition, expertise, and interaction with decision-support systems on logistics efficiency and adaptability. The workshops featured interactive presentations, group discussions, and practical case studies, fostering collaboration between academia and industry. The second workshop "Human-Centered and Technology-Driven Decision Support and management in Logistics" part was held on October 01-02, 2025 at TU Darmstadt.

#### Day 1, Workshop presentations:

"GENERATIVE AI IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT", Subrata Panja;

- "STRATEGIC DECISIONS FOR DIGITAL TRANSFORMATION TO SETUP AUTOMATED WAREHOUSE", Aurelija Burinskienė;
- "WHEN DOMAIN SPECIALIZATION HELPS AND WHEN IT BACKFIRES: THE CASE OF TECHNOLOGY-DRIVEN AUGMENTATION FOR TRUCK DRIVERS", Dominic Loske;
- "INTEGRATING GRAPH-NEUTRAL TRAFFIC FORECASTS WITH AN AGENT-BASED DIGITAL TWIN OF URBAN ROAD NETWORKS FOR HUMAN-CENTRED LOGISTICS DECISION SUPPORT", Valentas Gružauskas;
- "EMA SOFTWARE SUITE DIGITAL PLANNING OF SUSTAINABLE FACTORIES WITH PRODUCTIVE AND ERGONOMIC WORK PROCESSES", Michael Spitzhirn;
- "HUMAN-CENTRIC DESIGN IN HUMAN-ROBOTIC SYSTEMS FOR WAREHOUSING", Amir Zare:
- "A CASE STUDY ON THE ACTIVITY OF SME'S IN EU COUNTRIES IN APPLYING PRODUCT AND PROCESS INNNOVATIONS", Olga Lingaitienė;
- "THE ROLE OF DECISION-MAKING IN DIGITAL TRASFORMATION WITHIN LOGISTICS", Diana Daškevič.

#### Day 2, Workshop presentations:

- "MOTION TRACKING ACCURACY EVALUATION OF AZURE KINECT AND CAPTIV SYSTEM", Ting Zheng;
- "PREDICTING DELIVERY DELAYS USING XGBOOST AND DEEP LEARNING MODELS ON THE DELIVERY LOGISTICS DATESET", Artūras Serackis;
- "NATIONAL CULTURE AND SUSTAINABILITY IMPACT ON MNE MANAGEMENT", Edita Leonavičienė;
- "UPSTREAM SHOCKS, DOWNSTREAM OUTCOMES: EU DEMAND, INPUT SHORTAGES, AND SUPPLY CHAIN RESILIENCE", Arūnas Burinskas;
- "EXPLORING THE POTENTIAL OF CHATBOTS IN DEMAND FORECASTING: A COMPARATIVE STUDY", Subrata Panja;
- "A COMPREHENSIVE VIEW ON MACHINE LEARNING IN INTENTORY CONTROL", Ali Heidari.

The workshop was hosted by **Prof. Dr. Christoph Glock and Dr. Subrata Panja** (Technical University of Darmstadt) and **Prof. Dr. Eric Grosse and Michael Bauer** (Saarland University). This two-part workshop provided a valuable platform for sharing research findings, discussing innovative human-centered approaches, and advancing the integration of technology in logistics systems, ultimately contributing to more resilient, efficient, and sustainable operations.



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