



# BUSINESS ANALYTICS SKILLS FOR THE FUTURE- PROOF SUPPLY CHAINS

## CONFERENCE



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## Preparation for the BAS4SC Conference

As part of the BAS4SC project's dissemination activities, a conference aimed at the academic community was organized. Its goal was to encourage researchers, students, and business representatives to actively participate in developing knowledge and competencies in business analytics for supply chain management.

The Call for Papers (Appendix 1) was an open invitation to submit scientific articles presenting research results, case studies, and practical solutions regarding the use of data analytics, optimization methods, digital twins, and artificial intelligence tools in logistics and supply chains. Submitted papers were peer-reviewed, and selected articles were presented during a special BAS4SC session at the conference.

This initiative facilitated the exchange of experiences between academic institutions and practitioners, promoting international scientific collaboration and emphasizing the importance of analytical competencies in future supply chains. It significantly contributed to achieving the goals of the BAS4SC project by strengthening the transfer of knowledge between academia and practice, promoting an innovative approach to education in business analytics, and building an international community interested in developing modern competencies in logistics and supply chain management.



## Introduction

During the conference, held on September 17–18, 2025, at the Faculty of Management Engineering, Poznan University of Technology, a special session was organized to present the results of the BAS4SC – Business Analytics Skills for Future-proof Supply Chains project, funded under the Erasmus+ program (Appendix 2). The event was attended by **171 participants** (according to the attendance list) – representatives of academia, students, and business practitioners – demonstrating significant interest in logistics, supply chains, and the development of analytical competencies in logistics and supply chain management.

The conference provided a platform for the exchange of knowledge and experiences within the scientific community. It enabled participants to explore current trends in business analytics and modern supply chain management. The presented solutions and research findings highlighted the growing importance of analytical competencies and process automation.

The event also emphasized the practical dimension of the BAS4SC project, which developed tools, teaching materials, and learning scenarios to support the development of analytical skills among students and industry professionals. Participants had the opportunity to learn about the outcomes of the international consortium's collaboration and discuss the potential for implementing the developed solutions in educational settings. As a result, the conference contributed to strengthening cooperation and promoting data-driven approaches to supply chain management.



## Special session – presentations of BAS4SC tasks by participants of the competition

During the conference, BAS4SC competition participants presented the results of their project submissions, demonstrating diverse approaches to business analysis and the practical use of analytical tools. The presentations stood out for their thorough preparation, and the session itself created a valuable forum for discussing the role of modern tools and methods in shaping the future of business analytics.

The session (Figs. 1-7) was fully aligned with the main objectives of the BAS4SC project and the Erasmus+ program, which include supporting learning through international collaboration.

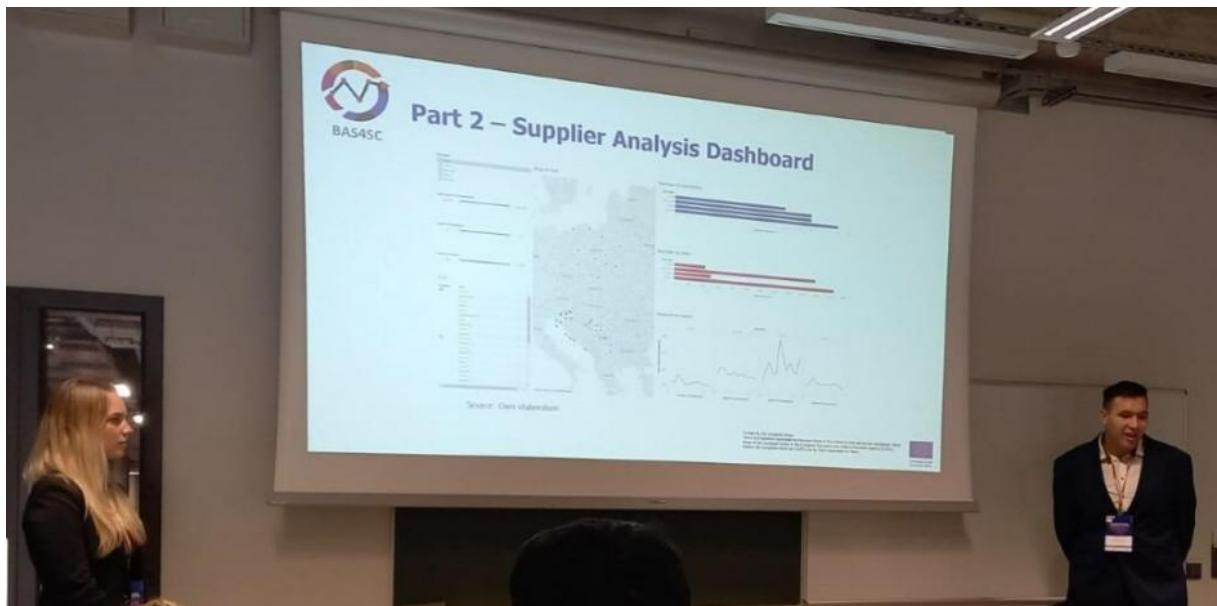


Fig. 1. Prezentacja zespołu konkursowego Laniakea Supernova– POLAND

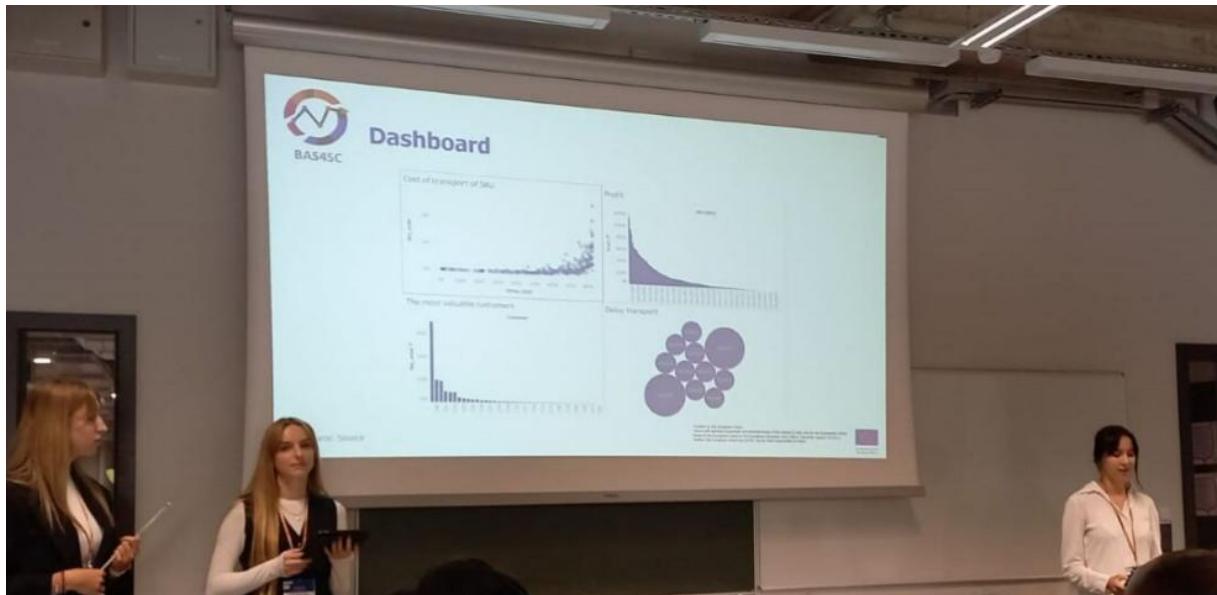


Fig. 2. Prezentacja zespołu konkursowego Power Puff Girls – POLAND



Fig. 3. Prezentacja zespołu konkursowego CORLOG – POLAND

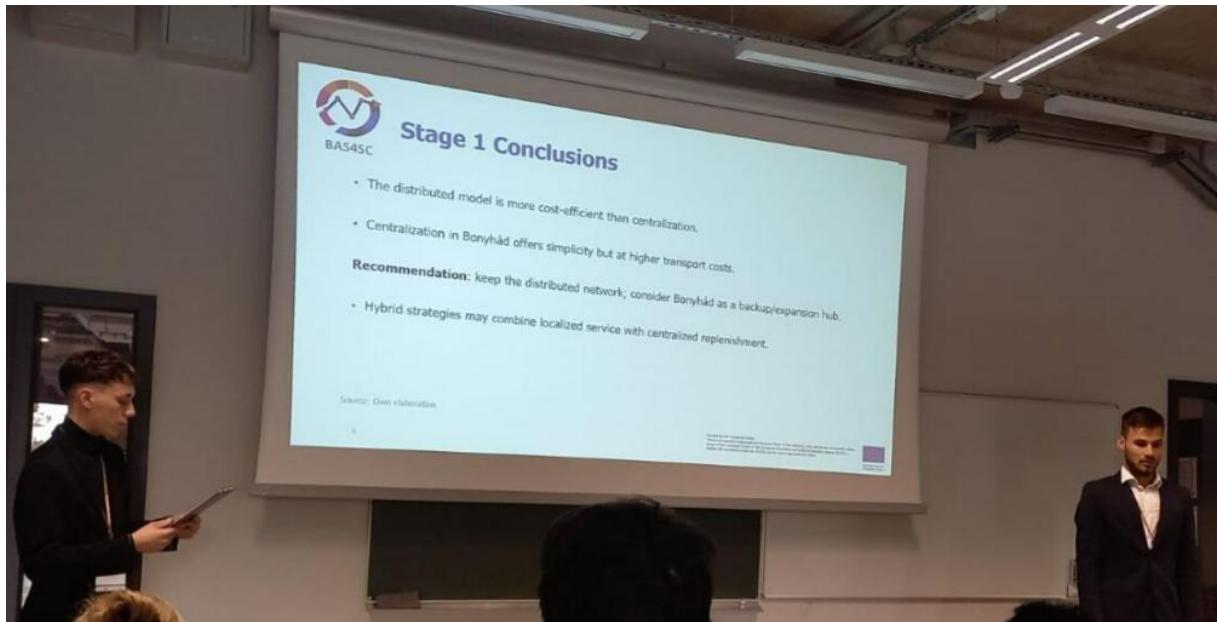


Fig. 4. Prezentacja zespołu konkursowego Brygada – POLAND

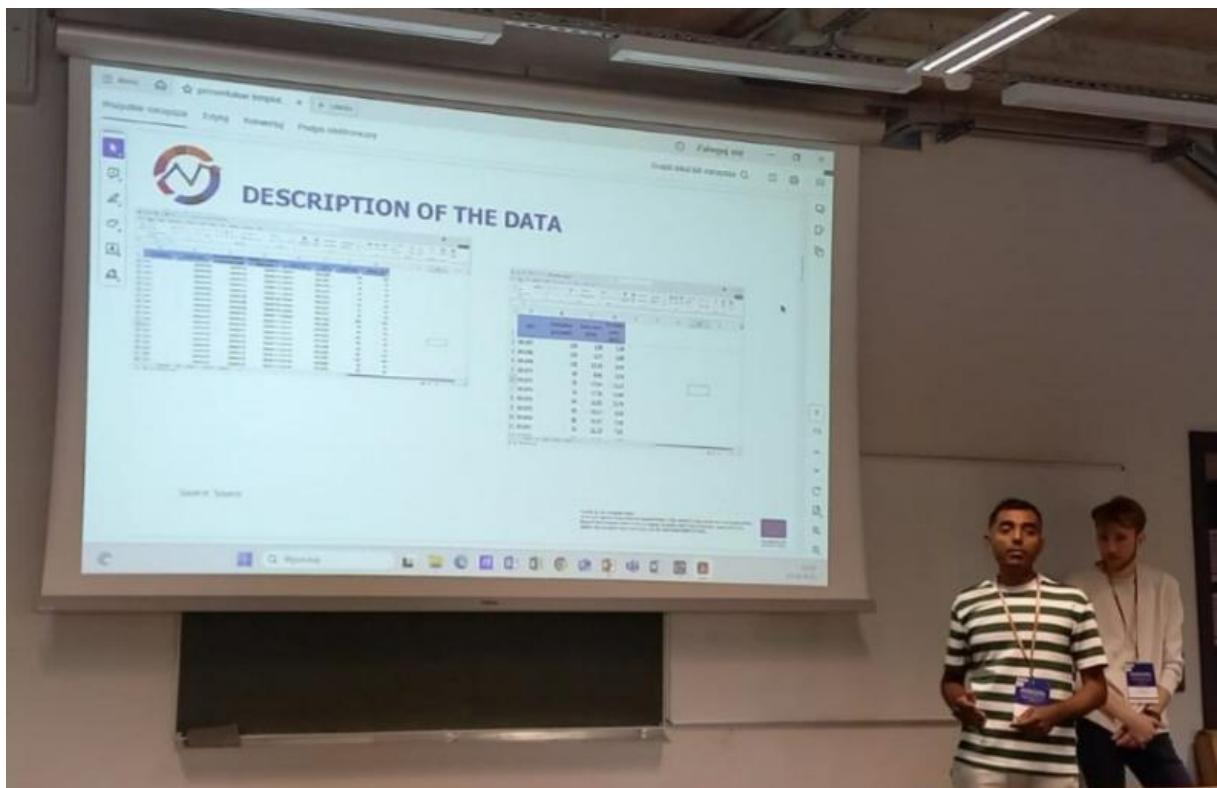


Fig. 5. Prezentacja zespołu konkursowego LogiSquad – SLOVENIA

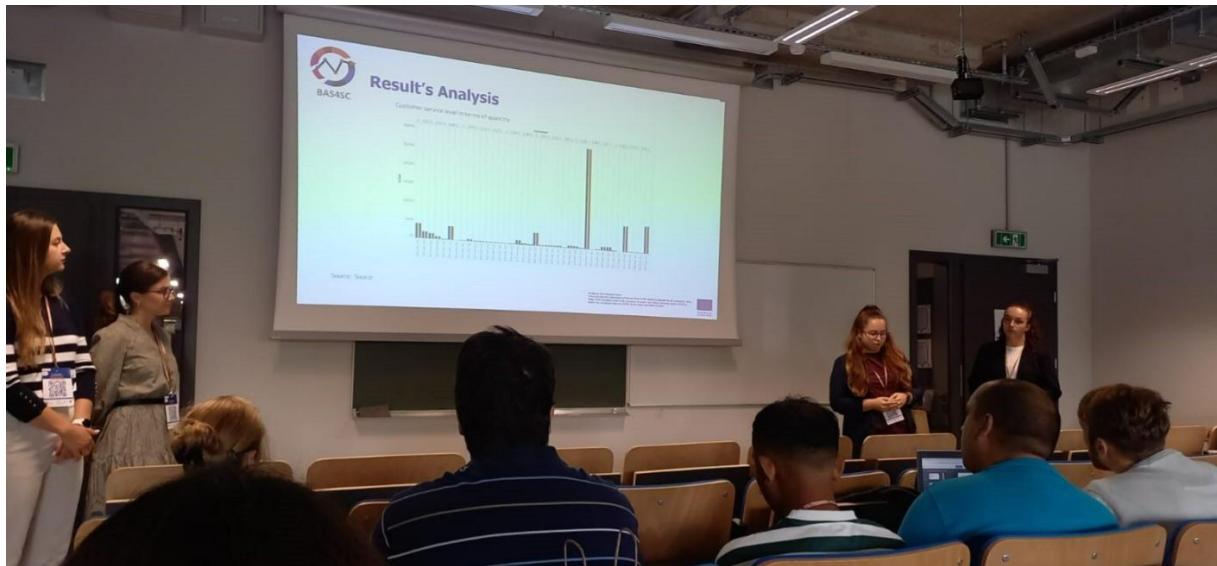


Fig. 6. Prezentacja zespołu konkursowego The Croatian Logisticians – CROATIA

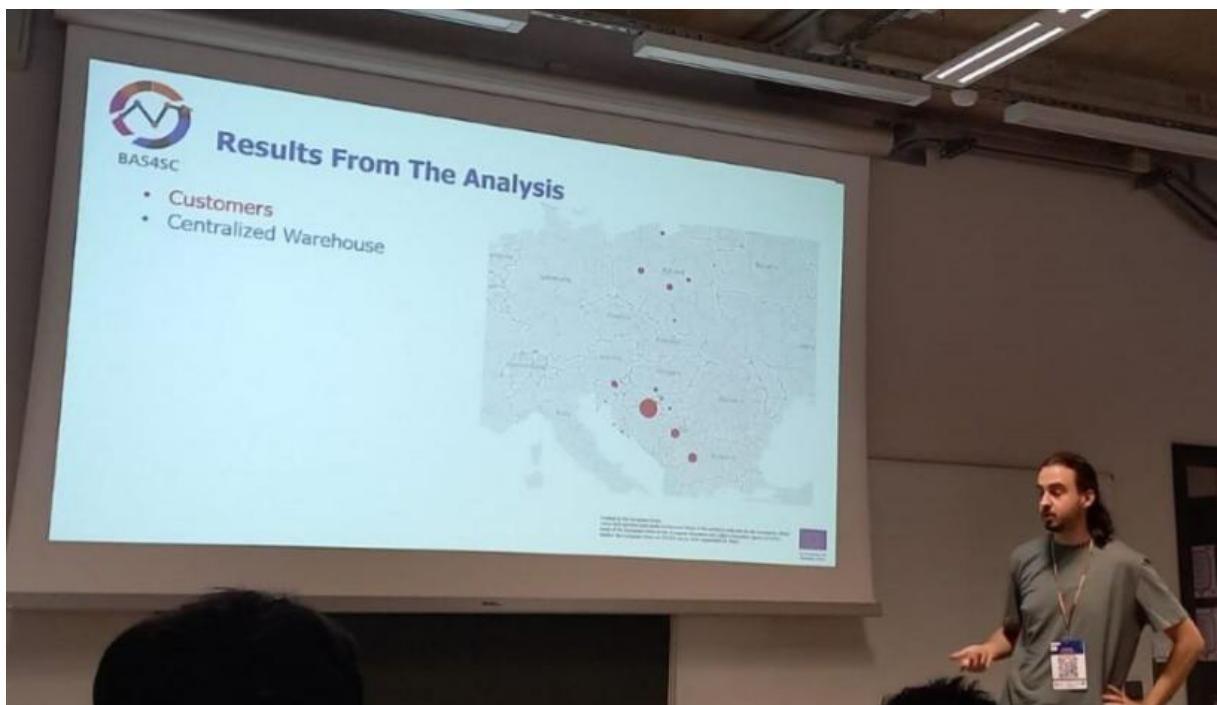


Fig. 7. Prezentacja zespołu konkursowego NS Explorers – SERBIA



## Expert Discussion Panel

During the discussion, experts shared their experiences, opinions, and forecasts regarding key challenges and emerging trends in business. The exchange was dynamic and multifaceted, with particular attention devoted to issues of digital transformation and the growing importance of data in managerial decision-making. The panelists not only listened to valuable insights but also actively engaged in asking questions, which made the meeting a genuine forum for dialogue and an effective bridge between business practice and academic theory (Fig. 8).



Fig. 8. After the presentation of the Expert Discussion Panel



## BAS4SC Main Panel

### Project presentation and

The conference included a presentation of the BAS4SC project, highlighting its main objectives, scope of activities, and the key results achieved by the international consortium. Educational tools and materials designed to support the development of analytical competencies in modern supply chains were showcased, along with their practical applications in student education and in developing professional skills for industry practitioners. Presenting the project's outcomes enabled participants to gain a deeper understanding of its significance in building future-proof and change-resilient supply chains (Fig 9-11).



Fig. 9. **BAS4SC main panel** – project presentation BAS4SC Business Analytics Skills for the Future – proof Supply Chains



Fig. 10. **BAS4SC main panel** – project presentation BAS4SC Business Analytics Skills for the Future – proof Supply Chains



Fig. 11. **BAS4SC main panel** – project presentation BAS4SC Business Analytics Skills for the Future – proof Supply Chains



## Announcement of the BAS4SC competition results (BAS4SC Awards Ceremony)

Later in the event, the results of the BAS4SC competition were announced, in which participants addressed real-world analytical challenges in logistics and supply chain management. The announcement served not only as recognition of the participants' efforts but also as an inspiration to the wider audience, demonstrating the significant value that modern analytical methods can bring to business practice (Figs. 12–18).



Fig. 12. Award ceremony for the NS Explorers competition team NS Explorers – SERBIA



Fig. 13. Award ceremony for the NS Explorers competition team LogiSquad – SLOVENIA



Fig. 14. Award ceremony for the NS Explorers competition team Corlog – POLAND



Fig. 15. Award ceremony for the NS Explorers competition team Brygada – POLAND



Fig. 16. Third place for the competition team Power Puff Girls – POLAND



Fig. 17. Second place for the competition team Laniakea Supernova – POLAND



Fig. 18. First place for the competition team The Croatian Logisticians – CROATIA



The ceremony also offered an opportunity to strengthen ties between participants, share experiences, and encourage collaboration. It fostered community integration, built relationships based on shared interests, and facilitated the exchange of ideas for future initiatives. Additionally, it provided a moment to thank all participants for their work, passion, and contributions, while formally awarding diplomas (Fig. 19).



Fig. 19. Finale of the BAS4SC project Business Analytics Skills for the Future – proof Supply Chains during the conference



## BAS4SC Special Session

The BAS4SC special session followed, allowing conference participants to explore the topic of data analysis in logistics and supply chains in depth, offering both educational and practical perspectives. This enabled the organizers to integrate the strategic message of the main panel with the interdisciplinary content of the special session, creating a coherent and valuable part of the program that enriched the conference with the development of analytical competencies in the context of modern supply chains.

The special session was one of the most valuable and content-rich events of the conference. Led entirely in English by Dr. Piotr Cyplik, DSc, Eng., professor at Poznan University of Technology, the session highlighted the international nature of the project and facilitated the active participation of representatives from partner universities in Poland, Croatia, Slovenia, and Serbia. The use of English as the working language fostered interaction between speakers and participants and enabled the presentation of research findings and best practice examples to an international audience.

This session served as a key element in disseminating the results of the BAS4SC project and provided a forum for exchanging knowledge and experiences between academia and business practice. The presented papers and case studies covered both research conducted within the international consortium and examples of implementing modern analytical tools in enterprises. Participants had the opportunity to learn about the application of data analysis, machine learning, digital twins, and optimization methods in decision-making processes, enhancing their understanding of how these technologies support the development of flexible and resilient supply chains.

During the session, particular emphasis was placed on the importance of business analytics (BA) as a key area of development for modern supply chains. Discussions focused on transforming large, complex, and often unstructured datasets into actionable knowledge for identifying patterns, predicting trends, and making better management decisions. In the context of dynamic digital transformation, the session also highlighted the need to educate employees who combine digital, analytical, and managerial competencies, as well as the



question of how to effectively teach and develop these skills in both academic and business environments.

The session program included eight presentations, showcasing the broad spectrum of analytics applications in logistics and supply chain management. Representatives from Poznan University of Technology (Michał Adamczak, Adrianna Toboła-Walaszczyk, Katarzyna Grzybowska, and Piotr Cyplik) opened the session, presenting research on the importance of analytical competencies for enhancing educational programs in Poland. Next, a team from the University of Osijek (Davor Dujak, Dario Šebalj, Jelena Franjković, and Josip Juraj) presented activities undertaken within the BAS4SC project to develop students' analytical skills. The Slovenian team (Roman Gumzej, Tomaž Kramberger, Kristijan Brglez, and Rebeka Kovačič Lukman) then expanded the perspective on knowledge-based engineering, demonstrating its connection to strategic planning. Finally, the Serbian team (Dejan Mircetic, Marinko Malaric, and Sanja Bojic) presented the practical application of machine learning in business intelligence systems (Figs. 20–23).



Fig. 20. BAS4SC Special Session – Business Analytics Skills in Supply Chains

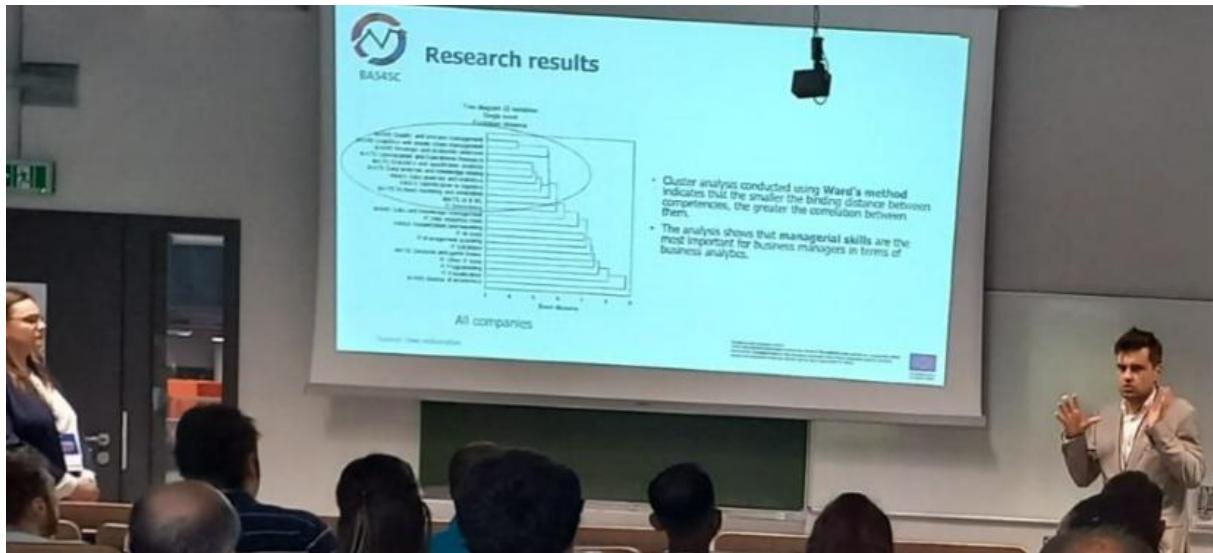


Fig. 21. BAS4SC Special Session – Business Analytics Skills in Supply Chains

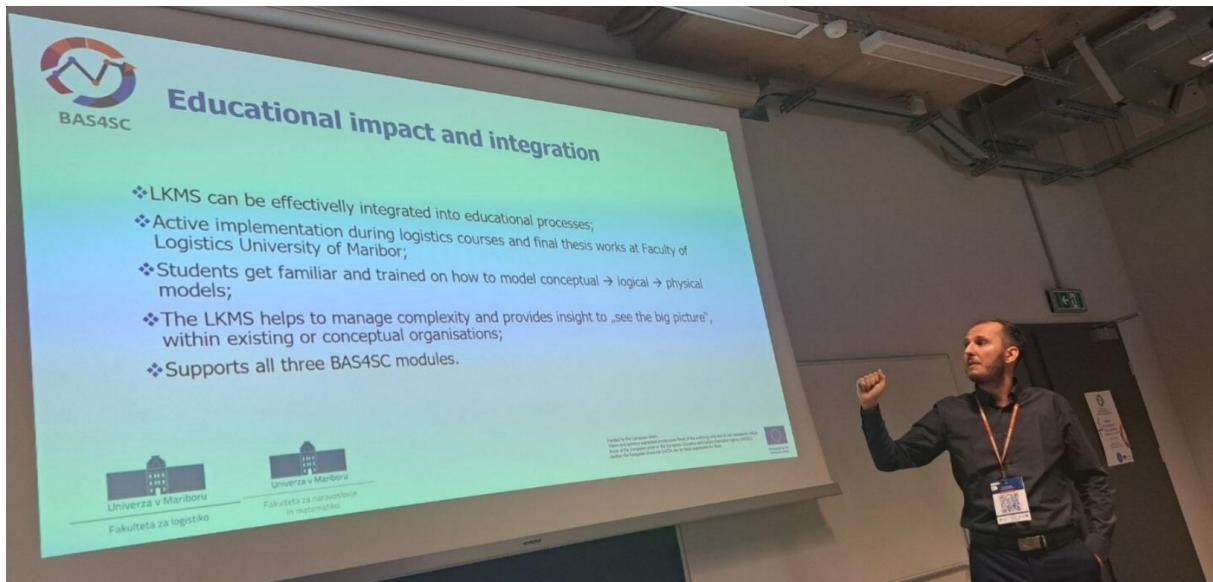


Fig. 22. BAS4SC Special Session – Business Analytics Skills in Supply Chains

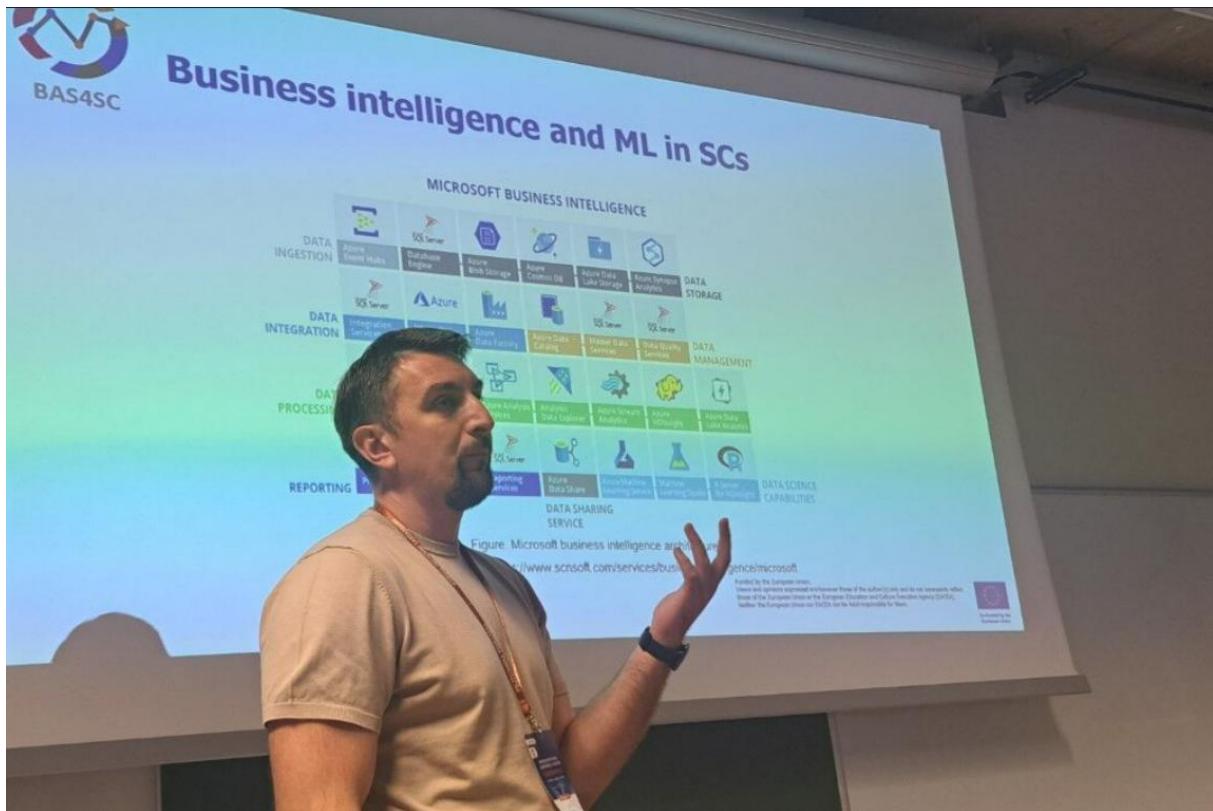


Fig. 23. BAS4SC Special Session – Business Analytics Skills in Supply Chains

The second part of the session focused on analytics in operational logistics. Two presentations addressed the optimization of warehouse processes – the first using graphs and the second using a digital twin. Tomasz Brzeczek then presented a case study on managing inventory costs during seasonal demand fluctuations. The BAS4SC session concluded with Emilia Sutton’s presentation on the strategic value of ESG reporting and the role of sustainability-focused leaders (Figs. 24-28).



Fig. 24. BAS4SC Special Session – Business Analytics Skills in Supply Chains

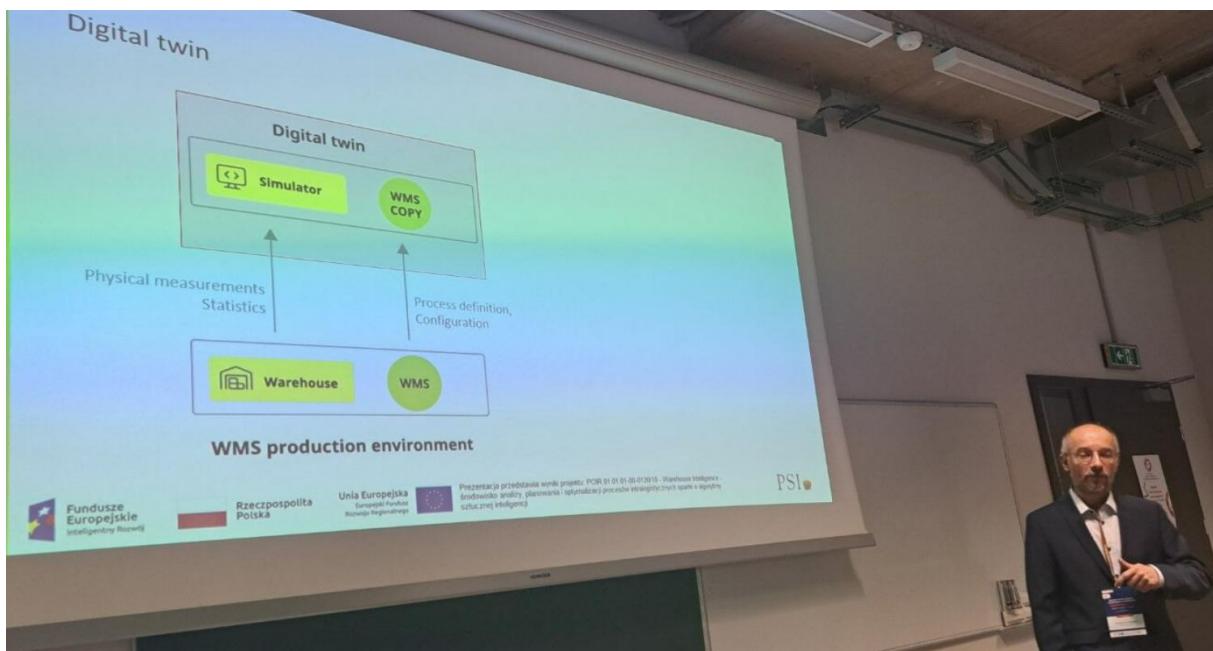


Fig. 25. BAS4SC Special Session – Business Analytics Skills in Supply Chains

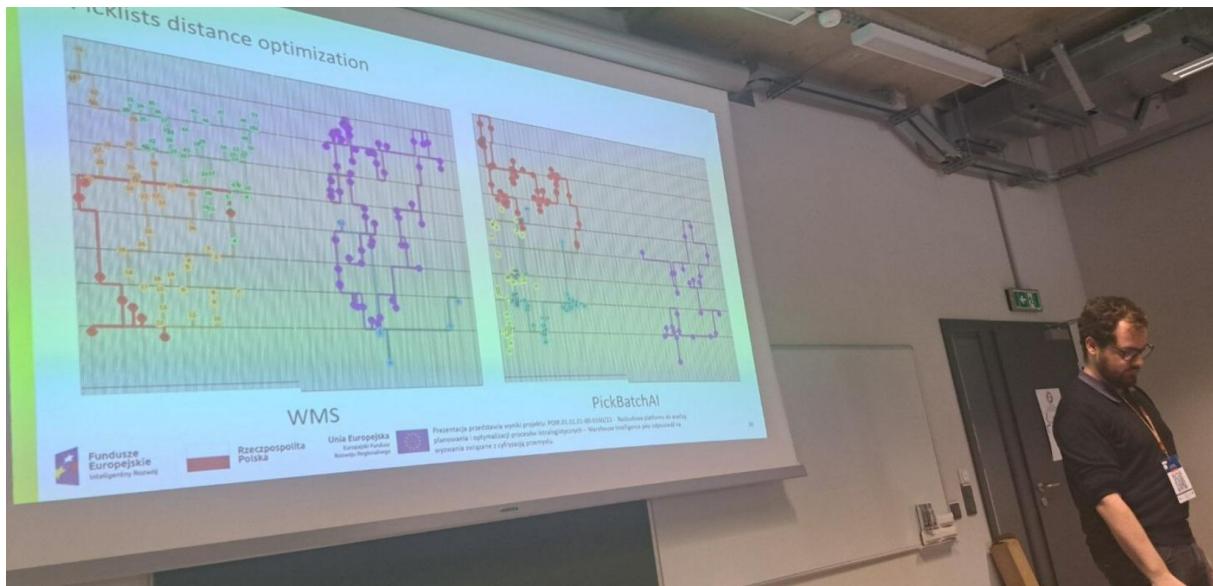


Fig. 26. BAS4SC Special Session – Business Analytics Skills in Supply Chains

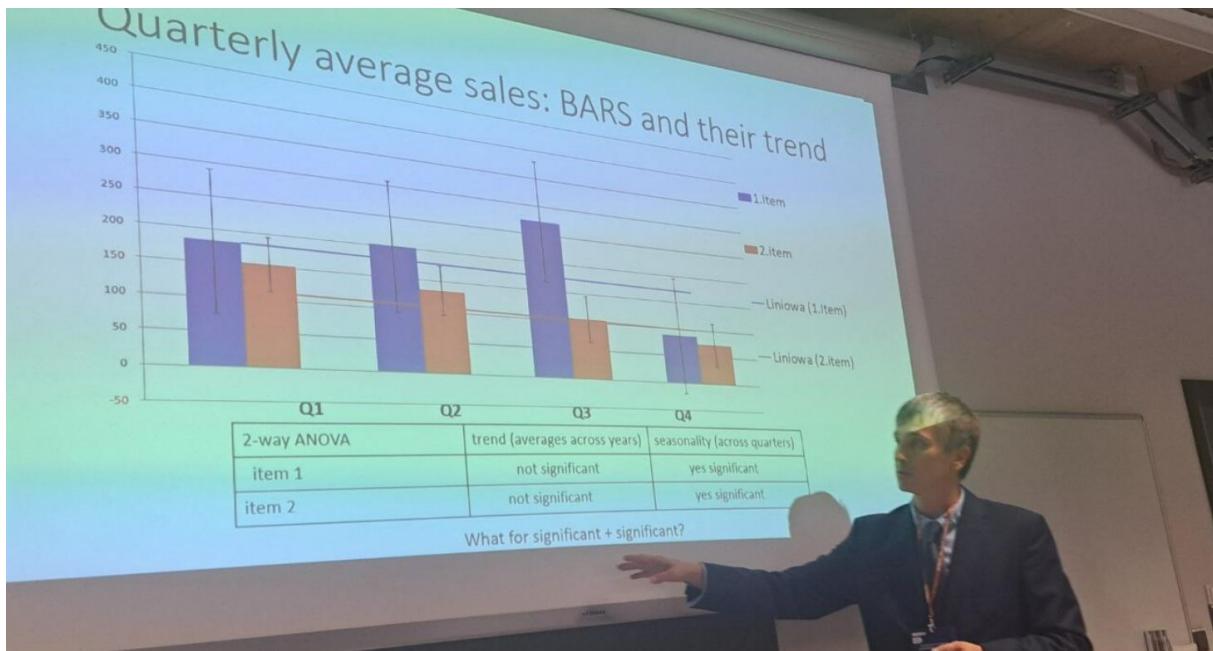


Fig. 27. BAS4SC Special Session – Business Analytics Skills in Supply Chains

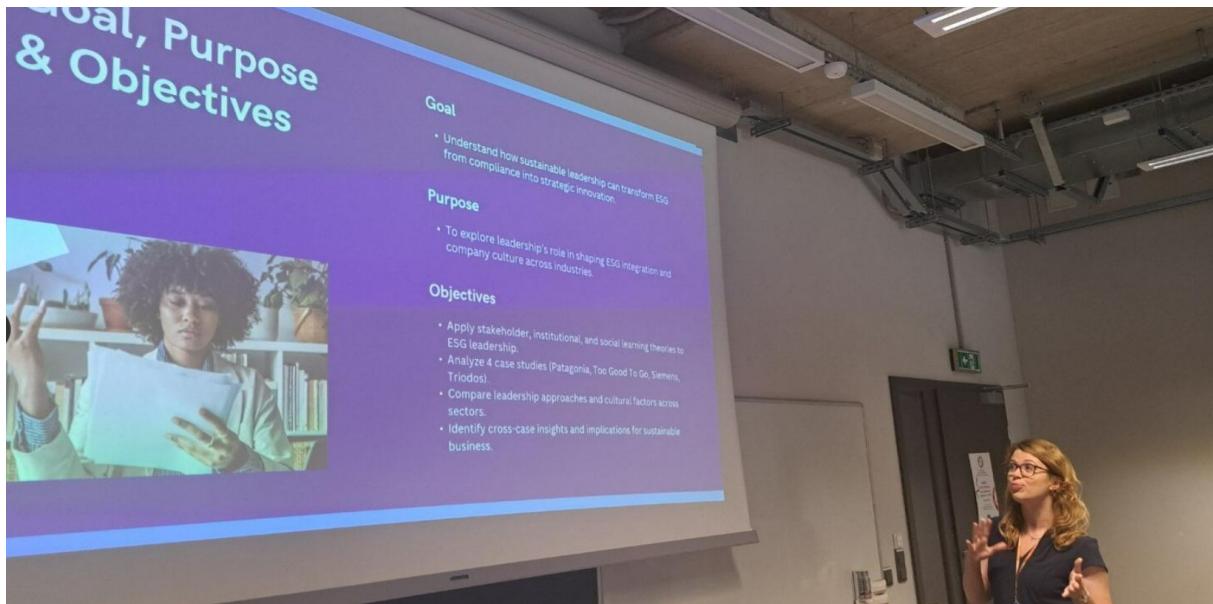


Fig. 28. BAS4SC Special Session – Business Analytics Skills in Supply Chains

The BAS4SC special session was distinguished by its diverse topics, high-quality content, and strong participation. It provided a platform for discussing the role of business analytics in shaping the future of logistics and for exploring ways to better align educational programs with labour market needs. The event contributed to raising awareness of key competencies, strengthened the profile of the BAS4SC project and the Erasmus+ program, and demonstrated its significance as an example of effective collaboration between universities in developing innovative competencies in supply chain management. The BAS4SC special session was not only an opportunity to summarize the project but also an important event with a social dimension.



## Gala dinner

The Gala Dinner at the BAS4SC conference provided a unique opportunity for participants to connect in an informal setting. Attendees were able to exchange experiences, establish new contacts, and strengthen existing professional relationships. The evening featured an elegant dinner, creating a conducive environment for conversation and networking. Additionally, the Gala Dinner highlighted the prestige of the conference, offering participants both a culinary experience and the chance to engage in inspiring discussions in a more relaxed atmosphere than during the panel sessions (Fig 29).

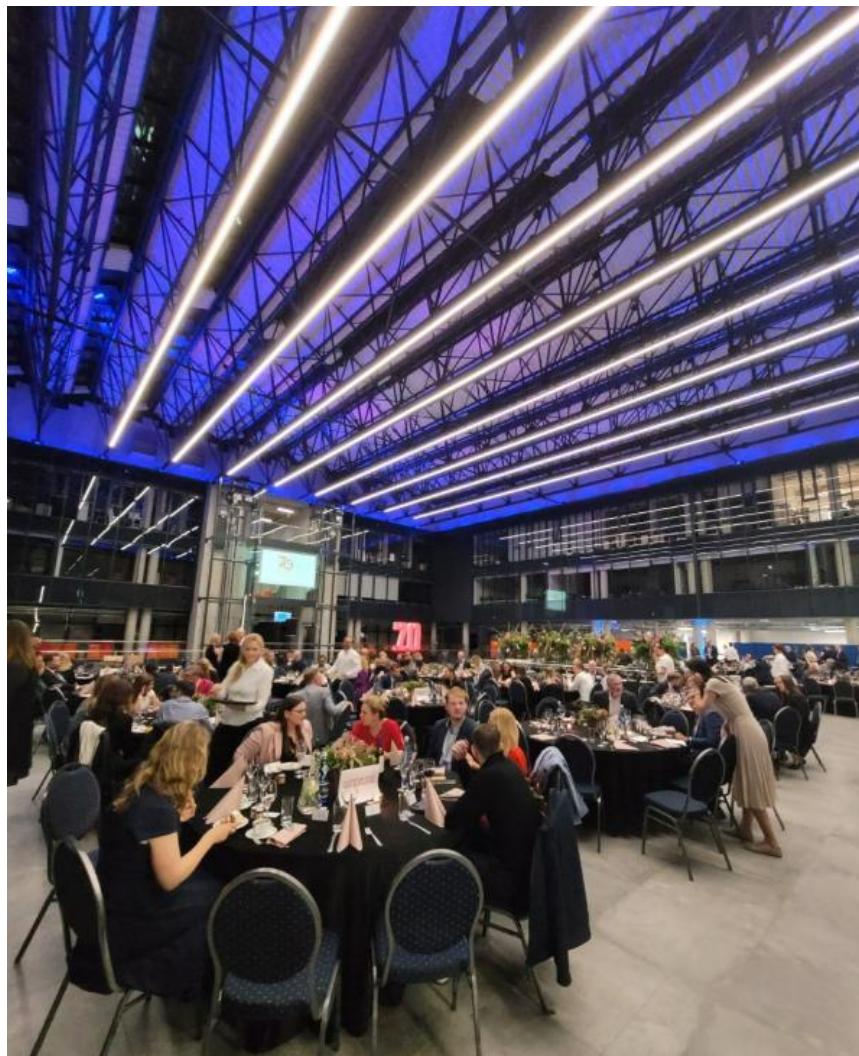


Fig. 29 Gala Dinner



## Quantitative summary

This section presents a quantitative summary of the results. The BAS4SC panel session was general in nature, focusing on the presentation of the Business Analytics Skills for Future-proof Supply Chains project in Polish. It consisted of a single informative presentation, supplemented by post-presentation discussions, allowing participants to familiarize themselves with the project's main goals and outcomes.

The BAS4SC special session focused more specifically on analytical competencies in supply chains. It featured eight presentations, including research reports, case studies, and post-presentation discussions, enabling participants to explore the topic in greater depth and examine practical examples of analytical tool applications.

Table 1. Quantitative summary – panel and special sessions

	<b>BAS4SC panel sessions</b>	<b>BAS4SC special sessions</b>
<b>Topic</b>	Business Analytics Skills for the Future-proof Supply Chains Project Presentation	Business Analytics Skills in Supply Chains
<b>Language of presentations</b>	Polish	English
<b>Number of presentations per session</b>	1	8
<b>Form of presentations</b>	Informative presentation, post-talk discussions	Research presentations, case studies, post-talk discussions

A comparison of the two sessions shows that the panel session was general presentation and informational in nature, aimed at a wider audience, while the special session was more interdisciplinary and practical, engaging a smaller but more specialized group of participants.



The BAS4SC competition session focused on the presentation of the competition entries prepared by seven teams. All presentations were conducted in English, enabling international exchange of experiences and evaluation of the projects in a global context.

The BAS4SC awards ceremony was celebrating the achievements of the competition teams. The number of teams remained the same, but the event focused on recognizing their results and promoting the project's impact to a wider audience.

The summary highlights a clear division of roles between the two sessions: the competition session was content-rich and interactive, allowing for the presentation and evaluation of projects, whereas the awards ceremony served a summarizing and promotional function, engaging a broader audience.



## Conclusions

The conference proved to be a unique event, combining education, creativity, and inspiration in one place. It allowed participants to significantly expand their knowledge of data analysis, gaining an understanding of both basic and advanced methods for processing and interpreting information. Participants had the opportunity to gain practical experience with modern visualization tools, learning how to present complex data clearly and attractively, and how to create interactive dashboards that support effective decision-making. Furthermore, the event fostered the development of presentation skills – participants refined their ability to convey conclusions clearly and logically, build a coherent narrative, and maintain audience engagement. This not only enhanced their understanding of data and its implications but also improved their ability to communicate analytical results effectively, a skill crucial for professional careers and future research projects.

The conference also promoted inclusiveness, creating a space for participants with diverse experiences, interests, and levels of expertise in data analysis. By collaborating on competition projects and exchanging ideas during sessions, participants shared knowledge, learned from one another, and drew inspiration from innovative solutions. The event fostered lasting professional connections and friendships, potentially leading to future collaborations, joint projects, or exchanges of experiences in academic and professional contexts. The interactive format, including discussions, Q&A sessions, and joint workshops, reinforced a sense of community and commitment to the development of the field, motivating participants to further refine their skills and tackle new challenges. In this way, the conference and competition functioned not only as a learning environment but also as a platform for collaboration, the exchange of inspiration, and the cultivation of valuable interpersonal relationships.



## Appendix 1

 Co-funded by the European Union 

Poznań, Poland  
17–18 September 2025

### Special session within the project BAS4SC Business Analytics Skills for the Future – proof Supply Chains

Business analytics (BA) is the use of knowledge (statistical methods, mathematical and computational models, etc.) and information technology to transform and analyse large, complex and often unstructured data sets into actionable information. Based on the collected data, patterns are identified, patterns are discovered, or future trends are predicted, allowing you to make more informed and accurate management decisions. With the increasing reliance on technology and the deluge of digital data, there has been a significant need for employees who can apply their digital and analytical skills in the area of logistics and supply chains. However, a key question arises: how to effectively teach and shape people's digital and analytical competences?

The development of such skills requires a combination of theoretical teaching with practical experience, and the use of innovative teaching methods, computer simulations or analytical tools. A teaching methodology that integrates a theoretical approach with practical experience also becomes important.

**Topics include, but are not limited to,:**

- The impact of Industry 5.0/Logistics 5.0 technology on the economics of production/logistics systems
- Business Analytics Skills
- New methodologies for active learning
- Theoretical teaching and practical experience
- Teaching methods
- Teaching methodology
- Systematic research on business intelligence skills
- Case Study
- Professionalization
- Digital technologies to transform and analyse datasets
- Advanced analytics software
- Analytical algorithms
- Real-time processing technologies
- Business Intelligence (BI) Systems
- Business reporting
- Data management

**Date:**

- Submission of abstracts: 15<sup>th</sup> June 2025
- Acceptance of papers: 21<sup>st</sup> June 2025
- Early payment for the conference: 30<sup>th</sup> June 2025
- Registration: 31<sup>st</sup> July 2025
- Payment for the conference: 5<sup>th</sup> September 2025
- Full version of papers: 30<sup>th</sup> September 2025

**Registration:** <https://interlog.put.poznan.pl/>  
**Submit a paper:** <https://easychair.org/my/conference?conf=interlog2025>







## Appendix 2

The poster features the following elements:

- Logos:** European Union flag, BAS4SC logo, Poznań University of Economics and Business logo.
- Title:** BAS4SC – Business Analytics Skills for the Future-proof Supply Chains 2022-1-PL01-KA220-HED-000088856
- Graphic:** A large, stylized circular logo composed of segments in various colors (orange, red, blue, green, yellow) and a central line graph with dots.
- Text:**
  - CONFERENCE & COMPETITION** (in large orange letters)
  - 17-18 SEPTEMBER 2025** (in orange)
  - POZNAN, POLAND** (in orange)
  - CONFERENCE & COMPETITION** (at the bottom in orange)
  - 0** (at the bottom right in orange)



 **BAS4SC – Business Analytics Skills for the Future-proof Supply Chains**  
2022-1-PL01-KA220-HED-000088856  FEZNAK UNIVERSITY OF TECHNOLOGY

## AGENDA OF THE CONFERENCE

Hours	Activity	Room	
<b>Day 1 – September 17, 2025 (Wednesday)</b>			
9:30 – 10:00	Registration of competition participants	main hall "level 1"	
10:00 – 10:15	Welcome to the BAS4SC competition participants – Phase II	132	
10:15 – 10:45	Discussion of the competition task – Phase II	132	
10:45 – 11:15	Coffee break		
11:15 – 16:00	BAS4SC competition – solving the competition task – Phase II	132	
16:00 – 17:00	Lunch break		
17:00 – 19:00	Deliberations of the BAS4SC Competition Jury – evaluation of competition tasks	132	
<b>Day 2 – September 18, 2025 (Thursday)</b>			
	<b>For participants of the competition on September 17, 2025</b>	<b>For other conference participants</b>	
8.00 – 8.45	Partners meeting	—	132
8:30 – 10:00	Registration of conference participants	Registration of conference participants	main hall "level 1"
9:00 – 11:15	Special session – presentations of BAS4SC tasks by participants of the competition	—	132

CONFERENCE & COMPETITION 1



**BAS4SC – Business Analytics Skills  
for the Future-proof Supply Chains**  
**2022-1-PL01-KA220-HED-000088856**



**BAS4SC – Business Analytics Skills for the  
Future-proof Supply Chains**  
**2022-1-PL01-KA220-HED-000088856**



PÓZNAN UNIVERSITY OF TECHNOLOGY

10:15 – 11:15	—	Expert Discussion Panel	AULA
11:15 – 11:45	Coffee break for competition participants / BAS4SC Competition Jury deliberations	Coffee break	
11:45 – 12:15	Short project presentation and announcement of the BAS4SC Competition results		AULA
12:30 – 14:15	<p>Special BAS4SC session – Business analytics skills in supply chains Chair: Assist. Prof. Piotr CYPLIK, PhD</p> <p>12:30-12:45 <b>Michał Adamczak, Adrianna Tabora-Wałaczuk, Katarzyna Grzybowska and Piotr Cyplik;</b> <i>Identification of relevance levels in analytical competences for the improvement of higher education programmes in Poland</i></p> <p>12:45-12:55 <b>Davor Oujak, Dario Šebalj, Jelena Franiković and Josip Juraj;</b> <i>Improving Supply Chain Analytics Skills at EFOS through BAS4SC Project</i></p> <p>12:55-13:05 <b>Roman Gusev, Tomáš Komberárek, Kristián Boček and Rebeka Kováčová Lukman;</b> <i>Knowledge-Based Engineering in Strategic Logistics Planning: From Ontology to BAS4SC Insights</i></p> <p>13:05-13:15 <b>Dejan Mircetić, Marinko Malović and Sanja Bojić;</b> <i>Machine learning in Business Intelligence</i></p> <p>13:15-13:30 <b>Michał Wójcik, Piotr Cyplik, Mikołaj Młyńczuk and Bartłomiej Rybicki;</b> <i>Optimization of warehouse logistics processes using graphs</i></p> <p>13:30-13:45 <b>Bartłomiej Rybicki, Piotr Cyplik, Michał Wójcik and Mikołaj Młyńczuk;</b> <i>Warehouse Processes Optimization Using Digital Twin Based on Camunda</i></p> <p>13:45-14:00 <b>Tomasz Brzeczek;</b> <i>Inventory cost management under seasonal fluctuations of demand. A company case study</i></p> <p>14:00-14:15 <b>Emilia Sutton;</b> <i>Beyond reporting - the strategic value of ESG in the hands of sustainable leaders</i></p>	132	
14:15 – 15:00	Walking session		
15:00 – 17:00	Lunch – <b>Turowski</b> Restaurant		
17:00 – 19:00	Special activity – tour of Poznań – walk around Ostrów <b>Turowski</b>		



  
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**BAS4SC – Business Analytics Skills for the  
Future-proof Supply Chains**  
**2022-1-PL01-KA220-HED-000088856**

20:00 – 24:00	Gala dinner	
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**GENERAL INFORMATION**

Conference Venue

The conference will take place in the Poznan University of Technology, WAWIZ Building, ~~Jacka~~  
~~Excalibur~~ Street 2, 60-965 Poznan.

Registration desk The registration desk will be located in the foyer (ground floor) of the WAWIZ Building.



Virtual tour of the WAWIZ building: <https://my.matterport.com/show/?m=WW9CB1FTxEp>

CONFERENCE & COMPETITION

3



**BAS4SC – Business Analytics Skills for the  
Future-proof Supply Chains**  
2022-1-PL01-KA220-HED-000088856

 FEZMAN UNIVERSITY OF TECHNOLOGY

**BUSINESS ANALYTICS SKILLS FOR THE FUTURE-  
PROOF SUPPLY CHAINS**