LEARNING, APPLYING, MULTIPLYING BIG DATA ANALYTICS

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LAMBDA Deliverable 5.6
Second Report on Communication activities and Dissemination Events

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Dissemination Level		
PU	Public	x
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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Workpackage	WP 5 Stakeholder Engagement, Community Building, Dissemination and Exploitation
Responsible for WP	Institute Mihajlo Pupin
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Related Tasks	Task 5.1 Stakeholder Engagement and Community Building Activities Task 5.2 Communication activities and Dissemination Events

Document History and Contributions

Version	Date	Author(s)	Description
0.1	1.06.2020	Valentina Janev (PUPIN)	First Draft
0.2	25.6.2020	Heba Mohamed (UBO)	In depth analysis of the LAMBDA Web site. Collecting reports about dissemination activities from LAMBDA researchers
0.3	26.6.2020	Marko Batić (PUPIN)	Review
0.4	30.06.2020	Valentina Janev (PUPIN)	Final version
0.5			
0.6			

Disclaimer:

Executive Summary

One of the specific objectives of LAMBDA (**L**earning, **A**pplying, **M**ultiplying **B**ig **D**ata **A**nalytics) project is focused its efforts on formulating and delivering proper strategies and activities for dissemination and communication that will result in the best and most effective advertising of the project at local, regional and European, and international level.

This report presents an update on the communication and dissemination activities conducted during the second year of the project (July 2019 – June 2020). During the reporting period, The LAMBDA researchers organized several scientific events including the LAMBDA Summer School of Big Data Analytics II. Researchers at LAMBDA have presented results at many other events (ECML PKDD 2019 in Würzburg, Germany, TELFOR 2019, ISWC 2019, BISEC 2019, CiSiM 2019, eLearning 2020, ICIST 2020) and attended different networking events on topics relevant for the project.

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Abbreviations and Acronyms

BDA	Big Data Analytics
KPI	Key Performance Indicator
OERs	Open Educational Resources
WP	Work Package

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1. Introduction

1.1 WP5 Scope

The main objective of Work Package 5 (WP5 Stakeholder engagement, Community building, and Dissemination) is to identify and reach out to the relevant stakeholders both on the side of actors-producers and users of Big Data, but also institutions within the domain of data science education. The dissemination and development activities are tailored to the needs of the consortium partners (PUPIN as the key beneficiary), as well as other related stakeholders from the expanding county (Serbia) and the region to reach, explore and understand the opportunities present in the area of Big Data. During the first reporting period (M1-M12), WP5 focused its efforts on developing and implementing:

- **[Task 5.1]** the appropriate Stakeholder Engagement Strategy, as an approach for the involvement of external stakeholders and coordination of that activity across the LAMBDA objectives and priorities defined in the Grant Agreement;
- **[Task 5.2]** the appropriate dissemination and communication strategies and activities that will result in the best and most useful promotion of the project in the local, regional areas as well as European and international level;
- **[Task 5.3]** the appropriate exploitation strategy for implementing the project goals and maximizing the impacts. In order to facilitate early involvement of researchers in the process of identifying real-world challenges, we organized brainstorming sessions with existing and potential partners from the industry. These sessions allowed us to understand the use of Big Data and emerging technologies for the competitive advantage of companies.

Thus, this deliverable reports an update about the dissemination and communication activities in the period from July 2019 to June 2020.

1.2 Relation to other Deliverables

We reported the results of WP5 in several deliverables.

- Deliverable 5.1 Stakeholders Database and Market Analysis (confidential, M6): Describes the stakeholder database established as part of the LAMBDA platform's private side, which comprises all stakeholders relevant to LAMBDA (local , regional , national and EU level).
- Deliverable 5.2 Dissemination and Communication Strategy and Preliminary Exploitation Plan (M6): Outlines the intended strategy for the dissemination, communication and exploitation of the LAMBDA project, as well as the specific objectives of the dissemination activities until the project is complete.
- Deliverable 5.3 First Report on Stakeholder Engagement and Exploitation Activities: Provides an update on the stakeholder engagement/interaction and a summary of the exploitation activities including market analysis, case studies, product/service development, teaching/training services, MSc/PhD thesis defence, follow-up projects or project proposals, and Big Data ecosystem development.

- Deliverable 5.5 First Report on Communication activities and Dissemination Events 1.0 (M12): Presents details of the dissemination and communication activities implemented for the reporting period (M1-M12).

This deliverable is also related to:

- o Deliverable 3.6 Belgrade BDA School II: Documents the 2nd edition of LAMBDA Big Data Analytics Summer School, https://project-lambda.org/Summer-School-2020

Information about the project activities and results is publically available on the LAMBDA portal (https://project-lambda.org). The LAMBDA portal is continuously updated with new information about the LAMBDA activities, publications and networking events. Websites most often updated are:

- o Past events, https://project-lambda.org/Past-Events
- o Deliverables, https://project-lambda.org/Deliverables
- o Publications, https://project-lambda.org/Publications

1.3 Structure of the Deliverable

This Deliverable is the third document delivered in WP5 framework and presents the following points:

- ● Summary of the LAMBDA dissemination activities within the reporting period including the EU conferences organized and the events in Serbia and the region (Section 2);
- ● The communication activities in the reporting period (Section 3);
- ● The statistics about LAMBDA website (Section 4);
- ● The conclusion of the deliverable (Section 5).

2. Dissemination Activities in the reporting period (M13 – M24)

2.1 Summary

Table 1. Dissemination Activities – Targets and Achievements

Output	Success Indicator	End of the project	Status, June 2019	Status, June 2020
Big Data Analytics School	Number of events	2	1	1
	Number of lectures books, published, e.g. via CEUR-WS.org)	More than 20 lectures	9 lectures	> 30 lectures
		2 open access books	1 book accepted for publication, chapters in preparation	1 book in print[1]
	Number of trained teachers / students	More than 50	> 30	>50, see also statistics about BDA School 2020
	Re-use of the lectures in different universities in the region	More than 10	9 different universities from West Balkan sent representatives for the 1st BDA School	Impact has been made across Europe, see also statistics about BDA School 2020
LAMBDA-Network of Experts	Number of organizations	More than 100	> 30	>60
	Number of experts	More than 200	57	92 in the LAMBDA network
Dissemination and outreach (other than BDA school)	Number of WS, seminars and networking events organized	More than 15	See Deliverable 5.5[2]	>15
	Number of brainstorming sessions on key society challenges	7 (including the annual Research-Industry forums)	See Deliverable 5.5[1]	6 research-industry forums[3]
	Number of joint scientific papers	6	2	11

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[1] Janev, V., Graux, D., Jabeen, H., Sallinger, E. (Eds.) Knowledge Graphs and Big Data Processing, Information Systems and Applications, incl. Internet/Web, and HCI, Vol. 12072. DOI 10.1007/978-3-030-53199-7, ISBN 978-3-030-53199-7, https://www.springer.com/gp/book/9783030531980

[2] https://project-lambda.org/D5.5

[3] https://project-lambda.org/Research-Industry-Forums

2.2 Organization of events (EU conferences) in the reporting period

Short name	Partner	LAMBDA events at International Conferences
PUPIN	Institute Mihajlo Pupin, Serbia (Coordinator)	- CECIIS Data Analytics Workshop, October 2nd 2019, Varaždin, Croatia (LAMBDA workshop in cooperation with Faculty of Organizational Sciences, University of Zagreb) 18th International Conference on Computer Information Systems and Industrial Management Applications (Chair of International Program Committee and organization of event in cooperation with Belgrade Metropolitan University). - Special track: Data Analytics Trends and Applications, ICIST, Serbia, March 2020
IAIS	Fraunhofer Institute for Intelligent Analysis and Information Systems, Germany	- International Semantic Web Conference (ISWC), November 2020, Virtual Conference. - LWDA workshops "Lernen, Wissen, Daten, Analysen", September 2020. - International Semantic Web Conference, October 2019, Auckland, New Zealand - ECML PKDD 2019, September 2019 - FUTURAS IN RES" conference, on 21- 22 November, 2019. (keynote talk) - LASCAR 2020 : 2nd Workshop on Large Scale RDF Analytics (LASCAR-20) at ESWC'20
UBO	Institute for Computer Science - University of Bonn, Germany	
UOXF	Department of Computer Science - University of Oxford, UK	

Figure 1. Prof. Jens Lehmann from the University of Bonn in the panel discussion of the workshop of 'New Trends in Representation Learning with Knowledge Graphs'

The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases took place in Würzburg, Germany, from the 16th to the 20th of September 2019. This event is the premier European machine learning and data mining conference and builds upon over 19 years of successful events and conferences held across Europe.

Figure 2. Dr. Sahar Vahdati from University of Oxford presenting the work at 'The Fourth Workshop on Data Science for Social Good'.

The University of Oxford and University of Bonn presented a joint scientific work entitled '*Improving Access to Science for Social Good*'. The publication has strong relevance to the Fridays for future and presented on 20th September where many people all over the world joined this movement.

2.3 Events in Serbia and the Region

- Special track: Data Analytics Trends and Applications, ICIST, Serbia, March 2020
  The following papers were presented by PUPIN staff and published in Proc. of 9th International Conference on Information Society Technology, Kopaonik, Serbia, March 10 – March 13, 2019. Information Society Serbia:

  - download Dea Pujić, Marko Jelić, Marko Batić, Nikola Tomašević Energy user benchmarking using clustering approach.
  - download Marko Jelić, Dea Pujić, Marko Batić Correlation between IoT sensor measurements and total electricity consumption in smart homes.
  - download Dusan Popadić, Lazar Berbakov, Marko Jelić, Marko Batić. Ontology Enabled IoT System for Smart Buildings.
  - download Dea Pujić, Marko Jelić, Nikola Tomasević. Comparison between different ML approaches for PV and STC production forecasting using real-world data.
  - download Valentina Timčenko, Slavko Gajin. Time-series entropy data clustering for effective anomaly detection
- Research Data and Open Science in South-eastern Europe, December 2019, Belgrade, Serbia (by invitation, discussion and foresight, dissemination of LAMBDA leaflets)
- Remote Smart Sensing in Precision Agriculture, PUPIN Institute, Belgrade, Serbia (presentation of PUPIN results and foresight discussion related to the topic)
- Telfor 2019, Belgrade, Serbia (invited talk)
- The Challenge and Opportunity of 5G in Serbia, November 2019. (presentation of PUPIN results and foresight discussion related to the topic)
- 18th International Conference CISIM, Belgrade on 20th September 2019.(organization of IC)
- 10th eLearning Conference, Belgrade on 26-27 September 2019. (presentation of LAMBDA results)
- 11th International Conference BISEC, on 13th September 2019 (dissemination of LAMBDA leaflets)
- Information Technology - IT 2020, 18-22 February, Žabljak, Montenegro (dissemination of LAMBDA leaflets)

Figure 3.ICIST Special Session, March 2020

PUPIn Team: Marko Jelić, Nikola Tomašević, De Pujić, Dušan Popadić, Marko Batić

Opening – Dr. Nikola Tomašević

Figure 4. Challenge and Opportunity of 5G in Serbia, November 2019
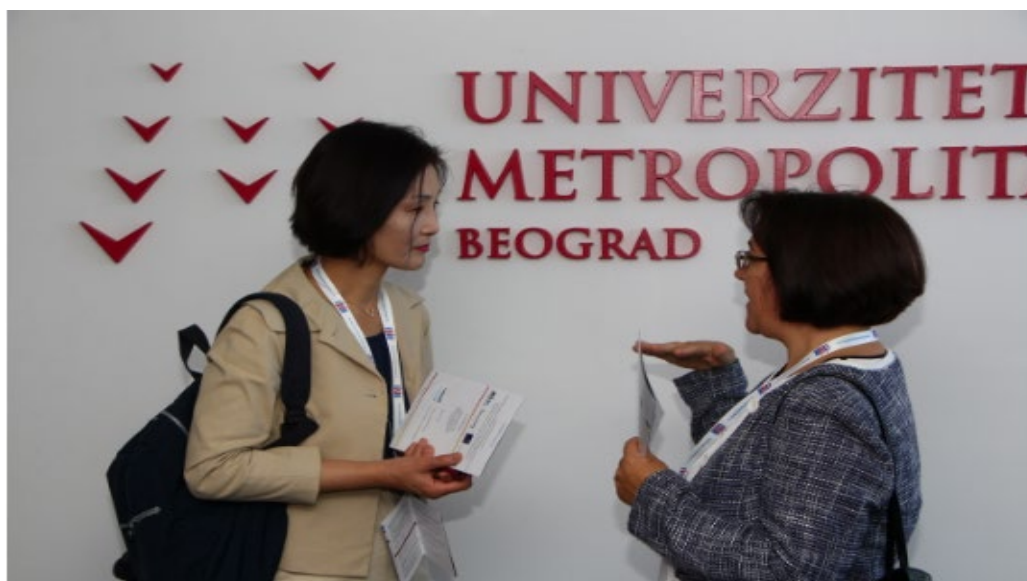

Guest speaker: Goran Laovski, Republic Agency for Electronic Communications and Postal Services

Institute Mihajlo Pupin, Belgrade, November 2019

Figure 5. Introducing the LAMBDA project to prof. Young Im Cho, Gachon University, Korea
(Keynote speaker of CISIM 2019)

LAMBDA results were presented at the [18th International Conference on Computer Information Systems and Industrial Management Applications](#) (CISIM 2020) in Belgrade on 20th September 2019.

2.4 Collaboration / Networking with other projects

This section points to several networking events that occurred in the reporting period. More can be found on the LAMBDA Web site, https://project-lambda.org/Past-Events

Figure 6. Open Data Event in Montenegro, March 2020

- [Open Data - Opportunities and Innovation, Podgorica, March 2020](#)

During the Open Data Week (2- 6 March 2020), the LAMBDA project together with the Chamber of Economy and the Ministry of Public Administration of Montenegro organized an event 'Open Data

- Business opportunities and innovation for SMEs and start-ups'. The event brought together experts from Serbia and Montenegro to discuss the

- **The European strategy for data**, COM(2020) 66, 19.02.2020, and
- **The Open Data Directive'** (**Directive** (EU) **2019**/1024)

- [Interconnection of South- Eastern electricity markets, January 2020](#)

Figure 7. In the context of the TRINITY project, LAMBDA researchers participated in the discussion on the interconnection of South-East electricity markets, january 2020

- [LAMBDA](#) results were presented at the COST Action **NexusLinguarum** Meeting in Prague, January 2020.

Figure 8. LAMBDA Poster at NexusLinguarum Meeting presented by Dr. valentina Janev, January 2020

2.5 Joint scientific papers

Eleven joint papers of have been published:

- (**download**) Mojtaba Nayyeri, Sahar Vahdati, Xiaotian Zhou, Hamed Shariat Yazdi, and Jens Lehmann, "*Embedding-Based Recommendations on Scholarly Knowledge Graphs*". In A. Harth et al. (Eds.): ESWC 2020, LNCS 12123, Springer, pp. 255–270, May 2020. https://doi.org/10.1007/978-3-030-49461-2_15
- (**download**) Valentina Janev, Dejan Paunović, Damien Graux, Hajira Jabeen, Emanuel Sallinger, Sahar Vahdati, "*Big Data Analytics: Lectures from the LAMBDA Network*", eLearning Conference, Belgrade Metropolitan University, 2019.
- (**download**) F Maqbool, S Razzaq, J Lehmann, H Jabeen, "*Scalable Distributed Genetic Algorithm Using Apache Spark (S-GA)*". International Conference on Intelligent Computing, 2019.
- (**download**) H Jabeen, N Tahara, J Lehmann, "*EvoChef: Show Me What to Cook! Artificial Evolution of Culinary Arts*". International Conference on Computational Intelligence in Music, Sound, Art, 2019.
- S Fathalla, S Vahdati, C Lange, S Auer, "*SEO: A scientific events data model*". In International semantic web conference (pp. 79-95). Springer, Cham, October 2019.
- S Fathalla, S Vahdati, C Lange, S Auer, "*Scholarly event characteristics in four fields of science: a metrics-based analysis*". Scientometrics, 1-29, 2020.
- M Ali, S Vahdati, S Singh, S Dasgupta, J Lehmann, "*Improving Access to Science for Social Good*". Joint European Conference on Machine Learning and Knowledge Discovery in Databases, 2019.
- A Rivas, I Grangel-González, D Collarana, J Lehmann, ME Vidal, "*Unveiling Relations in the Industry 4.0 Standards Landscape based on Knowledge Graph Embeddings*". arXiv preprint arXiv:2006.04556. June 2020.
- M Tasnim, D Collarana, D Graux, M Galkin, ME Vidal, "*COMET: A Contextualized Molecule-Based Matching Technique*". In International Conference on Database and Expert Systems Applications, pp. 175-185. Springer, Cham, 26th August 2019.
- AM Bajwa, D Collarana, ME Vidal, "*Interaction Network Analysis Using Semantic Similarity Based on Translation Embeddings*". In International Conference on Semantic Systems, pp. 249-255, Springer, Cham, 9 September 2019.
- H Thakkar, R Angles, M Rodriguez, S Mallette, J Lehmann, "*Let's build Bridges, not Walls: SPARQL Querying of TinkerPop Graph Databases with Sparql-Gremlin*". In IEEE 14th International Conference on Semantic Computing (ICSC), pp. 408-415. IEEE, 3rd February 2020.

2.6 Scientific papers

- (**download**) F Musyafa, J Lehmann and Hajira Jabeen (2020) Cross Administration Comparative Analysis of Open Fiscal Data. International Conference on Theory and Practice of Electronic Governance, 2020.
- (**download**) H Jabeen, E Hazeiv, G Sejdiu and J Lehmann (2020) DISE: A Distributed in-Memory SPARQL Processing Engine over Tensor Data. IEEE International Conference on Semantic Computing, 2020.
- (**download**) Guma Lakshen, Sanja Vraneš and Valentina Janev (2019) Linking Open Drug Data: Lessons Learned. In K. Saeed et al. (Eds.): CISIM 2019, LNCS 11703, pp. 164–176, 2019. Springer International Publishing. https://doi.org/10.1007/978-3-030-28957-7

- Gerald Berger, Georg Gottlob, Andreas Pieris, Emanuel Sallinger, "*The Space-Efficient Core of Vadalog*". Proceedings of the 38th ACM SIGMOD-SIGACT-SIGAI Symposium on Principles of Database Systems, pp. 270-284, 2019.
- Georg Gottlob, Andreas Pieris, Emanuel Sallinger: "*Vadalog: Recent Advances and Applications*". European Conference on Logics in Artificial Intelligence (JELIA). Springer, Cham, pp. 21-37, 2019.
- Luigi Bellomarini, Daniele Fakhoury, Georg Gottlob, Emanuel Sallinger, "*Knowledge Graphs and Enterprise AI: The Promise of an Enabling Technology*". IEEE 35th International Conference on Data Engineering (ICDE), pp. 26-37, 2019.
- J Clearman, R Ruslan, Fayzrakhmanov, G Gottlob, Y Nenov, S Reissfelder, E Sallinger, and E Sherkhonov, "*Feature Engineering and Explainability with Vadalog: A Recommender Systems Application*." In Datalog, pp. 39-43. 2019.
- L Bellomarini, G Gottlob, and El Sallinger. "*Datalog-based Reasoning for Knowledge Graphs*". In AMW. 2019.
- P Atzeni, Li Bellomarini, M Iezzi, E Sallinger, A Vlad, "*Weaving Enterprise Knowledge Graphs: The Case of Company Ownership Graphs*". EDBT 2020, pp. 555-566, 2020.
- H Jabeen, E Haziiev, G Sejdiu, J Lehmann, "*Dise: A distributed in-memory sparql processing engine over tensor data*". In IEEE 14th International Conference on Semantic Computing (ICSC), pp. 400-407, IEEE, 3rd February 2020.

- (**download**) Musyaffa, F. A., Vidal, M. E., Orlandi, F., Lehmann, J., & Jabeen, H. (2020). IOTA: Interlinking of heterogeneous multilingual open fiscal DaTA. Expert Systems with Applications, 147, 113135.

2.7 PUPIN Journal Papers

- Lazar Berbakov, Goran Dimić, Marko Beko, Jelena Vasiljević, Željko Stojković, Collaborative Data Transmission in Wireless Sensor Networks, in IEEE Access Journal, Volume 8, Issue 1, 2020, pp. 39647 - 39658. https://ieeexplore.ieee.org/document/9007355
- Lazar Berbakov, Čarna Jovanović, Marina Svetel, Jelena Vasiljević, Goran Dimić, and Nenad Radulović, Quantitative Assessment of Head Tremor in Patients with Essential Tremor and Cervical Dystonia by Using Inertial Sensors, in Sensors Journal, Volume 19, Issue 19, 2019. pp.1-16. https://www.mdpi.com/1424-8220/19/19/4246
- Nikola Tomasević, Nikola Gvozdenović, Sanja Vraneš, An overview and comparison of supervised data mining techniques for student exam performance prediction, Computers and Education Volume 143, January 2020, 103676 https://doi.org/10.1016/j.compedu.2019.103676
- Dea Pujić, Nikola Tomašević, Marko Batić (2019) Semi-supervised Approach for Improving Generalization in Non-Intrusive Load Monitoring (submitted)
- Guma Lakshen, Sanja Vraneš and Valentina Janev (2019) Quality issues in open big data ecosystems: A case study from the drug industry (submitted)
- Marko Jelić et all (2020) Towards self-sustainable island grids through optimal utilization of renewable energy potential and community engagement (accepted for publication)

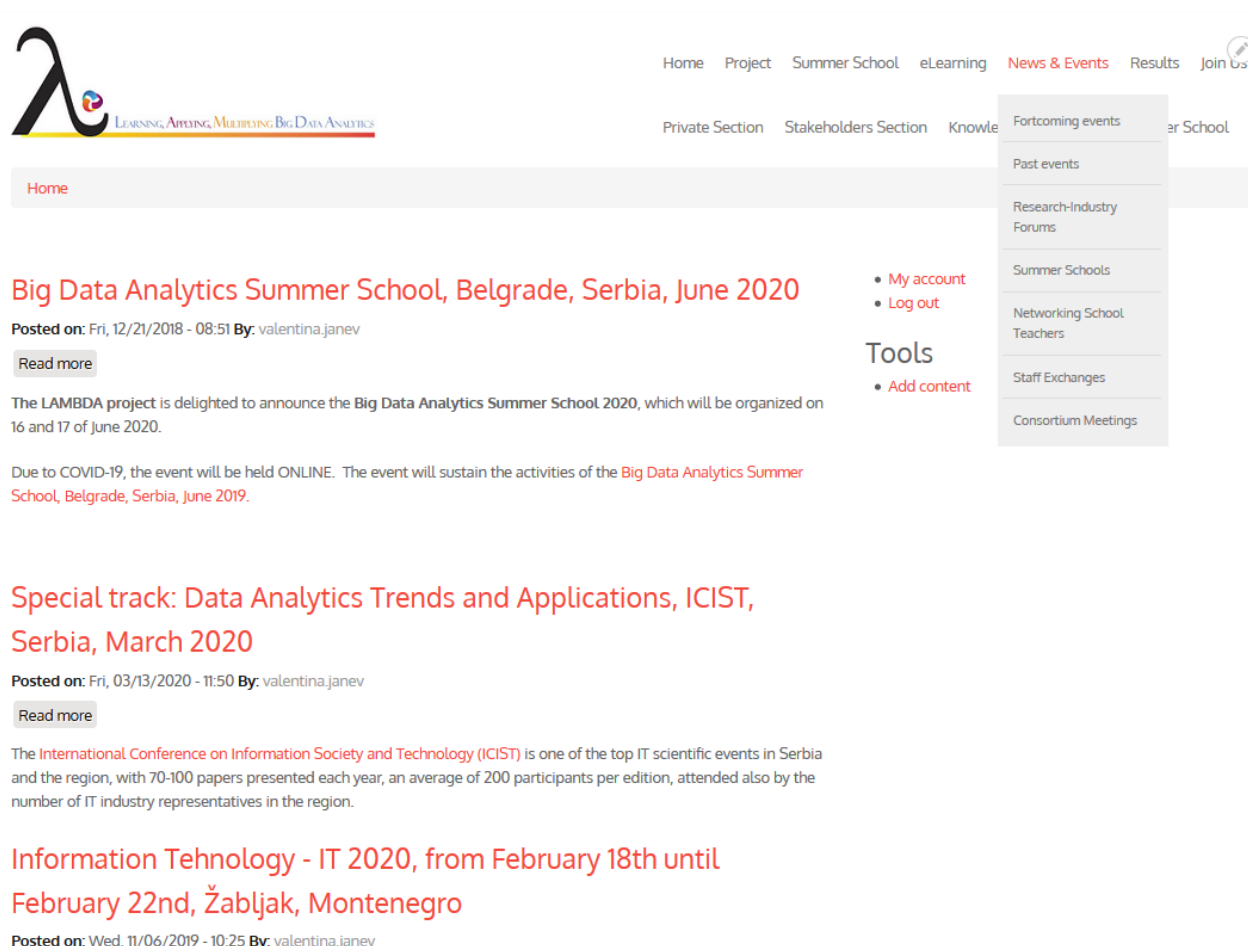
3. Communication Activities in the reporting period

3.1 Communication Channels

3.1.1 LAMBDA Portal

The portal of LAMBDA is continually updated with new information on the activities, publications and networking events of LAMBDA. Websites most frequently updated are:

- Events, https://project-lambda.org/Past-Events
- Deliverables, https://project-lambda.org/Deliverables
- Publications, https://project-lambda.org/Publications

Figure 9. Past events presented on the LAMBDA portal

3.1.2 LAMBDA Twitter Account

In the very beginning of the project the LAMBDA Twitter account was created https://twitter.com/Net4LAMBDA, see Figure
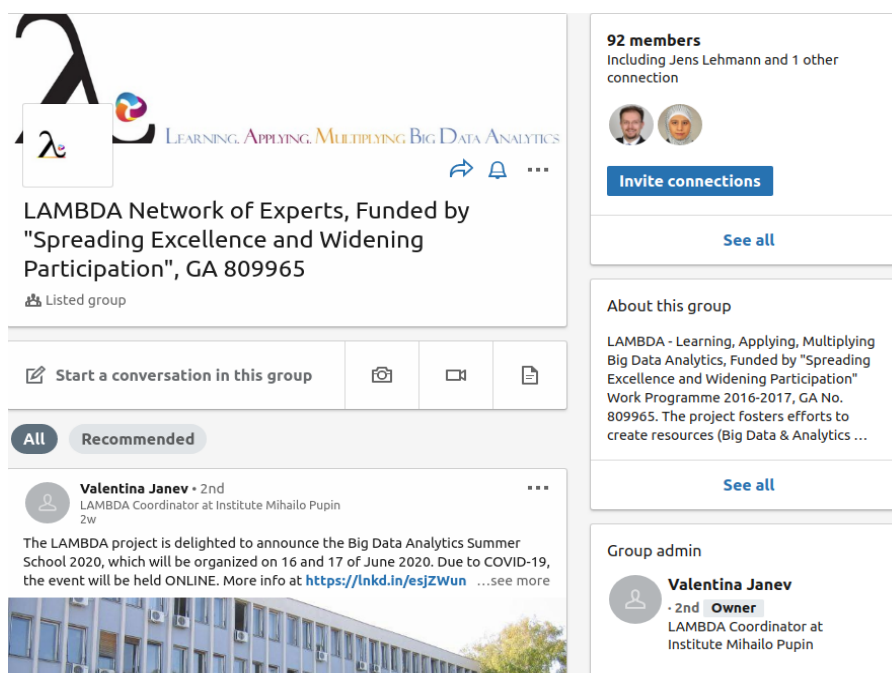
Figure 10. LAMBDA Twitter Account

3.1.3 LAMBDA LinkedIn Account

In the very beginning of the project the LAMBDA LinkedIn account was created https://www.linkedin.com/groups/12129621/ Figure 9 shows the use of social media for the project's publicity mainly on LinedIn.

Figure 11. LAMBDA LinkedIn account

3.2 Examples of Announcements for LAMBDA Events

3.2.1 ECML PKDD, Würzburg, Germany, September 2019

The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases was held in Würzburg, Germany, on 16-20 September 2019. LAMBDA had a strong presence with its partners at the ECML PKDD 2019 conference by:

- organizing a workshop of '*New Trends in Representation Learning with Knowledge Graphs*' by the University of Bonn,
- presenting a joint paper on '*Improving Access to Science for Social Good*' (the University of Bonn and the University of Oxford).

3.2.2 ESWC, Online, June 2020

The announcement can be found in the following link: https://2020.eswc-conferences.org/call-for-papers/

A "LASCAR 2nd Workshop on Large Scale RDF Analytics" is accepted at ESWC and it will be organized by members of UBO and IAIS.

A research paper "Embedding-based Recommendations on Scholarly Knowledge Graphs" is accepted at ESWC with members from UBO and UOXF.

A research paper "VQuAnDa: Verbalization QUestion ANswering DAtaset" is accepted at ESWC with members from UBO.

3.2.3 ISWC, Online, November 2020

The 6th Natural Language Interfaces for the Web of Data (NLIWOD) Workshop, will be co-located with the 19th International Semantic Web Conference (ISWC). The workshop will be organized by members of IAIS.

3.2.4 LWDA workshops, September 2020.

LWDA, which expands to „Lernen, Wissen, Daten, Analysen" („Learning, Knowledge, Data, Analytics"), covers recent research in areas such as knowledge discovery, machine learning & data mining, knowledge management, database management & information systems, information retrieval. The LWDA 2020 conference is organized by Fraunhofer IAIS and the MLAI group at the University of Bonn.

3.2.5 Big Data Analytics Summer School, Online, June 2020

The event will take place ONLINE, due to COVID-19. The event will preserve the activities of the Summer School of Big Data Analytics, Belgrade, Serbia, June 2019.

Figure 12. Announcement of the Belgrade BDA School 2020

Big Data Analytics Summer School, Belgrade, Serbia, June 2020

Posted on: Fri, 12/21/2018 - 08:51 **By:** valentina.janev

The LAMBDA project is delighted to announce the **Big Data Analytics Summer School 2020,** which will be organized on 16 and 17 of June 2020.

Due to COVID-19, the event will be held ONLINE. The event will sustain the activities of the Big Data Analytics Summer School, Belgrade, Serbia, June 2019.

Invitation	Agenda	Lectures

The School Program will include keynotes, panel discussions, and lectures from distinguished scientists

KEYNOTE SPEAKERS

Georgios Paliouras, NCSR "Demokritos"

Mariana Damova, Mozaika

Gloria Bordogna, Italian National Research Council IREA

BIG DATA FORESIGHT - PANEL DISCUSSION

Simon Scerri, Fraunhofer IAIS

Tom Krajnik , Czech Technical University

Luigi Bellomarini, Banca d'Italia and University of Oxford

Neven Vrček, University of Zagreb

Luka Filipović, Univerzitet Crne Gore

4. Statistics about the LAMBDA Website

The content presented via the LAMBDA platform and Website is structured into categories, as presented in Table 2.

Table 2. Statistics about the LAMBDA Website

Description	Number of pages	Links
Deliverables	> 30	https://project-lambda.org/Deliverables
Lectures	> 30	https://project-lambda.org/Knowledge-repository/Lectures
Webinars	3	https://project-lambda.org/Webinars
Publications	1	https://project-lambda.org/Publications
Awards	3	https://project-lambda.org/Awards
Forthcoming Events	2	https://project-lambda.org/Fortcoming-Events
Past events	26	https://project-lambda.org/Past-Events
Research Industry Forums	6	https://project-lambda.org/Research-Industry-Forums
Summer Schools	2	https://project-lambda.org/Summer-Schools
Networking School Teachers	1	https://project-lambda.org/networking-school-teachers
Staff exchanges	7	https://project-lambda.org/Staff-Exchange
Consortium Plenary Meetings	6	https://project-lambda.org/Consortium-Meetings
Promotional material	1	https://project-lambda.org/Promotional-Material

5. Conclusion

This deliverable provides a summary of the work carried out in the WP5 framework in the reporting period (M13-M24).

Significant increase in the scope and scale of activities can be noticed since the first deliverable (D5.1, M06) that is a result of the well-planned stakeholders' engagement strategy and the definition of a set of KPIs for different activities (also integrated into the first Periodic Report, M14). Another driver that provided impetus to the dissemination and exploitation actions was the specification of a detailed LAMBDA Action Plan for 2019 and 2020, see https://project-lambda.org/Action-Plan-2019 and https://project-lambda.org/Action-Plan-2020 .

Due to COVID-19, dissemination activities in the period from April 2020 to June 2020 were organized online.