



RDA EU Data Innovation Forum, 30 January 2018, Brussels, Belgium

Report

Web: <https://www.rd-alliance.org/rdaeue-data-innov-forum-2018>

The European Data Economy can flourish only if data is accessible & re-usable across borders, across types of organisations (private, public, research) and across different disciplines and sectors.

The RDA Data Innovation Forum was held in Brussels, Belgium, on January 30th 2018, bringing together a diverse audience composed of researchers, private sector and policy representatives, and collaborative initiatives. The overarching goal of the meeting was to discuss challenges related to boosting the European Data Economy and the RDA contribution to its building blocks, to collect and converge the different perspectives and push forward new innovative ideas in the overall context of the opportunities brought forward by the European Data Economy and data-driven innovation in Europe.

Ultimately the forum was focused on engaging industry and private sector stakeholders who are involved in data research, supporting the adoption of the RDA Outputs by industry while gathering input on related activities in Europe – understanding the landscape and rising important questions and topics to be addressed under the umbrella of the RDA Working and Interest groups.

The event has also served as a lead-up exercise prior to the RDA 11th Plenary Meeting held in Berlin from the 21 to 23 March 2018 and the focused Industry side-meeting scheduled for the 19 -20 March 2018.

AGENDA

09:00 – 10:30	<p>Finding a common ground: Industry, research data and the EU Data Economy</p> <p><i>Discussing challenges for research and industry data in the context of the European Data Economy, common ground and points of convergence.</i></p> <p>Moderator: Irina Kupiainen, CSC - IT Center for Science Ltd. - RDA EU call for action: European Data Economy must focus on interoperability - RDA Europe Statement on the European Data Economy</p> <p>Speakers: Ana Garcia Robles, Secretary General of Big Data Value Association (BDVA): Accelerating data-driven innovation in Europe Maria Elisabeth Rehbinder, Senior Legal Counsel, Vice Chairman of LIBER Working Group on Copyright: EU data economy – what have you done for me lately? Paolo Budroni, University of Vienna: Data Management Policies for SMEs Marta Pont Guixa, Everis: Study on B2B data sharing in Europe, preliminary findings</p>
10:30 – 11:00	<p>Coffee break</p>
11:00 – 12:30	<p>Facilitating data management, sharing & re-use – RDA Technical & social bridges / solutions</p> <p><i>The session will be dedicated to presenting RDA cross-sector research and Industry solutions, implementation and use cases, lessons learnt.</i></p> <p>Moderator: Raphael Ritz, Max Planck Society: Data Foundation & Terminology Recommendation & RDA ICT Technical Specifications</p> <p>Speakers: Andreas Rauber, Vienna University of Technology: Data Citation Recommendation Stefano Nativi, CNR: Brokering governance Recommendation Peter McQuilton, FAIRsharing.org / University of Oxford: FAIRsharing registry</p>
12:30 – 14:00	<p>Lunch break</p>
14:00 – 15:30	<p>Opportunities to shape future data research - blockchain and what is it for and what not</p> <p><i>Panel discussing a selection of topics where research and industry meet and how these can be incorporated in the current or future agenda of the RDA WGs & IGs. The panel will particularly focus on the blockchain technology that has got much attraction recently. How does its technology look like, what are its offers looked at from different views and what are its limitations. The views taken are from the typical data processing labs, future IoT data trading scenarios, health applications, education and AI based data analytics.</i></p> <p>Moderator: Peter Wittenburg, Max Planck Society: Short Introduction of blockchain and its possible role in IoT data trading</p> <p>Speakers: Edwin Morley-Fletcher, Lynkeus: Applying blockchain in Health sector Monique Morrow, Humanized Internet: Providing Self-Verification Capabilities via Blockchain Visa Vallivaara, VTT: Applying blockchain to increase trust in AI Session organised in collaboration with the NGI Consultation platform.</p>
15:30 – 16:00	<p>Coffee break</p>
16:00 – 16:30	<p>Wrap-up & calls to action</p> <p>The Data Management Engagement Award - Marta Teperek, Technical University Delft</p>

Finding a common ground: Industry, research data and the EU Data Economy

“Data is ultimately at core of the European Digital Single Market. It is an over-arching, cross-cutting, fundamental element. Be it research data, industrial data, commercial or public data - the possibilities that it brings us are too large to even predict.

Due to its nature RDA already has a global and cross-disciplinary outreach – it is a grass-roots organization building on the work of volunteers committed to tackle emerging data sharing challenges – it is the perfect place to gather input, increase awareness around key topics and address issues that are critical for both public as well as private sector, academia and industry – a single common ground increasingly critical for the European welfare.”

RDA EU call for action: European Data Economy must focus on interoperability - RDA Europe Statement on the European Data Economy



The **RDA Data Innovation Forum** formally opened with the **[RDA Europe Statement on the European Data Economy](#)**¹ presented by **Irina Kupiainen** (CSC- IT Center for Science / RDA Europe 3 Project partner). The Statement highlights the need to focus on interoperability systematically promoted at all levels: legal, organizational, semantic as well as technical. The Calls for action stress the need for all parallel initiatives under the Digital Single market to be developed coherently leveraging on the existing work and achievements. The RDA Recommendations and Outputs, and the RDA ICT Technical Specifications are concrete examples of this, together with RDA itself

as the neutral, problem solving platform that through its Working and Interest Groups enables data interoperability and open data to be shared across technical, domain, organizational and geographical boundaries.

Addressing the multi –faceted challenges raised by the European Data Economy, the Opening session was structured around a panel discussion and statements from Ana Garcia Robles (Secretary General of Big Data Value Association - BDVA), Maria Elisabeth Reh binder (Senior Legal Counsel, Vice Chairman of LIBER WG on Copyright), Paolo Budroni (University of Vienna) and Marta Pont Guixa (Everis).

Ana Garcia Robles , Secretary general of the Big Data Value Association, provided an overview of the BDVA European Big Data Value Strategic Research and Innovation Agenda – a Vision for the Big Data for 2020 covering objectives grouped in 7 key areas: Data; Technology; Societal; Skills; Legal; Business; Applications.

The BDVA Secretary general also outlined set of priorities as statements related to the European Data Economy which the BDVA and its members are committed to, potential common stepping stones for the future collaboration with RDA:

- Experimentation and testing is an essential activity for data driven innovation and to explore the implications of technological innovations as well as new data policies

¹ <https://rd-alliance.org/rda-eu-call-action-european-data-economy-must-focus-interoperability-rda-europe-statement-european>

- Strengthening the interoperable data-driven ecosystem through the creation of European Workforce in Data Standardisation and Interoperability - > minimising barriers between industries and sectors by prioritising a reference architecture or reference model
- Continuous support Data Innovation hubs - accelerating data-driven innovation in trusted environments, raising awareness and engage more actors to overcome initial reluctance to data sharing

The mission of the BDVA is to develop the Innovation ecosystem to enable the data-driven digital transformation in Europe that will deliver the maximum economic and societal benefit, consolidating Europe's position in global landscape of the Big Data Value creation and Artificial Intelligence.

Maria Elisabeth Rehbinder, Senior Legal Counsel, Vice Chairman of LIBER Working Group on Copyright, raised a set of practical questions to understand the benefits of the EU Data Economy for different stakeholders and how these opportunities are approached supporting the advancements of the EU Data Economy through Data Management Planning, the production of FAIR Data and the skills of graduate students for Data Economy. The Vice Chairman of LIBER Working Group has particularly raised a set of burning questions regarding the legislative framework around the Data Economy, how not allowing text and data mining for companies in the DSM directive will have far reaching consequences, not beneficial for sectors of EU economy. And at the same time she addressed the topic of the GDPR, debating how the possibility to limit rights of data subjects, when necessary for scientific research, has to be defined in national legislation. Due to this absence of a legislative framework on the matter she suggested the need for a code of conduct highlighting the potential role RDA can play in the definition and wide adoption of it.



Paolo Budroni, Head of the Library and Archive Services department, University of Vienna, offered on the other hand a comprehensive overview on Data Management Policies for Open Data and the how policies create value across sectors, public and private, by stimulating economic growth and promoting social engagement.

In his talk Paolo Budroni also discussed the importance of creating the legal framework necessary for the alignment of the policies so as to involve all stakeholder groups and cover the entire data value chain thus

empowering SMEs as well as relevant stakeholders in Open Science and the European Data Economy. In this context RDA can act as an incubator for policy development facilitating knowledge exchange and alignment and engaging the private sector and especially SMEs in the policy development process.

Marta Pont Guixa, from Everis, presented the preliminary findings of a study to estimate Business To Business (B2B) sharing and re-use in Europe. The study commissioned by the EC's DG CONNECT covers quantitative estimates on data sharing and reuse between companies inside the EEA , asserting missed business opportunities resulting from the lack of access to relevant data, highlighting obstacles as well as success factors for data sharing between companies.

When discussing the success factors, Marta Pont touched upon key issues previously addressed such as the need for a clear legal framework for data processing and use that would also support building trust and enable partnerships between companies and research organisations with complementary skills to reduce the innovation costs, foster job creation and overall boost the European Data Economy.

Facilitating data management, sharing & re-use – RDA Technical & social bridges / solutions

A key objective of the RDA EU Data Innovation Forum was to shining a spotlight on the RDA Recommendations and Outputs as technical and social bridges and practical solutions facilitating data management. The central session was aimed at presenting the 4 of the RDA flagship outputs, pinpointing the problem addressed, implementation and use cases and lessons learnt.



The session moderator, **Raphael Ritz**, Max Planck Society and RDA Europe 3 Project partner, provided insights into the RDA ICT Technical Specifications, process and benefits followed by a brief account on the first four endorsed RDA recommendations: Data Foundation and Terminology, PID Information Types, Data Type Registries, and Practical Policies.

To follow, **Andreas Rauber**, Vienna University of Technology, presented the RDA Data Citation Recommendation: a solution for the precise identification of data as it existed at a specific point in time, allowing analysts, regardless of their sector, to easily identify the data used. The solution comes with numerous advantages as its principles are applicable to all types of data, it is easy to implement, it reduces data management complexity, increasing traceability of results and building trust.

The Recommendation produced by the RDA WG on Brokering Governance was presented by the **Stefano Nativi**, CNR, who introduced the concept of Heterogeneity as a challenge in the (Big) Data Economy framework especially when it comes to Data Access and Interoperability and Data Aggregation and Harmonization. The solution developed to address the challenge of managing diversity is a Brokering service (Middleware) framework and a hybridized business model to ultimately support and make research data interoperability sustainable.



Addressing on the other hand the issue of the linking information on data and metadata standards, Databases and Data Policies, **Peter McQuilton**, University of Oxford, talked about FAIRsharing.org, the output of the RDA group he is chairing: “A web-based, curated, and searchable portal that monitors the development and evolution of standards, across all disciplines, inter-related to databases/repositories and data policies”. The solution’s main goal is to promote the FAIR approach for data by mapping the landscape and increasing the visibility of standards, repositories /databases and data policies across domains.

In the dedicated panel discussion, the speakers have addressed the issues related to cross sector adoption highlighting time constraints and lack of awareness as the main uptake barriers.

Opportunities to shape future data research - blockchain and what is it for and what not



The closing session, entitled “Opportunities to shape future data research - blockchain and what is it for and what not”, brought together a panel of experts to discuss a selection of topics where research and industry meet and how these topics can be incorporated in the current or future agenda of the RDA WGs & IGs. The panel was particularly focused on the blockchain technology, its potential and limitations.

The session was chaired by **Peter Wittenburg**, Max Planck Society and RDA Europe 3 project director, who introduced the context of RDA, Data in Science, Digital Objects and the Blockchain, raising a set of question to the panel and audience regarding the use of blockchain in a domain where data should be as FAIR and as open as possible, is blockchain the right technology for building trust federation and what are the alternative or complementary solutions.

Edwin Morley-Fletcher, Lynkeus, spoke about the the MyHealthMyData project focused on guaranteeing privacy and security for healthcare data by introducing a distributed architecture based on Blackchain, and how the topic is being addressed under the RDA Health Data Interest Group and the newly formed RDA Blockchain Applications in Health Working Group, answering the questions raised regarding the technology applicability and collaborations under the RDA umbrella.



Monique Morrow, Humanized Internet, raised a series of challenges facing the digital era such as the identification of refugees and stateless persons, or the simple certification of a degree in a university which doesn't exist anymore, as problems where blockchain can potentially solve. Her statement remained an open question on whether Self-Verification capabilities can be provided via Blockchain.

Visa Vallivaara, VTT, also began his presentation asking a crucial question: how can we trust information coming from a machine? Considering also the cybersecurity aspects underlined, Visa argued that blockchain is the enabling technology to build the needed trust going forward, storing secure information about data transaction and facilitating traceability, supporting other key technologies such as Artificial Intelligence (AI) and internet of things (IoT).

The closing session was organised in collaboration with the [NGI Consultation platform](#) . Discussions and outcomes from the Data Innovation Forum, particularly regarding blockchain, IoT and AI, will be streamlined into the Next Generation Internet (NGI) consultation platform for future NGI calls.

RDA Europe – Data Innovation Forum – Calls to action

The event concluded with a set of Calls to action

- ❑ RDA EU Statement on Data Economy - <https://goo.gl/maj77K> - Open for comment and suggestions!
- ❑ Convergence of data related initiatives across the research and private sector – BDVA & RDA collaboration; Join the RDA Industry side –meeting @ RDA 11th Plenary, March 2018, Berlin!
- ❑ Leveraging the work of RDA! It is an open problem-solving platform for the data science and data management communities – It provides recommendations & solutions applicable across sectors - and the support mechanisms for adoption.
- ❑ Call for adoption and implementation of the RDA Recommendations and the RDA ICT Technical Specifications – RDA welcomes feedback on how to make the RDA Recommendations & Outputs FAIRer – Join the dedicated session @ RDA 11th Plenary, March 2018, Berlin!
- ❑ The RDA is a neutral forum that enables data interoperability and open data to be shared across barriers - through focused Working Groups and Interest Groups, formed of experts from around the world –from academia, industry and government – Join & contribute! <https://rd-alliance.org/groups>
- ❑ WG & IG are vehicles to discuss, bring forward new topics & build consensus - addressing social and technical barriers to data sharing – example of blockchain – Join the newly formed RDA Blockchain Applications in Health Working Group @ RDA 11th Plenary, March 2018, Berlin!
- ❑ The RDA Organisational Assembly and RDA Europe Industry Advisory Board welcome contributions and members! Find out more here <https://rd-alliance.org/get-involved/organisational-membership> and <https://rd-alliance.org/groups/rda-europe-industry-advisory-board>