IFED 2020 Workshop Summary: Workshop on Digital Platform Ecosystems: From Interoperability to Federation

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IFED 2020 Online held in conjunction with the I-ESA 2020 conference, Tarbes, France, 18-November-2020, 13:30 - 17:30 CET.

IFED 2020 addresses the current interoperability challenges for digital platform ecosystems and points at a variety of interoperation solutions, e.g. semantic interoperability at the data level (decoding the meaning of data), structural interoperability (decoding the organisation of data), syntactic interoperability (converting data from a serialised representation to an internal data structure). The Workshop also addresses AI methods to leverage interoperation capabilities of federated platforms. The ground platform technologies presented in IFED 2020 include services and tools developed within currently ongoing projects from the H2020 DT-ICT-07-2018-2019 call:

- EFPF: https://www.efpf.org/
- ZDMP: https://www.zdmp.eu/
- Qu4Lity: https://qu4lity-project.eu/

In addition to ongoing projects, IFED 2020 opens discussions on recent interoperability challenges from digital platforms designed and developed through international and national research projects and activities, e.g. the NIMBLE project (https://www.nimble-project.org/).

IFED 2020 includes the presentations of the following 4 research papers:

- Paper 1: "B2B Platform Federation", by Yoav TOCK, Benjamin MANDLER, Suat GÖNÜL, Doğukan ÇAVDAROĞLU, Nir NAAMAN and Nir ROZENBAUM
- Paper 2: "A new data model for logistics in furniture collaborations", by María José Núñez, Juan Del Agua, Fernando Gigante, Suat Gönül, Doğukan Çavdaroğlu
- Paper 3: "Digital Manufacturing Cluster Evaluation Methodology", by Elsa Marcelino-Jesus, Artem Nazarenko, João Sarraipa, Joao Martins and Ricardo Jardim-Goncalves
- Paper 4: "Federated Search", by Dileepa JAYAKODY, Nirojan SELVANATHAN, Violeta DAMJANOVIC-BEHRENDT

Apart from the research papers, the Workshop included an open session to discuss current pros and cons of digital platforms for smart manufacturing and possible future directions. Wernher Behrendt (SRFG, Austria) referred the audience to an article published by the European Commission, at the time of IFED 2020 organisation. The article "New digital platform transforms supply chains into custom B2B online marketplaces" refers to the results of the NIMBLE project and emphasizes its open source technology stack for business-to-business (B2B) supply-chain platforms. María José Núñez (AIDIMME, Spain) informed the audience about the company's recent experience in using one of the cloud instances of the NIMBLE platform in the furniture manufacturing in Spain. AIDIMME's NIMBLE cloud instance is customized as a furniture manufacturing B2B online marketplace, which at the time of IFED 2020 included more then 300 companies, 190 product catalogues and over 1300 products and services (see Figure in the attachment).

The workshop ended with the information on the EFPF Open Call that offers European companies an opportunity to collaborate with manufacturing companies in diverse domains such as aerospace, furniture and smart waste management and an opportunity to access new sales channel through the EFPF Marketplace.