First International Workshop on Scaling Knowledge Graphs for Industry: Summary

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Abstract

This is a summary of the First International Workshop on Scaling Knowledge Graphs for Industry co-located with the 20th International Conference on Semantic Systems (SEMANTICS)

Summary

Knowledge Graphs have been used in industrial settings for many years – for data integration or/and storage, democratization of data-access, easy data-exchange, information retrieval tasks, etc. However, we identify the lack of scalable solutions as the main blocker for uptake in more use cases.

The goal of the workshop is to foster discussion on making knowledge graph systems work at industrial scale. We explicitly do not limit this discussion to how much data we can store and query (this is already pretty much working), but we would also like to address other scalability aspects such as knowledge modelling (scaling the design of KGs or ontologies), processing, streaming, and ingestion of large amounts of information into a knowledge graph systems.

We invited to join our workshop a wide audience of Knowledge Graph practitioners and researchers who would like to discuss what is the state of the art with KG adoption, what hampers it, what industries are more natural for KGs and why, and what we can do to further promote the scaling of KGs in industry.

The workshop has been co-organised by GraphMassiviser (GA 101093202) and enRichMyData (GA 101093202) EU projects since the scalability is in the heart of them: the latter looks into the scalable data annotation pipelines and the former into scalable processing of massive data.

The workshop took one day and its program consisted of 4 parts: talks of accepted papers and invited talks, a keynote, a panel and a presentation from two European projects GraphMassiviser and enRichMyData. The speakers were from all around the world: Europe, USA, Australia. The keynote talk was given by Felix Sasaki, Chief Expert for KG and Semantic Technology at SAP, who elaborated on Knowledge Graphs for Business AI. The panel consisted of several industry representatives including Alon Halevy from Amazon, Thomas Kaminski from Metaphacts and Felix Sasaki from SAP and it was moderated by co-organizers Evgeny Kharlamov and Michael Cochez. The talks were given by representatives from academic and industrial institutions including Triples, Bosch Center for AI, Deloitte, Ontotext, University of Klagenfurt.

The main take away message is that the topic of scalability is under a strong spot light, we are in the times where the new technology enables scaling Knowledge Graphs to industry needs while technological barriers still in place. The workshop was a success and we are looking forward for the second edition of it.

The website of the workshop is: https://sites.google.com/view/skgi

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