Seminar of KAU Data Science Research Center,
Institute of Mathematics,
May, 22, room 208, the beginning of the seminar 17:00

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Talk: Data Markets and Data Economics.

Abstract

Emerging data driven technologies and economy facilitate interest to making data a new economic value (data commoditisation) and consequently identification of the new properties of data as economic goods. Creating consistent and workable models for data exchange and commoditisation is critical to facilitating research data usage, creation of new value added data driven services bringing additional resources to research organisations. Consistent data pricing and data markets models are equally important for government funded and sponsored research, open data and governmental data. A number of examples from industry demonstrate practical interest to facilitate and obtain value from data exchange, interoperability, and adopting common architectures for data markets.

(Open) Data Markets (ODM) can be considered as an important enabling technology to facilitate data use and exchange for data driven economy. ODM must be based on relevant industry standards and provide secure and trusted data exchange between data market actors: data producers/owners and data consumers services and applications developers and operators. In fact, ODM operational model may benefits from the experience of well established commodity markets and big data companies' operational models. Functional data market model should include multiple aspects: definition of data as economic goods, data market architecture including data market infrastructure and functional components, data market operational model and regulatory basis.

This seminar will present the ongoing research to define data markets architecture and infrastructure components to enable secure and trusted data exchange and support data value creation. The recently published paper [1] introduced the STREAM data properties (Sovereign, Trusted, Reusable, Exchangeable, Actionable, Measurable) as economic goods that will help in defining ODM architecture and operational model, and acilitate creating the data monetisation model.

[1] Yuri Demchenko, Wouter Los, Cees de Laat, Data as Economic Goods: Definitions, Properties, Challenges, Enabling Technologies for Future Data Markets, ITU Journal: ICT Discoveries, Special Issue 2 "Data for Goods", November 2018