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The National Interoperability Platform – Coming Soon!

Over the years, there has been much effort in public administration to define best practices and guidelines for interoperability and information architecture. Traditionally data models have been designed to support institutions in implementing a data warehouse where data can be any functional data. Architecture based on traditional databases which have their own data models require lot of harmonisation and high cost expert labor work to move the data from one information system to another. Almost needless to say, implementations lack of shared semantics.

It is stated in the Prime Minister Juha Sipilä's Government Action Plan that public services will be designed to be user-responsive and primarily digital. Services being digital means that information should flow more flexibly in public administration and between national databases and in overall information should be requested only once and then been used for all applications.[i] To achieve this, some fresh ideas about information management are needed. Currently more focus is needed in support for adaptable data modelling and invocation of linked data practices, and on development of interfaces and data transfers between information systems. More focus is needed to support terminological work to create reusable resources to support both machine and human-readable communication and to describe exactly and context specific data content. The more we rely on digitalisation in our transaction and businesses, the more we need to ensure that machine to machine communication can take place at high speed. And that we still understand the data flowing in these transactions.

The new approach to data management and interoperability described in this abstract and presentation attached to it was first introduced in the field of Finnish higher education and research.[ii] This common information framework and basic infrastructure for information management is built by combining terminological theory, linked data and adaptable data modelling practices. Semantic technologies and linked data are used to describe machine-readable terminology, core vocabularies and application profiles.[iii] It also offers a new way to create and maintain linkages to relevant existing international work and resources, e.g. in public administration e-Government Core Vocabularies.[iv]

Actions in semantic interoperability and information management are complemented by a matching tool. The aim is to create "one-shop stop" for openly published vocabularies and terminologies, logical data models and reference data and by using persistent identifiers allow formal linkages between them. This National Interoperability Platform is developed as open source software and as a modular implementation which enables further development, as linkages e.g. to existing code services. In the future, the content of these semantic resources will be jointly produced by experts associated to each subject area. Semantically coherent data models help manage information exchange operation as well as database and software development. Centralised terminological database will help not only professionals in terminological work but also data

modelers and, what is important, citizens and users of public services to communicate with public administration. The first version of the platform is due to be published in January 2018. Objectives described in this abstract and presentation are to be strengthen in a new Information Management Act which is due to enter into force on 1 January 2019.

Descriptive vocabularies used in indexing help us to find data. There is good understanding about the maintained (base) registries in public administration in Finland. Systematically drawn terminologies help us to define exact and context specific data content. Linked data models, combined with the terminologies, help us to build data flows and API economy needed for smart digital public services. Collaborative tool help us to promote cross-domain cooperation. Digital humanism – we are building the relationship between the humanities and the digital also in public administration.

References

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[iii] Alonen, M., Remes, S. 2016, Interoperability Workbench -- Collaborative Tool for Publishing Core Vocabularies and Application Profiles. http://dcevents.dublincore.org/IntConf/dc-2016/paper/view/418

[iv] SEMIC – Core Vocabularies. https://joinup.ec.europa.eu/page/core-vocabularies

About the Writer

Suvi Remes is working as Senior Adviser at the Ministry of Finance, Finland. She leads as Project Manager one of the Government Key Projects which main objectives are to ensure that in the future information in public administration is requested only once and then used for all applications and that citizens' right to access their own information is reinforced while smooth information flows for official use are assured.

For more information, please visit: http://vm.fi/yhteinen-tiedon-hallinta

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