

# H2020 - Towards a Linked Data driven economy for Europe

#### **Position statements**

SEMANTiCS2014 is a venue, where different communities meet. These communities include business and research, and also different horizontals and verticals. Thus, SEMANTiCS has a huge potential in shaping the European research and innovation with regard to applying different technologies (semantic, data, language, and others) for solving real world problems.

We would like to take this opportunity and create a venue at the conference - a session that may have an impact on our fields in the future. The session will sketch directions we are targeting and link parties working on complementary topics or searching for solutions of problems.

We will go beyond a typical H2020 matchmaking session. The voice of the community will be heard. As Linked Data technology has matured and has proven its effectiveness in some areas, we - as a community - should discuss what strategies there are to drive the Linked Data economy to a boom in Europe.

In this 60-minute session, we will listen to Linked Data leaders and experts from the community about the potentials and current shortcomings of Linked Data as well as their individual opinion about the direction Horizon 2020 should go to provide effective support for Linked Data adoption by businesses.

Notes: <a href="http://bit.ly/WhwBDs">http://bit.ly/WhwBDs</a> (on Google Doc)

#### 1 Linked Data Roadmap (20 minutes)

#### 1.1 Phil Archer, W3C Data Activity Lead

#### 1.2 Sören Auer, former head of AKSW and now Uni Bonn & Fraunhofer IAIS

#### 1.3 Jose Leomar Todesco, jose.todesco@ufsc.br

Federal University of Santa Catarina, www.ufsc.br

We believe that LOD will provide a lot of opportunities not only for European community but for other countries, mainly the knowledge society.

### 1.4 Kjetil Kjernsmo, kjetil@kjernsmo.net (not present at the session, replaced by Tatiana Gornostay)

University of Oslo, <a href="http://folk.uio.no/kjekje/">http://folk.uio.no/kjekje/</a>

When I established the SWEO Community Projects in 2006, it was partly in response to a call for "things that are genuinely useful and that can be done right now". The LOD project was one of the entrants to the competition, but it didn't win, and I think some of the criticism voiced is still valid.

This community needs to be much more agile in responding to developer problems. E.g., the NEPOMUK project was highly successful, as it did get much code onto many desktops, yet, now, much of this code is being removed, as it didn't help developers solve their problems in the longer term.

These problems show up every now and then, but in the course of a long-term project, there is no room for the community to respond to them. This is, in my opinion, a fatal shortcoming that must be addressed.

# 2 Academia OR Business vs. Academia AND Business: Shall we put more stress on business or keep balance? (15 minutes)

#### 2.1 Timm Heuss, Timm.Heuss@web.de

University of Plymouth / University of Applied Science Darmstadt

We are living in the golden age of data. Within the context of the Linked -, and Open Data visions, dedicated data portals emerged, hosting thousands of all kinds of datasets. And thanks to the network effect, catalyst of the Web, these datasets multiply to millions of semantic apps. But wait - where are those apps?

Actually, the number of datasets exceeds the number of apps by orders of magnitude. Because apps don't magically appear, just because there is data. In order to deliver the advantages of semantic data to end users, more steps must be taken than current paradigms cover. Data integration must be part of the vision, to produce actually usable, fast and semantic apps. It's pragmatic. And it includes: leaving the realm of the sheer LOD technology stack.

#### 2.2 Erwin Folmer, erwin.folmer@tno.nl

TNO, www.tno.nl

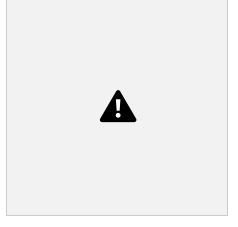
We need more industry and government applications of Linked Data. High value implementations that have impact: they change significantly the business. For that we need to expand the network of linked data expertise, and not being dependent on a small group of brilliant researchers; The goal should be that "normal" ICT specialists/architects/developers are familiar with Linked Data. Bringing the Linked Data knowledge to the "Applied" community. This can be done by for instance supporting open innovation networks such as the existing Platform Linked Data Netherlands; their events attracts 200 people, mainly IT people (not core linked data specialist) that are experimenting with linked data, but also business and government people interested in applications.

## 3 What kind of business cases? What about business models? "Would you pay for data or service?" (20 minutes)

Linked Data approach,

#### 3.1 Dimitar Trajanov, dimitar.trajanov@finki.ukim.mk

ss. Cyril and Methodius University - Skopje, www.funki.ukim.mk



management issues. By using the same approaches used in transforming the Web-of-Documents into a Web-of-Data, we can make document and data management rather simple. One comprehensive solution could make available additional data and actions related to a document, present the user with document details from the enterprise systems while he / she is editing it, identify local and global entities mentioned throughout the document, create new documents from templates, manage

document versions and update parts of the document, easy

Corporations, with their vast amount of documents, are faced with the same data management challenges the Web 2.0 has been facing for the past decade. By taking the Semantic Web and

they can overcome their data

access to related documents, etc

#### 3.2 Tatiana Gornostay, tatiana.gornostay@tilde.lv

Tilde



The two worlds – language and knowledge or linguistics and semantics – with their mature technologies have reached the level, on which they are ready to address challenges of digital content management. A huge share of digital content is created by businesses. A business needs a strong strategy to manage its content. This is important on all steps of digital content life cycle. An interdisciplinary approach is needed. We call for collaboration semantics to explore ideas of how businesses can benefit from our interdisciplinary collaboration. Terminology can help semantics to disambiguate a linguistic unit in a definite context. Translation can help semantics to represent a piece of knowledge in different languages, thus, supporting multilingual and

cross-language digital content management.

### 3.3 Prof. Dr. Adrian Paschke, paschke@inf.fu-berlin.de (not present, replaced by Tatiana Gornostay)

Freie Universität Berlin, http://www.mi.fu-berlin.de/en/inf/groups/ag-csw/



Semantic Complex Event Processing - Detection, prediction and mastery of complex situations are crucial to the competitiveness of networked businesses and the efficiency of dynamic distributed enterprise infrastructures in manifold domains. The combination of background knowledge (linked data), complex event processing (CEP) and Web reasoning is an enabling technology to extract actionable, situated knowledge from large amounts of events in real-time. This real-time behavior is considered as one of the main prerequisites for many highly relevant technology trends such as real-time business intelligence or adaptive event-based systems. CEP is now one of the fastest growing segments in enterprise middleware

software, with products provided by major software vendors around the world.

#### 3.4 Panos Alexopoulos, palexopoulos@isoco.com

iSOCO S.A., http://www.isoco.com



As a company applying Linked Data (LD) technologies in enterprise scenarios, we view the latter's value less and less on storing and providing access to large amounts of data and more in aggregating, transforming, and enriching heterogeneous data to support knowledge-intensive business activities (market intelligence, decision support etc.). To achieve such value, we need systematic approaches, methodologies and tools for effective Linked Data application development.

Also, for LD to be a valuable source of (re)-usable knowledge for enterprise scenarios, a better supply-demand balance needs to be achieved, i.e., the LD produced should strive to actually cover concrete business needs. Technologies that help businesses identify and get the LD that best serves their goals are also crucial.

#### 4 Going open (source)? (5 minutes)

#### 4.1 Andrea Volpini, andrea@insideout.io

Insideout10, www.insideout.io



As this sector evolves from academia to industry being able to innovate and create concrete business value is about establishing tight collaborations between parties (companies, universities, tool makers, ...).

Semantic web technologies while being mature enough from the technology point of view are still distant from mainstream developers' communities.

We believe open sourcing is key for creating momentum and engage with communities outside the existing magic circle of experts and technologists we all know.

#### 4.2 Jose Leomar Todesco, tite@stela.org.br

Stela Institut, www.stela.org.br

Non-profit organization that works with government open data that must contribute with govern transparency.