

Sharing Ideas for Complex Problems in User Interaction: SWUI 2009 at ISWC

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This workshop is the sixth in the Semantic Web User Interaction (SWUI) series. SWUI workshop information can be found on the Web at:
<http://swui.webscience.org/>.

Workshop Theme

This workshop gathers researchers and problem owners from a range of disciplines, both inside and outside the Semantic Web space, to explore key aspects of the user experience in complex, very heterogeneous data environments.

Use of Semantic Web protocols and technologies are increasing rapidly in government and business, so they are affecting an ever-widening user population on the web. Increasingly, web and data management tools are embedding RDF and linked data capabilities into their architectures, and projects are overlaying standards-based ontologies to supplement older proprietary vocabularies. However, two key questions remain:

- What are the most effective ways to harness these capabilities to support high quality user interaction by researchers and the public?
- To achieve successful interaction with archival data, how do we support archivists and records managers in the creation and maintenance of rich, linked, semantically-enabled data?

The cry "free your data" is being picked up everywhere. In particular is the move by some governments to open the data floodgates with large, new, and regularly updating data sets. Outside government, when an organization decides to share its data, a large quantity often becomes available at once, rather than trickling out to be consumed over time. So what happens as all that data and metadata hits the linked data web? What tools do we have to cope with it? How do we:

- Understand what's there
- Pull different sources together and make sense of it
- Sift it and sort it
- Make it legible, browsable, searchable, and usable by the public
- Enable new connections, refinements, and elaborations by non-technical users

If our goal is for anyone who can read a web page, a phone book or a data table to be able to work with linked data, then we are *not* ready for the supply (available data) or demand (desire for access/interaction). "Scaling up" is a problem, and great UIs haven't had to cope with vast arrays of widely differing data. Designs to date have worked best when the data is limited, highly structured and fairly constrained in scope. Are we using buckets to deal with a firehose-sized challenge?

Example Use Case for Discussion: Archival Information on the Web

This domain provides a rich opportunity for Semantic Web and linked data researchers, practitioners, and software developers to explore. From the public/researcher user perspective, it offers highly heterogeneous data sources, a wide mix of structured and unstructured data, diverse user populations and goals, requirements for a range of query/search/retrieval strategies, and unique needs for visualizing/rendering both results and individual objects. From the archivist/records manager perspective, it offers an increasing tidal wave of data in a wide range of formats that needs to be reviewed, processed, described, tagged, cataloged, shared, and enhanced over time – in an environment where users expect more and more while the available staff may remain static or even decrease.

Why is archival information an important topic for the Semantic Web community? Ultimately, it is a highly multi-dimensional, contextual, authoritative, and evolving problem space with an extremely diverse set of user needs and expectations, that at the same time has to provide a service today and plan for service tens or even hundreds of years hence. That sounds like the kind of complex environment where the rich potential of linked data and the power of the Semantic Web can play a key role!

The full use case can be read at:

<http://swui.webscience.org/SWUI2009/archival-casestudy/>

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