

Big Picture

- Intl. Information Infrastructure
- → World Wide Web
- → Giant Global Graph
 - Sir Tim Berners-Lee (2007)
 - http://dig.csail.mit.edu/breadcrumbs/node/215
- GGG
 - ~ Semantic Web
 - W3C
 - And Social Web/Network?
 - Sociological term: Social Media





Semantic Web

- Methods and technologies to allow machines to understand the meaning of information on the Web.
 - Questionable feasibility of W3C approach (addresed by microformats)
- Common framework that allows data to be shared and reused across applications.
 - Documents such as HTML page are readable by humans. Data are readable by machines.
- Autonomous agents, metadata, relations
 - smarter than common web browsers or thermostat ;-)
- □ RDF, ontologies, SPARQL, reasoning, ...
- Where are the people? And social interaction & dynamics?

Real World Examples

- DBpedia
 - A community effort to extract structured information from Wikipedia.
 - One of Linked Open Data's datasets
- Friend of a Friend
 - FooF describe persons, their activities and their relations to other people and objects.



Web as a Kind of Social Media

- Media = channel or tool to deliver data ~ interaction.
 - One-to-one, one-to-many (mass media), many-to-many
- User-generated content
 - Consumer generated media
 - Prosumer (A. Toffler, 1980, M. McLuhan 1972)
 - E.g. player generated content (common in RPG)
 - Value given by not so many to many
 - Participation inequality (aka 90–9–1 rule),
 - e.g. Wikipedia: 99.8-0.2-0.003
 - J. Nielsen: http://www.useit.com/alertbox/participation_inequality.html
- Social Networks (online community)
 - Membership Lifecycle (Amy Jo Kim, 2000)

Papers & Notable Contributions

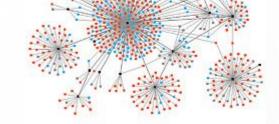
- □ Information Retrieval: Access Rights in Enterprise Full-text Search
 - Kasprzak, J. Brandejs, M. Čuhel, M. Obšívač, T. In ICEIS 2010: Proceedings of the 12th International Conference on Enterprise Information Systems, Volume 1: Databases and Information Systems Integration. 2010. vyd. Funchal, Portugal: INSTICC Institute for Systems and Technologies of Information, Control and Communication, 2010. od s. 32-39, 8 s. ISBN 978-989-8425-04-1.
 - So-called virtual tokens are suitable for social metadata
- Data mining & e-learning
 - ECEL 2010, Porto: Towards text mining in technology-enhanced learning
 - CELDA 2009, Rome: Advantages of Versatile E-learning Tools
- Absolventská síť MU (software)
- Wikinomics Forum 2010 conference organizer

Thesis proposal

- Social software and user attributes/metrics identification
 - Identity, Reputation, Presence, Relationships, Groups, Conversations, Sharing, ...
 - Engagement (Participation Inequality), Retention, ...
 - Critical Mass (Tipping Point), Network Effect and other sociodynamics terms
 - Roots of Net'sm Web's ad GGG's success (!?)
- Described by informatics terms
 - Mainly from graph theory: node centrality, topology, bridge, reach, ...
- Data Warehouse and framework for Data Mining & Social Network Analysis
 - How to store and evaluate metrics we are in need for aforementioned?
 - (?) Reporting and Visualization (simmilar to Google Analytics)
 - Data which hep us to understand what is happening "at the bottom" of MU.

Big Picture | Semantic Web | Social Web | My Work

T. O.



- □ Let's network. :-)
 - http://cz.linkedin.com/in/obsivac
 - https://is.muni.cz/osoba/obsivac
 - http://twitter.com/obsivac
 - ...
 - Wikinomics Forum 2011, UISK FF UK (?)
 - wikinomie.cz

How web influenced society?

- Knowledge sharing
- Crowdsourcing (J. Howe, Wired Mag, 2006)
 - Outsourcing tasks to community
 - The Wisdom of Crowds (J. Surowiecki, 2004)
- □ Network society (M. Castells, since 1996)
 - Step further from information (aka postindustrial) society
- Attention Economy, Economy of Free, Link Economy, Wikinomics