



Role of Social Media and Semantic WEB in Libraries

By

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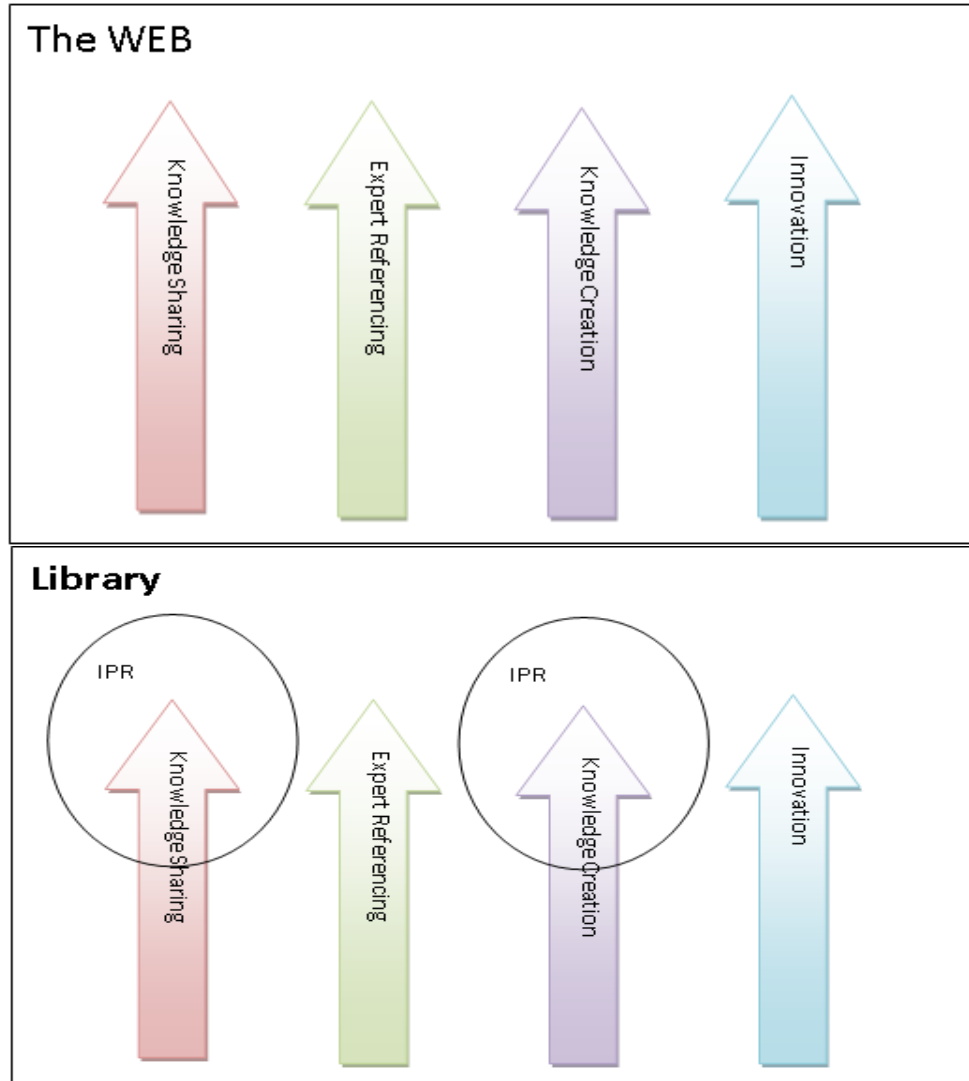


Layout Plan

- Where Library streams merge the WEB
- Recent Evolution of the WEB
- Social WEB
- Semantic WEB
- Innovations in the Library Science
- Future Libraries
- Current State--LOC
- Looking Forward--EOL



Where Streams Merge



Recent Evolution of WEB--Social Media



The World Wide Web

- 1990 –to- 1992 Tim Berners Lee & Robert Cailliau
 - A Read Only Web
 - TCP/IP
- 1993- CERN – WWW free to everyone
- 1993- Mosaic web Browser
- 1994- WWW Consortium (W3C)



From Dot-Com to Web 2.0

- Dot-Com
 - Business oriented
 - Venture Capitals
 - Read only
- 2000-2001---Bubble Burst
- 2004---Defining new WEB



Web 2.0 Frame Work vs Technologies



- Frame Work
 - Open Access
 - A rich user experience
 - User as a contributor
 - Long tail
 - Basic trust
 - Dissemination
- Technologies
 - XML & AJAX
 - Open APIs
 - Pull vs Push
 - --AND–
 - Folksonomy
 - Wikis
 - Blogs
 - RSS etc.

Social Media



Social Web & Web 2.0

- Web 2.0 started around User Generated Content
- Users Started Linking together weaving the new Web called Social Web
- Social Web Dominated Web 2.0
- Success of Facebook a milestone
- Twitter combined both the worlds



Where is it Going?

- Twitter ----Google Scholar----3,340,000
 - Since 2012-----50,000
- Facebook--- Google Scholar----3,070,000
 - Since 2012----- 50,000
- Social Networks-- Google Scholar--2,830,000
 - Since 2012----- 50,000
- Delicious ----Google Scholar----1,360,000
- LinkedIn ----Google Scholar----393,000



What will be 3rd Generation of Web?

- Web of Data
 - Semantic web
 - Socio- Semantic Web
 - ****L inked Open Data LOD
- Web of Things
- Web 3.0 ?

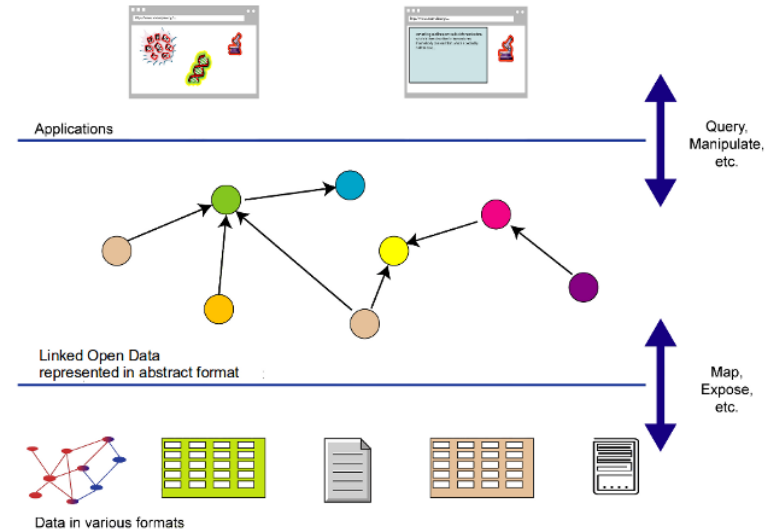
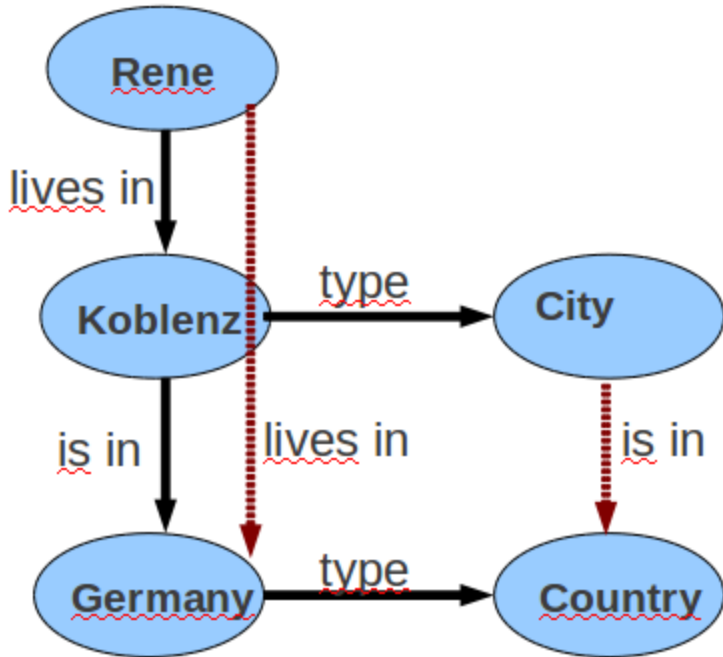


Linked Open Data-- LOD

- *Tim Berners Lee defines the Semantic Web as "a web of data that can be processed directly and indirectly by machines."*
- Basic Data Model
 - URI and
 - RDF triples

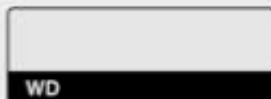


LOD Data Consumption

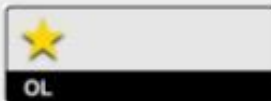


5 Stars of Data

Open data: 5 stars (Tim Berners-Lee)



Data: no stars



Open Data: 1 star - Open Licence



Open Data: 2 stars - Reusable



Open Data: 3 stars - Open Format



Linked Open Data: 4 stars - URI's



Linked Open Data: 5 stars - Linked Data

LOD in Libraries

- Dublin Core –Metadata
- FOAF – People
- SKOS for Thesaurus, subjects

FRBR

Functional Requirements for Bibliographic Records

Defined in relation to *tasks performed by users*
when *searching* and making use of national
bibliographies and *library catalogues*

Rush to LOD

- *BIBO The bibliographic ontology website*
- *WorldCat soon to be on LOD*
- **SKOS Simple Knowledge Organization System**

LODLAM

Linked Open Data in Libraries Archives and Museums



Problems / Challenges

- No Common Identifiers
- No Central Work
- String Matching
- Copyright
- Slow Innovation
 - Old Business Models



Innovations Needed in

- Communication
- Data Models
- Digital Repositories
- Relationship Discovery
- Online Higher Education
- Information Technologies ---information and access to social media and networks anytime/anywhere
- Mobile Environments
- Licensing options and models for library lending of e-books
- Scholarly Communication----New scholarly communication and publishing models are developing at an ever-faster pace, requiring libraries to be actively involved or be left behind



Future Libraries will Act As

- Information Gateway
- Reference Desk
- Content Creation
- Content Market Place
- Knowledge Bases
- Learning Environment



Future Library will have

- Social Media Tools and Social Networks around
 - Brand Rooms
 - Art studios
 - Imagination rooms
 - Cultural Halls
 - Publishing
- Online Library Learning Environments :
concepts and tools



Information Market Place– Long Tail

- Content Based Market Place
- Business Models –Open Access -- LongTail
- Publish
- Build
- Connect



Current State of Affairs

- Library of Congress USA offer Services for
 - Kids, Families
 - Librarians
 - Publishers
 - Researchers
 - Teachers
 - Visitors
- Pew International Study
 - 94% parents of minors in favor of libraries
 - Only 34% of students



Looking Forward



Looking Forward: Encyclopedia Of Life (EOL)



- E.O. Wilson
- EOL aims to be a global resource for information regarding all life on earth
- Meshed up all available authentic knowledge about life types from books, Web Pages, Author and Expert Pages, students and researchers using semantic technologies so that it remains current
- Provides a Publishing Environment
- Provides an interactive learning environment
- Three principles
 - Aggregation
 - Authentication &
 - Atomization
- Developing Mobile devices for instant discovery and confirmation from EOL databases



Thanks



Questions and Feedback

