

## **New Library Service Models for Scientific Knowledge: The Multiple Knowledge Junction**

**Daniela Canali, Augusta Maria Paci**

*Italian National Research Council (CNR)*

*Via dei Taurini, 19 – 00185 Roma*

[daniela.canali@tin.it](mailto:daniela.canali@tin.it)E-mail – [paci@isrds.rm.cnr.it](mailto:paci@isrds.rm.cnr.it)

### **Abstract**

The pre-existent repository models (webopac and bibliographic databases) are no longer sufficient to represent the complexities of the scientific knowledge organization while the growing size of Internet websites constitute an inappropriate environment for systematic information access.

New knowledge models must provide a new unitary system which inherits consolidated characteristics, therefore they have a legacy as regards the traditional structures, but open to and able to foresight the digital environment growth.

The need for studying of a new model for a the library service within a learning organization is determined by the change of the information chain paradigm into a value chain paradigm, replacing the consolidated one way dissemination route (from author, publishers, libraries, brokers, users) into a systematic and amplified knowledge filtering role to provide systematic and time persistent access to a generalized availability of digital materials in a complete changed information user environment (the webworld).

### **Main text**

The pre-existent repository models (web opac and bibliographic databases) are no longer sufficient to represent the complexities of the scientific knowledge organization while the growing size of Internet websites constitute an inappropriate environment for systematic information access.

New knowledge models must provide a new unitary system which inherits consolidated characteristics, therefore they have a legacy as regards the traditional structures, but open to and able to foresight the digital environment growth.

The study of these new models is not yet advanced although the main components are considered in the literature and may be represented by the following topics

- information pulling modalities combining and qualification elements (Dublin Core) with value adding in-depth elements embedded in RDF schemas
- new information pushing architectures: the users cannot solve own cognitive needs in a complex descriptive environment based on keyword searching and Boolean logic
- new organizations digital information environment (especially the learning organizations) where the role of the library service (de-centralized or centralized) needs an entire revision to encompass digital document heterogeneity, knowledge adding treatment, technical codification, administrative matters, distribution rights, consultation virtual spaces and paths, virtual desk reference, virtual alerting and selective dissemination, customer care relationship and satisfaction control techniques.

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author, publishers, libraries, brokers, users) into a systematic and amplified knowledge filtering role to provide systematic and time persistent access to a generalized availability of digital materials in a complete changed information user environment (the webworld).

The technological model must be considered a platform that represents the Information offer environment responding to information and knowledge needs as well as represents the information user environment.

The Information Environment is the information assets that provide the value for the Library existence, the Information User environment is what may provide the concrete return of investment of human resources applied to the creation of catalogues and bibliographic refereeing.

The Information User Environment represents a new virtual space where for instances sources and materials are related according to ontologies instead of classifications, alerted as pre-viewed documents to individuals and departments according to “user profiles”, exhibiting the role of the multiple knowledge junction to information nodes and web resources.

Above the Information technologies, the new paradigm of the “knowledge value chain” offers the new foundations for a concrete approach to innovative library services models in digital networked institutions and learning organization.

A prototype example of a library service application approaching the new paradigm and managing webopac and new services is under development making use of consolidated technologies.

## References

[1] Johann van Reenen, “Working in a digital world; new leadership practices for the development of a digital library workforce”, available at <http://www.ibict.br/cionline/300301/3031101.pdf>

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