

## Metadata in an Ecosystem of Presentation Dissemination

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Developing and managing local practices about metadata implementation (desired quality, workflow, support tools, guidelines, and vocabularies) and about metadata exposure (supported standards, and pre-exposure transformations) requires an ability to understand and communicate the specific complex settings in which the metadata, resources, and users exist. Developing such an understanding is often informed by an implicit or explicit conceptual model.

Ecology is the study of complex natural systems, with the aim of understanding and modeling the processes and interactions between the participants in the system and their environment. The concept is also widely used as a metaphor to describe complex systems within their settings. The Repositories Research Team (which supports repository development work in UK HE) has been examining the use of ecology as a metaphor to support the understanding and representation of interactions between repositories, dependent services, and their users. These interactions whether technical, political, or cultural have a direct impact on the metadata in each repository.

Where many other approaches to modeling facilitate an abstract view of a single type of interaction; the ecologically influenced approach seeks to support communication of the combined influences of a repository's technical and cultural setting, however specific and chaotic (or messy) it may be. The idea that ecology is a suitable metaphor for the interaction of users and technologies has been considered by Davenport (1997), by Nardi and O'Day (2000), in strand of projects funded by the European Union (see Nachira et al., 2007), and by Robertson et al. (2008).

This poster presents an ecologically influenced view of a researcher seeking to disseminate and store their presentations. The interactions and resources that will be considered, as they influence the metadata, include the storage of the presentation in formal and informal services (a repository, SlideShare), different versions of the intellectual content (blog post, slides, paper), different formats (PowerPoint, PDF). Environmental factors, which affect the metadata, that will be considered include influences on the researcher (e.g. availability of web 2.0 tools, the link between career progression and publication of research, a commitment to sharing resources, and institutional policies) and influences on the institutional policies (such as IPR concerns about the use of third party material or the loss of university ownership of intellectual outputs or branding).

### References

- Davenport, Thomas H. (1997). *Information ecology: Mastering the information and knowledge environment*. Oxford: Oxford University Press.
- Nachira, Francesco, Andrea Nicolai, Paolo Dini, Marion Le Louarn, and Lorena Rivera Leon (Eds.). (2007). *Digital Business Ecosystems*. Brussels: European Commission. Retrieved April 9, 2008, from <http://www.digital-ecosystems.org/book/de-book2007.html>.
- Nardi, Bonnie A., and Vicki L. O'Day. (2000). *Information ecologies: Using technology with heart*. Cambridge, Massachusetts: The MIT Press.
- Robertson, John R., Mahendra Mahey, and Julie Allinson. (2008). *An ecological approach to repository and service interactions*. Retrieved April 9, 2008, from <http://www.ukoln.ac.uk/repositories/digirep/images/a/a5/Introductoryecology.pdf>.