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Natasa Milic-Frayling joined Microsoft Research Cambridge, UK in 1998. She has been setting research directions for the Integrated Systems group. Her interests include design and evaluation of information retrieval systems, machine learning methods for text, user centred design of information management systems, and technologies for cross-platform and context rich communication. Since October 2004, Natasa has headed the Research Partnership Programme that facilitates collaboration between researchers and Microsoft teams in MS Subsidiaries across Europe, Middle East, and Africa (EMEA). Natasa is actively involved with a wider research and academic community. She is publishing at academic conferences, participating in program committees of academic events, and promoting research and innovation through public and academic presentation.

GRL2020 Position Paper

A considerable effort has been put into understanding what transformations libraries need to undertake in order to stay current and provide value to the users. 'Change' is the basic premise. However, in this paper I take the position that Libraries can deliver a great value to research by two current aspects of their work: (1) the curation and (2) bridging disparate disciplines.

Research and scientific discovery are based on large amounts of empirical data, theoretical models, and simulations. Researchers build complex and multifunctional systems to manage the data from the production, ingestion, storage, and curation to the publishing and consumption of data. Such systems exist and evolve over long periods of time, requiring careful considerations of storage, archiving, and preservation.

In order to achieve a long term impact, research organizations and communities require appropriate tools and skills. However, so far they have failed to define clearly the roles and the skill sets. In fact, there seems to be a lack of community wide recognition and appreciation for the scientific data curation function. As a result, there is no established professional path for individuals who wish to engage in scientific data curation and such individuals have varied skill sets.

At the same time, curation has been a well recognized value that Library staff bring to human knowledge. Continuing in that tradition, Libraries can help with establishing *systematic approaches, setting standards, and developing the research curation function*. In collaboration with research organization and communities the Libraries can enable development of personnel with well defined profiles, involving strong competencies in research disciplines and required curation functions.

This, in turn, would result in a natural flow of information and competencies between Libraries and Research and provide wide range of opportunities for career paths. A long term benefit is enhancement and securing of research knowledge through people who do have affinity, training, and knowledge of this.

Research Libraries have a unique position within the framework of scholarly work. By the nature of their work, librarians are enablers of knowledge dissemination. They are well equipped with knowledge and experience to help individuals learn about areas that are new to them. With their assistance scholars can cross the boundaries between disciplines.

However, as research areas progress rapidly, there is often not enough opportunities in one's lifetime to make connections among disciplines and thus produce new and unique values from the disparate areas of knowledge. Some specialists may connect with one or more other research areas but that is often left to an individual affinity and fortuitous circumstances. Libraries can change that.

Building on the previous idea of strong research curation function, I envision Research Libraries as power houses comprising individuals with in-depth understanding of specific research areas and capable of establishing connections across disciplines. Focused on the mission to build bridges, they can make concerted efforts to develop cross disciplinary programmes and identify synergies. They can drive scholarly engagements by organizing events and debates and facilitating the process of cross-pollination of ideas. Research Libraries can be the catalysts for distilling, synthesizing and disseminating research knowledge.

Recommendations

I suggest widening the focus of Research Libraries from services to active participation and leadership, enabling the research curation function and facilitating cross-disciplinary knowledge development.

Roles:

- Establish a professional profile and develop competencies of research curators
- Develop an active ecosystem to enable variety of career paths across Research and Libraries
- Leverage new roles and competencies to build programmes for cross-disciplinary research
- Enable and drive the cross-pollination of ideas across research communities
- Assume advisory function for industry and governments on the value of identified synergies.

Activities:

- Create programmes for educating research curators
- Establish standards, best practices and certification programmes
- Organize conferences, debates, seminars
- Set up cross-disciplinary projects
- Publish, run campaigns.
- Enable match-makers functions for researchers across disciplines.