Challenges by Katy Börner

- Development of test collections.
- Modular data mining tools and visual interfaces.
- IV - DL interoperability protocols.
- Algorithm comparisons a la TREC.
- User Analysis. Usability & usefulness studies.
- Personalization, personal baskets.
- Dissemination of results.
- Acquisition of funding.
IV Effort at Indiana University

Will provide an advanced computing infrastructure for IV/KDV education and research that facilitates sharing of code and (derivative) data & generation of IVs from large scale data sets.
Opportunities

- Unique resource for IV education & research that eases the implementation of new (commercial) applications (which in turn challenge the development and improvement of the algorithms), exploration of new ideas, etc.
- Easier consultation with others working on related topics.
- Improved dissemination of results.
Benefits for Potential User Groups

- **Students**: KDVs can help to gain an overview of a particular knowledge domain, to identify major research areas, experts, institutions, grants, publications, patents, citations, and journals as well as their interconnections, to identify influential papers, to see the influence of certain theories, …

- **Researchers**: KDVs can ease access to research results, relevant funding opportunities, potential collaborators inside and outside the field of inquiry and social network.

- **Industry**: KDV tools can be utilized to gain access to major scientific results, knowledge carriers, etc. Information on needed technologies could be incorporated into KDVs facilitating an industry-pull for certain directions of research.
**Grant agencies/R&D managers:** KDVs can not substitute informed peer evaluation or expert panels. They can be used as a tool to monitor (long-term) money flow and research developments, to evaluate funding strategies for different programs, decisions on project durations, and funding patterns but also to identify topical relationships, research trends, complementary capabilities. This would free up staff resources for scientific program development, the identification of areas for future development, and the stimulation of new research areas.

**Data Providers:** KDVs provide unique visual interface to DLs. An example is Medline's visual interface at http://pubmed.antarcti.ca/ powered by Antarcti.ca's Visual Net software.

**Society:** KDVs can dramatically improve the communication of scientific results.
You are invited to participate in this effort.
Just send mail to katy@indiana.edu.
Publications

Springer will publish a selected set of extended papers of the 2001 and 2002 JCDL workshop on "Visual Interfaces to Digital Libraries" in its Lecture Notes in Computer Science (LNCS) series. The edited book aims to provide a comprehensive coverage of the topic to a wider audience.