

# THE ROLE OF LIBRARIES IN THE FUTURE INTERNET

Authors: Klaus Tochtermann, Tamara Pianos

Affiliation: ZBW – Leibniz Information Centre for Economics,  
Kiel/Hamburg (Germany)

While Libraries are still trying to find their role in the Web 2.0 a new revolutionary wave emerges: The Future Internet (FI). The idea is to completely renew the Internet along four dimensions (see below). The European Commission organises a process to build up a new community triggering the FI. Unfortunately, libraries are under-represented in this community even though they might not only be affected by this trend but also hold potential to substantially steer it. The extended version of this paper will show why the FI is of great importance for libraries and, by example of ZBW, how libraries can contribute to this new development:

- The Internet of Knowledge and Content is related to the semantic web. Within this context, libraries already “semantify” their content and make it available as “knowledge” in the linked open data cloud. This opens up completely new ways to merge content from different libraries resulting in content which is not possible without semantic technologies. Examples of our own research can be found at [www.zbw.eu/labs/about.en.html](http://www.zbw.eu/labs/about.en.html).
- The Internet of People is very much coined by social networks such as Facebook et al. Our own studies revealed that many researchers are already using social networks (and not the library) to exchange literature with their colleagues. The key challenge for the future is how to move the people from social networks to library’s online services. ZBW has just hired one of the most famous community managers in Germany to develop and implement a corresponding strategy.
- The Internet of Services seeks new concepts for Internet-based service composition. Today, libraries already provide their own (isolated) services on the Internet. In contrast, the idea of the Internet of Services is to design standardized frameworks to offer users added-value services which will be based on services coming from different institutions. Within this context, completely new types of services will become possible for libraries. Application scenarios are being implemented in the German Theseus project ([www.theseus-programm.de](http://www.theseus-programm.de)), with the German National Library among the partners.
- The Internet of Things is based on the idea of having networked computers for all “things in the world”. For example, library books can “communicate” with other books or with the shelf they are stored in. Based upon location-based services, shelves can guide users the way to books they are seeking etc. In conjunction with mobile devices this again opens up new possible library services.

ZBW – Deutsche Zentralbibliothek für Wirtschafts-  
wissenschaften Leibniz-Informationszentrum Wirtschaft

**DIREKT AN DER KIELER FÖRDE**

Düsternbrooker Weg 120  
24105 Kiel  
Tel.: +49(0)431/8814-1 (Zentrale)  
Fax: +49(0)431/8814-520

**DIREKT AN DER BINNENALSTER**

Neuer Jungfernstieg 21  
20354 Hamburg

Postanschrift:  
20347 Hamburg

Tel.: +49(0)40/42834-219 (Team Information Hamburg)  
Fax: +49(0)40/42834-450

**WWW.ZBW.EU**