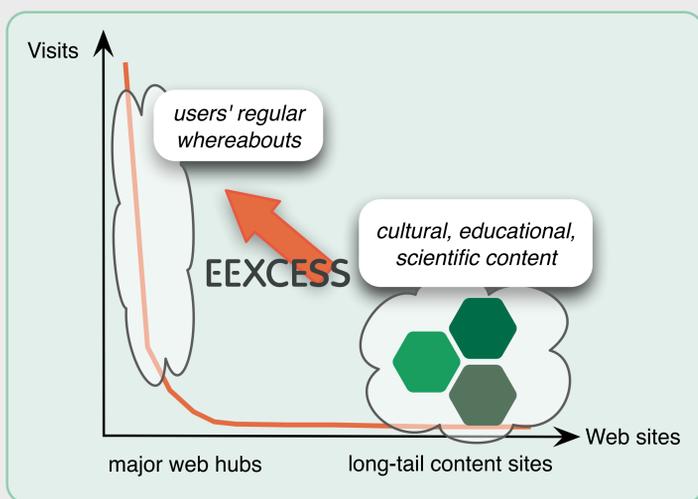




Challenges

- ❖ Cultural, scientific and educational resources are "hidden" in the Web's long-tail.
- ❖ Interested users access the Web via large information hubs and are not aware of the existence of the valuable contents.
- ❖ Existing aggregators provide access to resources when asked explicitly but not for implicit information needs.
- ❖ The way of presenting cultural, educational and scientific resources is not uniform across multiple data repositories.
- ❖ The way of presentation is not personalized and not equally suitable for teachers, students, researchers and general public users.



Objectives and Use Cases

Objective 1: Augmentation of Content



Reading a news article on the Greek financial crisis might prompt an infographic showing the timeline of rising or falling interest rates or an interview with leading experts.

Objective 2: Personalized Recommendations



Recommender systems might suggest (open access) overview papers to a novice or detailed in-depth analysis to an academic specializing in this field.

Objective 3: Quality Assurance



Users could then comment on the quality of the suggestion, whether it was useful in this particular moment and appropriate for this particular task, and thus continually improve the recommender system.

Use Case 1: Scholarly Communication



New tools and new channels of communication will allow closer collaboration among researchers. New discoveries can be shared at once and new findings can be improved sooner.

Use Case 2: Educational Support



Integrated services will enhance access to cultural, scientific and educational resources for students and teachers.

Use Case 3: General Public Education



Plugins for websites dedicated to general public education (e.g., wikipedia, wissen.de) will extend the outreach of long-tail cultural and educational content.

Unfold the treasure of culture, science and education anyplace and anytime. Vision of EEXCESS

Approach

Data Integration and Enrichment

- ❖ Integration and harmonization of various data sources.
- ❖ Open, extendable plugin architecture.

Personalized Recommendations

- ❖ Personalized just-in-time recommendations.
- ❖ Recommendations of narrative paths.

Adaptive Augmentation User Interfaces

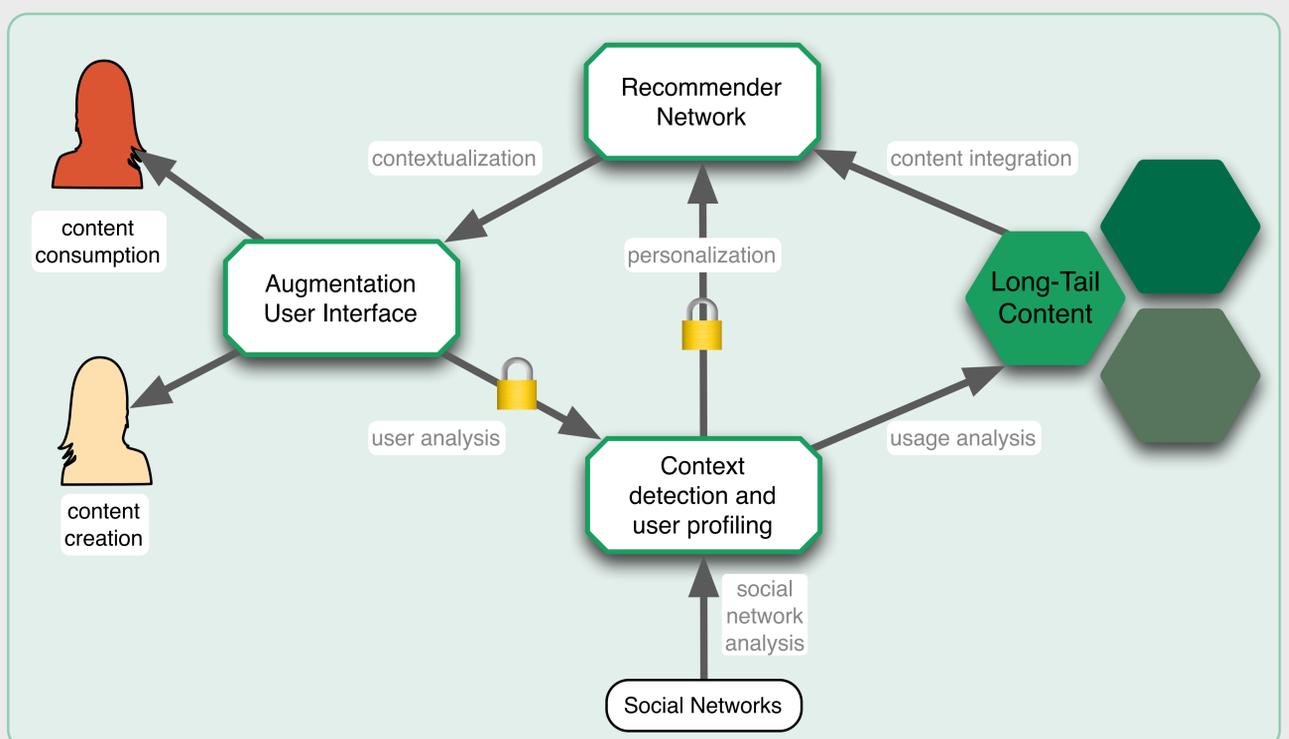
- ❖ Interactive information visualization of recommendation results and context.
- ❖ Adaptive, personalized visualizations.

User and Usage Mining

- ❖ Inferring user context for personalized recommendations.
- ❖ Mining usage of resources for enhancing recommendation quality.

Privacy Preservation

- ❖ Privacy-preserving proxy.
- ❖ Guaranteeing users' privacy while maintaining recommendation quality.



❖ Extensible, open-source framework.



Administrative Coordinator
Silvia Russegger
silvia.russegger@joanneum.at
Joanneum Research
Graz, Austria

Scientific Coordinator
Prof. Dr. Michael Granitzer
michael.granitzer@uni-passau.de
Universität Passau
Germany

Project Partners

