ABSTRACT
Wikipedia is a top-ten Web site providing a community-driven free encyclopedia. Its success depends on the support of its volunteer contributors. And Wikipedia is a research object in several academic fields. Wikimedia Deutschland, the German Wikimedia Chapter, is a partner in the EU-funded international research project “RENDER - Reflecting knowledge diversity”. With this participation we aim to support Wikipedia authors in editing, and to understanding the status of articles. This experience report focuses on our interaction with in particular the German-speaking Wikipedia community - less on the project and its results. We reached out to members of the Wikipedia community via several ways. In addition to the online channels, the live meetings are of particular importance to build up an interested and active community. During our project, we learned that it is very important to involve the users at an early stage. That helps to increase the acceptance and the willingness to support the project. If Wikipedians can see a benefit of research results and developments for their daily life in Wikipedia or the advancement of the whole project, they will be more willing to give innovations a try.

Categories and Subject Descriptors
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General Terms
Human Factors

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1. INTRODUCTION
Wikipedia is a top-ten Web site providing a community-driven free encyclopedia. Its success depends on the support of its volunteer contributors. And Wikipedia is a research object in several academic fields. Wouldn’t it be great if the results could flow back and support the object of research? This could also generate new data, raise further questions and provide benefit for researchers.

Wikimedia Deutschland e.V. is a partner in the EU-funded international research project RENDER\(^1\). With this participation we aim to support Wikipedia authors in editing and in understanding the status of articles.

In the past, there were several innovations on Wikipedia which were introduced without the involvement and explicit agreement of the community, for instance an assessment tool - a previous version of the later Article Feedback Tool to the German Wikipedia language version. In a long discussion the German speaking Wikipedia community decided to vote against and to force the deactivation.\(^2\) The same phenomenon could be observed in early 2013 concerning the overall roll out of the Article Feedback Tool version 5. The community decided to stop this process.\(^3\) These examples show that also developments with very good evaluation results can be refused by the Wikipedia community, probably caused by insufficient participation possibilities during the conceptual phase of projects.

In this experience report, we don’t want to explain the project and its results in detail, but present our interaction with the German Wikipedia community. We aim to highlight our experiences and lessons learned during this processes. Our conclusions can make community building activities in further research projects easier and help to build up a highly interested and motivated Wikipedia user group to test new developments and research results.

In the next section we will give a short overview about the REND\(\text{ER}\) project and our development activities as a use case partner. In the third section we will present details about our community building activities and experiences during the project. The fourth section will sum up our lessons learned and our conclusions for the future work with Wikipedians as users of research and development projects.

\(^1\)http://render-project.eu
2. WMDE AS A PROJECT PARTNER

In this section we give some insights to the objectives of the RENDER project which started in October 2010 with a duration of three years. Wikimedia Deutschland e. V. (WMDE) is one partner in this EU-funded international research project “Reflecting Knowledge Diversity”. This project is concerned with the reflection and leverage of knowledge diversity in different settings and applications. Increasing the quality of Wikipedia by supporting its users is the main goal of the Wikipedia case study. We as one of three use case partners developed and published tools that enable Wikipedia editors to find and revise articles that may need to be improved.

2.1 Diversity Aspects for Wikipedia

During the first phase of this project, we identified completeness, currentness, objectivity, and editor behaviour as the most important parameters for diversity in Wikipedia articles. These are mainly motivated by the criteria for high-quality articles, which the Wikipedia community defined and imposed them-self.

2.2 Use Case Scenarios

Out of these identified major aspects we formulated three case scenarios for the Wikipedia use case study:

- Display warnings to users when detecting patterns of bias
- Incentivising users to extend articles
- Notifying authors when an article is out of date

2.3 Analysis Approaches

Together with our project partners we implemented several approaches to analyse the diversity aspects. The results are visualised as show cases in a toolkit on the Wikimedia Toolserver. This RENDER Toolkit 4 provides a central access point for interested users or researchers to test the tools and to keep the development process as transparent as possible to include the community at an early stage.

2.4 Supporting Tools

The results of our analysis tools combined with results of further assessments tools and Wikipedia’s quality assurance methods are the input for two supporting tools for Wikipedia users 5. These tools are:

- The Article Monitor offers a brief overview about the quality and the current status of any Wikipedia article. This tool provides the possibility to check for different metrics and to have a quick overview about the quality and the status of an article. To use this tool the installation of a gadget is necessary.
- The Article List Generator enables a Wikipedia author to generate lists of articles related to a specific topic or preferred categories, which need to be improved.

We released the beta versions of these tool in the beginning of 2013 and tested them with small groups of users their usability and functionalities. During a series of local presentation events in six German cities, we introduced our results and collected valuable comments to improve and enhance the tools.

In the next section we will describe our activities to communicate and interact with the Wikipedia community, explain the used communication channels and events, and are going to illustrate our experiences in more detail.

3. COMMUNITY BUILDING ACTIVITIES

As a use case partner we aim to develop tools and techniques for Wikipedia users. We reached out to members of the Wikipedia community by using several ways. In addition to the online channels the live meetings are of particular importance to build up an interested and active community.

3.1 Communication channels

During the first year of the project, we established an information page on the Meta-Wiki 6. In the second year we additionally created an information web page in the German Wikipedia 7 to particularly inform the German community about the project in general, our plans, upcoming events and the current development status. The discussion page was intensively used to ask questions about the project, suggest further extensions and general remarks concerning the overall project.

We used the Wikipedia and Wikimedia mailing lists to inform the community about the progress of the project and to ask explicitly for feedback. Furthermore, we published blog entries on the German Wikimedia blog 8.

In addition, we used the Wikipedia:Kurier as a channel to reach to Wikipedia community. It is a very suitable channel to announce news to the German community. The release of the beta versions of our supporting tools we announced on the Wikipedia:Kurier. This news portal has a newspaper-like functionality within the German-speaking Wikipedia. Many authors read this page to stay informed about news within the Wikimedia universe. Sometimes the users discussed about certain aspects of our publications. So we had the possibility to explain things in more detail and clear out misunderstandings. A channel with a much broader scope within the Wikimedia community is the Wikimedia Research Newsletter which is published monthly on the Meta-Wiki. It presents internal research at the Wikimedia Foundation and highlights results attained by external research teams.

3.2 Community events

Besides conferences with an academic focus we attended to non-research community events like the Wikimania and the WikiConference. The Wikimania is the annual international conference of the Wikipedia community. In 2012, it took place in Washington, D.C., USA. We presented the current status of the project and discussed the functionality and requirements of the supporting tools as well as best practices.

6http://meta.wikimedia.org/wiki/RENDER
8https://blog.wikimedia.de/category/wissenschaft/render/
10https://meta.wikimedia.org/wiki/RENDERNewsletter

http://tools.unilabs.org/render/stools/

http://tools.wmflabs.org/render/stools/

http://toolserver.org/~render/toolkit/; moved to Wikimedia Labs in June 2013
for implementation and usage. The WikiConvention is the annual community conference of the German Wikipedia and its sister projects. In 2012, we took the opportunity during this conference in Dornbirn, Austria to present the prototypes of the supporting tools during a workshop (see figure 1). We discussed further requirements and needs of the users. After this meeting we got further requests, suggestions and had a very constructive exchange with the attendees. After the beta release of the supporting tools in January 2013 we visited six German cities and invited local Wikipedians to attend. We presented the tools and collected direct feedback, criticism, ideas and suggestions.

While attending all these events we learned that the users are mostly interested in the usage and not in understanding every technical detail or the functionality of different algorithms. For Wikipedians it is important to understand how they can use tools and how the presented research results can make their every day work in Wikipedia easier. This can be achieved by supporting the editing process, helping to find mistakes in a faster way, or shorten time consuming processes. In these meetings the atmosphere always friendly and constructively.

In the next section we will sum up our major observations and lessons learned for future projects and activities.

4. LESSONS LEARNED

During our research project we interacted in different ways with in particular the German Wikipedia community.

Using information pages to explain ideas, introduce prototypes, and present results in an understandable way as well as providing simple ways to give feedback and comments via feedback forms or discussion pages is very important. This allows people to interact and to stay in contact.

Our Lessons learned:

- Involve the end users as early as possible by asking for needs, requirements, restrictions and background information about the people who are the end users. Wikipedians are volunteers. They are happy to be supported in time consuming tasks and to get help to maintain the quality of the project.

- Online information channels - information pages, blogs, mailing lists - are important and useful

- Face to face conversations, local events and other community events are necessary to get more direct feedback and fruitful discussions. Mostly, these conversations are more friendly and produce less misunderstandings than online information channels.

During the last years we met several project groups which are developing tools or extensions for Wikipedia and had too insufficient contact to the Wikipedia community. We recommend the following points:

- Try to get in contact with the Wikipedia community at community events like the Wikimania, the WikiConvention (German), or local meetings

- Explain things in a comprehensible way to Wikipedians (often non-experts) and explain the advantages of your results and developments

- Ask chapters or WMF researchers to support your project. These people are in direct contact with the community and can help you to identify suitable channels and events to spread your ideas and support your communication processes.

Our experience was, if you are open minded and your ideas can help Wikipedia and its users - authors or readers - there will be a group of motivated people who are willing to test beta versions of tools, fill out questionnaires and give you feedback and suggestions at an early stage. The acceptance will be higher the earlier you start to involve the users.
5. CONCLUSION

We presented our experiences as a partner in a research project during the last three years. The RENDER project aims to develop tools to support Wikipedia users in understanding, finding and improving biased articles. During the project we interacted using different communication channels with the German-speaking community. Furthermore, we attended to and initiated several community events. We experienced that these meeting were always very constructive and fruitful. Additionally, we learned that it is very important to involve the users at an early stage. That helps to increase the acceptance and the willingness to support the project by testing, suggesting new expansions or implementing new features. Explain your concepts and results in a way that is also comprehensible to the non-experts. If they can understand a benefit for their daily life in Wikipedia or the advancement of the whole project, they will be more willing to give innovations a try.

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