

InfoVis:Wiki (<http://www.infovis-wiki.net>)

A Community Platform for Information Visualization

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1 MOTIVATION

In growing scientific disciplines, like Information Visualization (InfoVis) or Visual Analytics, it is hard to get an overview because many structures, sub-areas, and terms are emerging, changing dynamically, and are getting expanded by innovations. This was the motivation to create a well-structured pool of useful information for the area of InfoVis in 2005.

A basic problem of many online information resources in science and research is the “bottleneck” called author. Often, news areas are orphaned, event calendars are dated – a lack of timeliness combined with fragmented information that is scattered on the web. To avoid the effort of building unnecessary parallel structures, we have decided to put forward a paradigm change from “one/few for many” to “everyone for everyone”.

Starting points for the InfoVis:Wiki¹ were the two goals of supporting internal information exchange, on the one hand, and the collection of definitions of important terms in InfoVis, on the other hand. This basic idea was extended to a publicly available community platform for people interested in InfoVis and has been implemented based on the MediaWiki system. The InfoVis:Wiki provides a broad range of different areas, as for example news (including an RSS feed), a glossary, VizPatterns, events, web resources, publications, research & education, people, companies, techniques, software, job announcements, and a coffee room for informal discussions.

Through this initiative, a comprehensive information and knowledge resource was established with increasing popularity over the years. As of June 2009, about 30 000 hits are counted and 10 000 unique visitors use the InfoVis:Wiki per month with an ever increasing bandwidth consumption of now more than 4GB of data per month. Considering user activity over the last four years, 370 page edits were made on average per month. Bearing in mind the relatively small InfoVis community, these numbers are striking. Following our theme of *Contribute & Benefit!*, more users are getting involved in actively contributing content to collect it for themselves and simultaneously provide it publicly for the whole community. Besides this, the InfoVis:Wiki serves as platform for university courses both actively for e-learning as well as passively as information resource in an international context.

Because of the open Wiki technology, the InfoVis:Wiki allows for informal collaboration aside from formal borders of scientific

areas or communities, teachers and students, or science and industry in order to boost synergies.

2 CHALLENGES

Looking back to our experiences concerning the design and operation of the InfoVis:Wiki, we identified five main challenges:

- **Copyright vs. Copyleft** Questions regarding legal aspects of who owns which rights of online content, especially in an editable-by-anyone collaborative wiki environment, are tricky to handle but gain importance at the same time.
- **Anonymous vs. Registration and Spam** The flood of usernames and passwords are a hassle especially for casual users of a site. But allowing for anonymous edits is linked to the danger of increased spam attacks. Fighting spam is one of the most prevalent problem areas when running the InfoVis:Wiki.
- **Problems for Users** Authoring a wiki page is different from word processing or editing HTML documents. Apart from practical problems of how to write an article, the concepts of *categories* and *pages* are controlled bottom-up in wikis in contrast to the top-down line of thought usually employed otherwise. This is also due to the fact, that the idea of the InfoVis:Wiki is different from standard wiki encyclopedias and combines a portal structure with wiki concepts.
- **Active vs. Passive Users** Our theme *Contribute & Benefit!* refers to the aim of not mainly acting as a one-way information source but as a platform to enable information provision, information consumption, and discussion. The success of a platform for user-generated content depends mainly on the motivation of individuals in the community to contribute [1].
- **Quality Control** Clearly, apart from the already mentioned legal aspects, the quality of the provided content is decisive. Is a single authority doing quality control or is this up to the community? Moreover, in a scientific context, the question is whether those who do quality control are accepted by the community.

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