INTELLIGENT KNOWLEDGE RETRIEVAL THROUGH COLLABORATIVE KNOWLEDGE SHARING

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The prevailing issues of information overload, lack of peer review and context identification tend to compromise the relevance and utility of knowledge resources present on the web. In the absence of definitive measures to ascertain the relevance of web-based knowledge content, we propose a collaborative knowledge sharing approach for determining the relevance of specific web-based knowledge content as per a user's interest and needs. The underlying idea is to leverage the expertise, commonality of interest and information retrieval pattern of an online community of practice to determine and to suggest the relevant knowledge content for a particular user. In effect, we aggregate the otherwise solitary knowledge retrieval efforts of the members of a community of practice to realize community-driven specialized knowledge clusters—where each cluster encompasses the individual knowledge resources validated by like-minded members of the community—that are used to assist specialized knowledge retrieval by all members of the online community. We present the notion of using *personal bookmarks* of expert-level community members as an implicit form of recommendation of knowledge content and a means of inferring user interest. The systematic grouping of personal bookmarks leads to specialized knowledge clusters; also the comparison of bookmarks allows to determine the commonality of interests amongst community members. Our proposed knowledge sharing solution is envisaged to provide the following opportunities: (a) commonality and expertise of users can be leveraged to support the ability to automatically "push" relevant knowledge to selected users; (b) the essence of bookmarks as a knowledge store can be enhanced through the development of a conceptual domain hierarchy derived from the analysis of how users tend to cluster their personal bookmarks

References

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