How does localization influence online visibility of usergenerated encyclopedias? A study on Chinese-language Search Engine Result Pages (SERPs)

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ABSTRACT

Prior empirical and theoretical work has discussed the role of dominant search engine plays in the function of information gatekeeping on the Web, and there are reports on the high ranking of Wikipedia website among the search engine result pages (SERP). However, little research has been conducted on non-Google search engines and non-English versions of usergenerated encyclopedias. This paper proposes a method to quantify the "display" gatekeeping differences of the SERP ranking and presents findings based on the Chinese SERP data. Based on 2,500 mainly-Chinese-language search queries, the data set includes the SERP outcome of four Chinese-speaking regions (mainland China, Singapore, Hong Kong and Taiwan) provided by three major search engines (Baidu, and Google and Yahoo), covering over 97% of the search engine market in each region. The findings, analysed and visualized using network analysis techniques, demonstrate the followings: major user-generated encyclopedias are among the most visible; localization factors

matter (certain search engine variants produce the most divergent outcomes, especially mainland Chinese ones). The indicated strong effects of "network gatekeeping" by search engines also suggest similar dynamics inside user-generated encyclopedias.

Categories and Subject Descriptors

[Human-centered computing]: Collaborative and social computing – Collaborative filtering, Wikis, Empirical studies in collaborative and social computing

[Information Systems]: Web search engines – Collaborative filtering, Page and site ranking

General Terms

Management, Performance, Design, Human Factors, Theory

Keywords

Geo-linguistic analysis, network analysis, Network gatekeeping, Chinese Internet, Chinese characters, Localization, censorship.

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