

Should I Stay or Should I Go: Two Features to Help People Stop An Exploratory Search Wisely

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As information becomes more ubiquitously available, many information users tend to experience a sense of anxiety due to the “information overload”. Few studies have systematically examined searchers’ stopping behavior, i.e., how users recognize how much information is enough to terminate a search. Bad decisions on a stopping point will lead to either insufficient information or unnecessary waste of time and effort without much additional information gain.

Understanding searchers’ stopping behavior is extremely important to assist in thorough search result evaluation and to prevent a premature or a too-late search stopping. In this study, we present the design and implementation of two search techniques: *Result Preview* (RP) and *History Review* (HR), to help people make right decisions about when to terminate a search and how to consume information efficiently when facing an overwhelming amount of information. The basic idea of RP is to visualize the distribution of newly retrieved and re-retrieved documents to users, and that of HR is to display the previous search activities for searchers to review what has been done to help define the next steps. Both features are aiming at guiding searchers through the process of problem solving and decision making about whether to stay or leave during the search process. To implement the two techniques, we developed the search system on Bing Search API. The Bing search results were brought back to the search interface using AJAX and PHP. A formal user experiment with 24 participants is also proposed to evaluate the benefits and limitations, and also inform the future RP and HR design.

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