Editorial

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Biographical notes: Bernard J. (Jim) Jansen is an Assistant Professor at the College of Information Sciences and Technology at The Pennsylvania State University. He has more than 120 publications in the area of information technology and systems, with papers appearing in a wide range of journals and conferences. Several agencies and corporations have supported his research. He has received several awards and honours, including an ACM Research Award and six application development awards, along with other writing, publishing, research, and leadership honours.

The internet provides businesses with an opportunity for unique distribution of information, services, and products. As the spectrum of objects delivered via the web continues to grow, there is rising interest in multi-disciplinary research that focuses on the situational aspects of web users in the commercial domain. However, even with this increased attention, there has been little consideration of sponsored search, an increasingly popular and uniquely contextual form of interaction on the web that has strong marketing components. Sponsored search is a distinctive type of user technology – business interaction that combines both push and pull between customers and business. Sponsored search is becoming increasingly important in locating relevant information, services, and products on the web.

Consider the economic impact of sponsored search. Major Web search engines are commercial entities that require revenue streams – significant revenue streams! – to support the free access that these search engines provide every day to millions of customers. The primary business model for these search engines is sponsored links, which commercial corporations and small businesses (along with some other entities, organisations, and individuals) pay for. These sponsored links appear on search engine results pages when users enter certain key phrases, such as queries. The search engines provide the overall mechanism for this sponsored search process to occur. Sponsored search is a billion dollar industry and vital to the success of most major search engines. AOL, Google, and Yahoo! receive substantial portions of their revenue from sponsored search.

Despite this economic impact, sponsored search has attracted limited attention as an academic research area. Because of the uniquely dynamic contextual interplay among participants, sponsored search has implications for theories, models, and systems in a variety of fields, domains, and disciplines. It will also have significant e-commerce implications for customers, search engines, and businesses.

Bill Gross of Idealab (http://www.idealab.com) is credited with creating the sponsored searching paradigm in 1998 with the launch of Goto.com, which later became Overture, and is now Yahoo! Search Marketing. The two largest sponsored search entities, Yahoo! Search Marketing and Google, account for the majority of the sponsored search traffic. Research results indicate that sponsored search results are just as relevant as non-sponsored results for searcher queries. This equivalent effectiveness is an amazing feat for a searching model less than a decade old.

Sponsored search is analogous to a dynamic form of meta-tagging. Content providers develop campaigns of terms and search phrases that they believe are

- likely to be submitted by searchers

- applicable to their web content.

This dynamic information seeking process has ramifications for the way in which one views human information behaviour in this vibrant, multi-actor environment. There are certainly economic ramifications and potential consequences in terms of political discussions, educational issues, and social participation. Sponsored search, in other words, is both a rich area for research and an area with significant implications for systems, searchers, and content.

There are important research topics within the sponsored search paradigm with significant ramifications for a variety of research areas. Some of these research topics are addressed by the papers in this special issue.

In the lead paper, 'Sponsored search: an overview of the concept, history, and technology', Bernard J. Jansen and Tracy Mullen present a conceptual model of the sponsored search process, and frame it as an extension of overall information searching. Along with this model, the authors provide a historical overview of sponsored search and an in-depth examination of the technology that makes sponsored search possible. The researchers end their paper with the highlights and possible future implications of the sponsored search process.

In the second paper, 'Navigational behaviour and sponsored search advertising', Nico Brooks and Harrison Magun state that the navigational use of search engines is a distinct behaviour related to information seeking. This behaviour is of interest to businesses as navigational searching indicates intent on the part of the customer to visit a website. The researchers present findings on the navigational characteristics of sponsored search using click log data. The researchers discuss the implications of navigational behaviour for sponsored search advertisers, and they outline the requirement for better methods of evaluating the return on investment performance of sponsored search investments.

In the third paper, 'Advertising academia with sponsored search: an exploratory study examining the effectiveness of Google AdWords at the local and global level', authors Don Turnbull and Laura F. Bright present the results of an exploratory study that examines a sponsor search advertising campaign for a major US university's academic department. This paper provides an interesting insight into the use sponsored search for a non-commercial 'business'. The goals of the sponsored search campaign, using Google AdWords, were to increase awareness of the academic department and recruit potential graduate students. The researchers present a behavioural model of information seeking, suggesting that one could use it to select appropriate types of sponsored search

advertisements. The research findings showed little overlap between traditional, commerce-oriented online advertising methods and a general awareness campaign.

The fourth paper in the special issue, 'Equilibrium analysis of dynamic bidding in sponsored search auctions', by Yevgeniy Vorobeychik and Daniel M. Reeves has a more technical focus. The researchers examine the auction mechanism that makes sponsored search possible. They specifically focus on examining the incentives of advertisers where there is complete information and auction if repeated indefinitely.

Acknowledgements