SocialQ&A: An Online Social Network Based Question and Answer System

OBJECTIVE:

The primary objective of this System is to improve the performance of Q&A systems by actively forwarding questions to users who are capable and willing to answer the questions.

ABSTRACT:

Question and Answer (Q&A) systems play a vital role in our daily life for information and knowledge sharing. Users post questions and pick questions to answer in the system. Due to the rapidly growing user population and the number of questions, it is unlikely for a user to stumble upon a question by chance that (s) he can answer. Also, altruism does not encourage all users to provide answers, not to mention high quality answers with a short answer wait time. The primary objective of this paper is to improve the performance of Q&A systems by actively forwarding questions to users who are capable and willing to answer the questions. To this end, we have designed and implemented SocialQ&A, an online social network based Q&A system. SocialQ&A leverages the social network properties of common-interest and mutual-trust friend relationship to identify an asker through friendship who are most likely to answer the question, and enhance the user security. We also improve SocialQ&A with security and efficiency enhancements by protecting user privacy and identifies, and retrieving answers automatically for recurrent questions. We describe the architecture and algorithms, and conducted comprehensive large-scale simulation to evaluate SocialQ&A in comparison with other methods. Our results suggest that social networks can be leveraged to improve the answer quality and asker's waiting time. We also implemented a real prototype of SocialQ&A, and analyze the Q&A behavior of real users and questions from a small-scale real-world SocialQ&A system

INTRODUCTION:

The Internet is an important source of information, where the amount of data is vast and constantly growing. Users rely on search engines to find specific information in this   knowledge base. Search engines such as Google and Bing use keywords provided by the users to perform searches. Recently, industrial research and development activities, such as Microsoft and Facebook's social-featured Bing search endeavor, try to combine search engines and online social net-works for higher search performance. As previous research has indicated, search engines perform well in indexing web pages and providing users with relevant content to their search but are not suited for non-factual questions such as "Which is the best local auto shop?". To address this particular class of non-factual questions, many Question and Answer (Q&A) systems such as Yahoo! Answers, Baidu Zhidao, Stack Exchange, Quora and Ask have been developed. Since their inception, Q&A systems have proved to be a valuable resource for sharing expertise and consequently are used by a large number of Internet users.