

2005

Discovering Hidden Knowledge on the Behavior of Web Users and Content Providers through Web Mining

Jialun Qin

University of Arizona, qin@email.arizona.edu

Follow this and additional works at: <http://aisel.aisnet.org/amcis2005>

Recommended Citation

Qin, Jialun, "Discovering Hidden Knowledge on the Behavior of Web Users and Content Providers through Web Mining" (2005). *AMCIS 2005 Proceedings*. 95.

<http://aisel.aisnet.org/amcis2005/95>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2005 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Discovering Hidden Knowledge on the Behavior of Web Users and Content Providers through Web Mining

Jialun Qin

Department of Management Information Systems
University of Arizona
qin@email.arizona.edu

ABSTRACT

The World Wide Web, or the Web, has become the largest and most popular information system to support all types of the activities including commercial campaigns, scientific research, and even illegal activities and terrorism. Unlike most traditional information systems, the structure and contents of the Web represent a considerable amount of latent human annotation and offer us an opportunity to study the behaviors of the Web users and the Web content providers. For example, by examining customers' online shopping log, we could learn the customers' preference; by examining terrorist organizations' Web contents and Web link structure, we could learn the terrorists' propaganda plans, communication, and cooperation patterns. Such knowledge would be very important for the study of organization behaviors in domains such as e-Commerce, e-Government, and counter-terrorism domains and yet very expensive or difficult to obtain by other means. In this work, we view the Web as a three-layered model and propose a frame work which incorporates theories and methodologies from organizational behavior, computer-mediated communication, human computer interaction, and Web mining domains to study the extraction of hidden knowledge on Web users and content providers' behavior. We also present three case studies to demonstrate the feasibility and effectiveness of our framework.