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Table of Contents

Research Articles

1 A Common Knowledge Sharing Model of 24-Hour Knowledge Factory of Grid Computing Based on Case Based Reasoning
   Huosong Xia, Wuhan University of Science & Engineering, P. R. China and University of Arizona, USA
   Amar Gupta, University of Arizona, USA

19 Risk Management: Strengthening Knowledge Management
   Suzanne Zygler, La Trobe University, Australia

33 Applying Sense-Making Methodology to Design Knowledge Management Practices
   Bonnie Wai-yi Cheuk, Global Head of Knowledge & Information, Environmental Resources Management (ERM), UK

44 Toward a Knowledge Management Strategic Framework in the Arab Region
   Minwir Al-Shammari, University of Bahrain, Kingdom of Bahrain

64 Introducing Elasticity for Spatial Knowledge Management
   David A. Gadish, California State University Los Angeles, USA

82 A Proposed Framework for Designing Sustainable Communities for Knowledge Management Systems
   Lakshmi Goel, University of Houston, USA
   Elham Mousavi, University of Houston, USA

Book Review

101 Knowledge Management Systems
   Reviewed by Murray E. Jennex, Editor-in-Chief, JKM
A Common Knowledge Sharing Model of 24-Hour Knowledge Factory of Grid Computing Based on Case Based Reasoning

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ABSTRACT

In order to improve the level of decision making and competitive advantage, organizations try to learn and develop new knowledge management techniques that are suited for the evolving global economy. Decision makers are becoming increasingly faced with a dilemma: great difficulty arises in sharing knowledge where distributed and heterogeneous data sources are so rich in terms of their information content. In order to address the problem of knowledge sharing, this article proposes a common knowledge sharing model—the 24-hour knowledge factory—of grid computing founded on case-based reasoning (CBR). This article begins with a description of the 24-hour knowledge factory, the enterprise common knowledge shared (ECKS) methodology and the time-shift sharing model. Next, the notion of a CBR-adapted approach for 24-hour knowledge factory, based on grid computing, is presented. Third, based on the ECKS concept, this article analyzes the use of the model described in this article in decision evolution and builds upon enterprise sharing structure ECK modeling, focusing on activity-work sharing, passive-work sharing and mix-work sharing. Multiple types of enterprise common knowledge transfer mechanisms are presented in this article.

Keywords: 24-hour knowledge factory; case-based reasoning (CBR); decision evolution; ECK sharing (ECKS); enterprise common knowledge (ECK); grid computing; knowledge diffusion; knowledge transfer

INTRODUCTION

In today’s rapidly changing business environment, we have entered a new era of knowledge management; humans must now live and work in a knowledge-based society as knowledge workers (Drucker, 1993). Various streams of knowledge management (KM) research have emerged. Early research focused on understand-
for nationwide paper-less check processing. He serves as an advisor to a number of corporations and international organizations. He introduced a new course on outsourcing of professional activities at MIT in 2004 and is currently leading several initiatives that involve the use of geographically distributed teams of workers in diverse professions.