Trusted Data Markets - the Role of Data Quality

ABSTRACT

Optimization of information exchange among data producers and consumers in external settings between business partners, and internally within large organizations, is becoming increasingly important. Historically, information was exchanged informally based on established relationships through direct interaction. However, as more information exchanges move online involving digital products, challenges have arisen: parties to an exchange don't know each other, data needs are time sensitive, multidimensional and dynamic, quality of data assets is unknown or difficult to ascertain, and technology differentials are significant. Many techniques have arisen to moderate these problems, but significant inefficiencies continue making exchange costly and time-consuming. Electronic marketplaces, which have proven successful at minimizing transaction costs of physical product exchanges, are now being applied to information products. But current electronic data markets have important shortcomings that have not been adequately addressed. Trusted Data Markets provide a framework for addressing those shortcomings, in particular trust issues associated with data quality.

BIOGRAPHY

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David Becker is a Principal Information Systems Engineer with the MITRE Corporation working for the USAF out of the Dayton, OH site at Wright-Patterson AFB. He is currently engaged in projects involving enterprise architecture, information quality, data strategy, data management and program acquisition. David has over 30 years of experience in software development and information technology. While working as an employee, consultant, and senior technical officer for several public, private and academic organizations, he has had a broad range of assignments, including senior level IT and business consulting, technical leadership and management, project management, product research & development, seminar and workshop development, college level computer science course development and instruction, industrial liaison, international standards development, systems administration, and systems analysis, design and implementation. David's particular areas of strength include business, application, data and technology architectures, systems dynamics, project management, quality management, statistical process control, information search and retrieval, and artificial intelligence.