

Work Ownership Structure Approach: A Methodology for System Integration

Seung C. Lee

University of Minnesota

U.S.A.

Ashraf I. Shirani

San Jose State University

U.S.A.

Abstract

With their disparate information systems, many organizations today face the challenges of system integration. Rapid technological advancements, electronic commerce, and changing business practices such as automated supply-chain management are a few of the many driving forces behind the systems and applications that are distributed and heterogeneous but must interoperate to enable organizations conduct their business. System integration is not a one-time effort but a continuous process that needs to be continuously managed and there is a general lack of integrative methodologies to manage such a process. This research attempts to fulfill that need. The very nature of the system integration problem demands that such a methodology be time- and technology-independent to accommodate current and future trends in technology and business practices. The work ownership structure approach (WOSA) to system integration presented in this paper allows vertical as well as horizontal integration and helps lead to integrated solutions in the form of platform-independent components and applications. The WOSA approach facilitates semantic interoperability through standardization of content, structure, and format of tasks across cooperating organizational and extraorganizational units.