Special Issue – GLOGIFT 08

This issue of the journal contains six best reviewed papers of GLOGIFT 08, the “Eight Global Conference on Flexible Systems Management”, held at Stevens Institute of Technology, Hoboken, New Jersey. The theme of this conference was “Flexible Enterprise for Global Business”. These papers deal with process related issues of flexibility.

Flexible business process management needs to be examined by investigating the key problems with their solutions

The underlying requirement of flexible business process management needs to be examined by investigating the key problems with their solutions. This includes decomposition of complex processes, coordination of interactive activities, awareness of dynamic business environments, and flexible resource allocation and coordination. The first paper titled “Developing Flexible Business Process Management Systems Using Modular Computing Technologies”, authored by Minhong Wang and Kuldeep Kumar deals with different ways of modeling and developing flexible systems for business process management, using technology concepts and solutions such as object-orientation, componentization, web services, and intelligent agents. The authors of this paper have tried to investigate ways to apply these modular computing technologies for developing flexible process management solutions

Competitive business environment requires a more dynamic and flexible enterprise structure

Competitive business environment requires a shift from a disintegrated and closed enterprise structure to a more dynamic and flexible enterprise structure. The second paper titled “Creating Enterprise Flexibility through Service Oriented Architecture”, by Ozgur Erol, Brian J. Sauser and John T. Boardman proposes a theoretical model to create enterprise flexibility using service oriented architecture approach. This model is based on two key enablers of enterprise flexibility. First enabler is the capability of an enterprise to connect people, processes, and information in a way that allows enterprise to become more flexible and responsive to the dynamics of its environment, stakeholders, and competitors. Second enabler is alignment of information technology and business goals. The possible expansion of this theoretical model to develop an enterprise architecture framework based on service oriented architecture at the enterprise level has also been taken up.

Nature of migration as it applies to crossing system-retirement life cycle boundaries gracefully is explored

The third paper on “How Agile Systems Gracefully Migrate Across Next-Generation Life Cycle Boundaries” jointly authored by Rick Dove and Garry Turkington explores the nature of migration as it applies to crossing system-retirement life cycle boundaries gracefully, intending to inform purposeful design of would-be, long-lived, always-effective enterprises, and the systems that support them. They have analyzed two successful and contemporary large-scale migrations, and illuminate the factors that facilitated their success, contributing toward a pattern language for agile-system architecture in the process. Finally, the lessons of the analysis are suggested as potential informants for Force Transformation in the U.S. military and adoption of Service Oriented Architectures in the enterprise.

Strategic flexibility is often discussed as strategic choice, strategic maneuverability and strategic options

Strategic flexibility is often discussed ‘alongside’ such terms as strategic choice, strategic maneuverability and strategic options. The fourth paper, titled “Defining Strategic Flexibility” by Norm Roberts and Gary J. Stockport. Authors present a review of the literature about the term strategic flexibility. It analyzes various components and definitions of strategic flexibility. This article adds to our general understanding of the term by advancing a general definition of strategic flexibility.

How outsourcing could affect each of the building blocks of SOS flexibility is examined

One possible way of creating enterprise flexibility is by outsourcing certain functions which would help affect the flexibility of an organization. Fifth paper on “Effects of Outsourcing on the Flexibility Dynamic of System of Systems”, by S. Jimmy Gandhi, Alex Gorod and Brian Sauser deals with way of enhancing value from the SOS is by having the right amount of flexibility associated with it. They have discussed how outsourcing could affect each of the building blocks of SOS flexibility. They have also evolved a matrix to show the effects of insufficient as well as excessive outsourcing on the overall functioning of the SOS.

*An integrated framework
for the development of
solution methods and
heuristics in the formation
of virtual cells is provided*

Sixth paper titled, “Configuration Flexibility in Virtual Cellular System”, authored by Jainarine Bansee and Boppana V. Chowdary, provides an integrated framework for the development of solution methods and heuristics by incorporating various flexibilities in the formation of virtual cells within job shop setup. Through an extensive review of literature in traditional manufacturing areas, a new approach for cell formation that integrates machine grouping and layout design is followed with flexibility as a main focus in this paper. The proposed framework tries to address some of the performance evaluation issues such as system utilization, work-in-process inventory and related flexibilities.

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