

# Maintaining Data Consistency in Distributed Multi-Attribute Group Decision Support System

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**Abstract-** In distributed Group Decision Support System (DGDSS) environment, there is a collection of sites each of which hosting GDSS database and model base. This type of setting causes possible multiple updates are executed concurrently to the data repositories. If these updates are not controlled, they may cause data inconsistency and deadlock in the system. Therefore, the design of DGDSS must include a mechanism to isolate one update from the effect of concurrently executing updates. This paper outlines a framework and algorithms with locking mechanisms for the development of multi-attribute DGDSS. A case study on the tender evaluation in the public sector of Malaysia government is selected. The system has been implemented by highlighting the role of integrated model bases as the systematic and better way to handle decision making process.

**Keywords-** Distributed Group Decision Support System, DGDSS, Multi-Attribute DGDSS

**Remarks:** The full paper may be found in [www.charm72.com](http://www.charm72.com)