

# An innovative framework for sustainable and centralized material procurement management based on a full-domain set theory

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## ABSTRACT

The purpose of this study is to propose a theoretical framework to solve the problem of insufficient data integrity, insufficient information circulation, and poor global data integration and linkage in the material procurement management subsystem. Based on the theory of full-domain set, this study proposes the conceptual framework, the full-domain linkage model, and the theoretical framework of centralized material procurement management. With the proposed innovative management framework, current problems such as insufficient data integrity, insufficient information circulation and data linkage in the procurement management system can be solved. This study provides reference significance for the construction of centralized material procurement management in the context of big data and offers theoretical guidance for large group enterprises to carry out centralized procurement management.

## ARTICLE INFO

### Keywords:

Centralized procurement;  
Full-domain set theory;  
Big data;  
Intelligent procurement;  
Smart manufacturing;  
Analytics;  
Artificial intelligence;  
Cloud computing and manufacturing

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### Article history:

Received 21 October 2022

Revised 4 March 2023

Accepted 6 March 2023



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