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# 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.

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# Inovativni okvir za trajnostno in centralizirano upravljanje nabave materiala, ki temelji na teoriji množic s polno domeno

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**POVZETEK**

Namen te študije je predlagati teoretični okvir za reševanje težave nepopolnosti podatkov, nezadostnega kroženja informacij ter slabe globalne integracije in povezovanja podatkov v podsistemu za upravljanje nabave materiala. Ta študija predlaga idejni okvir na podlagi teorije množic s polno domeno, model povezovanja polne domene in teoretični okvir centraliziranega upravljanja nabave materiala. S predlaganim inovativnim okvirjem upravljanja je mogoče rešiti težave, kot so nepopolnost podatkov, nezadostno kroženje informacij in povezovanje podatkov v sistemu upravljanja nabave. Ta študija predstavlja priporočilo za izgradnjo centraliziranega upravljanja nabave materiala v kontekstu velepodatkov in ponuja teoretične smernice za velika podjetja za izvajanje centraliziranega upravljanja nabave.

**PODATKI O ČLANKU**

*Ključne besede:*
Centralizirana nabava;
Teorija množic s polno domeno;
Velepodatki;
Inteligentna nabava;
Pametna proizvodnja;
Analitika;
Umetna inteligenca;
Računalništvo v oblaku in proizvodnja

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