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REDUCING MANAGEMENT ENTROPY THROUGH ARTIFICIAL INTELLIGENCE-BASED ENTERPRISE COLLABORATION SYSTEMS: CASE STUDY OF CROSS-SITE MANAGEMENT IN SMALL AND MEDIUM ENTERPRISES

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Abstract

In the dynamic business environment, small and medium-sized enterprises (SMEs) often struggle with management entropy, i.e., the disorder that arises from complex and multi-entity operations. This study explores the impact of Enterprise Collaboration Systems (ECS) with embedded Artificial Intelligence (AI) in reducing management entropy within SMEs. Through case studies of a rental property company, a multinational factory, and a trading company, the research highlights how AI-enhanced ECS streamlines operations, automates processes, and improves decision-making. The findings indicate that tailored AI-based ECS solutions significantly boost operational efficiency and reduce manual errors in cross-site environments despite data integration and user adaptation challenges. The study concludes that AI-based ECS platforms are essential for reducing management entropy and driving sustainable growth in SMEs, offering valuable insights for broader industrial applications.

Conference Track

Internet and e-Business