This article proposes a specific graph database application for streamlining major knowledge management processes. The author develops a property graph data model to facilitate the process model of knowledge management.

The authors’ approach to creating a graph database schema (GDBS) is based on an entity-relationship diagram of the application domain, which is mapped to a GDBS in a two-step process.

The enterprise knowledge graph for entity 360-views has emerged as one of the most useful graph database technology applications when buttressed by W3C standard semantic technology, modern artificial intelligence, and visual discovery tools.

XACML policies can be presented in a graph data structure, but while these solutions increase performance, they also drastically decrease functionality. To address this, the authors’ approach models and stores XACML policies in a graph database.
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High-Performance with an In-GPU Graph Database Cache
Shin Morishima and Hiroki Matsutani

Graph databases could represent complex network structures, but they currently underperform for this task. To improve performance for graph database queries, the authors propose caching the graph database in distributed graphics processing units connected with a 10-Gbit Ethernet network.