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# A Survey of Hybrid Approaches for Ontology Construction from Domain-Specific Documents


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**Authors:**
Fatima Zahra EL HICHAMI [1]
Sara BOUZID [1]
Abdelghafour ATLAS [1]

*[1] Cadi Ayyad University, UCA, ENSA Marrakech, LMSC Laboratory, Marrakech, Morocco.*



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## Abstract

Ontology construction from domain-specific documents remains a major challenge in knowledge management and exploitation. Traditional approaches, whether manual, statistical or fully automatic, are often limited: they may lack precision [1], overlook complex semantic relationships, and require significant human intervention [2,4]. To overcome these limitations, hybrid approaches, combining automatic text analysis and the exploitation of existing knowledge, offer a promising solution [1,3,5].

This paper presents a comparative study of hybrid methods for generating ontologies from specialized documents. These approaches aim to produce more comprehensive, coherent, and readily exploitable ontologies [1,5]. The results of this study demonstrate a significant improvement in conceptual coverage and in the quality of extracted relationships between concepts, while reducing reliance on human intervention. These findings highlight the strategic value of hybrid approaches for scientific and technical domains [3].




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