

以代理人社群為基礎的主動式知識服務推薦系統之研究

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摘要

網際網路上資訊種類相當繁雜，由於缺乏適當的評估與管理機制，使得知識的重複利用率並不如原先所預期。網際網路串連生活所需要的各項資訊與知識，規劃知識服務的智慧型分享機制，可以讓使用者藉此機制取得更精確的服務，提昇自我的競爭優勢。本研究目的是透過推薦系統的知識交互推薦與分享，讓研發人員能將更多的時間專注於創新與研究。本研究設計的主動式知識服務推薦模型包含使用者介面、儲存庫、知識服務推薦核心等三個模組。服務提供者與服務需求者透過使用者介面與系統進行互動。儲存庫內容是由現實生活或網際網路上可以被存取的服務，服務內容描述包含服務的型態、實際內容、提供者資料與取得方式。知識服務推薦核心是由代理人社群所組成，包含顧問代理人預測使用者需求，替服務需求者進行服務的撮合與篩選；評估代理人計算服務的隸屬度，提供給顧問代理人進行服務的篩選；接洽代理人協助需求者取得服務；搜尋代理人進行服務儲存庫的資料搜尋。為使代理人社群開發過程更具彈性，本研究使用PASSI方法論進行分析、設計與實作主動式知識服務推薦系統。知識服務內容的規劃是遵循使用OWL-S規範。本研究建置的主動式知識服務推薦系統，具體貢獻如下：(1) 運用知識本體於服務的搜尋機制：以知識本體為基礎的查詢，讓知識服務需求者可以更精確的取得服務；(2) 以PASSI方法論實作代理人系統：藉由不同模型的組合搭配，使得代理人系統可以很完整而且順利的完成實作；(3) 整合各種工具與標準：本論文整合並且應用各種標準與工具進行主動式推薦系統的實作。由於知識服務在未來網際網路上的應用會越來越普遍，因此本研究在實際運用上有其前瞻性與必要性

關鍵詞：知識服務、PASSI、代理人社群、推薦系統、OWL-S

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