Leveraging Retrieval-Augmented Generation as Institutionally Governed AI Infrastructure in Master's Thesis Work within an Educational Leadership Programme

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Abstract:
This multiple-methods case study examines how retrieval-augmented generation (RAG) can function as an institutionally governed AI infrastructure to support master's thesis work in an Educational Leadership programme for part-time professionals. Drawing on diffusion of innovations theory, the technology acceptance model, and constructive alignment, we analyse how technological innovativeness, perceived AI objectivity, and collective drive shape students' evaluations of AI-supported thesis processes. An anonymous survey was analysed using structural equation modelling and complemented by qualitative data from students who employed AI tools to formulate problem statements, analyse interview transcripts, and relate empirical findings to theory. Quantitative results indicate that technological innovativeness and perceiving AI as an objective source are the strongest predictors of perceived AI utility, while collective drive plays a weaker, yet positive, role. Qualitative analyses show that students value AI as a brainstorming partner, conceptual clarifier, and "devil's advocate", but are concerned about hallucinations, unfamiliar references, and blurred boundaries between assistance and authorship. One might argue that a programme-specific RAG system, restricted to a curated corpus of course literature, institutional policies, and selected research, can mitigate these tensions by grounding responses in transparent sources and aligning AI support with the curriculum, thereby enabling ethically robust integration of advanced AI into master's thesis work.