

# **Evaluating the Integration of Deep Learning-Based Artificial Intelligence in the UAE Service Industry, with a Focus on Emirates Airlines' Technological Advancements in Aviation**

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## **Abstract**

This study examines UAE service industry AI use. AI has rapidly transformed several industries, necessitating a thorough understanding of its usage. The research tries to identify UAE service industry success elements, obstacles, and ethical issues. This goal can be achieved using four research objectives. 1) Evaluate UAE service industry deep learning usage. 2) To examine deep learning-based AI adoption success factors. 3) To examine service industry organisations' deep learning-based AI adoption problems 4) To advise UAE service industry decision-makers on deep learning-based AI. A comprehensive literature review gleaned insights from current investigations. The research will use qualitative and quantitative methodologies to reach its purpose. Key stakeholders with deep learning-based AI adoption experience in the service industry will be interviewed. A larger sample of UAE service industry organisations will be surveyed for the research. The RBV framework will show how organisations' unique resources and competencies affect AI adoption and implementation. Case studies from organisations that successfully applied deep learning-based AI in service operations will be included. The model should help explain UAE service business AI adoption. It demonstrates that AI adoption requires organisational culture, leadership support, technical skill, data quality, and collaborative human-AI engagement. Expect technological implementation, change management, workforce adaptability, data governance, and legal compliance challenges. This research is crucial to the goal. The important success elements and difficulties will assist decision-makers, practitioners, and policymakers implement AI. This study can successfully incorporate AI by closing literature gaps.

## **Keywords**

AI Adoption, Service Industry, United Arab Emirates.