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**Master Thesis Defense**

Entitled

*A NOVEL CHATBOT SYSTEM FOR DIGITIZING SERVICE MANAGEMENT TO IMPROVE BUSINESS  
CONTINUITY*

by

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Abstract

The COVID-19 pandemic underscored the importance of businesses transitioning to digital platforms to reduce human contact and maintain operations. Digital transformation is the act of leveraging digital technologies to enhance and update business operations, corporate culture, and customer interactions to address evolving market needs. IT service management (ITSM) stands to gain significantly from this shift, as many of its processes are currently manual and labor-intensive. In our research, we introduced a model designed to refine chatbot responses to user questions, making it an invaluable asset for our study. The model performed admirably, achieving an accuracy rate of 90%. Moreover, we conducted a survey involving IT officers from the same organization to assess the effectiveness of the chatbot system more accurately and identify areas for refinement. Based on the outcomes of both the model and the survey evaluation, the proposed model shows promise in digitizing service management, thereby enhancing business resilience.

**Keywords:** Digital transformation, IT service management, Customer-centric approach, Business continuity, AI.