

AI 360 Research Brief

Paper title: From human teller to virtual assistant: A study on chatbot adoption in leading banks

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Brief overview of the research:

This study evaluates AI-powered chatbots used by leading U.S. banks through standardized tasks across ten categories. We compare online-only banks with traditional banks operating physical branches and assess accuracy, precision, and failure rates. Results reveal significant performance variation and suggest that banking chatbots primarily complement, rather than replace, human customer service.

Why this research matters:

AI-powered chatbots are increasingly used by banks to enhance customer service, improve operational efficiency, and reduce costs. However, their performance and limitations vary considerably across institutions. By systematically evaluating chatbots implemented by leading U.S. banks using standardized tasks, this study identifies their strengths, weaknesses, and areas for improvement. The findings provide practical insights for banks seeking to improve chatbot effectiveness and customer experience. More importantly, the study suggests that AI chatbots should not be viewed as replacements for human employees, but as complementary tools that enhance service capabilities while preserving the value of human expertise.