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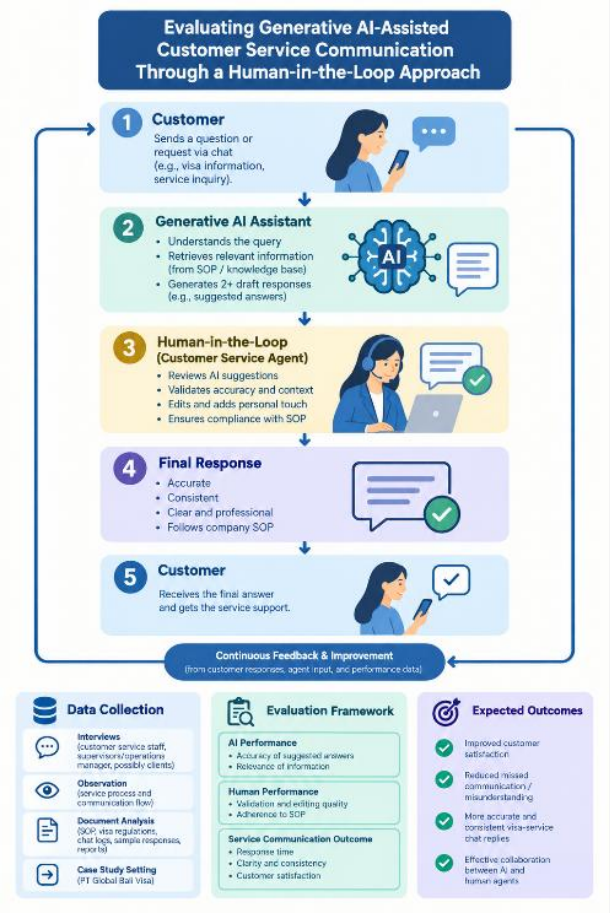
EVALUATING GENERATIVE AI-ASSISTED CUSTOMER SERVICE COMMUNICATION THROUGH A HUMAN-IN-THE-LOOP APPROCH



Generative artificial intelligence (GenAI) has attracted increasing attention as a tool for supporting communication and information-related tasks in various organizational contexts. Its ability to generate natural-language responses provides opportunities to assist customer service personnel in preparing responses, explaining information, and adapting messages to different customer needs.

Nevertheless, the use of generative AI should not be considered an automatic guarantee of effective communication. The quality of AI-generated responses still requires consideration in terms of contextual relevance, factual accuracy, clarity, and appropriateness for the specific service situation. Despite these opportunities, generative AI introduces challenges that require careful consideration. AI-generated responses may contain inaccurate information, omit important details, or fail to reflect the specific circumstances of a customer's inquiry.

These concerns suggest that organizations should not rely solely on the fluency of AI-generated text when determining whether a response is appropriate for customers. Instead, communication quality needs to be considered alongside information verification, accountability, and human judgment. A Human-in-the-Loop (HITL) approach provides a relevant perspective for addressing these challenges by retaining human involvement in the review and validation of AI-generated outputs. Human involvement is particularly important when responses concern changing regulations, company procedures, or situations that require contextual understanding.



The present study therefore focuses on the evaluation of generativeAI-assisted customerservice communication through a Human-in-the-Loop approach in the context of PT Global Bali Visa.

Accordingly, this study aims to examine how generative AI can support customer service communication while maintaining human responsibility for response validation. The evaluation focuses on the perceived usefulness of AI-generated response suggestions, the clarity and consistency of communication, the verification of information, and the challenges associated with human review. Using a case study approach, the research seeks to identify the potential benefits, limitations, and practical considerations of human-supervised generative AI in customer service communication.

The expected contribution is a context-specific understanding of how AI assistance and human judgment can be combined to support responsible communication practices. The findings are intended to inform practical recommendations for customer service workflows without requiring the development of a new software application or an autonomous chatbot.

Human involvement is particularly important when responses concern changing regulations, company procedures, or situations that require contextual understanding. Rather than positioning AI as a replacement for human personnel, the HITL approach emphasizes collaboration between AI-generated assistance and human judgment. These studies illustrate the growing research interest in AI-supported customer communication, although their approaches differ in research objectives and technical implementation.

This perspective is relevant to visa and immigration consulting services, where customers may require clear explanations of administrative procedures and applicable requirements. In such settings, the appropriateness of a response cannot be assessed solely through its linguistic quality; the response must also be consistent with verified information and relevant organizational procedures.