



RESEARCH STAY WEEK 14, Chatbots

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► **CONTEXT**

Chatbots are not a new development. They have been researched and implemented for decades. However they used to be extremely limited as most of them were rule based systems that matched input text with answers and didn't have any actual insights into the conversation. New chatbots, the most famous of which is ChatGPT have taken the world by storm with their surprising capabilities to mimic humans.

► **SEARCH METHODOLOGY**

The resources given talked about older techniques and technologies used for chatbots and did not focus on the SOTA, generative ai. I wanted to explore new uses of chatbots that aren't quite so obvious. I looked food chatbot implementations in past years in scopus and found their use for crisis management.

► Comparison

An Overview of Chatbot Technology	Survey the main ways chatbots have been implemented and their usecases.	2020	Rule based systems Retrieval based systems Generative systems (ML)	Interpersonal, intrapersonal, informative, task-based, conversational	Chatbots can provide capable information gathering systems that would reduce operational costs. They can be massively scaled and deployed and have shown great progress in the last years.
Can ChatGPT replace humans in crisis communication? The effects of AI-mediated crisis communication on stakeholder satisfaction and responsibility attribution	Determine whether AI chatbots could be a good replacement to humans in crisis situations	2024	Chat GPT (Generative)	Crisis response	Effectiveness: Chatbots can be effective in crisis communication, especially when providing instructing information in unresolved crises. Competence: Perceived competence of chatbots is crucial for stakeholder satisfaction and reducing responsibility attribution. Empathy: Chatbots' lack of emotional empathy can be a limitation, particularly in unresolved crises.

► BIBLIOGRAFÍA

- [1] Adamopoulou, E., Moussiades, L. (2020). An Overview of Chatbot Technology. In: Maglogiannis, I., Iliadis, L., Pimenidis, E. (eds) Artificial Intelligence Applications and Innovations. AIAI 2020. IFIP Advances in Information and Communication Technology, vol 584. Springer, Cham. https://doi.org/10.1007/978-3-030-49186-4_31
- [2] Xiao, Y., & Yu, S. (2025). Can ChatGPT replace humans in crisis communication? The effects of AI-mediated crisis communication on stakeholder satisfaction and responsibility attribution. International Journal of Information Management, 80, 102835. <https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2024.102835>