



Blame the Bot

Anthropomorphism and Anger in Customer-Chatbot Interactions

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What we found

Chatbots are designed to look and act like humans. They often have human names (e.g., Amazon's 'Alexa'), humanlike appearances (e.g., avatars) and the capability to converse like humans. The assumption is that having humanlike qualities makes chatbots more effective in customer service roles.

However, research from the Oxford Future of Marketing Initiative (FOMI) suggests that this is not always the case. When customers are angry, deploying humanlike chatbots can negatively impact customer satisfaction, overall firm evaluation and subsequent purchase intentions. The reason: Humanlike chatbots raise unrealistic expectations and then underdeliver on those expectations.

What we did

To better understand how humanlike chatbots impact customer service, we conducted five studies and analysed one large dataset of real-world customer interactions and four controlled experiments. Through this research, we discovered that deploying humanlike chatbots to serve angry customers can have a negative impact on firms.

In *study 1*, we analysed 35,000 chat sessions between an international mobile telecommunications company's chatbot and its customers. We found that when a customer started a conversation in an angry, emotional state, the humanlike quality of the chatbot had a negative effect on the customer's satisfaction.

In *study 2*, we created a series of mock customer-service scenarios where 201 participants were either neutral or angry and the chatbot was either humanlike or not humanlike. Again, we saw angry customers displayed lower overall satisfaction when the chatbot was humanlike than when it was not.

In *study 3*, we wanted to understand how chatbot interactions affect the way customers feel about a company. We put 193 participants through a new chat scenario where they could be neutral or angry and the chatbot could be humanlike or not humanlike. As expected, angry participants reported lower evaluations of the company overall.

In *study 4*, we partnered with a professional developer to create a custom chatbot that would better simulate realistic customer-service interactions. We successfully replicated our results from studies 1-3, which added credibility to our findings.

In *study 5*, we conducted an experiment with 192 participants that revealed two important findings: First, when companies deploy a humanlike chatbot to serve an angry customer, it has a negative impact on purchase intent. Second, and perhaps more importantly, the reason purchase intent declines is not because the customer would have preferred to interact with a real human, but because the humanlike chatbot fell far short of expectations.

Why it matters

Chatbots are increasingly replacing human customer-service agents on companies' websites, social media pages and messaging services. In fact, some experts predict that, by 2020, chatbots will power 85% of all customer service interactions (Hinds 2018).

For marketers, there is already broad consensus that chatbots will produce tremendous efficiencies for firms (e.g., cost savings, scalability, additional customer data). What remains an open question is whether chatbots can actually improve customer service — and how.

Our research provides a clear roadmap for how best to deploy chatbots when dealing with hostile, angry or complaining customers.

Actions

Our findings suggest that it is important for marketers to both carefully design chatbots and consider the context in which they are used, particularly when it comes to handling customer complaints or resolving problems.

- **Before the chat:** Firms should attempt to gauge whether a customer is angry before they enter the chat environment (e.g., via natural language processing). This way, the firm can deploy the chatbot (or customer-service solution) that aligns with the customer's mood.
- **If the customer is not angry:** Firms can assign a humanlike chatbot. Our research suggests there is less risk when customers are in a 'neutral' mood (e.g., seeking information).
- **If the customer is angry:** Firms have three options: They could (1) assign a non-humanlike chatbot; (2) assign a humanlike chatbot but reduce customer expectations — e.g., Slack's chatbot introduces itself by saying 'I try to be helpful. But, I'm still just a bot. Sorry!'; or (3) transfer customers to a real live representative for assistance.

Further reading

Hinds, Rebecca (2018), "By 2020, You're More Likely to Have a Conversation with This Than with Your Spouse," *Inc.*, 2 (April), <https://www.inc.com/rebecca-hinds/by-2020-youre-more-likely-to-have-a-conversation-with-this-than-with-your-spouse.html>.