CHATBOTS AND THEIR APPLICATIONS IN E-COMMERCE

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ABSTRACT

There is a growing interest in the chatbot service, which is being widely used for effective customer relationship management. Through chatbots applied to mobile devices such as smartphones, you can request services anywhere, and you can ask any questions any time regardless of the operating hours of the customer center. Chatbots enable you to deliver a positive customer experience through personalized customer interactions across locations and times. Therefore, chatbots are attracting attention as a solution to customer-focused marketing. Our research explores why most companies will focus on providing intelligent chatbot services, and how they will be provided to users in E-Commerce through chatbots.

INTRODUCTION

Ever since the development of the first chatbot Eliza in the 1960's chatbots have been designed to learn human conversation and responses and learn how to adapt to different requests and provide different responses. and being one of the prominent tools on modern Artificial intelligence chatbots have been placed into almost major industry in the country from education , health care and especially E-Commerce.

THEORY

We hypothesized that chatbots utilize keywords from conversations to help create preferences for that user which will help the chatbot offer deals on related items that are being sold

HOW CHATBOTS WORK

To understand how chatbots impact e-commerce we must understand how they operate. Some chatbots are Ruled based and are only able to operate off predetermined response based on user choice and a lot of these bots are simplistic and easy to make. The main purpose of rule-based bots is for data collection that way developers can use that data to give better choices for the user when the bot is updated. Some bots are intellectually independent and utilize Machine Learning algorithms to learn user requests and give responses that best suites the request. A.I. Driven chatbots utilize machine learning, A.I. and Natural Language Processing (NLP) to understand user requests. Chatbots that have NLP try make interactions between the user and the machine seem more personal and human like using Natural Language Understanding (NLU) and Natural Language Generation (NLG).

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EXAMPLES AND RESULTS

Platforms like Facebook messenger allow people to build their own chatbots which utilize Natural Language Processing to help their business, and online markets like Ebay developed a bot that utilizes NLP to help customers with a quicker shopping experience.
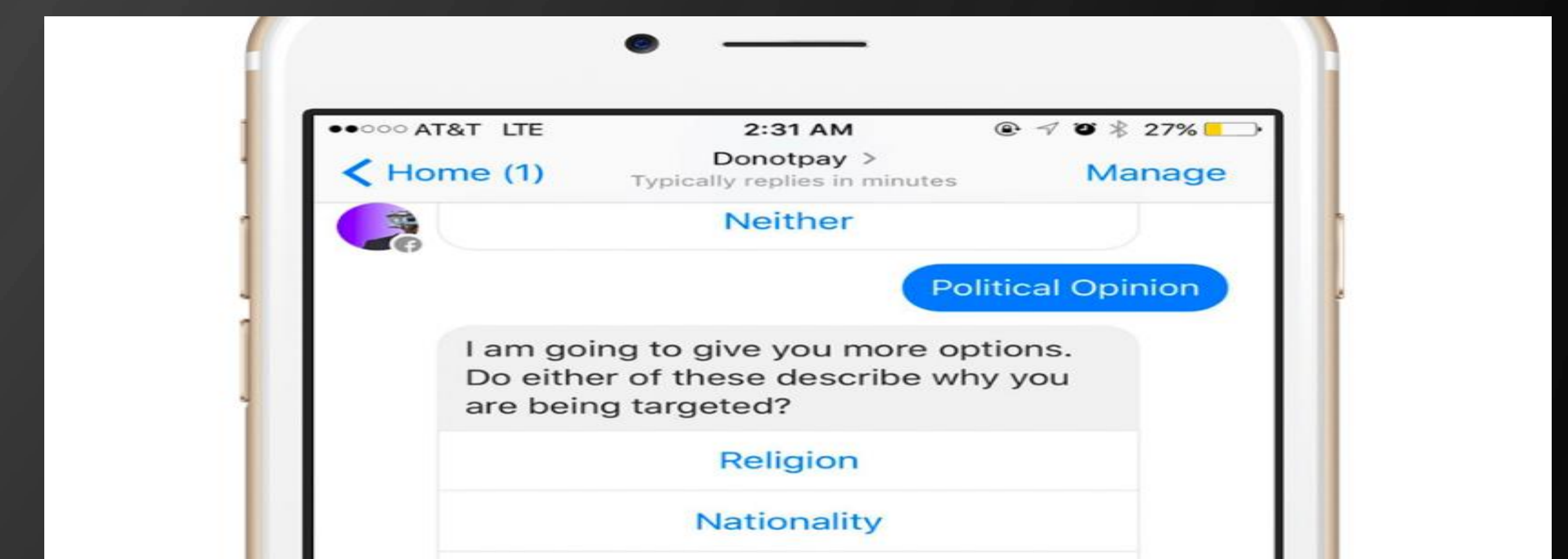
What We've found is that most online markets use the most complex chatbots with the most familiar phrases and greetings to help customers buy goods at a faster rate while offering better convenience. Most of the chatbots I've researched use A.I. and machine learning algorithms to convince the buyers that they are being helped by an individual instead of a machine.