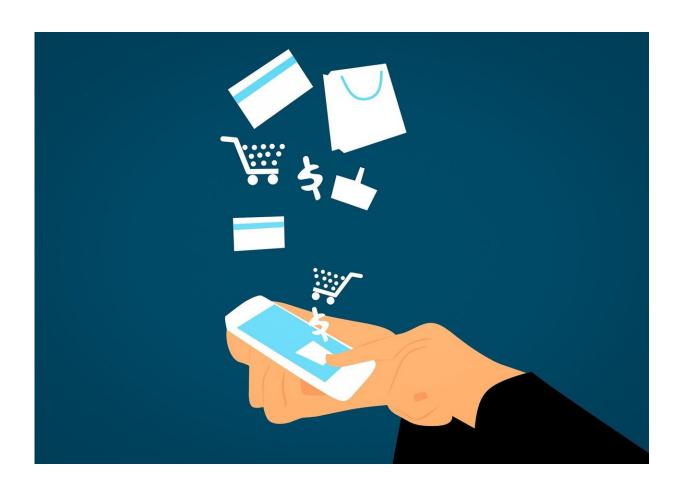# Improving virtual shopping

May 3 2022, by David Bradley

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The COVID-19 pandemic forced many people to do more activities online than they had in the past, including shopping. However, there are concerns that e-commerce does not match the experience of browsing and shopping in the real world. Research in the *International Journal of*

Technology Marketing has looked at the psychological response of consumers to the increasingly anthropomorphic virtual agents often used on e-commerce sites in an effort to replicate the in-store shopping experience and engagement. Indeed, anthropomorphic virtual agents already exist that can help inform consumers about new products, assist them in making their decisions as to what to buy, and answer questions about a product in which they are interested.

Sihem Ben Saad of the University of Tunis Carthage and Fatma Choura of the University of Tunis El Manar in Tunisia, explain that artificial intelligence has helped many e-commerce sites develop their offering to online customers. However, the experience does not yet match that of customers in "bricks-and-mortar" stores in terms of responsiveness and warmth. The team has surveyed some 660 internet users to examine the nature of their experiences with e-commerce virtual agents and what effects these interactions have on their psychological state when shopping online.

The team explains that the best anthropomorphic virtual agent "is adaptable and can be configured to meet the specific needs of the user. It can even adjust its behavior according to the situation and to the user's expectations." Moreover, these agents can make more advanced decisions based on customer choices as well as negotiate the closing transaction. Fundamentally, the team found that by endowing a virtual agent with a voice, human gestures and conversational skills, companies could maximize the perceived humanization of the interface and so positively affect their customers' intentions in ways that static non-interactive e-commerce might not be able to match.

The team adds that such virtual assistants so improve the user experience for many people, that they are then more inclined to spread the word about a successful transaction with friends and relatives and so potentially open up the market to those people through word-of-mouth

too.

More information: Sihem Ben Saad et al, Online shopping during the Covid-19 crisis: the impact of anthropomorphic virtual agents on consumers' psychological states, *International Journal of Technology Marketing* (2022). [DOI: 10.1504/IJTMKT.2022.122450](#)