Would you buy if you know? Does knowledge promote or deter adoption of Digital Home Assistants?

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We are living in an era characterized by continuous technology evolution. A number of technology acceptance models are found in the literature pertaining to information systems, business and other sectors like agriculture and farming. Lack of knowledge was identified as one of the main barriers to technology adoption and hence a number of studies examined awareness, information gathering and learning process as influencers of technology adoption.

In the context of web-based technology, much of the literature is related to E-Commerce or the use of other internet-based platforms, in what is known as computer mediated environment (CME). The barriers to adoption were found to be concerns of privacy, trust, information security and perceived risk. While e-commerce entails a user-initiated transaction, other devices and services like digital assistants and smart technology actively gather information, which the users may or may not be aware of. Digital home assistants (DHAs) like Google Home and Alexa, when connected to the homes, can perform numerous tasks and offer greater convenience. Recent incidents related to Facebook for example, have indicated breach of information gathered from the users, including information gathered without the active knowledge or consent of the users.

In this context, it is interesting to examine the users' perceptions of a digital home assistant which is always capable of gathering information of all members of the family and visitors. Are users aware of the information flows – inward and outward – when using a DHA? How does it influence the adoption of DHA? These were the questions addressed by the study. The study covered two sets of respondents: current users and non-users. A pretest-posttest model was used to study the level of knowledge and their purchase intention (non-users) / continuity intention (users)

First, the quantum of data captured and the inflows and outflows from Google Home has been measured in a four-day period.

The non-user respondents who displayed positive intention to buy have been exposed to the information and a post-test response related to purchase intention was measured.

The current users' knowledge related to information security in the use of DHAs was tested and their continuity intention was measured. The paper shares initial findings of the ongoing study of 102 non-users and 33 current users.

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