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Gohar Khan

The University of Waikato, gohar.khan@waikato.ac.nz

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Recommended Citation

Khan, Gohar, "Towards a Theory of “Ease of Use” in the Next Generation of IS Artifacts" (2020). *ICIS 2020*. 21.

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Towards a Theory of “Ease of Use” in the Next Generation of IS Artifacts

Gohar F. Khan, The University of Waikato Management School, New Zealand. Email: gohar.khan@waikato.ac.nz

The way end-users interact with IS artifacts has come a long way from the humble beginnings of interacting with punch cards to keyboards and mouse, touch screens, and now to gestures, speech, and thought-based control mechanism not requiring physical contact. However, reliable measures do not exist to understand the *ease* associated with this new genre of information systems artifacts. This research aims to fill this gap in the literature and proposes measures for the ease associated with the new genre of IS artifacts. We draw on literature spanning from technology adoption, the theories of consciousness, the speech theory, the theories of thoughts, to the gestural theories, and propose four core constructs for the new genre of information systems artifacts:

- **Perceived Cognitive Ease**—which is the perceived amount of mental ease experienced by a user when an autonomous artifact is carrying out tasks and activities for which the system is designed to support it.
- **Perceived Ease of Cognition**—which is the perceived amount of effort required to communicate conscious thoughts to an IS artifact.
- **Perceived Ease of Conversation**—which is the perceived amount of effort required to converse with an IS artifact.
- **Perceived Ease of Gestures**—which is the perceived amount of effort required to communicate intentional gestures to an IS artifact.

Aside from the theoretical value for academics, developing new measures for the new genre IS artifacts will have greater practical benefits for the businesses who are keen to understand their customer needs and demand.

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