Trusting Automated Consumer Dialog Systems: An Empirical Study

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Abstract

Automated dialog systems are deployed as a combination of an interface-provider (e.g. Facebook Messenger), a specific algorithm provider, that reflects the actual value of the system, and a data source provider (e.g. LinkedIn). In this paper, we reflect the involvement of different institutions in deploying an automated dialog systems as a new form of interaction between organizations and its consumers. We argue that trust is an important determinant and that when people start distrusting one of the different providers of such a system they might lose their trust into the entire system. For example, when people lost trust into Facebook because of the Cambridge Analytical case they might stop using an automated consumer dialog system simply because they do not rely on the Facebook Messenger anymore. Therefore, we provide a zoom-in into the institutional-trust dimension and argue that it is appropriate to split the dimension into at least three different measures for institutional trust to reflect the interface-, algorithm-, and data-provider of an automated dialog system. Our empirical study reported focusing on an automated dialog system in the recruiting context (N=193) supports these arguments. Therefore, the paper provides a trust measure for automated dialog systems that reflects the specific architecture of these online services.

Keywords: Trust, chatbots, automated dialog systems, institution-based trust, survey-research