

## **The Effect of Explainability Features on the Acceptance of Conversational Agents in Online Recruiting**

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Conversational agents revolutionize the way how information systems interact with humans. Implemented Artificial Intelligence (AI) makes the interaction between the system and the human similar to the way that humans interact with each other and does not follow predefined paths anymore. However, the challenge with AI is that it usually based on black box models making the factors underlying the behavior and eventual decisions of conversational agents intransparent.

Recruiting is a recent field of application for such systems where conversational agents now conduct job interviews online and even preselect candidates based on their responses. This application is especially sensitive to the black box character of AI, as the stakes for applicants are high and thus explanations of decisions are expected and often also legally required. Surprisingly, there is little research on both acceptance of conversational agents by (potential) applicants. Even less attention is paid to role that explainability of chatbot decisions can have on the acceptance of conversational agents and their decisions by applicants.

As one central factor that potentially can foster acceptance, explainability of chatbot decisions is studied as part of an explanatory model based on the unified theory of acceptance and use of technology (UTAUT), including affinity for technology interaction, general trust in AI systems and performance expectancy of conversational agents.

A quantitative quota-representative survey ( $n = 555$ ) is used to assess the acceptance and attitudes of (potential) applicants towards the use of chatbots in the recruiting process including a factorial survey (vignette analysis) to examine the causal influence of certain explainability features on different acceptance factors.

We find significant effects of various forms of explanations for the acceptance of preselection decisions made by conversational agents. In addition, we also find significant effects of the explanatory variables of the developed UTAUT model with a high  $R^2$  of around .40.

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