User's Benefit Perceptions and Privacy Concerns for the Personalised Recommendation Service on Taobao: A Privacy Calculus Perspective

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ABSTRACT

First proposed in 1992 by Goldberg, Nichols, Oki, and Terry, Recommendation System (RS) was regarded as an efficient tool for filing electric documents. Personalised recommendations are defined as a personalised list of items that the recommendation algorithm process the massive data to produce results (Wang et al., 2020). After decades of research and development, it has been utilised in fields such as social networks, streaming services, and e-commerce. (Ko et al., 2022). Promotion of customer satisfaction is one of the most mentioned goals of recommendation systems with its capability to deal with overloaded information and find relevant items that may interest customers. According to Abdollahpouri et al. (2020), a recommendation system is economically beneficial and sustainable for service providers and capable of creating values for users and perhaps further stakeholders. To balance customer satisfaction with personalised and targeted services economic-oriented goals like conversion rates, higher revenues, and client retention, personalised recommendations are provided in various contexts (Jannach and Jugovac, 2019). However, a great portion of data processed is collected from users causing risks of privacy leakage and users' concerns about privacy violations (Meng et al., 2018). It is prevailing for users to perceive privacy invasions due to the possibility of data sharing, renting, or selling to third parties (Liu et al., 2017). Malicious user attacks may occur with data collected from users and results from learning these data (Du et al., 2018). Discrimination issues and merchant-beneficial results also arise with the underlying data provided by users (Ekstrand et al., 2019; Ricci et al., 2022). As the Privacy Calculus Theory indicates, interests and privacy risks perceived from the Internet jointly influence users' willingness to personal information disclosure (Dinev and Hart, 2006).

Keywords: User's Benefit Perceptions, Privacy Concerns, Privacy Calculus