

# Managing Personalization-Privacy Paradox of Digital Services: A Systematic Literature Review

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Effective utilization of personal data contributes to greater customer satisfaction and provides a better fit between the offer and the customer needs, which can be leveraged as competitive advantage. However, consumers may be reluctant to share their personal information due to privacy concerns. This is referred to as the personalization-privacy paradox, and firms need to deal with the paradox to gain benefit of personalization. The purpose of this study is to provide further understanding of how to manage the personalization-privacy paradox of digital services. This study reviews privacy and personalization literature using a systematic literature review methodology. This study examines various theories and empirical findings to deconstruct the personalization privacy paradox and develops a conceptual framework of privacy decisions. This study also provides suggestions to manage the personalization-privacy paradox of digital services. The key to manage the paradox is to increase the value of personalized services and to lower privacy concerns, which are affected by the presentation of privacy policy, emotions and contexts.

## Research question

It has been shown that personalized services and products are preferred by customers due to the convenience they offer (Chellappa and Shivendu, 2007). To improve the quality of services, many firms are keen to provide personalized services, but need to collect customers' personal information to do so. As customers are increasingly concerned about how their information is used, asking consumers to share more personal information might make some of them reluctant to use the services. Subsequently, those firms hoping to gain benefit from personalization face a dilemma: either not to provide personalized services and products and lose out to their rivals or provide personalized services and products and lose some customers who are concerned about privacy. This is the personalization-privacy paradox (Awad and Krishnan, 2006; C.H. Lee and Cranage, 2011; Lee and Rha, 2016; Xu et al., 2011b). Hence, to get the benefit from personalization, firms need to have appropriate strategies to deal with this dilemma (Baek, 2014; Karwatzki et al., 2017; C.H. Lee and Cranage, 2011; Sutanto et al., 2013). The aim of this study is to answer the research question: How to manage the personalization-privacy paradox of digital services?

## Research methodology

To answer the research question, a systematic literature review (SLR) evaluates the contribution of the published studies on the relevant topics. Unlike a traditional narrative literature review, which is based on a heuristic search, a systematic review aims to make the review process transparent and as reproducible as possible (Ginsberg and Venkatraman, 1985). By using an explicit algorithm of searching

and critical appraisal of the literature, research bias can be minimized, which leads to an improvement in the quality of a review and a reproducible outcome (Tranfield et al., 2003). Even though there are challenges and limitations to this methodology, e.g. large amounts of material to review and insufficient representation from search criteria (Pittaway et al., 2004), a systematic review is argued to be an appropriate methodology given the depth and the breadth of the privacy literature.

Following Tranfield et al. (2003), this study employs a three-stage approach. In the first stage, a review panel directs the process and resolves the disputes over the protocol, and an iterative process of definition, clarification, and refinement is performed. A comprehensive and unbiased search in the second stage uses strict selection criteria to ensure that only the best-quality evidence is incorporated into the review. The process of research selection involves several steps, and extensive primary research papers are synthesized and presented for both academics and practitioners.

## Data

The study searches the following electronic databases for potentially relevant studies: Scopus, Science Direct, Emerald and Business Source Complete. These databases are selected for the wide coverage of the literature in the area of interest, such as business, information systems, and marketing and management. Peer-reviewed journals are considered to provide validated knowledge and have higher impact in the research domain (Lightfoot et al., 2013). Hence, the searches are limited to peer-reviewed articles published before between January 1990 and October 2018 in the English language.

The journal search results yield 1907 [Scopus], 119 Elsevier (Science Direct), 567 [Emerald] and 24 [Business Source Complete]. The duplicates and articles not written in English or not published in peer-reviewed journals are removed, bringing the number of remaining articles to 1714. The articles were filtered for quality, selecting only those published in the journals ranked as ABS 4\*, 4 and 3, which gives 337 results. These articles are filtered by manually reading titles and abstracts, selecting only the articles relevant to the research question. This leaves 158 journal studies. Subsequently, full paper review is performed and a study is included if the topic is relevant to privacy or personalization in the context of digital services. Finally, 45 journal studies are selected as a basis for further analysis.

## Key findings

From the results a conceptual framework is developed to explain how individuals decide whether to disclose personal information in a specific context. Practical suggestions are offered to firms on how to deal with the personalization-privacy paradox of digital services. Since context-specific privacy concerns may override general privacy concerns, firms need to carefully consider the personal information to be collected based on the context in which the personalized services and products are provided. If customers can easily estimate the potential risk of data misuse, they will have lower privacy concerns. Thus, the presentation of privacy policy needs careful curation, as this is an important medium for customers to learn about the privacy protection mechanism. The value and usefulness of the personalization is influential on customers' privacy decisions, as customers agree to share their personal information only when the perceived benefits outweigh the potential cost. Firms should be aware that negative emotions, e.g. anxiety and worry about potential data misuse, could lead to higher privacy concerns. Firms need to maintain a positive reputation and adopt support this through good data protection practices to convince customers that their personal information is well protected.