

Research Report

The Role of Information Overload to Participate in Social Networks

SOCIAL NETWORKS ARE COMMONLY USED IN PRIVATE AND BUSINESS LIFE. DIFFERENT STUDIES OUTLINE THAT THIS TREND WILL INCREASE IN THE NEARER FUTURE. IN ORDER TO UNDERSTAND THE BEHAVIORAL INTENTION TO PARTICIPATE IN SOCIAL NETWORKS OF NEXT GENERATION EMPLOYEES, WE EXTENDED THE WELL-ESTABLISHED THEORY OF PLANNED BEHAVIOUR TO HABIT AND INFORMATION OVERLOAD. USING SURVEY DATA FROM 262 PARTICIPANTS, WE FOUND THAT THE OVERLOAD OF INFORMATION PLAYS AN IMPORTANT ROLE TO PARTICIPATE IN SOCIAL NETWORKS, BESIDES THE HABIT TO USE SUCH NETWORKS.

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Introduction

In recent years, a growing number of Internet users participating in social networks (e.g., Facebook) formed a social online community. Thereby, the people's social capital and communication with other people increases (Wellman, 2001). Social networks support people's communication, navigation, and relationship-building within the Internet, but at the same time change their communication and collaboration behaviors (Wellman, 2001). For instance, people are more likely to communicate via social networks rather than meeting another in person. Being different from a social group (e.g., friends and relatives), social networks depict a broader spectrum of collaboration. People within a social group are heavily interconnected and the boundaries of this group are

clearly defined. In contrast, social networks provide the participants the possibility to connect and collaborate with other people outside of their social group (Wellman, 2001). However, the popularity of social networks suggests that people find tools useful and desirable that provide them with slices of their social experiences online. Therefore, this study explores the behavioral intention to participate in social networks by conducting an empirical study among 262 university members representing the next generation of employees for companies. Most of the bigger companies are already using social network platforms in their daily business environment. Actually, they advocate the use of those enterprise social networks to increase the informal working culture (Eppler and Mengis, 2004).

Based on Lin (2006), we developed a structural model to measure the behavioral intention to participate in social networks. We included two innovative constructs, information overload and habit, to explore how these factors influence the behavioral intention to participate in social networks. Our research questions in the context of social networks are:

1. What are the drivers of the behavioral intention to participate in social networks?
2. How does information overload influence the intention to participate in social networks?

Important Hypotheses

Several studies explored individual information overload in terms of different communication technologies (e.g., Reeves et al., 2008), but none of them has measured this concept as an own construct in a broader model. Hence, we based the conceptualization of this construct on the research of Kock et al. (2009). Concerning the impact of information overload on social network participation, we hypothesize:

1. The individual information overload negatively affects attitudes towards participation in social networks.
2. The individual information overload negatively affects the behavioral intention to use social networks.

There is an ongoing discussion in the extant literature due to the role of habit in people's behaviors. Limayem et al. (2007) demonstrated

that the concept of habit can be regarded as an indirect or direct effect to the people's behaviors. Indirectly habit influences behavior as a predecessor of people's intentions. Otherwise, habit can be seen as a direct effect on the behavior independent from people's intentions. Such a direct effect implies that habit is separate from a conscious decision-making process (Limayem et al., 2007). In sum, habit means to tend to perform behaviors automatically (Limayem et al., 2007). Regarding the effect of habit on participation in social networks, we hypothesize:

3. Habit positively affects attitudes towards participation in social networks.

Data Collection and Sample Profile

In order to validate the research model and the associated hypotheses, a questionnaire-based field study was conducted. The participants were asked to respond to the survey by filling out an online questionnaire. Finally, 262 responses were completed and could be used as valid data points for the measurement calculation, which corresponds to a response rate of 13.1%.

Structural Model

The results for the Partially Least Square estimation are calculated with SmartPLS with a path weighting scheme for the inside approximation. In addition, we used a bootstrapping procedure by generating 500 bootstrap samples as well as conducting the bootstrap procedure to test the significance of the path estimates, factor loadings, and weights.

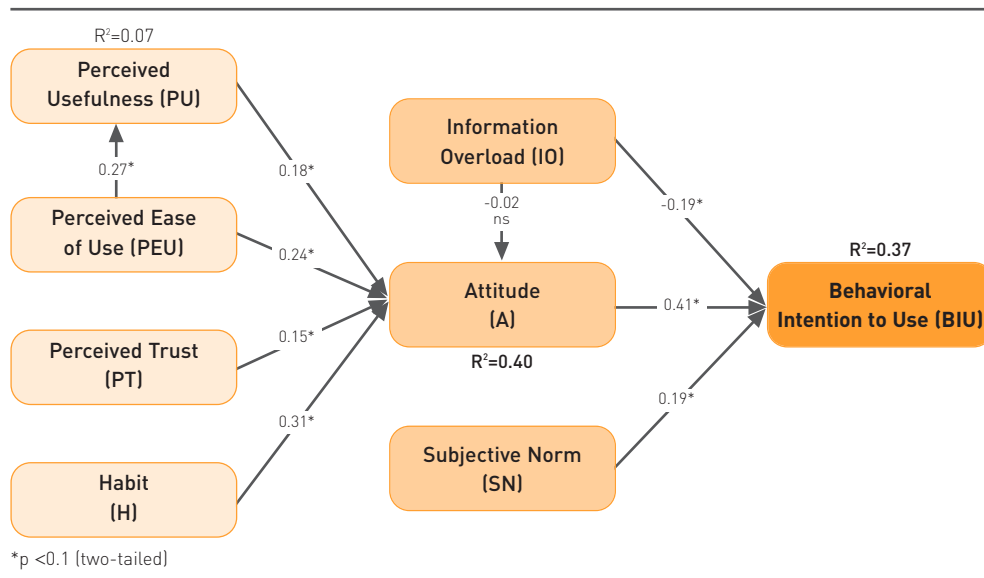


Figure 1: Estimated structural model

Figure 1 presents the results of this estimation and outlines that all path coefficients are above the minimum of 0.1. The influence of information overload on the attitude of the participants is not significant according to the survey data. The squared multiple correlations (R^2) depict the explanatory power of the structural model. Thereby, it is important that these R^2 are above the minimum of 0.33. In consequence, the model explains a moderate value of variance for the dependent latent variables.

Discussion of the Results

Theoretical implications that we found are that attitude towards behavior depends not only on the perceived usefulness, perceived ease of use, and perceived trust, but also on the habit to use social networks (Limayem et al., 2007).

Thereby, this habit has the strongest influence on the attitude. If an individual is used to participate in social networks, there will be a positive attitude to these social networks. With this outcome, we prove that habit cannot only be regarded as an indirect effect on the people's behaviors. Our statistical findings outline that habit can be measured as an own construct and thereby support the research of Limayem et al. (2007).

In contrast to Lin (2006), we found that subjective norm has a statistically significant influence on the behavioral intention to use social networks. Obviously, subjective norms, or the social environment of the participants, have a significant influence on the acceptance of social networks. Social networks are solely

valuable for an individual if other people are also participating in these networks. Otherwise, the social network would not make any sense. This outlines the ongoing trend to an increasing use of social networks.

We included the innovative construct of information overload in this context (Kock et al., 2009). We found a significant negative effect on the behavioral intention to use social networks, but not on the attitude of the participants. The more information an individual receives in social networks, or the more this individual is committed to check for incoming information, the more overloaded the individual is (Eppler and Mengis, 2004). This fact directly influences the plan to participate in social networks in a negative way.

The practical implication of our research is that information overload has to receive attention in modern society. Next generation employees are already used to social networks, but are also overloaded from all the information they get. Companies have to take this into account and should implement measures against an ongoing information overload. One example for possible measures against an ongoing information overload is provided by Reeves et al. (2008). They explored the phenomenon of information overload in terms of employees' e-mail usage. Thereby, they introduced a kind of marketplace and an artificial currency for every information exchange. The setting forces senders to evaluate the value of information of a message before clicking 'send'.

References

Eppler, M.; Mengis, J.:

The Concept of Information Overload: A Review of Literature from Organization Science, Accounting, Marketing, MIS, and Related Disciplines. In: The Information Society, 20 (2004) 5, pp. 325-344.

Kock, N.; Del Aguila-Obra, A.; Padilla-Meléndez, A.:

The Information Overload Paradox: A Structural Equation Modeling Analysis of Data from New Zealand, Spain, and the USA. In: Journal of Global Information Management, 17 (2009) 3, pp. 1-19.

Limayem, L.; Hirt, S.; Cheung, C.:

How Habit Limits the Predictive Power of Intention: The case of Information Systems Continuance. In: MIS Quarterly, 31 (2007) 4, pp. 705-737.

Lin, H.:

Understanding Behavioral Intention to Participate in Virtual Communities. In: Cyber Psychology & Behavior, 9 (2006) 5, pp. 540-547.

Reeves, B.; Roy, S.; Gorman, B.; Morley, T.:

A Marketplace for Attention: Responses to a Synthetic Currency used to Signal Information Importance in E-Mail. In: First Monday, 13 (2008) 5, pp. 1-17.

Wellman, B.:

Computer Networks as Social Networks. In: Computer and Science, 293 (2001) 5537, pp. 2031-2034.