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ARTICLE



# Encouraging the use of self-service business intelligence – an examination of employee-related influencing factors

Jens Passlick[a], Nadine Guhr[a], Benedikt Lebek[b] and Michael H. Breitner[a]

[a]Information Systems Institute, Leibniz Universität, Hannover, Germany; [b]Business Systems, Continental Tires, Hannover, Germany

**ABSTRACT**

This study examines which factors influence the use of self-service business intelligence (SSBI) applications. To analyse the interdependencies, we develop a structural equation model (SEM) and test it by surveying potential users of SSBI across different sectors. The SEM shows that the intention to use is significantly influenced by the expected contribution of SSBI to information needs, which is significantly influenced by business intelligence (BI) experience, SSBI flexibility, SSBI expected time savings and the importance of data quality. The perceived attention of a company to data quality has a significant negative influence on the intention to use. These results imply that the mere introduction of SSBI is not sufficient for successful use. Training on how to use SSBI and how SSBI can change individual ways of working are important components. A well-designed concept for ensuring data quality also promotes the intention to use. In addition, we found that the utilitarian value is independent of the decision environment.

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Self-service business intelligence; intention to use; structural equation modelling; contribution to information needs

## 1. Introduction

In an era of digitalisation, organisations are increasingly expecting their employees to make data-based decisions to achieve a competitive advantage (Convertino & Echenique, 2017). This development requires greater flexibility and faster decision support. Classical business intelligence (BI) standard reporting is often not able to meet these demands to a sufficient extent. The use of self-service BI (SSBI) software is considered to increase flexibility and thus contribute to meeting these new demands (Imhoff & White, 2011). SSBI can also help to reduce the workload of the IT department and free up resources for other activities. Time savings can also be the reason for the introduction of SSBI applications, as analyses are carried out directly by business users and not by IT department staff (Imhoff & White, 2011). Nevertheless, the IT department can still retain some control over the analysis plans with an SSBI governance strategy (Clarke et al., 2016). SSBI environments are designed to 'empower casual users to perform custom analytics and to derive actionable information from large amounts of multifaceted data without having to involve BI specialists' (Alpar & Schulz, 2016, p. 151). Nevertheless, implementing SSBI software alone does not necessarily lead to a better BI environment (Burke et al., 2016). It

**CONTACT** Jens Passlick passlick@iwi.uni-hannover.de