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Empirical Research in Information Systems: 2001–2015

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Contents

Empirical Research in Information Systems: 2001–2015

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ABSTRACT

While several studies have cast retrospective looks at IS research in order to define its boundaries, relatively little evidence exists regarding the main topics that IS researchers have empirically studied. In an effort to improve existing knowledge on this subject, the present paper first develops a relatively high-level, but sufficiently fine-grained framework that incorporates all constructs and relationships that have been examined by IS researchers. Then, it identifies all empirical papers published in four top IS journals (*Journal of AIS, Journal of MIS*, *Information Systems Research*, and *MIS Quarterly*) between 2001 and 2015 (a total of 1,361 papers), as well as the constructs and relationships they have studied, and incorporates them, as well as the number of times they were studied, onto the framework. The results provide an overall, yet a relatively fine-grained view of empirical research that has been published in these journals between 2001 and 2015, and can be useful for IS researchers by enabling them to identify potentially interesting and fruitful research areas.

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Introduction

IS research efforts have been examined from a variety of perspectives, including their diversity, (e.g., Benbasat and Weber, 1996; Robey, 1996), the need for high quality and impactful research (e.g., Agarwal and Lucas, 2005), and their focus on the IT artifact (e.g., DeSanctis, 2003; Orlikowski and Barley, 2001). Yet, two questions continue to preoccupy IS researchers: 1) the discipline's core identity and its boundaries (e.g., Benbasat and Zmud, 1999; Lyytinen and King, 2006; Sidorova *et al.*, 2008; Watson, 2014); 2) the relevance of IS research to practice (Benbasat and Zmud, 1999; Lee, 1999; Ginzberg, 2012; Niederman *et al.*, 2015). In order to address the first issue, some researchers have examined the IS topics that have been studied by identifying the themes covered in top IS journals (e.g., Ives *et al.*, 1980; Sidorova *et al.*, 2008), but without empirically identifying how much or how often IS researchers have studied which constructs and relationships. As the concepts and relationships examined in a scientific field provide the main building blocks of its theories (Burton-Jones *et al.*, 2015; Rivard, 2014), a key objective of many studies is to conceptualize constructs and their relationships (Alter, 2016). As such, evidence regarding which constructs and relationships the IS field has examined can be useful by helping

researchers to more clearly see the major research questions that have preoccupied the field during a given period, as well as by helping them identify the topics and relationships that researchers consider to be important, but which have been understudied.

According to many scholars, an important contribution of IS research stems from being useful to organizations and by creating knowledge that can inform professionals about how to manage and apply IS (Applegate *et al.*, 1999; Benbasat and Zmud, 1999; Benbasat and Zmud, 2003; Davenport and Markus, 1999; Klein and Rowe, 2008; Kock *et al.*, 2002; Lee, 1999; Rosemann and Vessey, 2008; Straub and Ang, 2008)[1]. However, the long-running assertions made by numerous researchers regarding the lack of practical relevance of IS research (e.g., Benbasat and Zmud, 1999; Ginzberg, 2012; Niederman *et al.*, 2015), have not been empirically supported (Straub and Ang, 2008), and "*the extent to which IS research is relevant to IS practice remains, objectively speaking, unknown*" (Lee, 1999, p. 32), an observation that is still valid, given the lack of empirical evidence in this regard.

Based on the above considerations, the objective of the present paper is to provide a first step in order to provide empirical evidence and knowledge in this regard. To do so, the paper first develops a broad, yet sufficiently fine-grained framework of IS research by integrating earlier frameworks. Then, it identifies all empirical IS research published from 2001 to 2015 in four top IS journals (*Journal of the Association for Information Systems, Journal of Management Information Systems, Information Systems Research, and MIS Quarterly*), and maps onto this framework all the constructs and relationships that were examined by the 1,361 empirical papers published in this 15-year period. Next, based on this mapping, and by drawing on criteria proposed by organizational (Thomas and Tymon, 1982) and IS researchers (Benbasat and Zmud, 1999; Lee, 1999; Straub and Ang, 2008) it provides a preliminary assessment of the relevance of empirical IS research to practice, and discusses the study's findings and their implications.

[1]It is important to note that the relevance of research to practice has been a concern not only of IS researchers, but it has also been viewed as a crisis that plagues organizational sciences (e.g., Hinkin *et al.* 2007; Rynes *et al.* 2001; Thomas and Tymon 1982).

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