Using Inquiring Practice and Uncovering Exformation for Information Systems Development

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ABSTRACT

One of the oldest themes in information systems (IS) research concerns the relationship between developers and users of information systems. Over the years, IS scholars and IS practitioners have addressed the problem in a variety of ways, often focusing on how the use of social techniques can improve understanding between the two parties. Users, however, still find themselves working with systems, which do not match their requirements, needs, and expectations. We suggest that the problematic developer-user dynamic can be addressed by introducing an inquiring practice approach to information systems development. Consequently, this chapter conceptualizes a new way of understanding information systems development through the lenses of inquiring practice, Socratic dialogue, and the uncovering of exformation. We show that by applying this approach, we can enhance the inquiring capabilities of organizations, and thereby facilitate design and development of better information systems.

INTRODUCTION

One of the oldest themes in information systems (IS) research concerns the relationship between developers and users of information systems. Over the years, the theme has been addressed in a variety of ways by IS scholars and IS practitioners, for example, as a systems development problem (Fitzgerald, Russo & Stolterman, 2002; Hirschheim, Klein & Lyytinen, 1995; Mumford, 1996; Wood-Harper, Antill & Avison, 1985), as a problem that can be solved through end-user computing (Jarke, 1986), or by engaging in par-

ticipatory design (Ehn, 1988; Greenbaum & Kyng, 1991). No matter how the problem is addressed, the underlying theme always seems to be how understanding between the two parties can be improved, typically through the use of various social techniques. The results, however, are not convincing. Users still find themselves working with systems which match neither their requirements nor their expectations.

We believe that attempts to address the problematic developer-user dynamic can be aided by a return to fundamental systems theory and the key questions raised by this body of knowledge. Churchman (1968) provides an example of such a key question in his book Challenge to Reason. He says, "How can we design improvement in large systems without understanding the whole system, and if the answer is that we cannot, how is it possible to understand the whole system?" (p. 3).

We argue that in aiming to develop improved information systems, we need to strive for an understanding of the whole system, and thus we pose the question: How can we facilitate a progression towards this understanding? For our part, we have chosen to focus on an inquiring practice approach to information systems development. In this chapter, we conceptualize a new way of looking at the theme through the lenses of inquiring practice, Socratic dialogue, and the uncovering of exformation. We suggest that by applying this approach, we can enhance the inquiring capabilities of organizations, and thereby facilitate the design and development of better information systems. In order to fulfill this purpose, the chapter proceeds in the following manner. First, we elaborate on the problems related to communication and understanding between developers and users of information systems, describe how conventional approaches to information systems development have dealt with the developer-user communication problem, and explain why it is appropriate to regard developers and users of information systems as belonging to different communities of practice. Second, we present the Socratic dialogue method and demonstrate how this approach to communication between different communities of practice is likely to enhance their inquiring capabilities. Third, we develop a model for how to apply Socratic dialogue method in information systems development practice, and thereafter we apply the model to a case of information systems development in order to demonstrate how developers and users can benefit from the use of Socratic dialogue method. For this purpose, we use the FXsystem case, which describes the developer-user communication difficulties encountered by the Danish software firm, Unique, while developing a Foreign Exchange System for West Bank. Finally, we conclude and identify the point of arrival for our inquiring endeavor.

INQUIRING PRACTICE AND INFORMATION SYSTEMS RESEARCH

The idea of inquiring organizations originates from the works on inquiring systems by Churchman (1971). The concept of inquiring organizations has predominantly attracted attention from scholars working in the fields of organization theory (Mirvis, 1996; Richardson, Courtney & Paradice, 2001), information systems research (Courtney, 2001; Klein & Hirschheim, 2001), and, more recently, knowledge management (Malhotra, 1997). While scholars of organization theory have focused on organizational learning, scholars of information systems research have addressed decision support systems and information systems development. The decision support systems approach focuses on building inquiring information systems for inquiring organizations, whereas the information systems development approach focuses on how organizations can take on an inquiring perspective when designing and developing information systems. Although differing in their focus, both approaches share the 13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/using-inquiring-practice-uncovering-exformation/25112

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