Chapter XI

Activity Theory as a Theoretical Foundation for Information Systems Research

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ABSTRACT

Theoretical models from social psychology have been widely used by information systems (IS) researchers as theoretical foundations to explain and predict information systems use. Unfortunately, most of these models used ignore the social context in which IS is used, but rather focused mainly on the individual and the technology. History and time are as well ignored in most cases. The set of philosophical concepts presented by Activity Theory makes it possible to marry the human aspects and the technological aspects of information systems into a more holistic research approach in information systems. This chapter presents the basic concepts of Activity Theory and its potential as a theoretical foundation for information systems use research.
INTRODUCTION

The field of information systems continues the search for appropriate approaches to information systems research that would marry the social and technological aspects in information systems. There has been the “war” between the quantitative and qualitative research camps, which, fortunately, was just recently declared to be over. Qualitative research is said to be now welcomed in almost all IS journals (Myers, 1999). Indeed, an increasing number of IS research is turning to qualitative research in IS. However, the search for a unifying theoretical foundation for IS research seems to be far from over. As the information technology advances so rapidly and the use of IS increases by the day, cracks in some earlier IS researches are beginning to appear. History, time, the socio-technical nature of IS and, perhaps most importantly, the absence of strong and unifying theoretical foundations may have contributed to these cracks (Markus, 2000).

Debates about the nature of the field of information systems still rages on in the IS community. IS researchers have suggested the use of social psychology models as potential theoretical foundations for research on the determinants of user behaviour and system use (e.g., Christie, 1981; Burton, Chen & Grover, 1993; Szajna & Scamell, 1993; Davis, Bagozzi & Warshaw, 1989; Netemeyer & Bearden, 1992, Bagozzi, Baumgartner & Yi, 1992; Martocchio, 1992; Natarajan, 1993; Kelloway & Barling, 1993; Mykytyn & Harrison, 1993; Wishnick & Wishnick, 1993; Saga & Zmud, 1994). Among the most commonly used theories for research in this area are the Theory of Reason Action (TRA), the Technology Acceptance Model (TAM), the Expectancy Theory, the Theory of Planned Behaviour (TPB), and the Social Cognitive Theory (SCT).

Despite the large amount of research surrounding the area of IS use, studies (Franklin, Pain, Green & Owen, 1992; Hornby et al., 1992; Hovmark & Norel, 1993; Williams, 1994; Markus & Keil, 1994) suggest that most systems fail to meet the objectives and aspirations held for them, not because they are not technically sound, but because psychological and organisational issues were not well-addressed during the development, implementation and use of the systems.

This chapter aims at presenting Activity Theory as an alternative theoretical foundation for IS research to address some of the shortcomings of the current theoretical approaches. The chapter first takes a brief look at some commonly used social psychology theories in IS research. The chapter then presents an overview of the concept of Activity Theory, followed by a discussion of Activity Theory as a theoretical framework for information systems research supported by one practical example of a work activity and an Activity Theory framework for a research work currently being carried out by the authors. The chapter continues
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