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Recommended Citation

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User Satisfaction in Mandated Implementations: A Study of Expectations, Contracts, and Trust

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Primary Research Area

Unmet user expectations regarding a new information system have been successfully used to predict user satisfaction. This research proposes using a larger set of expectations based on the Equity-Implementation Model (Joshi, 1991) to strengthen the scope of unmet expectations to include expectations related to changes brought about by the implementation. Additionally, the more emotionally salient concept of psychological contract breach (Rousseau, 1995) is proposed to have stronger predictive ability for the determination of user satisfaction than user expectations. Finally, the effect of psychological contract breach on user satisfaction is expected to be partially mediated by a change in trust levels toward the relevant party, based on prior research on employee contributions and psychological contract breach (Robinson, 1996).

Research Problem and Supporting Theory

Although much research in information systems (IS) has focused on the voluntary adoption and implementation of an IS, less attention has been paid to the implementation of systems for which the use is mandatory. Unlike situations of voluntary IS usage, a mandated implementation cannot rely on system use as a proxy for system success (Melone 1990, Delone and McLean 1992). A more acceptable measure of system success with mandated use is user satisfaction, which has long been used in IS research as a surrogate for system success (Delone and McLean 1992; Melone 1990; Doll and Torkzadeh, 1988; Jenkins and Ricketts, 1986; Bailey and Pearson, 1983; Ives, et al., 1983).

One approach to understanding the process through which user satisfaction with a new system is formed has been through the study of user expectations. User expectations about the system, which are unmet, have been empirically shown to have a significant negative effect on later measures of user satisfaction (Szajna and Scamell, 1993; Lyytinen, 1988; Ginzberg, 1981). The unmet expectation research has been restrictive, however, with both the scope of the expectations measured and with the lack of attention paid to the effects of interpersonal communication on expectations. This dissertation research is therefore motivated by the following question: what expectations are formed, and relied upon, by end users during the implementation of a new information system, and how are these expectations

affected by the other groups involved in the implementation?

Expectations have been measured focusing primarily on the IS and the outcomes produced by the IS. But what about expectations formed as a response to the change and turmoil of the implementation? Surely the end-users of a new system have relevant expectations that later affect satisfaction, such as changes in job power, tasks, ambiguity, autonomy, and other issues in addition to system-specific expectations. Therefore, this dissertation first seeks to identify a broader set of expectations that are considered by the end-user throughout the implementation of a new IS. This expectation set will be derived from the Equity-Implementation Model (Joshi, 1991), which is based on equity theory (Adams, 1963; 1965; Walster et. al. 1978), and will incorporate expectations about the IS and IS related outcomes as a subset of the larger revised set (Figure 1). Additionally, each proposed expectation will be weighted by its relevance to the user, using a separate scale. This has not been done in previous IS user expectation research, with the result that equal weights have been given for expectations as disparate as participation and training.

User expectations implicitly suggest the influence of other people, past experience, education, etc. But simply asking about expectations does nothing to identify relevant sources that may have built up those expectations, or targets of negative affect when the expectations are unmet. Recent work in psychological contracts suggests that people hold perceptions of promises made by others as a contractual obligation. As emphasized by Rousseau and Tijoiwala (1998, p. 681) "The distinction between psychological contract and expectation is of great practical significance, because violating psychological contract-based obligations can engender more intense and emotionally salient reactions than does failing to live up to other forms of expectations". The elements of the psychological contract will be operationalized in this dissertation as expectations which are relied upon due to the perception of implicit or explicit promises made by another (Figure 1). Therefore, in the context of the revised set of expectations from the Equity-Implementation Model (Joshi, 1991), this dissertation will compare the predictive ability of psychological contract breach against that of simple unmet expectations for determining user satisfaction,

hypothesizing that psychological contract breach will be the stronger predictor.

Trust has been shown to have a complex relationship with psychological contract breach, with prior trust mediating the likelihood of a breach being perceived, prior trust moderating the impact of perceived breach on subsequent trust, and subsequent trust moderating the effect of breach on employee contributions (Robinson, 1996). However, this prior research has considered psychological contracts and trust only from the employee's perspective as held toward the "employer". This dissertation will expand the understanding of psychological contract breach and trust by measuring changes in trust levels held by end users toward specific other stakeholder groups (e.g. supervisors, management, IS personnel, outside vendors, etc.) following a perceived psychological contract breach. Based on Robinson's 1996 research, these changes in trust levels are expected to partially mediate the relationship between psychological contract breach and user satisfaction (Figure 1).

In summary, the following major propositions are offered: P1 - The expanded set of expectations based on the Equity-Implementation model will be a stronger predictor of user satisfaction than a set focusing solely on the IS and IS related outcomes; P2 - Perceived psychological contract breach will be a stronger predictor of user satisfaction than simple unmet expectations; P3 - a change in trust brought about by psychological contract breach will partially mediate the relationship between contract breach and user satisfaction.

Methodology

The primary research approach will be a field study using surveys developed from a combination of prior instruments and relevant theory. An organization will need to be identified that is preparing to undertake a large-scale mandatory IS implementation.

This research will be conducted in 5 steps: survey development of instruments to measure expectations, perceived contract terms, and trust; pilot testing of these surveys; identification of relevant stakeholder groups and rich description of implementation through semi-structured interviews conducted at the field site; and two rounds of surveys - one sent prior to implementation and training but after a general orientation of the system has been provided, and another sent eight weeks after implementation to allow sufficient time for expectations and promises to be weighed against the perceived outcome of the implementation.

A specific instrument for measuring the dependent variable - user satisfaction - has not yet been identified, although the Bailey and Pearson (1983) instrument as

modified by Ives et al. (1983), or the Doll and Torkzadeh (1988) instrument emerge as the most likely candidates. It is recognized here that the measurement of user satisfaction must be held consistent with prior studies in order to say much about the relative effects of the various measures proposed here.

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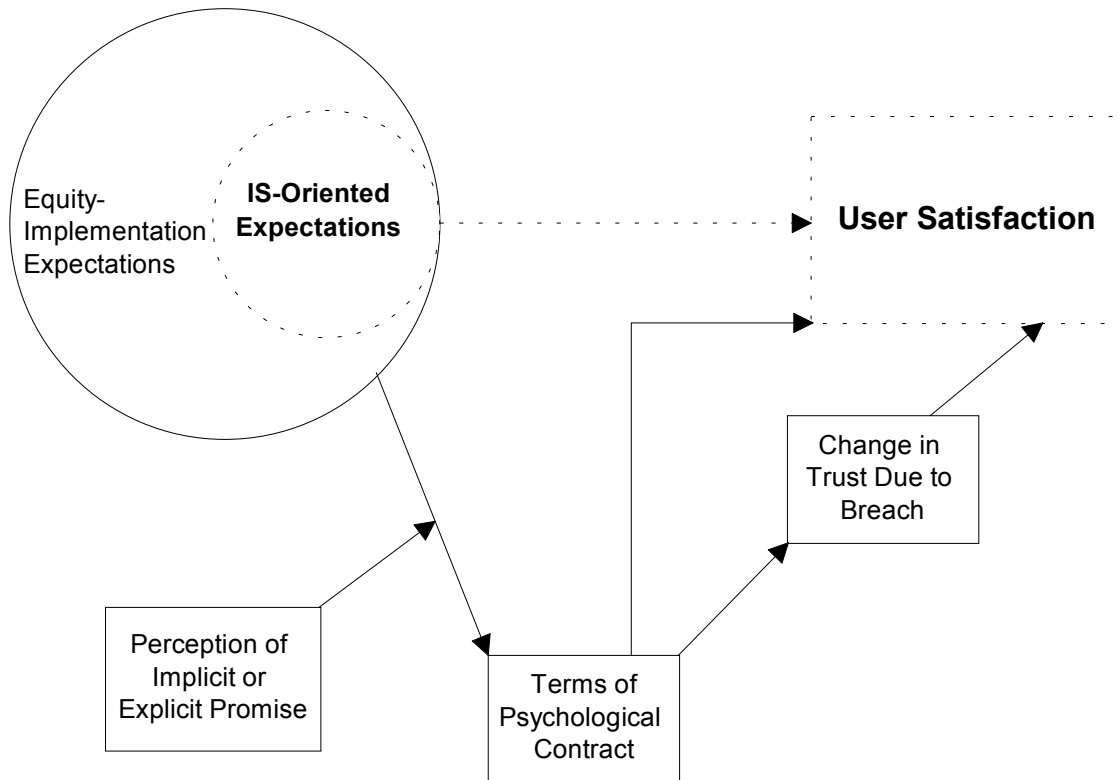


FIGURE 1

The Effects of an Expanded Expectation Set, Psychological Contracts, and Trust on User Satisfaction
 Note: Original unmet expectations model shaded