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Reassessing & Clarifying Information Systems Acceptance & Usage

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Reassessing & Clarifying Information Systems Acceptance & Usage

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Introduction

We review extant research on IS usage and acceptance and discuss its limitations in providing an accurate depiction of *acceptance* as well as *IS usage*. An alternative model is proposed based on the findings from a theory-driven exploratory field study. The proposed model is expected to overcome the inadequacies of the extant model by: (a) developing a more precise distinction between *IS usage* and *IS acceptance*, (b) taking into consideration not only the *quantity*, but also the *quality* of usage, and (c) defining the link between (a) and (b).

Extant Model of IS Usage & Acceptance Recent research on IS usage and acceptance has primarily given attention to the constructs of *perceived usefulness* (PU) and *perceived ease of use* (PEOU). PU has been generally defined in terms of the "subjective probability that using a specific application system will increase his or her *job performance*". PEOU has been generally defined as the "degree to which the... user expects the target system to be free of effort". While user's *acceptance* of IS has been generally defined as synonymous with *usage*, IS usage has been measured primarily in terms of *quantity*, specifically *frequency* and *volume of usage*.

Proposed Model of IS Acceptance & Usage

The current model, with its assumption of users being motivated primarily by job performance expectations from IS use, may be considered as a model of *compliance*. In this model, the users are motivated to use the IS to gain specific rewards or to avoid punishments. This delineation doesn't take into account users' *intrinsic motivation* (Davis 1989, Deci 1975), although it has been suggested that users may be unwilling to use the IS even if it could improve their *job performance* (Nickerson 1981).

Based primarily upon the notion of compliance, the extant model doesn't take into consideration the contrasting notion of *internalization*, specifically IS use motivated by the "fit" of the IS with the user's existing interpretation system or frame of reference. Within the proposed framework, users who perceive the IS to be congruent with their frames of reference are likely to be internalized -- "committed and enthusiastic" -- in their use of IS, while those who perceive it merely as a means to obtain rewards or avoid punishments are likely to be compliant -- "proforma and uninvested" -- in their IS usage (Klein and Sorra 1996, p. 1061). Thus, in the proposed model, *quality* of usage represents the continuum with avoidance on one end; skilled, enthusiastic and consistent use on the other; and meager and unenthusiastic use near the middle. A good "fit" would relate to high quality of usage and a poor "fit" would relate to low quality of usage. The proposed

model accounts for the notion of "fit" by adding a new antecedent construct of *psychological acceptance*, and accounts for the *quality* of usage by qualifying the construct of IS usage as used in the extant model. Within the proposed model, each of the three antecedents: PU, *psychological acceptance* and PEOU are shown as having a positive influence on the *quality* and *quantity* of IS usage.

The proposed construct of *psychological acceptance* is based on the theory of personal constructs (Kelly, 1955). It is based on the user's *internal* [psychological] construction of the IS, which is in contrast to the extant mainstream emphasis on *external* outcomes in terms of job performance. It represents the *psychological* assimilation of the IS by the individual. This construct distinguishes the *physical* act of usage of an IS from the *psychological* act of reconciling (fitting) that IS within one's existing system of constructs (frame of reference). Within this theoretical framework, *internalization* implies that the individual realizes a 'personal' meaning that he/she ascribes to the IS, thus leading to lesser inconsistency between the IS and the personal system of constructs. In contrast, *compliance* would occur if the IS is inconsistent with the individual's personal system of constructs. In such a case, acceptance would only be superficial: at a deeper level, the individual is still unable to resolve the inconsistencies of the new construct with one's existing system of constructs. Alternatively, the individual resolves such inconsistencies by finding means of 'getting by' with the imposed construct or by indulging in what is generally perceived as deviant behavior.

Expected Contributions

The proposed study is expected to contribute significantly to the theory, research, and practice of IS usage and acceptance. It will offer a more meaningful definition of IS acceptance and distinguish it from the extant notion of physical IS usage. The proposed framework redresses the limitations of the extant research model by accounting for intrinsic motivation and other non-performance factors relevant to users' IS acceptance and usage. Explicit consideration of the quality of IS usage in the proposed model is anticipated to have significant implications for the link between IS usage and IS performance. By taking into consideration *both quantity and quality* of usage, it offers a more meaningful understanding of usage behavior than the current notion of early and late adopters [based primarily on *quantity* of usage] and thus offers a new interpretation of these antecedents of the technology adoption process.

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