Measuring Pre-Adoptive Behaviors Toward Individual Willingness to Use IT Innovations

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This study explored some of the critical success factors at the individual level for usage of Personal Web Server (PWS) systems. We tested core assumptions from Diffusion Of Innovations (DOI; Rogers, 2003) theory for willingness to use new technologies, and used some key concepts from the Technology Acceptance Model (TAM; Davis, Bagnozzi, & Warshaw, 1989; Venkatesh, Speier, & Morris, 2002) to reinforce DOI. Statistical analyses revealed that relative advantage, complexity, and trialability were all significant predictors of willingness to use a new technology, and identified compelling interactions among these key DOI factors.

INTRODUCTION

Although information technologies are crucial to corporate strategy and firm performance, research that focuses on predicting and overcoming information technology (IT) implementation barriers early on has been limited. A fuller understanding of the factors that influence favorable pre-adoptive attitudes toward new technologies should contribute to enhanced firm performance. An abundance of prior research has examined information technology and various aspects of organizational performance (Akkermans & van Helden, 2002; Chan, Huff, Barclay, & Copel, 1997; Hitt, Wu, & Zhou, 2002), including the strategic role that information technologies can play in producing competitive advantage (Ives & Learmonth, 1984; Porter & Millar, 1985; Sethi & King, 1994). However, our understanding of how IT innovations are most productively adopted at the individual level, and how recognition of critical success factors for these technologies affects attitudes toward using them, is currently limited. In a global, fast-paced business environment, individuals' early attitudes toward the potential adoption of new IT innovations can significantly affect competitive advantage.

We designed the current study to examine some key determinants of individual willingness to use a new technology prior to acquisition. We use central tenets from Diffusion of Innovations (DOI) theory and the Technology Acceptance Model (TAM) to identify key critical success factors for individual willingness to use new information technologies.

LITERATURE REVIEW

Diffusion of Innovations (DOI) Theory

DOI theory (Rogers, 2003) is a well-established perspective that has been widely used in information technology (IT) diffusion-related research (Mustonen-Ollila, and Lyytinen, 2003; Prescott & Conger, 1995; Tornatzky and Fleisher, 1990). In his seminal work *Diffusion of Innovations,* Rogers (2003) treats diffusion as the process in which an innovation is communicated and adopted through certain channels over time among members of an organization, in order to reach a mutual understanding.

The perceived attributes of an innovation have a crucial impact on the adoption of an innovation. According to Rogers (1995), most of the variance in the rate of adoption of innovations at the organizational level (from 49 to 87 percent) is explained by five attributes: relative advantage, complexity, trialability, compatibility, and observability. Over the last three decades, numerous studies have sought to measure some or all of Rogers's five attributes. Midgley (1987) performed a meta-analysis of 95 studies that used key attributes (other than observability) of DOI theory to predict rate of adoption. Of these, 43 studied relative advantage, 27 studied compatibility, 16 studied complexity, and 13 studied trialability. Midgley found that 67% of the studies found statistically significant support for both relative advantage and compatibility, while complexity and trialability received 56% and 67% respectively. In the current study, we focus on the attributes of relative advantage, complexity, and triability both because they have special relevance to pre-adoption attitudes and because they have conceptual overlap with key elements of the TAM.

Rogers defines relative advantage as the degree to which an innovation is perceived as superior to the innovation it supersedes. The degree of relative advantage is often expressed as economic profitability, as conveying social prestige, or in other ways (Rogers 2003). The nature of the innovation determines what specific type of relative advantage (economic, social, or other) is important to users, although the characteristics of the potential adopters may also affect which specific subdivisions of relative advantage are most important.

Complexity concerns the degree to which an innovation is perceived as relatively difficult to understand and use (Rogers, 2003). Any innovation can be classified on a complexity-simplicity continuum because some innovations are relatively clear in their meaning to adopters whereas others are not.

Trialability is the degree to which an innovation will be available for trial usage before adoption (Rogers, 2003). Innovations available for trial for a period of time are generally more acceptable to individuals than those simply thrust upon them. Personally trying out an innovation is one way for an individual to give meaning to an innovation and determine whether it works for a specific setting, and can dispel uncertainty about a new idea (Rogers 2003).

The Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM; Davis et.al., 1989) is an information systems theory that models how users come to accept and use a technology. In the current study, Rogers's DOI theory provides the basis for our key predictions. However, there is some conceptual overlap between Rogers's perceived attributes and TAM, creating an opportunity for integration. Also, research on the TAM has provided validated measures of willingness to use that can be deployed to assess attitudes toward adopting a new technology among individuals at the outset of that technology's introduction without relying on rate of adoption measures that require longitudinal measurement and a comparison sample from which to infer rate.

A wealth of research on the TAM, conducted over more than a 20-year period, suggests that it represents a parsimonious and powerful model for understanding attitudes toward technology (Lee, Kozar, & Larsen, 2003; Venkatesh & Davis, 2000). TAM research has studied a variety of technologies (e.g., word processors, e-mail, the internet, group support systems, healthcare information systems), explored different temporal and cultural conditions, and included a wide range of control factors (e.g., gender, organizational type and size, sample differences).

The TAM suggests that when users are presented with a new innovation, such as a software package, a number of factors influence their willingness to use it. Most central to the current research, the TAM suggests that perceived usefulness and perceived ease-of-use both play a critical role in technology acceptance. Davis et al. (1989, p.320) define perceived usefulness as “the degree to which a person believes that using a particular system would enhance his or her job performance" and perceived ease-of-use as “the degree to which a person believes that using a particular system would be free from effort”. Prior research generally appears to offer converging support for the impact of both perceptions of user attitudes toward technology (Lee, Kozar, & Larsen, 2003).

Comparing DOI and TAM

Although the approaches used in prior research examining the TAM and DOI differ significantly, there are striking similarities between some concepts within both theories. Most notably: (a) relatively advantage (DOI) and perceived usefulness (TAM) are likely highly related in many technical contexts, and (b) complexity (DOI) is likely inversely related with perceived ease of use (TAM) in many or even most settings. It is also possible that constructs more unique to DOI theory, such as compatibility, trialability, and observability, could serve as antecedents to relative advantage and complexity (and therefore similarly to perceived usefulness and perceived ease of use).

Indeed, several prior researchers have noted some conceptual between the TAM and DOI (e.g., Oh, Ahn, & Kim, 2003; Wu & Wu, 2005), though empirical studies testing integrated hypotheses from both theories is still relatively rare, with some notable exceptions. Karahanna, Straub, and Chervany (1999) used combined aspects of DOI and TAM to compared pre-adoption and post-adoption beliefs. They found that potential adopters base their attitude toward usage on a richer set of innovation characteristics than actual users, whereas users’ attitudes were only based on instrumentality beliefs of the usefulness and perceptions of image enhancements. Chau and Hu (2001) found that compatibility perceptions were significantly related with perceived usefulness.

Research has also examined the role of prior experience with technology (which is central to DOI’s focus on rate of adoption) on key TAM variables. For example, Agarwal, Sambamurthy, and Stair (2000) found that relevant prior experience, mediated by general self-efficacy, affected perceived ease-of-use. The role of experience in the TAM has sometimes been hypothesized as a moderating variable (Taylor & Todd, 1995; Venkatesh & Davis, 2000). Specifically, studies by Venkatesh and Davis (2000) and Venkatesh and Morris (2000) found that experience moderated the relationship between subjective norms and perceived usefulness in longitudinal research. Although there are some conflicting results across such studies, they nevertheless support the value of applying rate of adoption logic from DOI to the more general issues of user acceptance central to the TAM.

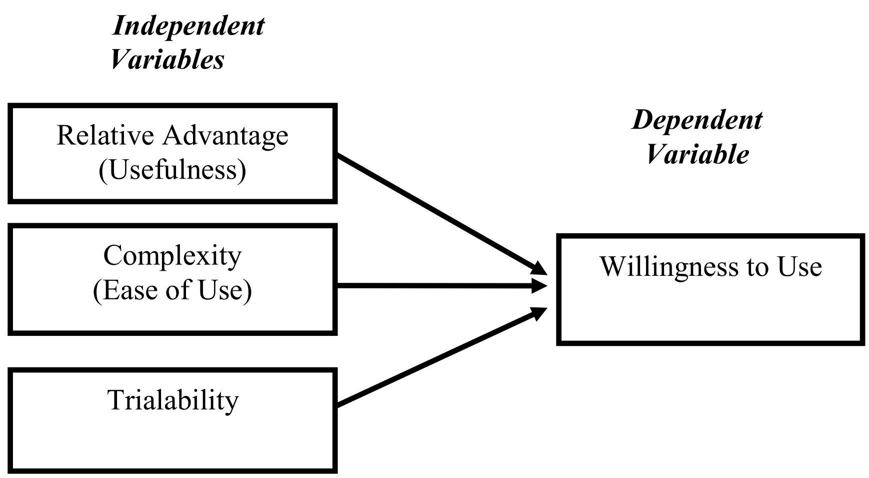
Willingness to Use New Technology

The key dependent variable in DOI theory (Rogers, 1995, 2003) is the rate of adoption, or the relative speed with which members of a social system adopt an innovation, compared with other individuals within that social system. Although rate of adoption is certainly a useful measure for assessing adoption across a group of individuals over time, it does not allow researchers to assess an individual’s attitude toward using new technology from the outset because it requires a longitudinal comparison of multiple individuals. Fortunately, the large literature associated with TAM provides a more general measure for assessing an individual’s attitudes toward adopting an innovation that does not rely on adoption rates over time—willingness to use (e.g., Moore & Benbasat, 1991; Son, Kim, & Riggins, 2006; sometimes called user acceptance, e.g., Davis, 1989; Venkatesh, Speier, & Morris, 2002). Therefore, because the current study was concerned with attitudes toward using technology before it is adopted across the organization, we deployed a measure of willingness to use technology as the key dependent variable to assess individual attitudes toward technology adoption.

The Current Study and Hypotheses

In the current study, we used key concepts from DOI and the TAM to test hypotheses specific to individuals' pre-adoption attitudes toward new technology. Specifically, we examined the extent to which perceptions of the relative advantage, complexity, and trialability of a new technology influence pre-adoptive attitudes, as well as what combination of these factors creates the greatest individual willingness to use new technologies. Based on some central features of DOI theory and their conceptual overlap with key perceptual variables in the TAM, we used the research model depicted in Figure 1 below to guide the current study hypotheses and design.

FIGURE 1
RESEARCH MODEL



Based on both theories, we predicted that individuals would be more willing to use new technology when they perceive it to be high in relative advantage (and therefore likely high in perceived usefulness), low in complexity (and therefore likely high in perceived ease of use), and high in trialability:

H1: Individuals will be more willing to use a new technology when they perceive that the relative advantage is high.
H2: Individuals will be more willing to use a new technology when they perceive that complexity is low.
H3: Individuals will be more willing to use a new technology when trialability is high.

METHOD

We used a scenario-based experiment to manipulate relative advantage, complexity, and trialability. The scenarios held levels of compatibility and observability constant. We assessed participants' willingness to use the new technology described in the scenarios by using scales validated in a pilot study.

Participants and Design

Participants were 95 business students (41 men and 54 women) enrolled at a mid-sized public university in the south central part of the United States. Students were enrolled in either a senior-level undergraduate capstone course in strategy and policy or in an MBA-level course in research and reporting.

We used a 2 (relative advantage: high or low) X 2 (complexity: high or low) X 2 (trialability: high or low) between-subjects experimental design. Each factor was manipulated via the wording of passages within the scenario, and each participant was randomly assigned to one of the eight scenario conditions.

Scenarios

Scenarios, or vignettes, are defined as "short descriptions of a person or a social situation which contain precise references to what are thought to be the most important factors in the decision making or judgment-making processes of respondents" (Alexander & Becker, 1978, p. 98). Scenarios have been frequently used to measure managerial decision-making preferences and other organizational phenomena (e.g., Akaah, 1989; Brenner & Molander, 1977; Carroll, Rosson, Chin, & Koenemann, 1998), in part because they allow difficult manipulations to be readily operationalized and provide researchers with control over otherwise unmanageable variables (Maiden, 2005).

We manipulated high versus low levels of relative advantage, complexity, and trialability via wording changes in the scenarios, and held compatibility and observability constant with identical wording in all versions of the scenarios. The scenario text and variations across conditions are shown in the Appendix.

Procedure

A system of partitions was used that allowed eight separate two by three foot portions of the room's conference table to be used simultaneously. Individuals set appointments eight at a time to participate. The environment was carefully controlled to reduce extraneous influences. Participants were instructed to concentrate fully on the scenarios, and then answer the questions on the instrument to the best of their ability.

Dependent Variables

The key dependent variable was willingness to use the new technology. After consulting prior multifactor measures assessing a range of dimensions of willingness to use new technology in specific settings (e.g., Moore and Benbasat 1991), we decided that they were more detailed and situation-specific than ideal for our current purposes, and proceeded to write a brief eight-item scale to assess willingness to use in an efficient, face-valid manner. In addition, given the importance of rate of adoption in DOI, we developed a four-item measure assessing how rapidly participants felt they would apply the technology. Finally, as an additional measure of willingness to use reflecting broader or more general feelings, we included a four-item scale asking about participants' overall evaluation of the new technology. All items were assessed using 7-point Likert-type scales ranging from strongly disagree to strongly agree. Table 1 shows the wording of the scale items:

To provide initial validation of these scales and also help assure that the scenarios were worded in a clear and understandable manner that was responsive to our manipulations, we conducted a pilot study on 48 students enrolled in a senior-level capstone strategy course at a large Midwestern University (a different university than that used for the main experiment). The pilot study suggested that the scenarios were clear and effective, and produced coefficient alphas ranging from good to excellent for the dependent variables (.94 for willingness to use, .80 for rate of adoption, and .97 for overall evaluation). Coefficient alphas for the dependent variables in the main experiment were .92 for willingness to use, .76 for rate of adoption, and .97 for overall evaluation, again suggesting good to excellent internal consistency.

TABLE 1
ITEMS USED TO ASSESS DEPENDENT VARIABLES: CONSTRUCTS AND ITEM WORDINGS

Willingness to Use
1. It is likely that I would adopt the new PWS software.
2. I intend to use the PWS software for communicating with others.
3. I intend to use PWS frequently in my job.
4. I intend to use PWS for planning purposes.
5. I would be willing to use the PWS.
6. I would welcome full implementation of the PWS in the company.
7. I would prefer not to use the PWS.*
8. Using the PWS would be a waste of time.*
Rate of Adoption
1. I would take advantage of any available PWS training immediately.
2. Before using the PWS, I would prefer to wait and see how it affects others.*
3. I probably would not use the PWS until I felt it was absolutely necessary.*
4. I would strive to be an early innovator in using the PWS.
Overall Evaluation
1. All things considered, my using PWS is a wise decision.
2. All things considered, my using PWS is a positive decision.
3. All things considered, my using PWS is a beneficial decision.
4. All things considered, my using PWS is a good decision.

*Indicates that this item was reverse-coded.

RESULTS

We analyzed our data using 2 x 2 x 2 between-subjects analyses of variance (ANOVAs). To examine the effectiveness of the manipulations of the three independent variables, we included three manipulation check items on the post-scenario questionnaire. We tested our hypotheses using the 8-item willingness to use scale as the key dependent variable, with the four-item rate of adoption and overall evaluation measures providing information about rate issues and allowing for an initial examination of the degree of convergence in findings across two different willingness to use measures. Initial analyses found that gender and level of student (undergraduate or MBA) had no significant effects, so both of those variables were excluded from all subsequent analyses.

Manipulation Checks

For relative advantage, we asked participants to report the extent to which they felt that using the PWS would give them an advantage in doing their work more effectively. There was strong, significant main effect of relative advantage, F (1,87) = 63.38, $p < .001$, such that using the PWS was viewed as much more advantageous by individuals in the high condition (M = 5.86) than in the low condition (M = 3.04). There were no other significant main effects or interactions. Thus, the relative advantage manipulation was successful.

For complexity, we asked participants to report the extent to which they believed that the PWS would be easy to use. Complexity had a strong, significant main effect on this item, F (1,87) = 133.15, $\rho < .001$, such that the PWS was viewed as much easier to use in the low condition (M = 5.94) than in the high condition (M = 2.87). There were no other significant main effects or two-way interactions involving complexity, although there was a significant three-way interaction F (1,87) = 10.90, $p < .001$ that showed that relative advantage and trialability interacted to influence the means more in the high complexity condition than in the low complexity condition (where the mean values were closer together). However, the PWS was viewed as uniformly easier to use in the low complexity conditions (*M*s ranging from 5.69 to 6.08) than in the high complexity conditions (*M*s ranging from 1.82 to 3.82). Thus, the relative complexity manipulation was successful.

For the triabability manipulation check, we asked participants to report their amount of agreement with the item "Before the PWS is implemented, I will be able to try it out." Trialability had a strong, significant main effect on this item, $F(1,87) = 146.13$, $\rho < .001$, such that participants reported that it was much more likely that they would be able to try the PWS out before it was implemented in the high trialability condition ($M = 6.54$) than in the low trialability condition ($M = 2.34$). There were no other significant main effects or interactions. Thus, the trialability manipulation was successful.

Finally, to assess the extent to which we successfully held compatibility and observability constant across condition, we asked participants to respond to two items asking the degree to which they felt that the PWS would be compatible with all aspects of their work and would be very visible in their organization. There were no significant main effects or interactions for either of these items, suggesting that the scenario wording was successful in holding perceptions of these factors constant.

Willingness to Use

We predicted that individuals would be more willing to use a new technology when it was perceived to be high in relative advantage (Hypothesis 1), low in complexity (Hypothesis 2), and high in trialability (Hypothesis 3). All three hypotheses were supported.

Specifically, there was a strong, significant main effect of relative advantage on willingness to use, F (1,87) = 31.83, $p < .001$, such that individuals were more willing to use the PWS when relative advantage was high ($M = 5.50$) rather than low ($M = 4.24$). This provides strong support for Hypothesis 1.

There was also a strong, significant main effect of complexity on willingness to use, F (1,87) = 10.83, $p < .01$. Willingness to use was higher when complexity was low ($M = 5.25$) rather than high ($M = 4.55$). Thus, Hypothesis 2 received strong support.

There was also a significant main effect of trialability on willingness to use, F (1,87) = 5.31, $p < .05$, such that willingness to use was higher when trialability was high ($M = 5.14$) rather than low ($M = 4.66$). Therefore, Hypothesis 3 was also supported.

In addition, there was a significant interaction between relative advantage and complexity, F (1,87) = 5.35, $p < .05$, such that relative advantage had a stronger impact on willingness to use when complexity was high (high advantage $M = 5.39$, low advantage = 3.60) rather than low (high relative advantage $M = 5.61$, low relative advantage $M = 4.86$). This suggests that individuals may be relatively willing to use a new technology when complexity is low regardless of its relative advantage, but that when complexity is high, using the new technology must offer some distinctive advantage to individuals before they are willing to use it.

There was also a significant interaction between complexity and trialability, F (1,87) = 5.41, $p < .05$. When complexity was high, individuals were more willing to use the PWS when trialability was high ($M = 5.06$) rather than low ($M = 4.02$). However, when complexity was low, individuals were equally willing to use the PWS whether triability was high ($M = 5.23$) or low ($M = 5.27$). This suggests that when using new technology that is complex, it may be especially important to allow individuals to try the technology out before implementing it.

Rate of Adoption and Overall Evaluation

We performed two additional ANOVAs on the rate and overall evaluation measures to see if our willingness to use results would converge across two different measures, and also whether these patterns would also hold for rate of adoption. For rate, there were significant main effects (similar to those previously found for willingness to use) for relative advantage, F (1,87) = 11.61, $p < .001$ (high $M = 4.79$, low $M = 3.91$), and trialability, F (1,87) = 4.21, $p < .05$ (high $M = 4.63$, low $M = 4.12$). The main effect for complexity was not significant, F (1,87) = 2.36, $p < .13$, (high M = 4.19, low M = 4.56), although the means were in the predicted direction. There were no significant interactions. In sum, these results provided further support for Hypotheses 1 and 3, but not for Hypothesis 2.

For overall evaluation, there were three significant main effects mirroring those previously found for willingness to use. Specifically, there were significant main effects for relative advantage, F (1,87) = 25.84, $p < .001$ (high M = 5.59, low M = 4.29), complexity F(1,87) = 16.64, $p < .001$ (high M = 4.46, low M = 5.47), and trialability, F (1,87) = 5.76, $p < .05$ (high M = 5.26, low M = 4.69) with the means in the predicted directions. Thus, individuals had more favorable overall evaluations of the new technology when it was high in relative advantage, low in complexity, and high in trialability. This provided additional, converging support for Hypotheses 1-3.

There was also a significant interaction between complexity and trialability similar to that previously found for willingness to use, F (1,87) = 5.45, $p < .05$,. Specifically, when complexity was high, individuals had a more favorable evaluation of the PWS when trialability was high (M = 5.05) rather than low (M = 3.85). However, when complexity was low, trialability had no effect on individuals' overall evaluation (high trialability M = 5.46, low trialability M = 5.49).

DISCUSSION

DOI Theory and TAM converge to suggest that an individual's willingness to adopt a new technology is influenced by three critical factors: relative advantage, complexity, and trialability. Specifically, individuals should be more willing to use technology (and in DOI should adopt it more quickly) when they perceive it as high in relative advantage, low in complexity, and high in trialability. The current study provides strong initial support for these central tenets of both theories. All three hypotheses were supported both by the key willingness to use measure, as well as by a measure of the overall evaluation of the technology. In addition, the relative advantage and trialability hypotheses were also supported by our anticipated rate of adoption measure, although the complexity hypothesis was not supported for the rate measure. Overall, our study provides solid, converging support for these three key components that are central to both TAM and DOI.

Our observed interactions were also interesting. Namely, the significant interaction between relative advantage and complexity suggests that individuals may be fairly willing to use a new technology when complexity is low without regard to its relative advantage. However, when complexity is high, the technology may need to represent a pronounced relative advantage before individuals will be willing to use it. We also found a significant interaction between complexity and trialability, suggesting that when the complexity of a new technology is high, trialability may be especially important. Taken together, these interactions suggest that complex technologies may require compensating benefits in the form of distinct advantages or opportunities to try out the technology, before individuals will be willing to use it.

The bulk of prior DOI studies have focused on the rate of adoption of new technologies during implementation throughout organizations. Our study is rather unique in focusing on DOI theory factors that influence user acceptance of new technologies before they are deployed. Our research model also incorporated attributes of both DOI and TAM in assessing a user's willingness to adopt a new information technology. Our analysis suggests that synthesizing perceived usefulness with relative advantage, and perceived ease of use with complexity creates opportunities for interplay between the TAM and DOI perspectives that can be more fully exploited in future research and applications. To our knowledge, this is the first study to focus on pre-adoption factors within a hybrid model combining DOI and TAM models at the individual level, utilizing a scenario-based research design. The results of this study serve to reinforce the notion that although a great deal of research has preceded in the field of information systems usage, we still as yet do not have a complete understanding of all of the complex variants that go into acquisition decisions.

Our results can assist managers in identifying and assessing the critical success factors of user acceptance of new information technologies before rather than after acquisition. Prior to investing in what may be mission-critical and costly information systems, managers might gauge their employees' perceptions regarding the relative advantage, complexity, and trialability of the new technology. This study shows that individuals may be more willing to use a new technology if they perceive that it will offer them advantages, lack complexity, and allow them a chance to try it out before purchase. In addition, complex technologies may need to be seen as having special advantages or greater chances for experimenting with the technology prior to adoption. Organizational change agents might tailor IT demonstrations, marketing efforts, training programs, and other interventions to emphasize criteria that end users actually employ to make their adoption decisions. This, in turn, could increase the likely effectiveness and efficiency of managerial interventions in the analysis and acquisition decisions of crucial IT applications.

Despite these strengths and contributions, as with any research study, the methodological choices made in the current research also have some limitations. First, our results are based on individuals' judgments of a hypothetical situation rather than a technology being adopted by an actual organization. Hence, they must be regarded as tentative pending future replication in organizational contexts. Second, the use of a student sample raises external validity concerns. However, it should also be noted that our use of senior or MBA-level students may strengthen the potential for generalization to organizational employees. In addition, college students have been used successfully in many IT-related studies and are often viewed as valuable subjects due to their fairly high computer efficacy (Peytchev, Couper, McCabe, & Crawford, 2006). Finally, readers should recognize that we only examined one type of technology and used data gathered solely in the United States. Given the wide diversity of technology available, future research will be needed to determine the applicability of our current results to other technologies and cultures.

In conclusion, the current study represents a solid beginning in a new pre-adoption research area and suggests great potential for future work that integrates key aspects of DOI theory and the TAM. Our findings appear to nicely replicate some previous organizational-level research on post-adoption perceptions of new technology, extend that work to the realm of individual pre-adoption judgments of technology, and raise intriguing new insights. Additional research is called for to expand and enhance the findings. For example, future research that endeavors to more fully examine all key DOI variables might seek to manipulate observability and compatibility rather than holding it constant. Other constructs, such as voluntariness, image, results demonstrability, and visibility are also worthy of consideration (Moore & Benbasat, 1991). It is our hope that the results of our study will be informative to researchers, empiricists, and practitioners interested in pre-adoptive intents and behaviors.

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APPENDIX 1

SCENARIO TEXT

Background Information (common to all conditions):

> You are a mid-level employee at a major services company. Your company has decided to adopt a new company intranet software tool called Personal Web Server (PWS) that allows employees to post documents to the company intranet, and allows enhanced information sharing. Many other companies have chosen to adopt this technology.
>
> Specifically, the Personal Web Server turns a personal computer into a low-volume Web server, making it as possible to share HTML and FTP files over intranets and the Internet as it is to share and print document files over a network. Users of PWS will share Web content in the same manner as they share folders on a network. You have attended an informational meeting and reviewed the basic capabilities of the software. Your boss has not required you to use the software, and it is not compulsory in your job.

Passages Controlling for Compatibility and Observability (common to all conditions):

Compatibility:
Using the software should be compatible with all aspects of your work, and you believe that it will be compatible with the way you like to work and with your work style. The PWS is consistent with the existing values, past experiences and needs of potential users.

Observability:
The consequences of using the PWS will be readily observable. In your organization, one sees PWS on many desktops and observers can see the software in use. Also, you have observed the software in use at other organizations.

Independent Variables (High condition is shown, with Low condition variations shown in parentheses)

Relative Advantage:
Using the new software will likely have very great (very little) effect on your ability to accomplish tasks more quickly and improve the quality of the work that you do. It is also likely (unlikely) to enhance your effectiveness and give you greater prestige on the job.

Complexity:
Your interaction with the PWS will probably be clear (unclear) and understandable (not understandable), and it will likely be relatively easy (difficult) to get the software to do what you want it to do. Overall, you believe that the system will be easy (difficulty) to use, and that learning to use it will be easy (difficult) for you.

Trialability:
Before deciding whether or not to use any of the PWS applications, you will definitely be allowed (not be allowed) to sample the software on a trial basis long enough to see what the system can do.