Individual Taxpayer Intention to Use Tax Preparation Software: Examining Experience, Trust, and Perceived Risk

Alexander McLeod
Sonja Pippin
Richard Mason
University of Nevada, Reno
Accounting & Information Systems
1604 N. Virginia

Abstract

The purpose of this paper is two-fold. First, we apply the “Unified Theory of Acceptance and Use of Technology” (UTAUT) model in the novel context of individual tax preparation. Second, we introduce additional concepts into the UTAUT model related to trust in the system as well as individual perceived risk and computing and tax experience. We believe these are important factors in an individual and personal setting. Results suggest that, while the ‘traditional’ UTAUT constructs are significantly related to the acceptance of tax preparation, software security and privacy concerns do not seem to be particularly relevant. We believe that these findings suggest a possible trade-off of security and privacy for convenience.

Keywords: Trust, Privacy, Security, Risk, Intention to Use, Technology Acceptance
Introduction

Technology and tax preparation is an important topic in the United States. In 1998, the "Internal Revenue Service Restructuring and Reform Act of 1998" (P.L. 105-206) introduced a goal of 80% electronic filing (e-filing) for all federal tax returns by the year 2007 (§2001(a)(2)). Recent announcements by the IRS indicate that, while this goal was not reached, e-filing has increased significantly since its introduction in the late 1990s. Electronic filing implies the use of new technology, specifically the internet and some form of tax preparation software. These types of software packages have been in use for many years by professional accounting firms. Nonetheless, many taxpayers are still hesitant to use software and to e-file because of various reasons, such as lack of trust, limited access to technology, and limited knowledge about the technology.

While the U.S. government set ambitious goals for electronic tax preparation, the e-file growth rate recently declined from 2005 to 2006 by 23 percent (Weigelt, 2006). In 2006, 73 million taxpayers, about 54% of all individual returns, e-filed with 20 million being filed from personal home computers. In 2007 the numbers were similar with about 80 million returns, 57% of all individual returns, filed electronically (IRS, 2007). The IRS continues to modernize but states that, at the current level of use, getting more taxpayers to e-file will be difficult. In order to file electronically the tax returns must be prepared using tax preparation software. Thus, individual acceptance of tax preparation software is critical to increasing the number of taxpayers who choose to e-file. Understanding the various determinants of use is important in order to improve technology acceptance in the tax context. We believe that our study provides insight into this issue.

The purpose of this paper is to develop a model and survey instrument that investigates the determinants of individual use of tax preparation software. As such, this study contributes to the literature in two ways. First, we apply the Unified Theory of Acceptance and Use of Technology (UTAUT) model (Venkatesh, Morris et al., 2003) to the novel setting of individual tax form preparation. One aim of academic research is to develop and assess new theories and models (Wacker, 2008). Prior studies have shown that the relatively new UTAUT model works well in organizational environments, the setting for which it was originally developed. However, in order to advance UTAUT it must be applied and tested in various contexts. Individual tax preparation is very different from the common application of the UTAUT model for several reasons. Most technology acceptance research focuses on the use of technology in business organizations. In these studies, the individual decision to accept or not accept a certain technology relates to job performance. Tax preparation software use is different because it is an individual private matter not directly related to business performance. Thus, individual trust in the sys-
tem, perception of privacy and risk may be more important whereas social influence from superiors and/or peers may matter less. While some research has looked at technology acceptance and e-filing (Wang, 2003; Chang, Li et al., 2005; Fu, Farn et al., 2006) none of these studies employed the UTAUT model.

The second purpose of this paper is to expand the UTAUT model by introducing three new concepts. First, we introduce concepts related to trust and risk from prior literature. These constructs are important for the use of tax preparation software because of the sensitive nature of the data. Second, we introduce perceived risk into the UTAUT model. Risk perceptions may affect acceptance of tax preparation software and may have a place in the general technology acceptance model. Third, we consider individual experience and perceived expertise related to computers and taxes. We do this because an individual's computer and tax domain expertise may affect their intention to use tax preparation software. To our knowledge, no prior literature has focused on computer or tax experience and how these may affect tax software acceptance and intention to use. Notably, Orlikowski (2000) examined the relationship between technology use and structures and employed the example of tax preparation software. While this work includes user expertise as a significant factor in technology use, it does not specifically address technology acceptance or adoption in the tax context.

The structure of the remainder of this paper is as follows. The next section provides the theoretical background. Section three introduces the research model and methodology. Section four lists and discusses the results and the limitations of this study and section five concludes.

Theoretical Background

Technology acceptance has been studied extensively in the past (Davis, 1989; Davis, Bagozzi et al., 1989; Mathieson, 1991; Davis, 1993; Davis and Venkatesh, 1996; Szajna, 1996; Venkatesh and Davis, 1996; Gefen and Straub, 1997; Dishaw and Strong, 1999; Agarwal, 2000; Venkatesh, 2000; Venkatesh and Davis, 2000; Legris, Ingham et al., 2003; Pavlou, 2003; Venkatesh, Morris et al., 2003; Wixom and Todd, 2005). A summary of these studies suggests that the most important determinant of individual intention to use technology is the perception of how technology will help perform a required task. Note that intention to use and use have been found highly correlated in many of these studies. Also important is the expectation of learning and being able to use the technology successfully. Both of these factors relate to the convenience of the software. Other theoretical factors are the individual's social environment and various demographic variables, especially age and gender.

The UTAUT model (Venkatesh and Davis, 2000; Venkatesh, Morris et al., 2003) consolidates various technology acceptance models and theories.
It replaces the simpler perceived ease of use and perceived usefulness constructs of TAM with "performance expectancy" and "effort expectancy." Performance and effort expectancy correlate positively with intention to use and are moderated by demographic variables. Social influence measures how an individual's peers and supervisors feel about them using technology. Venkatesh et al. (2003) find that social influence is positively correlated with intention to use and moderated by gender, age, experience and the voluntariness of the technology use. Facilitating conditions relate positively to use behavior. Finally, intention to use correlates positively with the actual use. Venkatesh et al. (2003) emphasize that the following relationships are not significant: facilitating conditions -> intention to use, computer self-efficacy -> intention to use, computer anxiety -> intention to use, and attitude toward technology -> intention to use. They argue that effort expectancy captures computer experience and expertise.

Several researchers have studied individuals' intention to e-file in Taiwan (Wang, 2003; Chang, Li et al., 2005; Fu, Farn et al., 2006). Researchers using early technology acceptance constructs have shown that perceived usefulness influences taxpayer intention to use electronic filing more than perceived ease of use. In addition, perceived credibility, a combination of individual trust in security and trust in privacy, plays a role in predicting intention to use e-filing for the Taiwanese taxpayers. While many of these findings generalize to American taxpayers, conducting a tax technology acceptance study in the United States provides additional validation of the results and helps to understand some country-specific taxpayer behavior. This is important since taxpayer attitude and taxpayer behaviors vary across countries. (See for example Alm and McKee (2004), Alm and Torgler (2006), Torgler and Schneider (2007)). Note further that these studies examine e-filing adoption and not the intention to use tax preparation software. While these two items are likely strongly related they do not refer to the same issue. In fact, one can characterize technology acceptance in the tax context as a two-step process because in order to file electronically, a tax return the tax data must be available in electronic form. While both steps of the process offer interesting research avenues, the current paper concentrates on the first step, the acceptance and intention to use tax preparation software.

Orlikowski (2000) uses the example of tax preparation software to illustrate the relationship between structure and use of technology. That is Orlikowski focuses on the same technology but addresses a different phenomenon - her objective is to explain different uses of technology and not technology acceptance, which is the focus of our paper.

In a recent study, Nicolaou and McKnight (2006) examine the relationships between trusting beliefs, perceived risk, and technology acceptance. This study involved inter-organizational data exchanges in the United States. They found a negative correlation between perceived information quality and
perceived risk and between perceived risk and intention to use indicating that individual perception of the technology's risk should be included.

Based on these studies, we believe that, in the tax domain context, the original UTAUT variables do not adequately capture determinants of individual intention to use. Specifically, we believe that taxpayer trusting beliefs and perceived risk, as well as their domain specific knowledge and expertise, are also important. Therefore, we introduce additional trust constructs measuring 1) individual trust in the tax software system, and 2) tax domain and computer expertise. Thus, in addition to testing UTAUT model outside the traditional business/organization environment, this paper examines the following research questions:

1. How do taxpayer beliefs concerning system security, privacy, logic and risk affect system use?
2. How do computer and tax expertise affect individual security, privacy and logic beliefs?
3. How can convenience, security, privacy, and risk trade-offs be integrated in technology acceptance theory?

Research Model and Methodology

Model

The focus of this study is the relationship between trust constructs, knowledge and expertise constructs and individual taxpayer use of tax preparation software. We employ an extension of the UTAUT model developed by Venkatesh et al. (2003). We exclude constructs related to voluntariness and facilitating conditions because these constructs are not relevant for individuals using tax preparation software. Based on cited literature and our research questions, we add additional constructs and propose additional relationships as presented in Figure 1 below:

Construct Definition

Performance Expectancy - This construct measures the degree to which the individual believes that using tax software will help to improve performance. One important distinction from other studies is that tax preparation takes place outside of the traditional organizational setting. Individuals making the choice to use tax preparation software do not focus on job performance but rather on individual personal performance. Thus, for purposes of this study, performance relates to what individuals ultimately desire in tax software. For example, if a person's priority is to receive a high refund, they will rate the software's performance based on how successful the software is in getting that refund. On the other hand, if a person wants to avoid a tax audit, they will rate software performance based on the probability of avoiding a tax audit.
Effort Expectancy - This construct measures how easy it is for an individual to use the technology. In this particular case, the individual will compare how much effort it takes to complete a tax return with or without tax software. Interestingly, there are two alternatives for individuals who opt not to use tax preparation software: either they can use paper & pencil or they can take their return to a professional preparer.

Social Influence - This construct is designed to measure the extent that individuals believe "important others" think they should be using tax software. One significant difference in this study is that there is no supervisor expecting (requires/wishes/imply) the individual to use the software. "Important others" are spouses, partners, parents, friends, co-workers, etc. We believe that this construct is less important in measuring technology acceptance in this setting because of the lack of an organizational context. The relationship between social influence and behavioral intention (defined below) is likely moderated by some demographic variables, in particular by age.

Behavioral Intention - This construct measures individual intention to use tax software for preparing and filing a tax return. Performance expectancy, effort expectancy, and social influence behavioral intention to use. Behavioral intention is presumed to have a direct effect on actual usage.

Trust in Logic - This construct is defined as the belief that tax software correctly applies the rules and regulations when completing the tax return. Most individuals do not possess expert knowledge concerning tax law. This is
a primary reason for most taxpayers to use tax preparation software. In this context, the software is a surrogate for the tax expert.

- Trust in Security - This construct is defined as the belief that the information system will be safe from hacking and the introduction of viruses. For example, a user who trusts the system’s security expects to use the system without introducing viruses or other unsafe software effects into their machine.

- Trust in Privacy - This construct is defined as the belief that personal information entered into a system will remain private. For example concerning tax preparation software, a user who trusts the system privacy expects that no personal tax information will be divulged to unauthorized people or systems.

- Perceived Risk - This construct is defined as the belief that there is potential for loss when using an information system, such as tax software. Underlying perceived risk is the uncertainty of negative consequences of use. We introduce a variable related to perceived risk and propose that security and privacy beliefs inversely affect perceived risk, which in turn is negatively correlated with individual intention to adopt new technology. User perceptions of risk in using software have been studied, however there are mixed results involving intention to use and risk (Featherman and Pavlou, 2003; Wang, 2003; Kim, Ferrin et al., 2008).

- Tax Domain Expertise - This construct defined as the perceived ability to apply the heuristics and laws of the tax domain to individual income tax returns. It is unique to the present setting but could be generalized as domain expertise - where individuals may be overwhelmed with the subject matter. This is important from a security standpoint because people may make a rational choice, weighing security and privacy protection against the benefit of not having to understand the complexity of the domain (Featherman and Pavlou, 2003). We predict that in the case of individual choice to use tax preparation software, users will consider the convenience of not having to learn the tax rules. This may outweigh any concern they have regarding system security and privacy. Specifically, we put forth that individuals with more knowledge and expertise in the computer domain will be more skeptical toward the system in general, relating to lower trust in the system.

- Computing Experience - Venkatesh et al. (2003) posit that computer efficacy and computer anxiety do not significantly influence individual behavioral intention beyond what is already captured in the “effort expectancy” construct. However, we believe that in this particular case an interaction of computer knowledge and tax law knowledge may be possible.
Methodology

Individual intention and attitudes were measured using a survey methodology. In creating the survey we followed the guidelines proposed by Straub (1989). Where possible we employed and adapted questions from prior technology acceptance studies. The questionnaire was distributed to 15 accounting, information systems faculty members and external professionals to assist in establishing content validity. Based on feedback, we revised and clarified questions. The survey was administered to 215 graduate and undergraduate business majors who completed a 43-question survey available in Appendix A. Incomplete surveys were excluded yielding 190 valid subject responses with no missing values and a response rate of 88%. The subjects exhibited a range of experience/expertise from zero to over 20 years of personally filing tax returns. In other words, the respondents possessed varying degrees of tax and computer knowledge and experience making them suitable subjects. While the use of student subjects may compromise external validity in non-professional settings, student subjects may also serve as a good proxies (Libby, Bloomfield et al., 2002; Elliott, Hodge et al., 2007). Table 1 presents the demographic information.

<table>
<thead>
<tr>
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<th>Mean</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
</tr>
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<td>23</td>
<td>19</td>
<td>55</td>
</tr>
<tr>
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<td>5</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>Years of personally preparing tax returns</td>
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<tr>
<td>Years of computing experience</td>
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<td>Accounting courses completed</td>
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<td>20</td>
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<tr>
<td>Information systems courses completed</td>
<td>3.2</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 1- Demographics Overall Sample

The subjects were relatively young averaging 24 years of age. They had an average of six years experience in completing tax returns and averaged ten years of computer experience. The male and female sub-groups varied little. One notable difference is the number of years of computer experience. Males self-reported an average of 10.2 years of computing experience compared to 9.1 years for the overall sample and 7.8 years for the female sub-sample.

To examine Internal Consistency Reliability, we calculated Cronbach’s Alpha for all theorized constructs. We removed statistically weak questions to improve reliability of the remaining construct items. As shown in Table 2 below, six questions were dropped to improve construct reliability.
Table 2 - Construct Reliability

We used a structural equation modeling technique, Partial Least Squares (PLS), to analyze construct relationships. PLS provides for the testing of the measurement model and structural model simultaneously. Compared to other modeling techniques, PLS has minimal demands for sample size, sample distribution and provides for the use of both reflective and formative indicators (Chin, 1998; Gefen et al., 2000; Gefen and Straub, 2005). In this study, we used both reflective and formative indicators to measure constructs. The dependent variables were intention to use (ITU), perceived risk (PR), trust in logic (TIL), trust in privacy (TIP), and trust in security (TIS) as shown in Figure 1.

Results

In order to analyze measurement properties, we calculated the composite reliabilities, the shared variance between the constructs and the individual construct items, correlations among variables and the factor loadings of our reflective constructs in accordance with Gefen et al. (2005). We also calculated the mean and standard deviation of all constructs for descriptive purposes. Although there is no statistical method for calculating the minimally accepted value of composite reliability, the generally acceptable standard is 0.70 or greater (Yi and Davis, 2003). As shown in Table 3, all compos-
ite reliability measures were greater than 0.70 demonstrating good item reliability following Chin (1998).

Next, we examined discriminant and convergent validity. The acceptable method for analyzing these validities is for indicator loadings of the latent construct to load on their own construct and be higher than cross loadings. In addition, the square root of the average variance extracted must be at least 0.70 (see diagonal elements in Table 3) and greater than correlations with other latent constructs in the model (Gefen and Straub, 2005). With the exception of the Computer Expertise construct, all of our measures meet this requirement.

<table>
<thead>
<tr>
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<th>Composite Reliability</th>
<th>Mean</th>
<th>StDev</th>
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<tr>
<td>Computer Expertise</td>
<td>0.76</td>
<td>6.01</td>
<td>1.37</td>
</tr>
<tr>
<td>Effort Expectancy</td>
<td>0.9</td>
<td>5.39</td>
<td>1.36</td>
</tr>
<tr>
<td>Intention to Use</td>
<td>0.94</td>
<td>4.87</td>
<td>1.79</td>
</tr>
<tr>
<td>Perceived Risk</td>
<td>0.81</td>
<td>3.01</td>
<td>1.26</td>
</tr>
<tr>
<td>Performance Expectancy</td>
<td>0.87</td>
<td>4.63</td>
<td>1.42</td>
</tr>
<tr>
<td>Social Influence</td>
<td>na</td>
<td>4.54</td>
<td>1.44</td>
</tr>
<tr>
<td>Tax Domain Expertise</td>
<td>0.8</td>
<td>5.14</td>
<td>1.61</td>
</tr>
<tr>
<td>Trust in Logic</td>
<td>0.87</td>
<td>4.85</td>
<td>1.29</td>
</tr>
<tr>
<td>Trust in Privacy</td>
<td>0.92</td>
<td>4.37</td>
<td>1.52</td>
</tr>
<tr>
<td>Trust in Security</td>
<td>0.84</td>
<td>4.28</td>
<td>1.58</td>
</tr>
</tbody>
</table>

Notes: (1) Diagonal elements are the square root of the shared variance between the constructs and their measures; off-diagonal elements are correlations between constructs.

Table 3 - Measurement Model Estimation

Table 4 illustrates the relationship between each item and the corresponding construct. With the exception of TIP3 all construct loadings are greater than 0.60, the generally acceptable level. Removing this item from the model does not change the overall results.

Before adding additional constructs, we tested the basic UTAUT model in the context of individual choice to use tax preparation software. Bootstrapping
with 1,000 samples of 190 cases was run to obtain the standard errors for the path coefficients and to calculate the t-tests of the model pathways.

Table 4 - Item Loadings

<table>
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<tr>
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<th>Effort Expectancy</th>
<th>Intention to Use</th>
<th>Trust in Logic</th>
<th>Perceived Risk</th>
<th>Performance Expectancy</th>
<th>Trust in Privacy</th>
<th>Trust in Security</th>
<th>Social Influence</th>
<th>Tax Domain Expertise</th>
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<td>CE1</td>
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Table 4 - Item Loadings
Notes: CE: computer expertise; EE: effort expectancy; ITU: intention to use; PE: performance expectancy; PR: perceived risk; SI: social influence; TDE: tax domain expertise; TIL: trust in logic; TIP: trust in privacy; TIS: trust in security.

The relationship between performance expectancy, effort expectancy, social influence and intention to use were positive confirming UTAUT in this setting (Table 5). About 55 percent of the variance in the model can be explained with these three factors suggesting that the UTAUT model is applicable in this context. Note that PLS does not provide an adjusted R-square measure. Thus, we include the R-square from the PLS regression and add an adjusted R-square number computed using OLS regression in SAS in the table.

Next, we added the privacy, security, risk and expertise constructs, to the basic UTAUT model. Again we performed a bootstrap resampling of 1,000 samples of 190 cases to obtain standard errors for path coefficients and compared them to the PLS model using t-tests. In this model, performance expectancy and social influence remained valid; however, the effort expectancy variable was only marginally significant. The results are presented in Table 6 and graphically illustrated in Figure 2.
Discussion and Follow-Up Analyses

The main findings can be summarized as follows: performance expectancy, social influence, and logic beliefs are positively related to use intention. Effort expectancy $\rightarrow$ intention to use was marginally positively related. Trust in security $\rightarrow$ perceived risk was negatively correlated. Computer expertise $\rightarrow$ trust in security, computer expertise $\rightarrow$ trust in privacy, tax domain expertise $\rightarrow$ trust in privacy, and computer expertise $\rightarrow$ trust in logic were all positively correlated. The results concerning performance and effort expectancy, social influence, and trust in logic are intuitive and expected. The positive relationship between computer expertise and trust in security and privacy, on the other hand, is surprising. Similarly, we were surprised to find that the relationships perceived risk $\rightarrow$ intention to use, individual trust in privacy $\rightarrow$ intention to use, and individual trust in security $\rightarrow$ intention to use, are not significant (see Table 6).
Table 6 - Integrated Model including Privacy, Security, Risk, and Expertise Constructs

These findings could be an indication that despite a perceived negative relationship between security and risk, users of tax preparation software do not take security, privacy, or risk into account when choosing tax preparation and filing methods. We were also surprised to find that the privacy and tax domain expertise variables were generally not significant.

A non-significant relationship offers two main explanations: either there is not sufficient power to reject the null or the null hypothesis is true. We performed a power analysis for the associations where our results suggest non-significance and found high power for five of the seven relationships, suggesting that only the tax domain expertise construct may require a larger sample (see Table 7).
Perceived Risk → Intention to Use  0.99
Tax Domain Expertise → Trust in Logic  0.55
Tax Domain Expertise → Trust in Security  0.35
Trust in Logic → Perceived Risk  0.99
Trust in Privacy → Intention to Use  0.91
Trust in Privacy → Perceived Risk  0.99
Trust in Security → Intention to Use  0.99

Table 7 - Power Analysis

Another explanation for the non-significant results could be relatively high correlation (i.e. multi-collinearity) among the perceived computer and tax domain expertise constructs and between trust in security and privacy. We tested for this by estimating the model excluding the security construct and found that without security beliefs in the model the privacy construct is significantly related to perceived risk. Further, a combined privacy/security construct is also positively correlated with perceived risk. Alternatively stated, it appears that individuals do not separate security mechanisms and privacy protection. This is interesting because it implies that individuals are not concerned about other security aspects aside from privacy protection. Similarly, when excluding computer expertise from the model, tax domain expertise is positively related to trust in logic and privacy belief suggesting correlation between the two expertise constructs.

Summarizing the analysis, we believe that the two most interesting results of this study are (1) trust in security, trust in privacy, and perceived risk do not affect intention to use, and (2) computing expertise is positively related to trust in system security, privacy and logic. We discuss these findings in more detail in the next section.

Limitations

As is common with survey research this study is not devoid of limitations. Specifically, we used a convenience sample of upper division undergraduate and graduate students in accounting and information systems. Compared to the general population students represent a very homogeneous group with a young average age and a relatively high education level. Thus, our subjects are not representative of the general population. Further, one may argue that the strong relationship between e-filing and tax preparation may have lead to some confusion especially with regard to system security.
and privacy questions. However, we believe that the survey questions were sufficiently clear in stating that the focus of research was tax preparation software and not electronic tax filing (see Appendix). Similarly, the subjects' failure to distinguish security and privacy may lead to some concerns. We believe that these issues need to be subject of future studies.

Conclusion

This research examines how individual trust in security and privacy affects use intention when domain complexity may introduce a convenience-security trade-off. Two main results of this study seem particularly interesting: First, we find that while individuals consider security and privacy negatively related to risk, risk does not seem to affect use intention. This indicates that while individuals do believe that security and risk are related, they do not include security, privacy, or risk as determinants of use intention. We believe that this is due to a convenience-security trade-off that arises in settings of high domain complexity such as individual tax preparation. Users may simply choose to reduce their effort and increase performance - measured here with the "effort expectancy" and the "performance expectancy" constructs - rather than deal with security and privacy concerns. This finding has implications beyond the particular setting of the present study. If individuals knowingly disregard security and privacy risks when information systems provide them with a convenient way to accomplish a task, many of the proposed security improvement methods may not work. This has implications for various stakeholders such as security experts, system auditors, software developers, tax accountants, as well as individual users.

We also find a significantly positive relationship between perceived computer expertise and security and privacy beliefs as well as trust in system logic. This result may be due more to experience leading to a more positive attitude toward the system in general. Additionally, we find that individuals fail to distinguish between privacy and security matters, which we believe to be two distinct concerns. Future research may determine why users view privacy and security as one element.

Finally, we find support for the use of UTAUT outside the traditional organizational environment and in highly complex domains. This is important for academic research because (1) much of the information systems research occurring today is outside the traditional business environment due to ubiquitous computing and the omnipresence of the internet and (2) because testing and expanding theories and models advances academic disciplines. We find the integrated model useful for analyzing the convenience-security trade-off. In fact, we argue that - especially in situations of high complexity domains - the focus should be on the individual user's convenience and potential tradeoff of security and privacy concerns. The human remains the weakest link.
References


Author Biographies

Alexander McLeod is an assistant professor of Information Systems at the University of Nevada, Reno. He received his Ph.D. in Information Technology from the University of Texas at San Antonio. Research interests include individual and organizational performance involving enterprise systems, healthcare information systems, tax and technology and information system security. He has published in Communications of the Association of Information Systems, Journal of Information Science and Technology, Deci-
Sonja Pippin, Ph.D. is an assistant professor in the Department of Accounting and Information Systems at the University of Nevada Reno. Professor Pippin earned an M.S. in Geography from the University of Zurich, Switzerland, in 1998. In 2001, she graduated with an M.S. in Tax from Texas Tech University and in 2006 she earned her doctorate in Business Administration (Accounting) also at Texas Tech University. She has taught various undergraduate and graduate accounting courses and currently teaches mostly corporate taxation. Her research interests include technology acceptance in the accounting and tax environment, as well as public policy (tax policy) and public finance related issues.

Richard Mason, Ph.D., J.D. earned a B.B.A. at Hofstra University, a J.D. from St. John’s University School of Law and a Ph.D. in Business Administration (accounting) at the University of Connecticut. He is a member of the New York State Bar since 1981. He is an associate professor at the University of Nevada Reno where he teaches mostly tax courses.

APPENDIX A: SURVEY INSTRUMENT

1. Tax preparation software lets me prepare my taxes more quickly. (PE1)
2. My tax return will have less errors if I use tax preparation software. (PE2)
3. I do not find tax preparation software useful for doing my taxes. (PE3)
4. If I use tax preparation software, I increase my chances of getting a larger refund. (PE4)
5. By using tax preparation software, I decrease my chances of being audited. (PE5)
6. It would be easy for me to become skillful at using tax preparation software. (EE1)
7. I would find tax preparation software difficult to use. (EE2)
8. Learning to operate tax preparation software is easy for me. (EE3)
9. People who are important to me think that I should use tax preparation software. (SI1)
10. People who influence my behavior do not think I should use tax preparation software. (SI2)
11. In general, people around me have supported me using tax preparation software. (SI3)
12. A lot of tax knowledge is required to fill out a tax return. (TDE1)
13. I could complete my tax return if there was no one around to tell me what to do. (TDE2)
14. I know little about U.S. tax laws. (TDE3)
15. I could complete a tax return if I could call someone for help if I were stuck. (TDE4)
16. I could complete a tax return with the help on the IRS website and the instructions for the forms. (TDE5)
17. I use computer applications often for a variety of purposes. (CE1)
18. I am unable to complete a job or task using software on my computer. (CE2)
19. I can complete a job or task using software on my computer if there is no one around to help me. (CE3)
20. I can complete a job or task using software on my computer if I can call someone when I get stuck. (CE4)
21. I use the software often for a variety of purposes. (CE5)
22. Tax preparation software will not divulge my personal information to unauthorized persons. (TIP1)
23. I believe that when using tax preparation software my personal information will be held private. (TIP2)
24. I do not rely on tax preparation software to keep my personal information private. (TIP3)
25. I do not worry about security when using tax preparation software. (TIS1)
26. Tax preparation software is a secure way to prepare taxes. (TIS2)
27. Security is a concern when using tax preparation software. (TIS3)
28. The tax preparation software wizard/interview is not very accurate. (TIL1)
29. My tax return will be more accurate when using tax preparation software than when I do it by hand. (TIL2)
30. The error check feature of the tax preparation software helps me catch some of the mistakes I make. (TIL3)
31. I trust the tax preparation software wizard/interview to help me complete my tax return. (TIL4)
32. Use of tax preparation software may cause my personal income tax information to be stolen. (PR1)
33. It would be risky to use tax preparation software. (PR2)
34. I think it is unsafe to use tax preparation software because of privacy and security concerns. (PR3)
35. I intend to use tax preparation software for my income tax return next year. (ITU1)
36. In choosing preparation methods for my income tax return, my first choice would be to use tax preparation software. (ITU2)
37. I would recommend tax preparation software to my relatives and friends. (ITU3)
38. Age
39. Gender
40. Years of filing tax returns
41. Years of personally preparing tax returns
42. Years of computing experience
43. After completing your tax return, do you show it to a tax, finance or legal professional? (Yes; No; NA)