A qualitative exploration of tax software adoption in small and medium-sized enterprises

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ABSTRACT

The current study explores the factors considered when choosing tax software, as well as the level of satisfaction of the chosen tax software and relative benefits and drawbacks. The theory of mental shortcuts, and theory of planned behavior were used as a dual theoretical framework. The study employs a qualitative inquiry through interviews. The findings reveal three themes: cost, familiarity, and needs of clients. These themes were the main factors accounting firms use to guide tax software selection. Participants utilize recognition and familiarity heuristics by choosing tax software based on previous experience, knowledge, and familiarity. Accounting firms who had high levels of satisfaction were more likely not to change software because of their favorable attitude, positive intention, and perceived behavior of "ease". These results align with the Journal of Accountancy and Tax Advisor national survey of tax software usage based on firm demographics.

Keywords: tax software, cost, needs of clients, familiarity, theory of planned behavior, theory of mental shortcuts

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INTRODUCTION

Every accounting firm makes the critical decision of which tax software to use in their business. This decision plays a vital role in the success of an organization. Each year, the Journal of Accountancy and The Tax Adviser have surveyed tax preparers who are members of the American Institute of Certified Public Accountants (AICPA) on their chosen tax software. The survey was conducted to collect insight on the type of tax software employed, the likes or dislikes of the product, and their rating level of various aspects. Respondents were asked to rate the product, on a one to five scale, based on questions like, "How easy was the update/installation process?", "How easy was the software to use?", "How well did it handle updates during tax season?", "How well did it handle multistate business returns?", "How well did it integrate with your accounting and other software?", "How easy was electronic filing?", and "Would you recommend it to someone starting a tax practice?", as well as, an overall rating (Bonner, 2024).

The organizations that deployed the survey have done so for many years. The survey was typically available in the month of June and was open for responses for 18 days. The most recent survey was conducted from June 3-21, 2024. The results were published on August 15, 2024. The survey was sent to 140,401 individuals with 2,508 responses. The response rate decreased one percent from 2023 to 1.7%. However, in 2024, the survey was sent to about 40,000 more individuals than in 2023. The top seven tax software products used were: UltraTax CS, Lacerte, Drake Tax, CCH Axcess Tax, ProSeries by Intuit, CCH ProSystem fx, and ATX. The usage rate ranged from 22.6% to 4.7% of respondents respectively, with UltraTax CS receiving the highest usage at 22.6% of respondents. Other tax software worth noting that received lower than 4.7% of the respondents usage, was TaxACT, TaxSlayer, TaxWise, TurboTax, ProConnect, and GoSystem Tax RS (Bonner, 2024).

Participants were also asked to provide their firm size which was categorized by using range based on the number of preparers. Drake, overwhelmingly, took the lead in sole practitioners by 30% using their tax software. Two to five preparer firms had three within close proximity; UltraTax CS with 27.3%, Lacerte with 20.1%, and Drake Tax with 17.7%. The top products in the range of six to twenty preparers were Lacerte at 22.5% and UltraTax CS at 39.9%. Twenty-one to one hundred preparers had two top products: CCH Axcess Tax at 32.3% and UltraTax CS 20.4%. One hundred and one to five hundred had an even distribution between CCH Axcess Tax, Drake Tax, Lacerte, ProSeries, and UltraTax CS. The final group, five hundred and one or more, had CCH Axcess Tax at the top with 32.4% and UltraTax at 26.7% (Bonner, 2024).

Drake received an overall rating of 4.5 based on a 5-point scale. Also, this software was given high scores for ease of use, number of forms, price, technical support, electronic filing, updates, and installation process. Ninety-six percent of users indicated they would recommend this software to someone starting a tax practice. ProSeries received a 4.3 overall rating, with high scores for ease of use, installation process, learning curve, number of forms, and technical support. This software received a 86.8% recommendation result. Finally, UltraTax received an overall rating of 4.2. High scores were given in the areas of multistate business returns, ease of use, integration with other software, number of forms, installation process, easy of importing data, and technical support. Of the individuals who use UltraTax, 70.9% would recommend this product (Bonner, 2024).

This survey was conducted on a national level with participation among all firm sizes and thousands of subjects. To establish a more robust understanding of the factors considered in deciding which tax software to utilize, a narrower scope is utilized. This study aims to localize the findings of the annual survey and investigate the use of various tax software specifically in small to medium sized accounting firms. Relative to the annual survey, the study looks into the factors used in deciding which tax software to employ, and the perceived satisfaction of using the chosen software. Localized data from this study will aid in reinforcing the findings from the national survey and provide more context to the nuances faced in small to medium sized firms. The following parts of this paper are organized as follows: literature review, research design, results and findings, themes, and discussions and conclusions.

LITERATURE REVIEW

Previous Research

A review of the literature reveals a lack of studies focusing on impact of tax software on small to medium sized accounting firms. Of the few articles presented in the literature, the majority were published between 2008 and 2010. An article published by Pippin et al. (2010) analyzed the factors important in tax software comparing a professional and novice. Professionals were found to have a greater appreciation for tax software (Pippin et al., 2010). These individuals found it to be more effective for performance, easy to use, less risky, and more concerned about overall functionality (Pippin et al., 2010). On the other hand, novice individuals were found to be unaware of the benefits of tax software, more risky, more susceptible to marketing pressures from software companies, and did not understand the foreseen learning curve (Pippin et al., 2010). McLeod et al. (2009) explores the differences in tax software use with the technology acceptance theory. The authors used constructs, based on the UTAUT model, to examine the findings for professionals and novices (McLeod et al., 2009). The survey was sent to Certified Public Accountants (CPA) in a professional organization and students at a public university, with the final sample size as 130 respondents (McLeod et al., 2009). They found that the most significant factor of tax software use, for professionals was performance expectancy and functionality (McLeod et al., 2009). For novices, the prominent factor was the perceived effort it would take to learn the tax software (McLeod et al., 2009). A final article changed the scope to examine an individual taxpayer's intention to use tax software based on their experience, trust, and perceived risk (McLeod et al., 2008). The study found previous tax knowledge, previous computer experience, security issues, and performance expectancy were important factors for individuals when considering the type of tax software to employ to prepare their own taxes (McLeod et al., 2008).

Relevant Theories

To analyze the research topic, this study drew from two theoretical lenses. The first theory is the theory of mental shortcuts, also known as heuristics. Singun, in their research study, defines heuristics as "the specific rule-of-thumb discovered from knowledge or experience which can simplify the complexity of making judgements" (Singun, 2018, p. 143). Heuristics are used by humans to create mental shortcuts to draw conclusions or solve problems (Singun, 2018). Heuristics are common in accountants everyday activities. With the use of tax software in

an accounting firm, heuristics are applied to technology. In technology, mental shortcuts are created when designing user interfaces, layouts, or patterns (Raeburn, 2024). These shortcuts can be created based on past experience, tax laws, accounting rules, etc. (Raeburn, 2024). This allows accountants to work more efficient by making quicker decisions (Raeburn, 2024). There are eight types of heuristics: recognition, familiarity, availability, representativeness, anchoring and adjustment, affect, satisficing, and trial and error (Raeburn, 2024). Recognition heuristic applies a mental shortcut when an individual is asked to choose between two options and they choose the option they recognize or what they already know (Raeburn, 2024). Individuals utilize familiarity heuristics when they prefer to use or choose an option that they are familiar with (Raeburn, 2024). Availability heuristic is based off of a person's experiences, with individuals judging events based on prior knowledge (Raeburn, 2024). Representativeness heuristics is defined as "assigning an object to a specific category or idea based on past experiences" (Raeburn, 2024, para. 19). Affect heuristic is applied when people make decisions based on their feelings (Raeburn, 2024). Satisficing is a mental shortcut where people settle and choose an option because it is "satisfactory" (Raeburn, 2024). Finally, trial and error is applied when repeated experimentation is used as a problem-solving method (Raeburn, 2024).

Another theory used in the research study was the theory of planned behavior (TPB). This theory is an extension of the theory of reasoned action by adding a "perceived behavior control" element (Ozer & Yilmaz, 2011). The addition of this element allows behaviors that are not under control to be predicted (Ozer & Yilmaz, 2011). Under TPB, an individual's attitude or feeling towards a particular behavior is the determining factor of their intention (Edicreia & Lauro, 2018). Asare (2015) identifies three constructs to this theory: behavioral intention, attitude towards the behavior, and subjective norm. A behavior is more likely to be performed if the intention behind it is strong (Asare, 2015). Secondly, if a person has a favorable attitude towards the behavior, the outcome or belief of the behavior will be positive (Asare, 2015). Subjective norm focuses on social pressures, beliefs, and motivation (Asare, 2015). If an individual has high motivation, pressure, and personal belief, the behavior is more likely to be performed (Asare, 2015).

In the literature, this theory has been employed in various studies. One article applied TPB for predicting fraudulent financial reporting intentions (Yuniarwati et al., 2021). The authors found "positive attitudes and subjective norms had a significant effect on fraudulent financial reporting intentions" (Yuniarwati et al., 2021, p. 529). In another research study, TPB was utilized to find the intention of pursuing a CPA career (Solikhah, 2014). The three constructs of TPB were found to have a positive intention for students to pursue a CPA career (Solikhah, 2014). Another study applied TPB on the working adult population to the predictors of financial behavior (She et al., 2023). The findings showed individuals with financial knowledge had a positive attitude about retirement (She et al., 2023). Also, subjective norms and perceived behavior showed a positive relationship with the intention on retirement planning (She et al., 2023). Finally, working adults who exhibited positive financial behavior were positively associated with behavior intention and perceived control (She et al., 2023).

When given a choice, these theories encompass the mental behaviors and feelings toward various options and the reasoning behind the final decision. These theories were applicable in the research study. This research study focused on an accounting firm's decision to use a particular software, the reasons behind that decision, and the pros and cons of the software. The theory of mental shortcuts and TPB provided an understanding of the how and why behaviors and decisions were made.

RESEARCH DESGIN

This study employed a qualitative inquiry research design. Accounting firms were contacted by email or phone to see if they would be willing to participate in the study. A list of questions were developed. Of the firms willing to participate, the questions were either sent by email or were used to conduct interviews using Microsoft Teams. Ten interviews occurred with small, medium-sized accounting firms in a rural county in the Mid-Atlantic region. According to the United States Census Bureau (2022), the county population was 67,267. Of this population, the median age was 42.2 years, 20.2% had a bachelor's degree or higher, and the poverty rate was 19.8% (US Census Bureau, 2022). The median household income for the county was \$54,384, compared to a \$98,678 median household income for the state (US Census Bureau, 2022). There were 1,472 employer establishments (US Census Bureau, 2022). Considering the demographics, there were not a significant number of accounting firms located in this county. As a result, conducting ten interviews was a sufficient and reliable amount of data collection for this research study.

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RESULTS AND FINDINGS

Interviewees

A list of the interviewee's information is stated in Table 1 in the Appendix.

Firms

Of the ten firms interviewed, nine had been in service longer than ten years. Eight of those nine firms have been in service longer than 25 years. All of the firms offered individual tax preparation and bookkeeping services. Eight of the ten firms offered other services such as business tax preparation, payroll, financial statement preparation, and tax planning. The other two firms solely focused on light bookkeeping and only individual tax preparation. All of the firms serviced more than 250 clients. Of the firms who serviced tax preparation for individuals, the number of clients ranged from 250 to 2,500. Of the firms who serviced tax preparation for businesses, the number of clients ranged from 4 to 150. The number of partners ranged from one to four, while the number of tax preparers ranged from two to twelve. Finally, the majority of the firms serviced Maryland, Pennsylvania, and West Virginia. Two of the ten firms serviced other states such as, California, Washington, Florida, Texas, Ohio, and New Jersey.

The main objective of the interview was to determine which tax software the firms have chosen to use for their services and the benefits and drawbacks to the chosen software. Of the ten firms interviewed; four used TaxWise, two used Drake, two used Ultra-Tax, and two used Pro Series by Intuit. The majority of the interview participants did not know the relative cost associated with the tax software. Some of these individuals were staff accountants who did not have access or knowledge of this information. Of the individuals who knew; Ultra-Tax was valued at costing about \$25,000, TaxWise had a cost of \$3,000 per year for unlimited returns, Drake, depending on the package, the cost ranged from \$1,800-\$3,000, and ProSeries ranged from \$8,000-\$10,000.

Interviewee's were asked the factors that were considered when choosing the tax software. The main factors were: ease of use, familiarity, cost, efficiency/functionality, customer

service availability, and needs of their clientele. All of the interviewees were familiar with one or two tax software, but believed the majority of them are homogeneous in nature, with eight of ten firms having not switched or converted software within their tenure at the firm. The two firms that had switched stated the driving force was behind the calculation of income tax and personal property tax. Finally, seven firms stated, if starting from scratch today, they would still choose the same software to use in their organization. The other three individuals were unsure in their decision and noted they would take into account all tax software. In general, cost, functionality, learning curve, and needs of the organization, were the primary factors firms would consider in the decision making process of potentially choosing a new software.

Participants were asked how satisfied they were of their chosen tax software. Eight out of ten firms stated they were satisfied or very satisfied. One individual stated he would rate ProSeries a "B'. With the main reason being that he wished the software had more capabilities. Another individual who used TaxWise cited they are fairly satisfied. With the consensus rating a good satisfaction level, six out of ten firms had recommended their software to other individuals and businesses.

Finally, the interviewees provided a list of pros and cons for their software. Of the firms who used Ultra-Tax, pros of this software were the ability to calculate all federal income taxes and all state personal property tax. The main con was slow factoring changes at the state level. The firms who utilized Drake stated pros were, great customer service, cost efficient, and easy to use. No cons were mentioned. Firms who employed TaxWise stated pros were very easy to use, efficient, easy to install and transfer data, it provided access to all states tax forms, and good customer service. The cons pertained to the business side: not as in-depth as needed and requires some prior knowledge to be used efficiently, lack of timeliness of available forms early in tax season, and diagnostic errors. For ProSeries by Intuit, the pros provided were great customer service, simple to learn, and effective. The main con was how expensive the cost can be if the firm wants to upgrade for the software to have more capabilities.

THEMES

There were three themes that emerged from the research study; cost, familiarity, and needs of clients. These items were recurring patterns in the data across all firms interviewed. Together, these themes conceptualize the main reasons why tax software was chosen for an organization.

Cost

Monetary cost was the most prominent theme that developed from the research study. The majority of all firms interviewed cited cost to be an important, if not the most important factor, in choosing a tax software. The demographics of each organization were very similar and paired with a median income lower than the national average and low number of business establishments, it elevates cost as a factor that carries a large weight in the selection of tax software. When asked "if you were to start from scratch today, which software will you choose?", one interviewee stated, "I would test various software, but if we were just starting with a few clients, I think cost would be a major factor". Another person cited, "Cost would be the main factor." A third interviewee stated, "It has been a while since we took a hard look at all the available options, but cost would the first factor considered".

There were four different tax software used in the accounting firms; Ultra-Tax, TaxWise, Drake, and Pro Series by Intuit. Drake and TaxWise were on the lower end of the cost spectrum, with a comparable price of \$1,800-\$3,000. While, Ultra-Tax and Pro Series were more expensive, costing firms between \$8,000-\$25,000. TaxWise was used the most by four of ten firms. One interviewee stated, "TaxWise, to me, is so efficient for what we are doing and also 10% of the price of other tax software. We do about 2,700 total returns, so the price is unbeatable". An individual who used Drake stated, "I am satisfied with Drake. We only do individual tax returns, making it cost effective for our firm." Another interviewee who utilized Drake detailed pricing to be the biggest factor considered when choosing this as their software.

It is evident by these statements that cost is the leading priority in determining which tax software to employ. With seven out of ten participants being owners or partners, the cost and related benefit of the software takes precedence compared to individuals who are not directly impacted by those decisions. The owners/partners want the most cost effective software for their firm.

Familiarity

The second theme that emerged from the interviews was familiarity. Participants emphasized familiarity when asked "which factors were used in determining your chosen software" and "what factors would you take into consideration if starting from scratch today". Familiarity was cited by six out of the ten firms as one of the main factors taken into consideration in choosing a software. It is also apparent in statements like, "I would stick with Drake. Like I said earlier, we are familiar with it," and "Familiarity and accuracy would be the two most important factors".

The term familiarity was also used when participants were discussing the learning curve it would take to switch to a new software and ease of transition. Many participants had used the same software their entire tenure at their organization. Six of the ten interviewee's had not switched or converted to a different software since working at their firm. One of the ten participants had switched about 20 years ago when their firm was under different leadership. However, since taking over, they chose to continue to use the same software. One participant stated, "If TaxWise was ever discontinued and we already had a successful business, my biggest factor would be ease of transition." Another individual stated, "The main factors in choosing to convert to a new software would be cost and time it would take to learn a new software". Many of the individuals interviewed were only familiar with one or two tax software including the one they currently use. One individual stated, "I have only used TaxWise and am only familiar with that software". Another participant said, "Really only with TaxWise, have heard of other software but not familiar with it". Finally, one individual stated, "I have not used any other software since beginning my career in tax preparation and am only familiar with Drake". The time and effort it would take these small to medium-sized firms to convert to a new software could be extremely costly and time consuming. The majority of these firms only have a couple of partners and employees. To rely on these individuals to switch to a new software, after only being familiar with one they currently utilize, and still maintain the same level of clientele and business activities could take a significant amount of time, money, and learning. If the integration was not seamless, it could be detrimental to these sized firms.

Needs of Clients

The third theme that surfaced from the interview data was needs of clients. As described earlier, the demographics of the clientele these firms service were relatively low compared to the national averages (i.e. median income, median age, poverty rate, etc.). The majority of the firms in this area were solely focused on doing individual tax preparation, small business tax preparation, and basic bookkeeping. These firms were focused on having a tax software that is applicable to the needs of their clients.

Three individuals stated needs of our clients as one of the factors considered in their chosen software. One individual who utilized Drake, stated "They would still use Drake, even if they had to start from scratch, because it fits the needs of our clients". Participants also stated functionality and ease of use in the same context as needs of the clients. At this point, many of individuals were using their chosen tax software for the services they offer and the clientele they serve. In separate interviews, two participants stated functionality and "it does everything we need it to do" when discussing factors in the decision of why they chose their software.

Overall, 80% of the participants stated they would still choose the same software if they could start from scratch. The three themes; cost, familiarity, and needs of clients, are pivotal factors in the decision making process. Out of the firms interviewed, nine of ten stated they are very satisfied with their current software. These themes were important to consider in the level of satisfaction.

DISCUSSION AND CONCLUSIONS

A theme is an idea or pattern that emerges through the data in relation to the focus of the research study. The primary themes that emerged from the research study were cost, familiarity, and needs of clients. It was evident, through high repetition of responses and interviewee statements, these three items were key reasons to choosing tax software.

This study draws upon the theory of mental shortcuts and theory of planned behavior (TPB) as the theoretical underpinnings of the research. The familiarity heuristic and recognition heuristic are directly connected to the findings. It was evident in the themes that familiarity was a prominent factor in the interviewees tax software decision making process. Whether members of the firm recognized the tax software was a pivotal factor in selecting and continuing the use with such tax software. Interviewees were employing mental shortcuts to make a choice of tax software based on their previous recognition, understanding, and familiarity of the product.

The theory of planned behavior focuses on an individual's feelings and intention towards a behavior. This theory aligned with the focus of understanding the perceived satisfaction of certain tax software. Individuals who had a high level of satisfaction towards their chosen software, in turn, would still choose the same software if given the choice. When citing the benefits and drawbacks of a given software, the participants who had high levels of satisfaction had very few drawbacks. High satisfaction is a driver for the intention to keep their chosen software. These accounting firms have pre-existing knowledge and understanding of how their software operates making their perceived behavior control and attitude favorable. Combining high satisfaction, positive attitudes, and prior understanding of the software, accounting firms have a favorable appraisal and perception of "ease" behind the intent to remain consistent with their software.

Many of the findings of this study aligned with the survey distributed by the Journal of Accountancy and The Tax Advisor at a national level. All the firms in this study were small to medium sized with a range of two to twelve preparers. The results of the national survey revealed UltraTax and Drake as common tax software utilized for that specific range of preparers (Bonner, 2024). Forty percent of the accounting firms in this study used Drake or UltraTax. Contrary, TaxWise was used by forty percent of the accounting firms in this study compared to not being among the top seven products used in the national survey. Additionally, the users of the top seven products indicated top likes for each tax software. Ultra Tax, Drake, and Pro Series received similar likes, which were, ease of use, price, number of forms, and customer support. This study found comparable likes of cost and fits the needs of the clients. One factor that was not listed as a "top like" in the national study but apparent in this study was familiarity. Even though there were two key differences, the results largely support the findings of national survey. This study revealed a relationship between the factors considered in choosing tax software, benefits and drawbacks of the chosen software, and level of satisfaction with firms of similar size and demographics. Furthermore, these conclusions increased the reliability and validity of the national survey results on a smaller scale.

With any research study, there are inherent limitations. The possible limitations of this study were sample size, with only ten accounting firms studied. The relatively small sample size limits the external validity of the findings. Likewise, this data was collected in a single region. The results of this data may not be applicable to other geographic regions and may not represent a diverse population. Finally, some interviews were conducted using Microsoft Teams, while others were questionnaire responses received via email. This could create bias with the lack of consistency in the data collection. Some potential avenues for further research exploration could be exploring the findings of large firms, researching tax automation and how it is shaping the future of tax preparation, or focusing on one tax software across a variety of firm sizes to find ways to better serve a more broad and diverse population.

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APPENDIX

Table 1 below lists the interviewee's information.

Position	Tenure
Owner	25 years
Owner	1.5 years
Staff Accountant	19 years
Staff Accountant	46 years
Partner	5 years
Staff Accountant	2 years
Owner	34 years
Partner	8 years
Owner	16 years
Owner	30 years
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