

# Factors that Affect SMEs in the Adoption of E-Tax Payment Systems in Zambia, the Case of Kamwala Trading Area-Based on UTAUT Model

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## Abstract

The study was conducted to establish the factors affecting the adoption of e-tax services through the ZRA online system. In this study the UTAUT model was used as the conceptual framework to generate five hypotheses which were analysed after data collection and findings. The study assessed the factors affecting the adoption of the e-tax services that were provided on the ZRA online system in order to ascertain and identify whether actual usage of the electronic services was affected by the five attributes of the UTAUT Model. The Taro Yamane Formula was used in this study to derive the sample size of 100. The locations site used to conduct the study was, Kamwala Trading area; survey questionnaire was used to collect data with a 100% response rate. Quantitative data was collected from respondents using a structured questionnaire. The questionnaire was generated based on the UTAUT conceptual model. Descriptive analysis and Pearson's correlation were used to analyse the results. The results for H1 showed a Pearson correlation coefficient of 0.000 which is statistically insignificant if the (sig. 1-tailed) < 0.05 indicated that there was no statistical significant relationship between performance expectancy and the actual usage of e-tax services by SMEs. However, the results from H2 indicated that there was a strong positive relationship between effort expectancy and actual usage of e-tax services by SMEs as the Pearson correlation indicates 0.620 at (sig. 1-tailed) < 0.05; H3 indicated that there was a moderate positive relationship between social influence and the actual usage of e-tax services as the Pearson's correlation indicates 0.500 at (sig. 1-tailed) < 0.05; H4 indicated there is actually no relationship between Facilitating Conditions and the actual usage of e-tax services by SMEs as the Pearson correlation indicated zero at (sig. 1-tailed) < 0.05. H5 indicated that there is a strong positive relationship between behavioural intentions and actual usage of e-tax

services by SMEs as the Pearson correlation indicates 0.791 at (sig. 1-tailed) < 0.05. The study concluded that the results suggest that, Performance expectancy, Effort expectancy and social influence had a positive moderate correlation with the actual use of e-tax services. Facilitating conditions and Behavioral Intentions had no relationship with the actual use of e-tax Services.

### **Keywords**

Adoption, E-Tax Payment, UTAUT Model, SMEs, Actual Usage, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Behavioral Intentions, Zambia

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## **1. Introduction**

Information system has continued to be vital in helping organizations to be highly efficient and to remain competitive in its environment; therefore, it has been widely used in public sector and business organizations (Anuar & Othman, 2010). This has been seen through the evolution from their traditional ways of doing business to modern technologies which offer more convenience and faster processing activities. To conduct effective government management, many governments and other public sector organizations have invested heavily into the establishment and development of information system. According to Colesca and Liliana (2008), an effective government management must certainly portray less corruption, increased transparency, better delivery of government services, improved interactions with business and industry, revenues, cost reduction and so on. Hence, employing the right information system is essential to ensure improved government's transparency, responsiveness and accountability towards its customers (Belanger & Carter, 2008). It is for this reason, that public sector organizations are finding it better to overcome such operational inefficiencies by adopting the use of electronic services; an example of one such service is electronic tax payment system. Electronic tax system has received a lot of attention from scholars in recent times. This is because the provision of tax payment methods that are convenient for taxpayers will facilitate smooth tax payments to the treasury, and reduce the risk of tax arrears (Araki, 2013). Therefore, it is beneficial for both taxpayers and tax administration bodies to introduce electronic tax payment methods that reduce the costs associated with tax payments, such as internet banking and direct debit where a tax administration body is authorized to withdraw tax amounts from a taxpayer's bank account. However, despite the benefits of electronic tax system there is limited literature into its adoption among SMEs. Thus, the study will attempt to highlight factors that affect SMEs in the adoption of e-tax payment systems in Zambia.

SMEs are notably considered to be the seedbed for indigenous entrepreneurship and generate all the many small investments, which would otherwise not

have taken place (Phiri, 2013). Their significance in a developing economy like Zambia cannot be over emphasised. Hence, Zambia needs to further the development of its private sector by creating an environment favorable to the growth of SMEs, strengthening the factors that lead to business success, and addressing the problems threatening the existence and advancement of small and medium enterprises, so they can adequately play the role expected of them in economic transformation. Despite the introduction of e tax service by ZRA, Tax compliance among SMEs is poor (Thabani & Kasongo, 2020). Low tax compliance causes the government to lose out on much needed revenue which hampers their expenditure. Thus, identifying factors contributing to SMEs adoption of the said system is very important so that the present online tax payment system can be further enhanced and will accordingly lead to the increase of its usage level. To date, none of the technology acceptance studies has been done to evaluate the SMEs adoption of e tax system in Zambia. Therefore, this is the gap the study seeks to fill.

## 2. Literature Review

Empirical studies show that there is no consensus on the factors that affect the adoption of e-tax payment system among SMEs for both developed and developing economies. Majority of the studies reviewed focused more on the e tax filing, tax compliance, and the adoption of electronic technologies in other sectors. From the global studies for instance, Schaupp and Carter (2009) proposed a model of e filing adoption that incorporates risk perceptions and optimism bias to explain e-file diffusion. Results of a multiple regression analysis were consistent with their predictions; effort expectancy, performance expectancy, social influence, perceived risk, and optimism bias significantly influence intention to e-file. Similarly, Bramantyo (2020) established that the users' attitudes were significantly influenced by the perceived useful, beliefs, and compatibility and the subjective norms were not affected by the external influence, but rather by interpersonal influence. Wang (2012) found that for the adopters, if they feel Perceived usefulness the e-tax service has a higher practical utility, they have a high self-efficacy to use the e-tax service, and e-tax service can satisfy their many kinds of demands, they will continue to use the e-tax service. Perceived usefulness, self-efficacy, and compatibility have a high influence for adopters. As regards to non-adopters, if they feel the e-tax service has a higher practical utility and the people around he or she has a positive experience on e-tax service and suggest he or she to use the e-tax service, that will have a high probability to use the e-tax service. Okunogbe and Pouliquen (2017) also highlighted that e-filing training coupled with logistical help with registration was highly successful at promoting e-filing adoption as 93 percent of firms in the treatment group adopt e-filing. In contrast, the e-filing training alone did not produce an effect with any significant difference from the control group treatment (63 percent adoption, compared with 59 percent in the control group). Furthermore, Araki (2013)

found that tax administration bodies in Asia and the Pacific, including those in developing economies, are generally equipped with basic foundations for ICT-based tax administration operations. With respect to electronic tax filing systems, the picture varies from one economy to another. While penetration rates had reached quite high levels in developed economies, even where electronic tax filing is available, its penetration rates were still low in some developing economies. On the other hand, the trend in tax payment appeared to have shifted from in-person payment at tax offices to electronic tax payment such as internet banking and direct debit based on bank systems, which will help reduce corruption risk and resource costs at tax offices. [Brezavšček et al. \(2017\)](#) also indicated that all five external variables (statistical software self-efficacy, computer attitude, statistics anxiety, statistics learning self-efficacy, and statistics learning value) influence either perceived usefulness or perceived ease of use, which directly affect students' behavioural intention to use statistical software during university education and in the future after graduating. In contrast, [Sondakh \(2017\)](#) stated that perceived ease of use had a significant positive effect on the perceived usefulness and attitudes towards use of e-SPT. The perceived usefulness has a positive and significant effect on the attitudes towards use e-SPT but no significant effect on behavioral intention to use e-SPT. [Alshehri \(2012\)](#) found that the five independent constructs of the UTAUT model, that is, Trust (TR), Performance Expectancy (PE), Effort Expectancy (EE), Website Quality (WQ) and Facilitating Conditions (FC), significantly affect the Behaviour Intention (BI) to accept and use e-government services. In contrast, Social Influence (SI) had an insignificant effect on the Behaviour Intention (BI) to accept and use e-government services.

In Africa, [Fatoki & Asah \(2011\)](#) indicated that there was a significant positive relationship between human, social and financial capital and the performance of SME. [Obert et al. \(2018\)](#) concluded that electronic filing system actually influences tax compliance. [Adebisi and Gbegi \(2013\)](#) findings disclose that enlightenment and adequate utilization of tax revenue on public goods discourages tax avoidance and tax evasion, high tax rates encourages tax avoidance and tax evasion. Furthermore, [Nkwe \(2013\)](#) revealed that was a very strong positive relationship between the taxpayers' attitudes and tax compliance behavior in the SMEs of Botswana. In addition, [Mekonnen \(2020\)](#) found perceived usefulness, perceived risk, self-efficiency and timeliness are statistically significant but, subjective norm is insignificant. [Night and Bananuka \(2018\)](#) found that adoption of electronic tax system and attitude towards electronic tax system are significantly associated with tax compliance. In contrast, [Attuquayefio and Addo \(2014\)](#) established that Effort Expectancy (EE) significantly predicted Behavioural Intention (BI) to use ICT, while Social Influence (SI) and Performance Expectancy (PE) were statistically insignificant, as was Behavioural Intention (BI) on Use Behaviour (UB). However, Facilitating Conditions (FC) ( $\beta = 0.26, p < 0.01$ ) significantly influenced UB.

In Zambia, [Thabani and Richard \(2020\)](#) found that high tax rates and complex filing procedures are the most crucial factors causing non-compliance of SMEs. [Soneka and Phiri \(2019\)](#) focused on Tax Online system used by domestic taxes division in Zambia. The results showed that, E-tax system in Zambia is useful, easy to use and also secure. Based on the findings, majority of the taxpayers are filing their returns and paying taxes online. However, results revealed that there are few taxpayers who still felt that E-tax is not useful, easy to use and secure. Similarly, [Mukuwa and Phiri \(2020\)](#) showed that Performance Expectancy, Effort Expectancy and Social Influence affect SMEs' behavioral intention to use eservices. Further, only Behavioral Intentions of SMEs significantly affect their use behavior of e-services. In contrast, [Sakala and Phiri \(2019\)](#) found that there was a significant positive relationship between perceived ease of use, perceived usefulness, user attitude, external variables, user intention and system use. The regression results further showed that, the independent variables in the TAM model, perceived ease of use, perceived usefulness, external factors, user attitude and user intention account for 47% of the variance in the factors that determine the use of electronic banking technologies such as mobile banking. Alternatively, [Lishomwa and Phiri \(2020\)](#) using TRA model stated that the digital banking system provides numerous advantages to customers, however, there is still a lack of trust among some corporate customers. It was established that the key factors influencing internet banking were: performance expectancy, control factors, social influence and behavioural intention.

### 3. Methodology

This study used quantitative research design. This design is appropriate for this research as the method allows for the use of statistical data as a tool for saving time and resources. [Bryman \(2001\)](#) argues that quantitative research approach is the research that places emphasis on numbers and figures in the collection and analysis of data. Imperatively, quantitative research approach can be seen as being scientific in nature. In addition, the use of scientific methods for data collection and analysis make generalization possible with this type of method. Interaction made with one group can be generalized. Similarly, the interpretation of research findings need not be seen as a mere coincidence ([May & Williams, 1998](#)). However, replicability is another benefit derivable from the use of this research approach ([Daniel, 2016](#)). Since the research approach basically relies on hypotheses testing, the researcher need not to do intelligent guesswork, rather he would follow clear guidelines and objectives ([Lichtman, 2013](#)). The research study using this type of research tool is conducted in a general or public fashion because of its clear objective and guidelines, and can therefore be repeated at any other time or place and still get the same results ([Shank & Brown, 2007](#)).

The target population was estimated to be 1,616,192 from the total registered electronic users of ZRA portal from which a sample is to be estimated using [Yamane \(1967\)](#) formula for sample size determination as seen in the works of

Khamis and Gumawa (2020) with a 90% confidence level giving us the error precision of 10% ( $e = 0.10$ ).

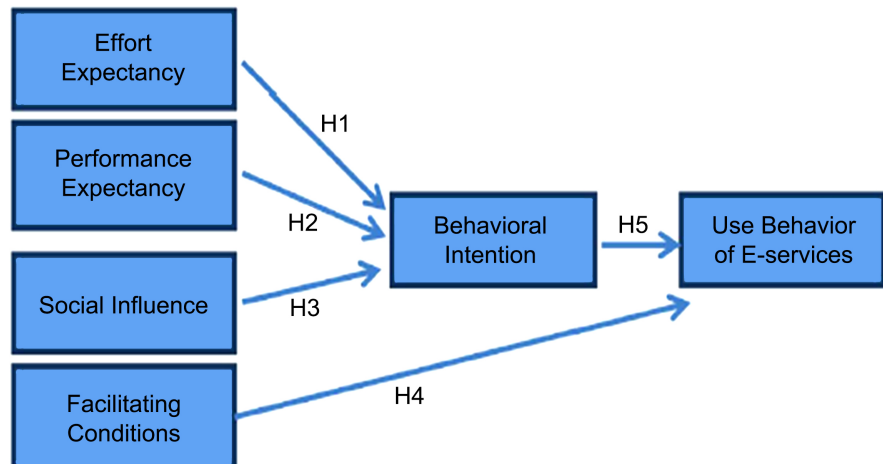
Therefore, 100 respondents from the study population were selected to participate in this study. The 100 respondents which are registered business from Kamwala trading area in Lusaka.

The sample was selected by using a non-probability sampling method called "Purposive sampling method". Purposive Sampling involves choosing information rich-cases for purposes of helping a researcher conduct an in-depth study in understanding about the cases under consideration without the need or desire to generalize to all such cases (McMillan & Schumacher, 2006). Purposeful sampling is done to increase the utility of information obtained from a small sample. In this study, the researcher will purposefully sample the SMEs in Kamwala shopping complex in Lusaka Township.

### 3.1. Research Model

UTAUT is the most predominant and comprehensive theory existing in the literature to date. The UTAUT model is derived from eight theoretical models: the theory of reasoned action (TRA), the technology acceptance model (TAM), the motivational model, the theory of planned behavior (TPB), a model combining the technology acceptance model and the theory of planned behavior, the model of PC utilization, the innovation diffusion theory, and the social cognitive theory. Each model attempts to predict and explain user behaviour using a variety of independent variables. A unified model was created based on the conceptual and empirical similarities across these eight models. The theory holds that four key constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) are direct determinants of usage intention and behaviour (Venkatesh et al., 2003). The goal of UTAUT is to understand intention/usage as the dependent variable (Venkatesh et al., 2003). In addition to technology adoption factors, the literature also identifies perceived risk as an important predictor of intention (Fu et al., 2006). This research also sought to determine the applicability of the UTAUT model on SMEs' adoption of the e tax payment system. The model, developed by Venkatesh et al. in 2003 has four independent variables and two dependent variables. Gender, age, experience, and voluntariness of use are posited to mediate the impact of the four key constructs on usage intention and behaviour, however, these have been excluded in this study (Figure 1).

As by Figure 1, the UTAUT model attempts to explain how individual differences influence technology use. More specifically, the relationship between perceived usefulness, ease of use, and intention to use can be moderated by age, gender, and experience. For example, the strength between perceived usefulness and intention to use varies with age and gender such that it is more significant for male and younger workers. The effect of perceived ease of use on intention is also moderated by gender and age, such that it is more significant for female and



**Figure 1.** Adopted conceptual framework based on the UTAUT model by Venkatesh et al. (2003).

older workers, and those effects decrease with experience (Venkatesh et al., 2003). The UTAUT has four predictors of behavioural intention or usage: performance expectancy, effort expectancy, social influence and facilitating conditions. The predictors are defined as follows (Venkatesh et al., 2003):

1) Performance expectancy (PE): “is the degree to which an individual believes that using the system will help him or her to attain gains in job performance.”

2) Effort expectancy (EE): “is the degree of ease associated with use of the system.”

3) Social influence (SI): “is the degree to which an individual perceives that [it is] important others believe he or she should use the new system.”

4) Facilitating conditions (FC): “is the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system.”

### 3.2. Research Hypotheses

The UTAUT was therefore adopted in generating hypotheses used in this study. The main moderators or predictors were PE, EE, SI, FC and BI. The following are the research hypotheses which the study follows as guided by Venkatesh et al. (2003).

H<sub>1</sub>: There is a positive relationship between performance expectancy and the use of e-tax payment services by SMEs in Zambia.

H<sub>2</sub>: There is a positive relationship between effort expectancy and the use of e-tax payment services by SMEs in Zambia.

H<sub>3</sub>: There is a positive relationship between social influence and the use of e-tax services by SMEs in Zambia.

H<sub>4</sub>: There is a positive relationship between facilitating conditions and the use of e-tax services by SMEs in Zambia.

H<sub>5</sub>: There is a positive relationship between behavioural intention and the use of e-tax services by SMEs in Zambia.

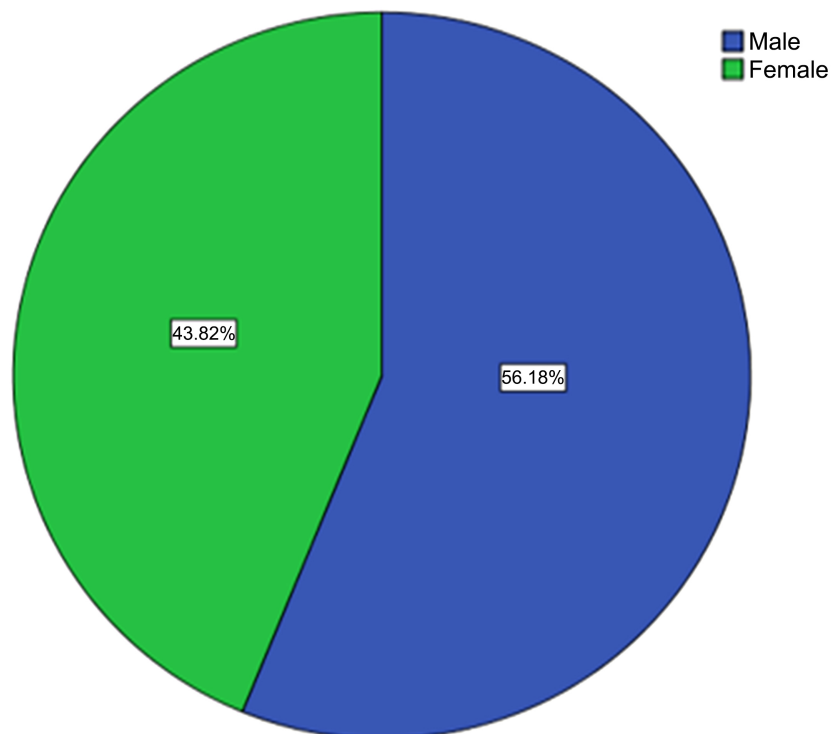
### 3.3. Model Testing

Pearson's correlation analysis was used for hypothesis testing. This was done using SPSS to test if there is a linear relationship between the dependent and independent variables. A Sig value below 0.05 indicates that there is a significant relation between the dependent and independent variable whereas a Sig value above 0.05 indicates that there is no relationship between the dependent and independent variable.

## 4. Results

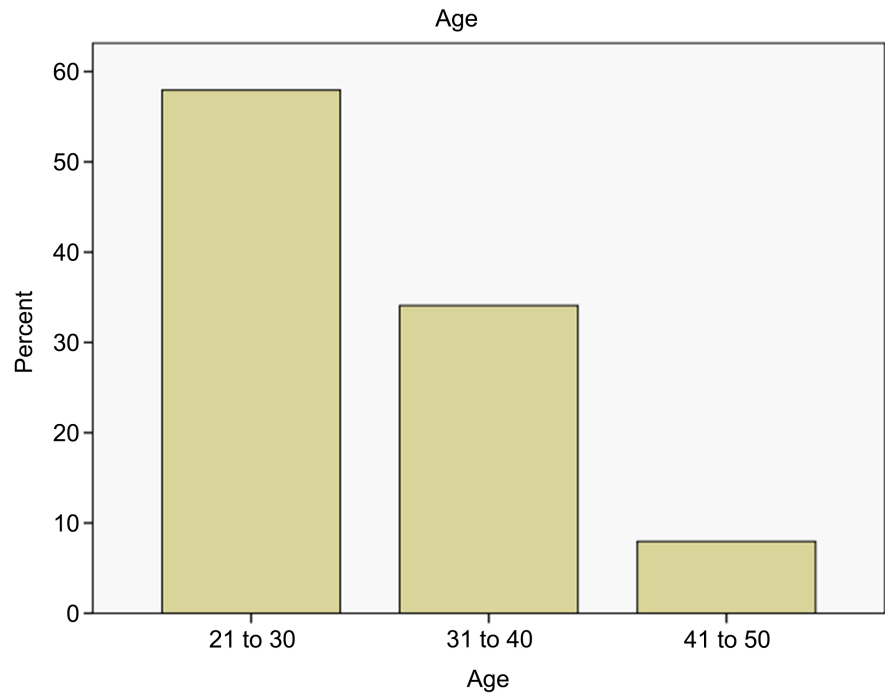
### 4.1. Analysis of Demographics

**Figure 2** shows that the majority of the study respondents were male, constituting 56.18% of the sample size. 43.82% of the study respondents were female. **Figure 3** below, the age distribution shows that the work force is made up of majority of the respondents which are between the ages of 21 and 30 while the least age range of respondents was 41 to 50. The middle age range of the respondents ranges from 31 - 50. **Figure 4** below shows that 52.8% went up to Grade 9 level, 32.6% went up to Grade 10 - 12 level, 7.9% had never been to school, 3.4% went up to university level, 2.2% went up to College level and 1.1% went up to Primary school level.

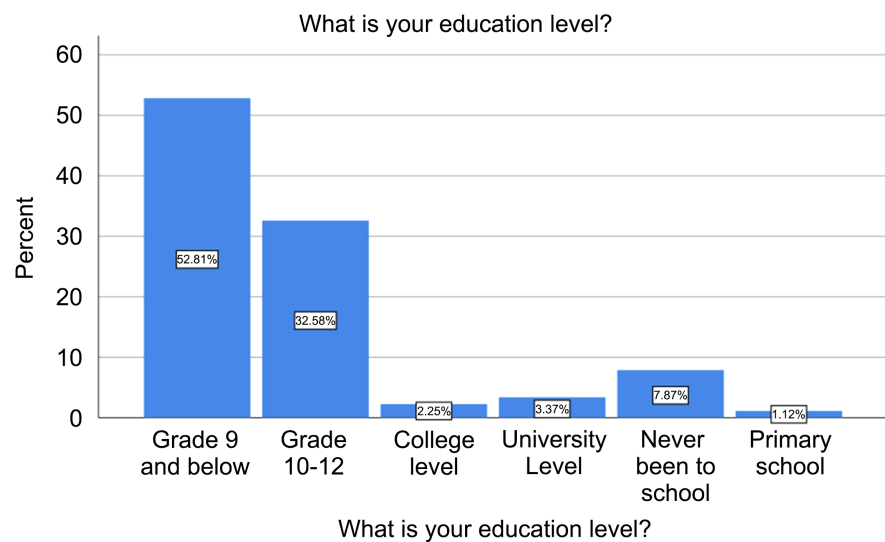


**Figure 2.** Gender distribution of SMEs.





**Figure 3.** Age distribution of SMEs.



**Figure 4.** Education level distribution of SMEs.

#### 4.2. The Factors Affecting the Adoption of E-Tax Service among SMEs in Zambia

Pearson Correlation analysis was conducted using SPSS in order to check if there is a linear relationship between the dependent and independent variables.

**Table 1** shows that the correlation coefficient between the actual usage and performance expectancy is 0.000. This means that there is no relationship between actual usage and performance expectancy. As seen from **Table 1**, the P-value for the actual usage and performance expectancy using 1 tailed test is

0.500, this figure is more than the 0.05 (5 percent) level of significance thus we fail to reject the null hypothesis. This means that there is no statistical relationship between the actual usage and performance expectancy at 0.05 (5 percent) level of significance. The results suggest that regardless of the business expectancy there is no probability of the SMEs using the e tax payment system. These results are similar to the findings of [Fatmasari et al. \(2017\)](#) and in conflict with the findings of [Okunogbe and Pouliquen \(2017\)](#).

**Table 1** shows that the correlation coefficient is between the actual usage and effort expectancy is 0.620. This means that there is a positive relationship between actual usage and effort expectancy. As seen from **Table 1**, the P-value for the actual usage and effort expectancy using 1 tailed test is 0.000, this figure is less than the 0.05 (5 percent) level of significance thus we reject the null hypothesis. This means that there is a statistical positive relationship between the actual usage and effort expectancy at 0.05 (5 percent) level of significance. The result was contrary with the findings of [Mukuwa and Phiri \(2020\)](#) and [Schaupp and Carter \(2009\)](#) despite using the TAM model.

**Table 1** shows that the correction coefficient is between the actual usage and social influence is 0.500. This means that there is a positive relationship between actual usage and social influence. As seen from **Table 1**, the P-value for the actual usage and social influence using 1 tailed test is 0.000, this figure is less than the 0.05 (5 percent) level of significance thus we reject the null hypothesis. This means that there is a statistical positive relationship between the actual usage and social influence at 0.05 (5 percent) level of significance. This is similar to works of [Fatmasari et al. \(2017\)](#) and contrary to the works of [Hermanto et al. \(2022\)](#) who used an extended meta—UTAUT model.

**Table 1** shows that the correction coefficient is between the actual usage and Facilitating Conditions is 0.000. This means that there is no relationship between actual usage and Facilitating Conditions. As seen from **Table 1**, the P-value for the actual usage and Facilitating Conditions using 1 tailed test is 0.500, this figure is more than the 0.05 (5 percent) level of significance thus we fail to reject the null hypothesis. This means that there is no statistical relationship between the actual usage and Facilitating Conditions at 0.05 (5 percent) level of significance. The findings revealed that Facilitating Conditions had no relationship with actual usage of e-tax services by SMEs. The relationship was found to be insignificant at 0.05 (5 percent). These results are contrary to the findings of [Bramantyo \(2020\)](#).

**Table 1** shows that the correction coefficient is between the actual usage and Behavioural Intentions is 0.791. This means that there is a positive relationship between actual usage and Behavioural Intentions. As seen from **Table 2**, the P-value for the actual usage and social influence using 1 tailed test is 0.000, this figure is less than the 0.05 (5 percent) level of significance thus we reject the null hypothesis. This means that there is a statistical positive relationship between the actual usage and Behavioural Intentions at 0.05 (5 percent) level of significance.

**Table 1.** SPSS coefficients results summary.

Hypothesis Path	Correlation Coefficient	Sig. (1-tailed)
H1 Performance Expectancy—Actual Usage	0.000	0.500
H2 Effort Expectancy—Actual Usage	0.620	0.000
H3 Social Influence—Actual Usage	0.500	0.000
H4 Facilitating Conditions—Actual Usage	0.000	0.500
H5 Behavioral Intentions—Actual Usage	0.791	0.000

**Table 2.** Summary of hypotheses results.

Research/Alternate Hypothesis	Results
H1: There is a positive relationship between Actual usage and Performance expectance.	Rejected
H2: There is a positive relationship between Actual usage and Effort expectancy	Accepted
H3: There is a positive relationship between Actual usage and Social influence	Accepted
H4: There is a positive relationship between Actual usage and Facilitating Conditions	Rejected
H5: There is a positive relationship between Actual usage and Behavioural Intentions	Accepted

The findings revealed that Behavioural Intentions had a positive relationship with actual usage of e-tax services by SMEs. The relationship was found to be significant at 0.05 (5 percent). This is similar to works of [Haryani et al. \(2015\)](#) who using the UTAUT model argued that perceived ease of use and perceived usefulness significantly affect the behavioral intention of the citizen towards the adoption of electronic tax filing and the works of [Sondakh \(2017\)](#) who using TAM model found that perceived usefulness are having positive and significant effect on the attitudes towards use e-SPT but no significant effect on behavioral intention to use e-SPT.

## 5. Conclusion

The main purpose of this study was to determine the major factors that affect SMEs in the adoption of e-tax payment system in Zambia. The findings revealed that there was a strong positive statistical relationship between actual usage and Effort expectance, social influence and Behavioral intentions. The other findings indicated that there was no relationship between actual usage and performance expectancy and facilitating conditions. Thus, the study concludes that an increase in effort expectancy, social influence and behavioural intentions can en-

hance the adoption of e-tax payment systems among SMEs in Zambia.

It is interesting to note that the study focused on investigating the major factors that affect SMEs in the adoption of e-tax payment system in Zambia. Thus, it could be worthwhile to conduct another study looking at the adoption of e filling system among the SMEs in Zambia. In addition, this study used the UTATUT model to assess the adoption of the e tax payment system among SMEs in Zambia. It could be worthwhile to utilise other adoption models and compare the results accordingly.

## 6. Recommendations

1) The ZRA authorities and government should work on creating awareness to SMEs about the e-tax service. In addition to tax payers being given online access to their tax account, there is need for ZRA to conduct massive sensitization campaigns on the importance of using e tax payment among SMEs given that it is both time and cost saving. The tax payer will be willing to adopt the e tax service as this will increase their income and the income of the government. Furthermore, this campaign will be effective given that most SMEs are in need of formal learning about the system.

2) System availability should be ensured by ZRA who should have its servers upgraded to be able to absorb pressure on e-traffic. This will enhance adoption as SMEs will not have to wait long for the servers to be operational when there is system failure.

3) The government should improve the infrastructure that supports internet coverage across the country for electronic filing to be a success. It is Government that should ensure Internet connectivity for all. This is because taxpayers are found all over; even those in the rural areas can pay tax thus internet access should be guaranteed.

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## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

Adebisi, J., & Gbegi, D. (2013). Effect of Multiple Taxation on the Performance of Small and Medium Scale Business Enterprises. A Study of West African Ceramics Ajeokuta, Kogi State. *Mediterranean Journal of Social Sciences*, 4, 323-334.

<https://doi.org/10.5901/mjss.2013.v4n6p323>

- Alshehri, M. A. (2012). *Using the UTAUT Model to Determine Factors Affecting Acceptance and Use of E-Government Services in the Kingdom of Saudi Arabia*. A Research Report, Griffith University.
- Anuar, S., & Othman, R. (2010). Determinants of Online Tax Payment System in Malaysia. *International Journal of Public Information Systems*, 2010, 1.
- Araki, S. (2013). *Electronic Taxpayer Services in Asia and the Pacific*. The Governance Brief—Africa Development Bank (ADB).
- Attuquayefio, S. N., & Addo, H. (2014). Using the UTAUT Model to Analyze Students' ICT Adoption. *International Journal of Education and Development Using Information and Communication Technology*, 10, 75-86.
- Belanger, F., & Carter, L. (2008). Trust and Risk in e-Government Adoption. *Journal of Strategic Information System*, 17, 165-176. <https://doi.org/10.1016/j.jsis.2007.12.002>
- Bramantyo, S. A. (2020). Determinants of E-Tax System Acceptance by Users. *RJOAS*, 5, 169-174. <https://doi.org/10.18551/rjoas.2020-05.18>
- Brezavšček, A., Šparl, P., & Žnidaršič, A. (2017). Factors Influencing the Behavioural Intention to Use Statistical Software: The Perspective of the Slovenian Students of Social Sciences. *EURASIA Journal of Mathematics Science and Technology Education*, 13, 953-986.
- Bryman, A. (2001). *Social Research Methods*. Oxford University Press.
- Colesca, S. E., & Liliana, D. (2008). E-Government Adoption in Romania. In *The Proceedings of World Academy of Science, Engineering and Technology*.
- Daniel, E. (2016). The Usefulness of Qualitative and Quantitative Approaches and Methods in Researching Problem-Solving Ability in Science Education Curriculum. *Journal of Education and Practice*, 7, 91-100.
- Fatmasari, R., Sampaleng, D., Gunherani, D., Sugiarti, D. Y., & Murniarti, E. (2017). Effect of Performance Expectation, Social Influence, and Self-Confidence on the Mobile Learning Behavior (A Study on Bachelor Degree Students of Economic Education Program of Universitas Terbuka). In *Advances in Social Science, Education and Humanities Research* (Volume 174, pp. 594-599). Atlantis Press.
- Fatoki, O., & Asah, F. (2011). The Impact of Firm and Entrepreneurial Characteristics on Access to Debt Finance by SMEs in King Williams' Town, South Africa. *International Journal of Business and Management*, 6, 170-179. <https://doi.org/10.5539/ijbm.v6n8p170>
- Fu, J. R., Farn, C. K., & Chao, W. P. (2006). Acceptance of Electronic Tax Filing: A Study of Taxpayer Intentions. *Information & Management*, 43, 109-126. <https://doi.org/10.1016/j.im.2005.04.001>
- Haryani, S., Motwani, B., & Matharu, S. K. (2015). Behavioral Intention of Taxpayers towards Online Tax Filing in India. *Journal of Business & Financial Affairs*, 4, Article ID: 1000135.
- Hermanto, A. H., Windasari, N. A., Purwanegara, M. S., & Adeola, O. (2022). Taxpayers' Adoption of Online Tax Return Reporting: Extended Meta-UTAUT Model Perspective. *Cogent Business and Management*, 9, Article ID: 2110724. <https://doi.org/10.1080/23311975.2022.2110724>
- Khamis, M., & Gumawa, A. M. (2020). Effect of Entrepreneurial Skills on Small and Medium Scale Enterprises (SMEs) Performance: A Study of Registered Businesses Operating in Sabon Gari Market Kano. *International Journal of Advanced Academic Research (Social and Management Sciences)*, 6, 82-96.

- Lichtman, M. (2013). *Qualitative Research in Education: A User's Guide* (3rd ed.). SAGE Publication.
- Lishomwa, L., & Phiri, J. (2020). Adoption of Internet Banking Services by Corporate Customers for Forex Transactions Based on the TRA Model. *Open Journal of Business and Management*, 8, 329-345. <https://doi.org/10.4236/ojbm.2020.81020>
- May, T., & Williams, M. (Eds.) (1998). *Knowing the Social World*. Open University Press.
- McMillan, J., & Schumacher, S. (2006). *Research in Education: Evidence-Based Inquiry* (6th ed.). Pearson Education.
- Mekonnen, N. (2020). Factors That Affect Taxpayers' Adoption for Electronic Tax Service: The Case of Addis Ababa Taxpayers. *Research Journal of Finance and Accounting*, 11, 12-19.
- Mukuwa, V., & Phiri, J. (2020). The Effects of E-Services on Revenue Collection and Tax Compliance among SMEs in Developing Countries: A Case Study of Zambia. *Open Journal of Social Sciences*, 8, 98-108. <https://doi.org/10.4236/jss.2020.81008>
- Night, S., & Bananuka, J. (2018). The Mediating Role of Adoption of an Electronic Tax System in the Relationship between Attitude towards Electronic Tax System and Tax Compliance. *Journal of Economics, Finance and Administrative Science*, 25, 73-88. <https://doi.org/10.1108/JEFAS-07-2018-0066>
- Nkwe, N. (2013). Tax Payers' Attitude and Compliance Behavior among Small Medium Enterprises (SMEs) in Botswana. *Business and Management Horizons*, 1, 113-137. <https://doi.org/10.5296/bmh.v1i1.3486>
- Obert, S., Rodgers, K., Tendai, M. J., & Desderio, C. (2018). Effect of e-Tax Filing on Tax Compliance: A Case of Clients in Harare, Zimbabwe. *African Journal of Business Management*, 12, 338-342.
- Okunogbe, O., & Pouliquen, V. (2017). *Impact Evaluation of the Introduction of Electronic Tax Filing in Tajikistan*. Endline Report, World Bank Group.
- Phiri, S. C. (2013). *The Evolution of the Informal Economy and Its Implications for Tax Policy in Zambia*. Dissertation, The University of Zambia.
- Sakala, L., & Phiri, J. (2019). Factors Affecting Adoption and Use of Mobile Banking Services in Zambia Based on TAM Model. *Open Journal of Business and Management*, 7, 1380-1394. <https://doi.org/10.4236/ojbm.2019.73095>
- Schaupp, L. C., & Carter, L. D. (2009). Antecedents to e-File Adoption: The U.S. Citizen's Perspective. *eJournal of Tax Research*, 7, 158-170.
- Shank, G., & Brown, L. (2007). *Exploring Educational Research Literacy*. Routledge.
- Sondakh, J. J. (2017). Behavioral Intention to Use E-Tax Service System: An Application of Technology Acceptance Model. *European Research Studies Journal*, 20, 48-64.
- Soneka, P. N., & Phiri, J. (2019). A Model for Improving E-Tax Systems Adoption in Rural Zambia Based on the TAM Model. *Open Journal of Business and Management*, 7, 908-918. <https://doi.org/10.4236/ojbm.2019.72062>
- Thabani, M., & Richard, K. M. (2020). Factors That Affect Tax Compliance among Small and Medium Enterprises (SMES) in Lusaka, Zambia. *Journal of Accounting*, 3, 1-14. <https://doi.org/10.47941/jacc.415>
- Venkatesh, V., Morris, M. G., & Davis, G. B. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27, 425-478. <https://doi.org/10.2307/30036540>
- Wang, X. (2012). *Factors Influence Citizen Adoption for Government E-Tax Service*. Örebro University.
- Yamane, T. (1967). *Statistics: An Introductory Analysis* (2nd ed.). Harper and Row.