# FACTORS THAT INFLUENCE THE USE OF COMPUTER-ASSISTED AUDIT TECHNIQUES (CAATs) BY INTERNAL AUDITORS IN SRI LANKA

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## INTRODUCTION

Information technology (IT) is an excellent investment in the current business world. More businesses are converting to e-business from traditional company practices (Damer *et a*l., 2021). The rapidly expanding field of IT includes computer hardware, databases, networks, telecommunications, the internet, extranets, CAATs, etc. (Cerullo & Cerullo, 2003). CAATs can assist internal and external auditors in performing audit tests and activities to predict financial failure or fake financial statements; CAATs can range from straightforward processes like electronic working papers to statistical analytic software and artificial intelligence capabilities (Mansour, 2016). Although IT-based auditing techniques offer several advantages over conventional auditing methods, their effectiveness depends on corporate and human characteristics (Pathmasiri & Piyananda, 2021).

The auditor skilled in computer-based auditing will add value because he or she possesses at least two areas of expertise: auditing and information technology. Auditors use CAATs to protect a business from loss due to human error and limit the potential for fraud. CAATs are an effective audit technique for detecting financial inconsistencies and fraud. Optimizing the application of CAATs to financial statements can aid in the prevention of fraud. One method for detecting fraud is to assess the availability of data to identify fraud symptoms. The use of audit processes necessitates using CAATs because it is impractical for the auditor to verify every transaction that occurs (Lestari et al., 2020). This study aims to provide insight into the CAATs adoption by paying attention (Venkatesh & Zhang, 2010) to internal auditors in Sri Lanka PLCs.

## METHODOLOGY

This study applies a dependent variable and five independent variables to research. According to this study, the intention to use CAATs is the dependent variable, and independent variables are performance expectancy, effort expectancy, social influence, and facilitating conditions. One branch of information technology research focuses on technology adoption by evaluating usage or intention as a dependent variable (Pathmasiri & Piyananda, 2021), and the goal of the UTAUT is to explain user intentions to use an IS as well as subsequent usage behavior (Venkatesh & Zhang, 2010). The UTAUT model is the most effective for researching behavioral intention (Chao, 2019). According to the conceptual framework and literature review, the researcher developed directional and causal hypotheses to assess the explanatory power of independent variables on intention to CAATs by internal auditors in Sri Lanka PLCs.

$H_1$: There is a significant influence of performance expectancy on internal auditors' intention to adopt CAATs in Sri Lanka.

*H₂*: There is a significant influence of effort expectancy on internal auditors' intention to adopt CAATs in Sri Lanka.
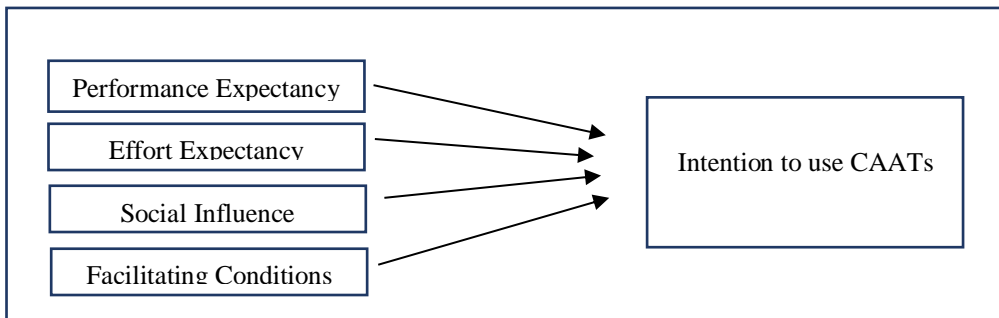
*H₃*: There is a significant influence of social influence on internal auditors' intention to adopt CAATs in Sri Lanka.

*H₄*: There is a significant influence of facilitating conditions on internal auditors' intention to adopt CAATs in Sri Lanka.

**Conceptual Framework**
**Figure 1**
*Conceptual framework*



The study's target population includes internal auditors PLCs. As of 31 January 2023, the CSE has 304 firms (PLC). Internal auditors were taken as a sample unit of the study. The sample was selected using the population of the companies. Based on the multistage cluster sampling method, those companies are categorized into four main categories according to the total market capitalization percentage.

01. Total market capitalization 0% - 0.5%

02. Total market capitalization 0.6% - 1%

03. Total market capitalization 01% - 2%

04. Total market capitalization >2%

As per the above, the researchers have taken 100 samples per category. Unfortunately, there is no proper database in Sri Lanka to get the exact information regarding the population size of internal auditors presently working at PLCs because every PLC has many branches. Therefore, the book "Research Methods for Business" has mentioned 75, 180, 384, and 500 sample sizes (Sekaran & Bougie, 2016). According to the Morgan chart, the researcher can get a more reliable and reasonable sample size using the convenience sample method. Consequently, the sample size for this study will be more than 384. After considering the non-response rate, the researcher will select 390 as the sample size per the abovementioned public limited company categories.

**RESULTS AND DISCUSSION**

Demographic data analysis

The researcher provides an in-depth profile of the respondent's demographics.

**Analysis of gender**

**Table 1**

*Gender*

| Gender | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Female | 195 | 50.0 | 50.0 | 50.0 |
| Male | 195 | 50.0 | 50.0 | 100.0 |
| Total | 390 | 100.0 | 100.0 | |

**Analysis of education qualifications**

**Table 2**

*Analysis of education qualifications*

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------|---------|---------------|--------------------|
| Bachelor's degree | 260 | 66.7 | 66.7 | 66.7 |
| Diploma or below | 65 | 16.7 | 16.7 | 83.3 |
| Master's degree | 52 | 13.3 | 13.3 | 96.7 |
| PhD | 13 | 3.3 | 3.3 | 100.0 |
| Total | 390 | 100.0 | 100.0 | |

**Reliability**

**Table 3**

*Reliability*

| The Variable | Cronbach's Alpha | No of items | Conclusion |
|--------------|------------------|-------------|------------|
| Performance Expectancy | 0.922 | 6 | Excellent |
| Effort Expectancy | 0.876 | 5 | Excellent |
| Facilitating Conditions | 0.801 | 5 | Excellent |
| Social influence | 0.738 | 5 | Reliable |
| Intention to use CAATs | 0.868 | 3 | Excellent |

According to Morgan's table, 390 internal auditors who worked at PLCs in Sri Lanka were chosen for this study. However, 384 responded. According to current data, 98.17 percent of respondents were recorded. From them, the reliability analysis table shows that all the variables were organized from 0.738 to 0.922. That means the variables are considered very dependable.

Regression Analysis

The researcher conducted a multiple regression analysis to determine the validity of the hypotheses. The results showed that all hypotheses were accepted without social influence. There is a positive impact of performance expectancy on the intention to use CAATs by internal auditors in Sri Lanka, with a sig. value of 0.000, less than 0.05. A positive impact of effort expectancy on intention to use CAATs was similarly found, with a sig. value of 0.000, less than 0.05.

**Table 4**

*Regression Analysis*

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | β | Std. Error | β | | |
| (Constant) | -0.239 | 0.109 | | -2.191 | 0.029 |
| Performance Expectancy | 0.774 | 0.031 | 0.768 | 25.135 | 0.000 |
| Effort Expectancy | 0.227 | 0.036 | 0.218 | 6.367 | 0.000 |
| Facilitating Conditions | 0.090 | 0.025 | 0.074 | 3.616 | 0.000 |
| Social Influence | -0.028 | 0.030 | -0.027 | -0.944 | 0.036 |

a. Dependent Variable: Intention to use CAATs.

Further, the positive impact of facilitating conditions on intention to use was found, with a sig. 0.000 value. Lastly, the negative impact of social influence on intention to use was found to be –0.027, with a sig. value of 0.036, less than 0.05. This indicates that social influence significantly negatively impacts internal auditors' intention to use the CAATs in Sri Lanka PLCs.

## CONCLUTION AND IMPLICATIONS

This study aims to determine which criteria have a significant role in influencing how often auditors use CAATs. To properly evaluate a company's financial statements, its owners, stakeholders, and regulatory authorities like the Institute of Chartered Accountants of Sri Lanka need to have a solid grasp on the relationships between the CAATs used by auditors and the external factors that can affect them (ICASL). Since the beginning of 2019, the world, including Sri Lanka, has been impacted by the COVID-19 pandemic. Information technology advancements are being made to deal with unforeseen travel restrictions and lockdown circumstances. Therefore, many businesses request computerized automated information systems like CAATs to carry out day-to-day responsibilities like auditing. Adapting CAATs is minimal in Sri Lankan companies due to various issues such as auditors' perception, facilities to adopt new technology, and current security issues. Because of this, this study is significant for internal auditors of PLCs in Sri Lanka to use this as a tool to enhance their future workings.

*Keywords***:** Computer assisted audit techniques, effort expectancy**,** facilitating conditions, performance expectancy**,** social influence.

## REFERENCES

Cerullo, M., & Cerullo, M. (2003). Impact of SAS No. 94 on computer audit techniques. *Information Systems Control Journal, 1*, 53-58.

Chao, C. (2019). Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model. *Frontiers in Psychology, 10*, 1652.

Damer, N., Al-Znaimat, A., Asad, M., & Almansou, Z. (2021). Analysis of motivational factors that influence usage of computer-assisted audit techniques (CAATS) by external auditors in Jordan. *Academy of Strategic Management Journal, 20*, 1-13.

Lestari, D., Mardian, S., & Firman, M. (2020). Why don't auditors use computer-assisted audit techniques? study at small public accounting firms. *The Indonesian Accounting Review, 10*(2), 105-116.

Mansour, E. (2016). Factors affecting the adoption of computer-assisted audit techniques in the audit process: Findings from Jordan. *Business and Economic Research, 6*(1), 248-271.

Pathmasiri, B., & Piyananda, D. (2021). Key Determinants of Internal Auditors' Usage of Computer Assisted Audit Techniques in Sri Lanka. *International Journal of Accountancy, 1*(2), 66-82.

Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach.* West Sussex: Wiley & Sons.

Venkatesh, V., & Zhang, X. (2010). Unified theory of acceptance and use of technology: US vs. China. *Journal of Global Information Technology Management, 13*(1), 5-27.