



## The Impact of Insecurity regarding Technology on Usage of Computer Based Accounting Practises among the Small Scale Business Owners in Nuwara Eliya District

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### Abstract

*Technology has influenced the accounting field by reducing the work load since that the task that normally would take at least five persons to perform can be accomplished by one accountant. Advent of the computerized accounting practices equally affected to the organizations in both developed and developing countries. As introducing new technologies, the manual accounting systems have become gradually inadequate for decision needs.*

*The major objective of the research paper is to explore the impact of Insecurity regarding the Technology on their Usage of Computer based Accounting Practices among small scale businesses. Moreover, it tries to evaluate the level of Insecurity regarding the Technology and the level of the Usage of Computer based Accounting Practices among small scale businesses. And ultimately it tries to find out the relationship between Insecurity and the Usage of Computer based Accounting Practices among the small scale businesses.*

*The study was conducted among the sample of hundred small business owners who were randomly selected from Nuwara Eliya district in Sri Lanka. The data analysis included the Univariate analysis (descriptive), Cross Tabulation analysis and Bivariate analysis. Considering the variable, Usage of Computer Based Accounting Practices among small scale businesses in Nuwara Eliya district is in low level and the influence of the Insecurity regarding the Technology is also in low level. The Pearson's correlation analysis explores that there is a negative but insignificant linear relationship between Insecurity regarding the Technology and the Usage of Computer based Accounting Practices. Regression analysis has proved that Insecurity regarding the Technology of small business owners shall be considered as a strategic tool but because of the high technology readiness among the small business owners the Insecurity is not major predictor of Usage of Computer based Accounting Systems.*

**Keywords:** Computer Based Accounting; Insecurity

### 1. Introduction

Present world people can't imagine their life without technology. New technologies are helping people to live their lives more luxury. Accounting plays a critical role in the success or failure of contemporary business institutions. Accounting systems are responsible for recording, classifying, summarizing, analysing, evaluating and interpreting the financial performance of companies, preparation of documents necessary for tax purposes,

providing information support to many other organizational functions, and so on.

Like many other fields, the accounting field changed with the arrival of personal computers. Computerized Accounting is the use of computer to keep files and accounts by folders and software in computer.

For the small enterprises, an adoption of computer based accounting system (CBAS), becomes vital and may well be the determining factor for the survival and success of an

organization. However in developing countries SMEs have not realized the full benefit of advancement in hardware and software (Munesinghe and Jayawardena, 1996).

Most of these studies, however, examined the use and implementation of IT in organizations. Few studies, however, have attempted to specifically identify the use of IT in accounting by small scale businesses. As a modern technology people's propensity to adopt computerized accounting system are vary to person to person or business to business. Therefore in this research study it is assumed that adoptions of computer based accounting practices in small business is mainly depending on the feeling of Insecurity regarding the Technology of small business owners.

### 1.1 Research Problem Statement

In this context, the problem of the study is identified as,

**“What is the impact of Insecurity regarding Technology on Usage of Computer based Accounting Practices among small scale enterprises?”**

### 1.2 Research Objectives

Based on the research problem identified above, following objectives are set for the study:

1. To identify the level of Usage of Computer based Accounting Practices among the small scale businesses in Nuwara Eliya district.
2. To evaluate the level of Insecurity regarding the Technology among the small scale business owners in Nuwara Eliya district.
3. To find out the relationship between the Insecurity regarding the Technology and the usage of Computer based Accounting Practices among small scale business owners in Nuwara Eliya district.
4. To explore the significant influence of Insecurity regarding the Technology on usage of computer based accounting

practices among small scale business owners in Nuwara Eliya district.

## 2. LITERATURE REVIEW

### 2.1 Overview of Technology

Technology has been around as long as the human race. When we think of modern technology, we often think of computers, complex machines, and space shuttles. However, people had to find ways of solving problems and meeting needs- in other words, develop technology- way back in history.

Organisations adopt new technologies to improve the efficiency and effectiveness of various work processes. But failed investments in technology may not only cause financial losses, but also lead to dissatisfaction among employees (Venkatesh, 2000). Hence, explaining and predicting user adoption of new technology is important. Businesses in developing countries are increasingly relying on innovative technology to create new markets or penetrate existing markets (Chipp, Hoenig & Nel. 2006).

### 2.2 Insecurity

Insecurity is an uncertainty or anxiety about one self, lack of confidence. And it can be further described as the state of being open to danger or threat, lack of protection. We will of course continue to enjoy the benefits of the Information Age, but we must also remain constantly aware of the dangers and pervasive pitfalls of cyber-theft, cyber-threats, cyber-crime, and of course of cyber-terrorism and cyber-war. Any or all of these can hit each one of us at any time. The insecurity of computer systems and networks goes much further than the well-known computer viruses, and has now become a priority (Eduardo Gelbstein, Ahmad Kamal, 2002).

Insecurity has been defined as Distrust of technology and scepticism about its ability to work properly (Parasuraman, 2000). Elliott,



Meng, Hall, 2008 has been defined insecurity as a need for assurance that a technology-based product, service or process will operate reliably and accurately. And it has been defined as individuals avoiding the use of computers due to their innate fear of technology (Kwon & Chidambaram, 2000).

### 1.3 Usage of Computer based accounting system

Every accountant knows that accounting is the language of business. That language has gone through many changes throughout the ages. But through all the changes accounting technology has always played a part in making the accountant's job just a little easier. He/she now has the ability to interpret the language of business with such ease that the accountant has become a corporation's most trusted business advisor (Agnes Ann Pepe, 2011)

Usage of Computerized accounting system has defined as an amount of practicing a system that uses computers to input, process, store and output accounting information inform of financial reports (Meigs et al 1998). Marivic (2009) described usage of computerized accounting system as an amount of using method or scheme by which financial information on business transactions are recorded, organised, summarized, analysed, interpreted and communicated to stakeholders through the use of computers and computer based systems such as accounting packages.

However, there are certain things in mind before buying an accounting software, like the prices of the software, its different features, its after-sales support and alike. There is a lot of top accounting software available in every category. Peachtree (Best Software), MYOB Plus for Windows (MYOB software), Quick Book (Intuit), Small Business Manager (Microsoft) are top accounting softwares which available in the current market for small businesses (Ashish Jain, 2009).

## 3. Method

### 3.1 Sampling Designs

The study was conducted among the small business owners in the Nuwara Eliya district. The size of sample selected for this research is 100. The sample is selected using Random Sampling technique from the total population of small scale businesses owners in Nuwara Eliya district without applying any conditions. The study was based on the primary data collected by distributing the questionnaire on the sample. The questionnaires for measuring Insecurity had been originally developed by Dr. A. Parasuraman (2000), University of Miami (U.S.A). The questionnaires for measuring the Usage Computerized Accounting Systems have been originally developed by the researcher. It contains the statements to measure various services used by the small businesses owners by using the computerized accounting system.

### 3.2 Method of Data Analysis and Evaluation

The data collected and measured by the use of questionnaire has been analysed and evaluated on the following methods,

1. Univariate Analysis.
2. Bivariate Analysis.

#### 3.2.1 Univariate Analysis

Each and every variable in the research model has been analysed by using Descriptive Statistical method. The independent variable in the research model (Insecurity) is measured by the use of questionnaires with five point scales. The five point scales for the variables of Insecurity ranged from "Strongly Disagree" to "Strongly Agree" with the points of 5 to 1 respectively as for the negative statements. And the dependent variable of Usage of Computer Based Accounting Systems, the five point scales has ranged from "Never" to "Always" with the points of 1 to 5 respectively. The mean value has lied between 1 and 5 of these five point scales. Hence, this mean value has been

taken as the deciding factor, which determined particular variable or not. whether the respondents are in favour to the

**Table 01.** Decision Criteria for Level of Usage of Computer based Accounting Practices.

Range	Decision
If $1.0 \leq X \leq 2.5$	Low level
If $2.5 < X \leq 3.5$	Moderate level
If $3.5 < X \leq 5.0$	High level

**Table 02.** Decision Criteria for Level of Insecurity regarding Technology

Range	Decision
If $1.0 \leq X \leq 2.5$	High level
If $2.5 < X \leq 3.5$	Moderate level
If $3.5 < X \leq 5.0$	Low level

### 3.2.2 Bivariate Analysis

The Bivariate Analysis is used to know how one variable is related to another. In this research the bivariate analysis has been made to determine

- a. Whether there is any relationship between
  - i. The Usage of Computer Based Accounting Systems and Insecurity
- b. What the strength (Magnitude) of the relationship between those variables, and
- c. Whether the Usage of Computer Based Accounting Systems can be predicted from the observations on Insecurity regarding the Technology, and determine a functional relationship between dependent variable and the independent variable.

The following statistical techniques have selected to do the above bivariate analysis.

1. The Correlation Analysis
2. The Simple Regression Analysis

#### 3.2.2.1 The Correlation Analysis

The Correlation Analysis has been used to measure the magnitude and the direction of the relationship between two variables. Hence, the Correlation analysis has been made to measure the magnitude and the direction of the relationship between the following pair of variables.

- i. The Insecurity and the Usage of Computer Based Accounting Systems.

Let “r” be the correlation coefficient of two variables

Range	Decision	Range	Decision
$0.0 \leq r \leq 0.19$	Very weak positive correlation	$0.0 \leq r \leq -0.19$	Very weak negative correlation
$0.2 \leq r \leq 0.39$	Weak positive correlation	$-0.2 \leq r \leq -0.39$	Weak negative correlation
$0.4 \leq r \leq 0.59$	Moderate positive correlation	$-0.4 \leq r \leq -0.59$	Moderate negative correlation
$0.6 \leq r \leq 0.79$	Strong positive correlation	$-0.6 \leq r \leq -0.79$	Strong negative correlation
$0.8 \leq r \leq 1.0$	Very strong positive correlation	$-0.8 \leq r \leq -1.0$	Very strong negative correlation

### 3.2.2.2 Simple regression Analysis

The Simple Regression Analysis has been used in this research to determine the functional relationship between a Dependent Variable and an Independent Variable (a predictor) for the purpose of prediction and making other inferences (Mason, Lind, & Marchal, 1999; Field, 2000). It has been analysed the following three main aspects.

1. The relationship between a Dependent Variable and an Independent Variable (a predictor)
2. The strength of the relationship
3. Statistical significance of the relationship

Hence, the Simple Regression Analysis has been made to determine the functional relationship between the Dependent Variable (DV) and an Independent Variable (IV).

### 4. Data Analysis

Usage of Computer based Accounting System is evaluated with the help of nineteen indicators and Insecurity is evaluated by using five indicators. Table 04 indicates the Level of Insecurity, Table 05 indicates the Level Usage of Computer Based Accounting System, and the Table 06 indicates the Usage level of CBAS by Insecurity.

**Table 04.** Level of Insecurity

Level	No	Percent
Low Level	62	62
Moderate Level	32	32
High Level	6	6
Total	100	100

Source: Survey Data

As shown in the table 04, out of 100 respondents 6% are in higher-level Insecurity, 32% perceived a moderate level while 62% falls into lower level Insecurity. Overall mean of the Insecurity with regarding Technology Readiness among the small scale business owners is 3.5620. Therefore the level of Insecurity with regarding Technology is in Low Level.

**Table 05.** Level Usage of Computer Based Accounting System

Level	No	Percent
Low Level of Usage	62	62
Moderate Level of Usage	18	18
High Level of Usage	20	20
Total	100	100

Source: Survey Data

As shown in the table 05, out of 100 respondents 20% are in high level of good usage, 18% perceived a moderate level of usage while 62% fall into low level of usage of computer based accounting practices. Overall mean of Usage of Computer Based Accounting System among the small scale businesses is 2.0295. Therefore the level of Usage of Computer Based Accounting System is in Low Level.

**Table 06.** Usage of CBAS by Insecurity

Level of Insecurity	Low Level	Moderate Level	High Level	Total
Usage of CBA	2.2635	2.1795	1.9386	2.0295

Source: Survey Data

As indicated by mean values in the table 06 we can see when the level of Insecurity is increasing the usage level is decreasing gradually.

#### 4.1 Correlation Analysis

Using the Pearson's Correlation with two – tailed test of significance, the Correlation analysis has been made to investigate any relationship between the independent variable- Insecurity and dependent variable-Usage of Computer based accounting systems can be summarized as follows.

**Table 07.** Correlations -Usage of Computer based accounting systems and Insecurity

		Technology Readiness
Usage of CBAS	Correlation (r)	-.066
	Significance Level (2-tailed)	0.562

Source: Survey Data

According to the results of the Pearson's correlation shown in the table 07, there is a negative correlation between the usages of computer based accounting systems and Insecurity regarding Technology of the respondents. But the correlation is insignificant as p value is 0.562, and as the Coefficient (r) is -.066, it is found as a very weak negative correlation.



## 4.2 Simple Regression Analysis

The result of simple regression between Usage of Computer based Accounting Systems and Insecurity shown in table 08,

**Table 08.** Statistics of Regression between Insecurity and CBAS

	Method	Overall level of Technology Readiness
Usage of Computer Based Accounting Systems	R Square	.034
	b – Constant	2.425
	b – Insecurity	-.111
	Beta	-.066
	P- Value	0.562

According to that, the Regression Equation is:

$$UCBAP = 2.425 - 0.111 (I)$$

The b value of the equation, the gradient of the regression, is -0.111. It means when Insecurity increase by one the Usage of Computer based accounting systems will be decreased by 0.111. As the P- value is  $0.562 > 0.05$ , the independent variable (Insecurity) is not a useful predictor of dependent variable (Usage of Computer based Accounting practices). As indicated by R Square, 3.4% of the variance of Usage of Computer based accounting packages has been explained by Insecurity with the standardized beta of -0.066.

## 5. Results and Discussion

### 5.1 Level of Usage of Computer based Accounting Practices and Insecurity

When considering the usage level of Computer Based Accounting packages, more than half of the small businesses owners in this selected sample are poorly used accounting packages for their business activities. And also there is a considerable amount of owners are in high level. However the overall usage level of Computer based Accounting packages is in low level as its mean value is 2.0295.

Majority of the small business owners in this selected sample are feeling secure when using new technologies. Also the few of them are feeling insecure when using technology. But the

overall insecurity related to Technology is in low level.

### 5.2 Relationship between Insecurity and Usage of Computer based Accounting Practices

As observed from Table 07 a negative but insignificant relationship has been found between Insecurity and Usage of Computer based accounting systems. The correlation coefficient between these variables is -0.066, which is insignificant as p value, 0.562 is greater than 1% level of significance. This correlation is found to be very weak negative correlation as it is between 0 and -0.19.

The sign (+/-) of the correlation coefficient indicates that direction of the relationship and its value indicates the strength of relationship between two variables. Therefore it indicates that when Insecurity increases, the level of Usage of Computer based Accounting practices will decrease to some extent (-0.066), but not all of the Usage of Computer based Accounting practices.

### 5.3 Impact of Insecurity on Usage of Computer based Accounting Practices

According to the results of simple regression analysis between these two variables, Insecurity has been found to have a insignificant negative impact on Usage of Computer based accounting



systems with the strength of B value of -0.111. And 3.4% of the variance of Usage of Computer based accounting packages has been explained by overall Insecurity. But as the P-value (0.562) is greater than 0.05 Insecurity is not a useful predictor of the Usage of Computer based Accounting Practices.

## 6. Conclusion and Recommendation

### 6.1 Conclusion

According to the findings larger proportion of responding small businesses are still following manual accounting systems and those who are computerized for accounting practices have been found to be of insignificant proportion.

It is possible for the independent variable to account for 3.4% of the variation in the Usage of Computer based Accounting while the 96.6% of the variation is unexplained by this variable. In fact, other variables, which are not considered in this study, should be the variables that may account for the unexplained variations in the Usage of Computer based Accounting Systems.

Insecurity is the predictor of this model, which alone explains 3.4% of the variation in the Usage of Computer based Accounting Systems.

The researcher believes in the important independent variables that may account for the unexplained variations in the Usage of Computer based Accounting Systems may be the Perceive usefulness, Business competition, CEO innovativeness, Perceive ease of use, Optimistic. And the factors inhibiting effective utilization of CBAS such as discomfort of using new technologies, inaccuracy of reports generated, frequency of systems breakdown, lack of support for large data volume, inconsistent supply of electricity, absence of data-filtering (import/export) functions, inability to fully comprehend and interpret output.

### 6.2 Recommendation

Based on these research findings, conclusion and researcher's experience throughout this

research to improve the Usage of Computer based Accounting Systems among small scale businesses in Nuwara Eliya district. The following recommendations and strategies have been suggested by the researcher.

It is proposed that the government should provide appropriate incentives to encourage the use of Computer based Accounting Systems.

To face the high competition, time relevant and the actual information in hand, a correct result needs to achieve by small business. Therefore there is a need to strengthen security measures, provide high quality computerized systems to avoid the risk of usage of computer application for Accounting.

Government should set up training organizations through small business development unit in Nuwara Eliya district secretariat office offers CBA specific skills development program targeted to those involved in small businesses. And also small business can hire workers those who are more capable and expertise regarding IT skills.

By collecting valuable feedback information about Computer based Accounting packages from the small business owners who are already using the packages authorized parties can make necessary adjustment, control and improvement of the services with high quality security. And also those feedbacks can use to motivate the non-users.

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