

**The impact of optimism on usage of computer based accounting practices  
among small scale enterprises**

**Name:** R. M. M. P. Rathnayake

**Contact No.** 0711420548

**Email:** melapgck@gmail.com

**Address:** “Praboda”, Karanadagolla, Kumbukwella, Via Halgranoya

## **The impact of Optimism regarding Technology on Usage of Computer based Accounting Practices among Small Scale Enterprises**

### **Abstract**

In most parts of developed countries, it is almost impossible to function as an accountant without requisite Information Technology skills. 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 Optimism of small business owners on their Usage of Computer based Accounting Practices among small scale businesses. Moreover, it tries to evaluate the level of Optimism 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 Optimism 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. 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 but the influence of the Optimism regarding the Technology is in high level. The Pearson's correlation analysis explores that there is a positively significant linear relationship between Optimism regarding the Technology and the Usage of Computer based Accounting Practices. Regression analysis has proved that Optimism regarding the Technology of small business owners shall be considered as a strategic tool and major predictor of Usage of Computer based Accounting Practices among small businesses in Nuwara Eliya district.

**Keywords:** Computer Based Accounting, Optimism

## 1. Introduction

The revolution in information technology has significantly changed the nature of business (Elliot, 1992), and it has created competitive advantages for those who appreciate its effects (Porter & Millar, 1985). This development therefore behoves a firm to change its accounting systems in order to ensure that outputs from the accounting systems could be prepared in a timelier manner. 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.

Prior to the advent of personal computers, businesses were limited to manual methods for keeping track of financial data. However, using manual methods for processing data will create some errors that they could go undetected for quite some time. Like many other fields, the accounting field changed with the arrival of personal computers. A computerized accounting system is able to handle financial data efficiently. Computerized Accounting is the use of computer to keep files and accounts by folders and software in computer. It is type of adoption new technology for accounting. Best accounting program has everything to manage financial records including Stock, Inventory, Voucher entries and Customer-Vendor, Billing details at one place.

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. In order to be able to compete successfully, a small scale businesses need to have an information system that would enable it to prepare current reports for more timely and informed decisions. 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 optimism 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 optimism 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 Optimism regarding the Technology among the small scale businesses in Nuwara Eliya district.
3. To find out the relationship between the Optimism regarding the Technology and the usage of Computer based Accounting Practices among small scale businesses in Nuwara Eliya district.
4. To explore the significant influence of Optimism regarding the Technology on usage of computer based accounting practices among small scale businesses in Nuwara Eliya district.

## **2. LITERATURE REVIEW**

### **2.1 Overview of Technology**

Technology is all around us. It is a part of our daily lives. Technology is the way people use resources to meet their wants and needs. 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. Unfortunately, several technology-based products and services never reach

their full potential, and some are simply rejected (Burton-Jones & Hubona, 2006). Businesses in developing countries are increasingly relying on innovative technology to create new markets or penetrate existing markets (Chipp, Hoenig & Nel, 2006).

Technology Acceptance Model is widely applied to assess users' usage in various information system/information technology areas. Technology Acceptance Model, developed by Davis (1989), is one of the most influential research models in studies of the determinants of information systems and information technology acceptance to predict intention to use and acceptance of information systems and information technology by individuals. In the Technology Acceptance Model, there are two determinants including perceived ease of use and perceived usefulness. Perceived usefulness is the degree to which an individual believes that using a particular information system or information technology would enhance his or her job or life performance. Perceived ease of use is the degree to which a person believes that using a particular information system or information technology would be free of effort. Perceived ease of use and perceived usefulness positively affect the attitudes toward an information system; and further, positively affect the individuals' intentions to use and the acceptance of the information system. (Shih-Chih Chen, Shing-Han Li, Chien-Yi Li, 2011)

## 2.2 Optimism

Optimism is a tendency to look on the most favourable side or to expect the most favourable outcome of events or conditions. And also it can be further describe as the quality of being full of hope and emphasizing the good parts of a situation, or a belief that something good will happen (Cambridge Advanced learner's Dictionary). It generally captures positive feelings about technology.

Optimism brings about positive outcomes in relationships by promoting favourable expectancies, which in turn cause individuals to pursue their relationship goals more flexibly and persistently. This core principle helps explain why other individual differences that correlate only modestly with optimism, such as a secure attachment style or low fear of negative evaluation, appear to lead to many of the same outcomes: they are multiple pathways to favourable expectancies. This principle also suggests avenues for therapeutic intervention or self-improvement. The benefits enjoyed by optimists may be accessible to individuals who work on changing their beliefs (Srivastava, S., & Angelo, K. M. 2009).

Optimism is defined as a positive view of technology and a belief that offers people increased control, flexibility, and efficiency in their lives (Parasuraman & Colby, 2001, p. 34). Franken (1994) state optimism dimension refers to a generalized expectancy that good, as opposed to bad, outcomes will generally occur when confronted with problems across important life domains. In general, optimism is used to denote a positive attitude or disposition that good things will happen independent of one's ability.

### **2.3 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. As our knowledge of technology increased so has the accountant's ability to analyse statistical values. Technology advancements have enhanced the accountant's ability to interpret data efficiently and effectively. 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 computerized accounting system involves the use of computers to handle large volume of data with speed, efficiency and accuracy aimed at overcoming fundamental challenges which do not change the principle. The principle of accounting remains the limitations of many accounting and hence producing quality and reliable work (Amviko agnes, 2001)

Computerization has become part of our everyday life over the past few years. Concept of computers has been made popular not only by referrals in the press, radio and TV, films etc. but also due to the versatility and dynamic uses of computers. Most of the organizations now do their accounting work with an electronic computer rather than with the manual methods

described above but some others may be despondent (T.S. Grewal). Accounting software is all about the various functional modules that it has. Some of them are General ledger which takes care of the company's financial dealings; Accounts Payable where the company enters its bills and pays the money it owes; Accounts Receivable where money received is entered.

### **2.3.1 Different categories of accounting software**

- a) Small business/personal accounting software which is mainly meant for home users. They are simple and inexpensive with simple functioning such as management of budgets.
- b) Low end accounting software are for small business markets that are capable of serving a single national market. Such software are characterized by 'single entry' products.
- c) Mid-market accounting software are for companies with large businesses. These software are capable of serving the needs of multiple national accountancy standards and facilitate accounting in multiple currencies.
- d) High end accounting software are complex and expensive business accounting software that are also known as Enterprise Resource Planning or ERP software.

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. Most of the accounting software includes all the important accounting modules. The more specialized features software has, the more expensive it becomes. Software features must be compatible with the nature of the business. Also, the after-sales support is important like FAQ package, local service centre and others. There are 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 software 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 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 Optimism 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 (Optimism) is measured by the use of questionnaires with five point scales. The five point scales for the variables of Optimism ranged from “Strongly Disagree” to “Strongly Agree” with the points of 1 to 5 respectively as for the positive 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 whether the respondents are in favour to the particular variable or not.



Table 01 Decision Criteria for Univariate Analysis

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

### 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 Optimism
- 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 Technology Readiness, 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 Optimism 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 following set of a Dependent Variable (DV) and an Independent Variable (IV), (the impact of the Optimism on Usage of Computer Based Accounting Systems).

- i. The Usage of Computer Based Accounting Systems (DV) and the Optimism (IV)

#### 4. Data Analysis

Usage of Computer based Accounting System is evaluated with the help of nineteen indicators and Optimism is evaluated by using eight indicators. Table 03 indicates the Level of Optimism, Table 04 indicates the Level Usage of Computer Based Accounting System, and the Table 05 indicates the Usage level of CBAS by Optimism.

Table 03 The Level of Optimism

Level	No	Percent
Low Level	1	1
Moderate Level	21	21
High Level	78	78
Total	100	100

Source: Survey Data

As shown in the table 03, out of 100 respondents 78% are in higher-level Optimism, 21% perceive a moderate level while 1% falls into lower level Optimism. Meanwhile overall mean of the Optimism among the small scale business owners is 3.9100. Therefore the level of Optimism is in High Level.

Table 04 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 04, 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 05 Usage of CBAS by Optimism

Level of Optimism	Low Level	Moderate Level	High Level	Total
Usage of CBA	1.0000	1.2237	2.2597	2.0295

Source: Survey Data

As indicated by mean values in the table 05 we can see when the level of optimism is increasing the usage level also increase 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- Optimism and dependent variable-Usage of Computer based accounting systems can be summarized as follows.

Table 06 Correlations -Usage of Computer based accounting systems and Optimism

		Technology Readiness
Usage of CBAS	Correlation (r)	.484**
	Significance Level (2-tailed)	0.000

\*\*Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Data

## 4.2 Simple Regression Analysis

The result of simple regression between Usage of Computer based Accounting Systems and Optimism shown in table 07,

Table 07 Statistics of Regression between Optimism and CBAS

	Method	Overall level of Technology Readiness
Usage of Computer Based Accounting Systems	Multiple R	.484
	R Square	.234
	b – Constant	-2.670
	b – Optimism	1.202
	Beta	.484
	P- Value	0.000

Source: Survey Data

According to that, the Regression Equation is:

$$UCBAP = -2.670 + 1.202 (O)$$

The *b* value of the equation, the gradient of the regression, is 1.202. It means when Optimism increase by one the Usage of Computer based accounting practices will be increased by 1.202. As the P- value is  $0.000 < 0.05$ , the independent variable (Optimism) is a useful predictor of dependent variable (Usage of Computer based Accounting practices). As indicated by R Square, 23.4% of the variance of Usage of Computer based accounting practices has been explained by Optimism with the standardized beta of 0.484.

## 5. Results and Discussion

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

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.

In this selected sample the most of small business owners are highly optimistic regarding Technology and a few of them are low level in optimism. Because the mean value of optimism is 3.9100, the overall Optimism regarding the Technology is in high level.

### **5.2 Relationship between Optimism and Usage of Computer based Accounting Practices**

As observed from Table 06 a positive and significant relationship has been found between Technology Readiness and Usage of Computer based accounting systems. The correlation coefficient between these variables is 0.484, which is significant as p value, 0.000 is less than 1% level of significance. This correlation is found to be moderate positive as it is between 0.4 and 0.59.

The sign (+/-) of the correlation coefficient indicates that direction of the relationship and its value indicates the strength of relationship between two variables. In this case the strength of correlation is modest because 'r' has taken the value of 0.484. This indicates that when Optimism increases, the level of Usage of Computer based Accounting practices also increase to some extent (0.484), but not all of the Usage of Computer based Accounting practices.

### **5.3 Impact of Optimism on Usage of Computer based Accounting Practices**

According to the results of simple regression analysis between these two variables, Optimism has been found to have a significant positive impact on Usage of Computer based accounting systems with the strength of B value of 1.202. And 23.4% of the variance of Usage of Computer based accounting packages has been explained by overall Optimism. And also as the P-value (0.000) is less than 0.05 Optimism is a useful predictor of the Usage of Computer based Accounting Practices.

## **6. Conclusion, Recommendation and Implication**

### **6.1 Conclusion**

According to the findings larger proportion of responding small businesses are 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 23.4% of the variation in the Usage of Computer based Accounting while the 76.6% 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.

Optimism is the predictor of this model, which alone explains 23.4% 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. And also quality of Computer-Based Accounting System such as accuracy, content, format, timelines etc., general background of Firms such as ownership, legal status, industry, years in operation, and number of full-time employees etc, factors inhibiting effective utilization of CBAS such as insecurity, 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. Usually fully integrated accounting software is very

expensive to obtain and tax relief from this acquisition by the government will reduce the financial burden of small scale businesses. And also it could be provide loan facilities to small business owners to acquire the computer based accounting software as its initial cost is very high.

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 introduce non-users to a Computer based Accounting Systems, it should be consider business operators those who are uninformed about the benefits of using a CBAS. This lack of knowledge may be a further result of the deficiency in IT skills as reported by respondents. 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, to avoid reluctance among small business owners about the effectiveness in computer self-efficacy. 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 that provide by the systems. And also those feedbacks can use to motivate the non-users.

In conclusion, recognition of these recommendations is important because by adopting the computerized accounting systems (CAS), will determine the success of a business organization. As a major role to achieve economic development, small scale businesses need to consider about implementing this technology.

### **6.3 Implication**

The findings of this research study shall be important on the theoretical as well as on the practical level. As this research model proves to be an explanatory model of Usage of Computer based Accounting Systems, the findings of this study are important to improve Usage of Computer based Accounting Systems among small businesses in Nuwara Eliya district.



This research study will help any future researchers who are interested to do a study in regarding with Optimism and Usage of Computer base Accounting Systems among small scale businesses.

Ultimately the findings of this research will help to various parties those who are interested to the relevant subject and decision makers to get proper decision regarding the small scale businesses and also in order to build right strategy for Small scale business to get right understanding about role of Computer Based Accounting, its effectiveness and factors affecting the Usage of CBAS.

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