

# FACTORS AFFECTING THE ADOPTION OF COMPUTER BASED ACCOUNTING SYSTEMS IN SMEs

**D. R. Dayarathne\*, J.S. Kumari**

Department of Accountancy & Finance, Rajarata University of Sri Lanka, Sri Lanka

\*:roshidnet@gmail.com

**Key words:** Computer Based Accounting, SMEs

## **Introduction**

Small and Medium Size enterprises (SMEs) play an important role in any economy through generation of employments, contributing to the growth of Gross Domestic Production (GDP), embarking on innovations and stimulating of other economic activities (karunananda A and Jayamaha A quoted from Gamage 2000). Sri Lanka as a developing country, it is important to increase the growth of SMEs in order to gain sustainable development. As well as SMEs have increasing trends so as to increase the profitability of SMEs there should be a sound financing reporting practice otherwise it may be not accurate and to do this accounting practice firms can use three type of accounting systems as manual accounting system, combination of manual and computerized systems and fully computerized systems or accounting packages. Moreover if firms need to be survive in market they have to adopt new innovations for the business success.

Through this, author study to what extent SMEs adopt these systems and what factors affect for the adopting

Computer Based Accounting Systems in SMEs. Modern computerized accounting systems are based on the concept of database. A database is implemented using a database management system, which is define by a set of computer programs (or software) that manage and organize data effectively and provide access to the stored data by the application programs.

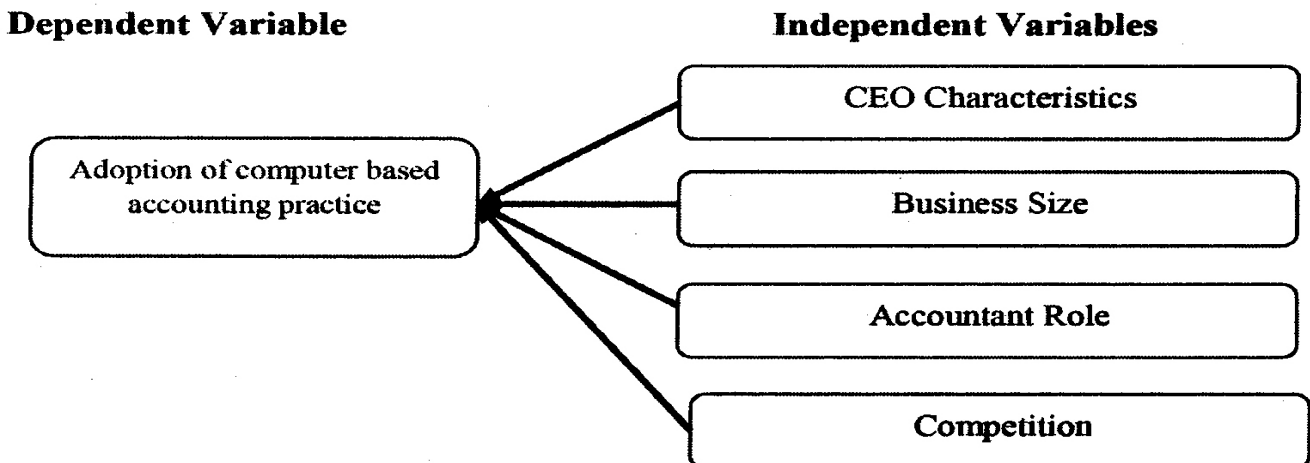
Through this research authors focus to investigate whether those above discussed determinants affect for adopting the CBAS in SMEs or any other factors are there to be affected to CBAS in SMEs.

After reviewing the related literature regarding the adoption CBAS in SMEs it has been found that in Sri Lankan context it has a few related researches related to this area as well as those explained various factors surrounding the implementation and adoption of CBAS such as;

- i. CEO characteristics
- ii. Business Size
- iii. Competition
- iv. Accountant role

## Methodology

Figure 1: Conceptual Framework of the study



### Population & Sample

Population is all the 250 SMEs that registered under Anuradhapura District Chamber of Commerce, Industry and Agriculture (ACCIA). And sample is selected from randomly 115 SMEs from population.

### Method of Data Collection

The main primary sources of collecting data are questionnaires, personal interviews and telephone interviews. Secondary data collected from articles, journals, web sites, relevant documents and records, annual reports are to be perused to collect data relating to study. The questionnaires are given to the sample in order to collect data. There are 115 questionnaires are distributed to randomly selected Enterprises who work in Anuradhapura District.

### Primary Data and Secondary Data

#### Primary Data

Primary data were collect from enterprises by providing questionnaires. Primary data were used to identify the factors influence the adoption of computer based accounting practice Small and Medium Enterprises (SMEs).

#### Secondary Data

Relevant text books, previous researches, journals magazines, websites, annual reports and newspaper articles also used to obtain the data as it necessary.

#### Data Analysis

The data, obtained from questionnaire and observations, analysis was done by using the graphical method. Data analysis was done by using SPSS 16.0 and MS Excel 2007 software by graph and table presentation and regression analysis.

#### Experimental results

**Selection of Accounts system Distribution**

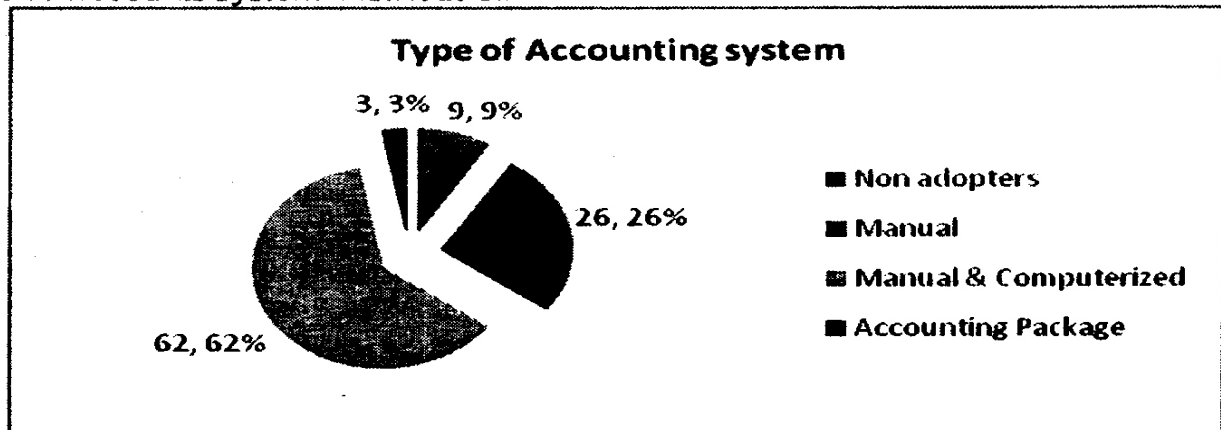
After reviewing cross tables it is very clear that most usage accounting system type is combination of both manual and computerized systems and

it is 62% here authors consider if any way use computer for business it may be billing system or use to prepare accounts . Only 3% use accounting package also 26% not using computers for their businesses.

Table 1: Accounts system Distribution

Accounting system	Total
Non adopters	9
Manual	26
Manual & Computerized	62
Accounting Package	3
Total	100

Figure 2: Accounts system Distribution



**Regression Model**

After testing hypothesis by using regression model, following equation could be illustrated.

$$Y=24.8+.027b_1+.027b_2+.081b_3+.004b_4+.021b_5+.006b_6+.252b_7+.045b_8+.201b_9$$

Table 2: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.248	.140		1.781	.078
Business Characteristics	business type (b1)	.027	.045	.021	.610	.544
	no of employees (b2)	.081	.018	.170	4.622	.000
CEO Characteristics	age of CEO (b3)	.004	.022	.006	.188	.852
	level of education (b4)	.021	.032	.023	.658	.512
Accountant Characteristics	accountant educational level (b5)	.006	.054	.004	.118	.907
	Accountant experience (b6)	.252	.040	.223	6.282	.000
	Accountant (b7)	.045	.028	.128	1.582	.117
Competition	Competition (b8)	.201	.024	.668	8.424	.000

### Interpret Coefficients

According to the table 4.6.2  $b_0 = .248(24.8)$  that indicates the intercept of the linear regression equation and further it describes the value of Y (dependent Variable) when all the variables take zero value. As well as the data range of all the independent variables do not covers zero value hence do not interpret intercept.

### Business Characteristics

In the table  $b_1 = .027$  it explains when other independents hold constant adopting computer based accounting system affected by 2.7% of business size.

$B_2 = .081$  in this model, adopting computer based accounting system increased 8.1% by no of employees when other variable decisions is constant

### CEO Characteristics

According to the  $b_3 = .004$  that indicates age of CEO affected to adopt computer based accounting system positively by 0.4%. this variable also less important than other variables.

CEO level of education indicate by  $b_4$  and value of  $b_4$  is .021 that value explains CEO level of education affected to adopt computer based accounting system positively by 2.1%

### Accountant Characteristics

Here interpret accountant characteristics those indicated by  $b_5, b_6, b_7$  and value of  $b_5 = .006$  that is educational qualifications of accountant and that variable influenced to adopt computer based accounting system positively by 0.6%. value of  $b_6 = .252$  that is Experience of Accountant and that variable influenced to adopt computer based accounting system positively by 25.2% and value of  $b_7 = .045$  that is accountant role and that

variable influenced to adopt computer based accounting system positively by 4.5%.

### Competition

$B_8$  indicates Competition its value is .201 and that means competition also affected to when making decision of adopting CBAS by 20.1% positively.

By analyzing all the independent variables all are taking positive values that means all affected positively according to the regression model most of the cases mostly affected factors are number of employees, Experience of Accountant ,Competition. And less important factors are age of CEO and educational qualifications of accountant.

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