

Adoption of Accounting Information System Practices by Entrepreneurs in Sri Lanka (with Special Reference to Polonnaruwa District)

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Abstract

Technology is having a rapid change in the world. Most of the multinational companies are engaging their systems with the sufficient experience and consulting in their business. But Small and Medium Enterprises are not sufficiently in condition to have the consulting facilities in their business. Recently entrepreneurs also adapt to use the accounting information systems to their business activities. While considering on the accounting information system there are number of selection of many AIS software packages in the world. As an Entrepreneur they have to select the correct and efficient Accounting Software package which is more suitable for their business.

The purpose of this study is to identify the AIS software used by the entrepreneurs and evaluate the level of satisfactory implementation of the AIS software packages in the small business. The background of the choice of system selection will indicate the company size, selection of AIS, cost of the system, number of systems and the facilitated features of the systems, knowledge of the system users and the company outflow. Satisfaction of the entrepreneurs on their system is the dependent variable.

The study mainly focuses on the accounting information system practices adapted by entrepreneurs' life in Sri Lanka with special reference to Polonnaruwa District of North Central Province in Sri Lanka. For the purpose of finding data, it was collected by issuing a questionnaire to a selected sample from entrepreneurs of those who are registered in SMEs in Chamber of Commerce in 2012 from Polonnaruwa District of North Central Province in Sri Lanka.

Based on the results generated in the data collection it explains that the knowledge of the system users and the cost of the implementation of the system is a common problem to the entrepreneurs. Some of them are having some doubt in selecting the appropriate accounting system to their business. Dependent variable of Satisfaction of the entrepreneurs on their system has been developed through the selection of the system and the knowledge of the system users.

Keywords: Small and Medium Enterprises (SMEs), Accounting Information System (AIS)

INTRODUCTION

Most of the entrepreneurs are now developed their business with help of micro finance. Most of micro finance company will grant the finance and the entrepreneurs are more encouraging developing the business with the new technology. With the advanced accounting information system will leads to higher performance of the business activities. And also entrepreneurs may have the competitive advantages among the business activities. With the usage of the system various factors are contribute to the higher success of the business with the multiple outcome results. Rather than manipulations, system will generate the all relevant reports with the fact of data. By using the reports entrepreneurs can make their decisions to develop the business.

In this study mainly focus on the adoption with the accounting information system practices by entrepreneurs in Sri Lanka. The selection of the suitable software is the main considerable task in this situation. As a good entrepreneur should have the knowledge to selection best accounting package for their operation. In the meanwhile, having the human capital with the capability of functioning the system is also very much important to the business.

An objective of this paper is to investigate the Adoption of Accounting Information System Practices by Entrepreneurs with special reference to the North Central Province in Sri Lanka with answering following questions;

- ✓ Whether Accounting Information System is effective to the business
- ✓ Whether entrepreneurs are satisfied with the accounting Information System

Research Questions

Research questions are mainly based on the following criteria development in the study;

1. What type of business conducting?
2. Age of the business (for an analysis of the respondents' longevity in business)
3. How much revenue outflow will achieve the business in annually?
4. What type of accounting software is use in the business?
5. Type of knowledge that system users have regarding the accounting package
6. Rank the reasons for selecting the software that currently using in the business.
7. Level of satisfaction with entrepreneurs regarding adoption of software.

Objectives of Research

The purpose of this study is to identify the AIS software used by the entrepreneurs and evaluate the level of satisfaction implementation of the AIS software packages in the small business. And also this study investigates the selection of the AIS for the business in correct manner. The background of the choice of system selection will be indicating the cost, number of systems and the facilitated features of the systems.

Significance of the Research

Based on the results of the research most of the entrepreneurs can take their investment decisions on the Accounting Information System. And also they can gather the information relating to the match with their business and it will lead to take a better investment decision on their Accounting Information System.

LITERATURE REVIEW

The Small Medium Enterprise (SME) sector has been identified as a significant strategic sector in the overall policy objectives of the Government of Sri Lanka (GOSL) and it is seen as a driver of change for wide-ranging economic growth, regional development, employment generation and poverty reduction. SME sector is envisaged to contribute to transform lagging regions into emerging regions of prosperity. (M. W. Madurapperuma *et al*, 2016)

Today Sri Lankan government is facing a critical issue of providing employment opportunities for GCE A/L & above. The development and growth of SMEs in Sri Lanka provides a solution to this problem. The Government of Sri Lanka recognizes SMEs as the backbone of the economy, as it accounts for more than 75% of the total number of enterprises, provides 45% of the employment and contributes to 52% of the Gross Domestic Production (GDP). SMEs promote broad based equitable development and provide more opportunity for Women and Youth participation in the economic development of the country. (M. W. Madurapperuma *et al*, 2016)

The accounting practices of the small business are much more important for their success in the business. M. W. Madurapperuma *et al*, 2016 explain that, “in the statutory requirements to prepare financial statements is needed for the chief users. Owner-managers in SMEs value the use of profitability in measuring performance”.

With the improvements of the technology most of the businesses are now engaging with the computerized accounting systems. Rootman and Kruger (2010) explain the importance of Accounting Information System for small business as “SMMEs need to be familiar with their business functions as these functions are essential towards a firm’s overall performance measured by sales, profits, rates of return, customer satisfaction and customer retention. It is this important for a firm’s owners and managers to be able to adjust and manage these functions when global economic changes occur”.

With using the Accounting Information System helps business to make their decision in successfully and efficiency manner. Briggs et al. (2003) explain that “raise the opinion that AIS should provide solutions (information which will lead to better decision-making) that are custom-made for small businesses, which should allow them to operate efficiently and to save on costs by managing more effectively”.

Minimal research can be noted in the area of entrepreneurs and Accounting Information Systems (AIS). Even less data can be found on small business and minorities. Small business owners rely heavily upon accounting information systems (AIS) software to manage their businesses. (Linda A. Bressler, Martin S. Bressler)

With the support of the knowledge and the theoretical practices in accounting by the user can develop the AIS in the organization. “The IT professional played an important role since he knew the business processes of the company, was strongly committed to the project and took hand of the requirement specification”. Eli Hustad (2013)

Most of the small businesses are concern on their cost and sales in their business. They are most focus on the liquidation and the cash handling and the inventory management. “The results confirm that SMEs do keep complete set of accounts, especially to capture sales and cost of sales. There is however a few numbers of SMEs are keeping primary entries to record information. SMEs in the retail shops business are keeping complete set of accounts for controlling inventory and those in the service sector keep cash book only as owners try to maintain their cash”. (M. W. Madurapperuma et al, 2016)

RESEARCH METHODOLOGY

The main objective of this research to identify the Adoption of Accounting Information System Practices by Entrepreneurs lives in Sri Lanka with special reference to North Central Province. For the purpose of finding data was collected by issuing the questionnaire to the selected sample from entrepreneurs those who are engaging with the small and medium business in North Central Province in Sri Lanka.

Sampling

Population of the study consists of the all the entrepreneurs from small and medium business in North Central Province and entrepreneurs were selected randomly from verity of cities in North Central Province. Due to the lack of communication and the responses by the entrepreneurs, only 64% responses were received from 150 questionnaires from the entrepreneurs in Polonnaruwa district.

Method of Data Collection and Evaluation

The study sample selects the entrepreneurs of small and medium business in North Central Province in Sri Lanka which are registered in the Chamber of Commerce.

The collected data was analyzed by using the SPSS software (version 16.0) and tool will be analyze with related analyzes in this company. The correlation analysis, regression analysis and ANOVA analysis is use to interpret the collected data.

Conceptual Framework

Adoption of Accounting Information System Practices by Entrepreneurs in Sri Lanka will lead with the sub variables in the factors influencing on the Accounting Information System. The factors which are influencing on the Accounting Information System will impact on the success of adoption of the Accounting Information System in Entrepreneurs. The model of the success of adoption of the Accounting Information System in Entrepreneurs can be explained as follows;

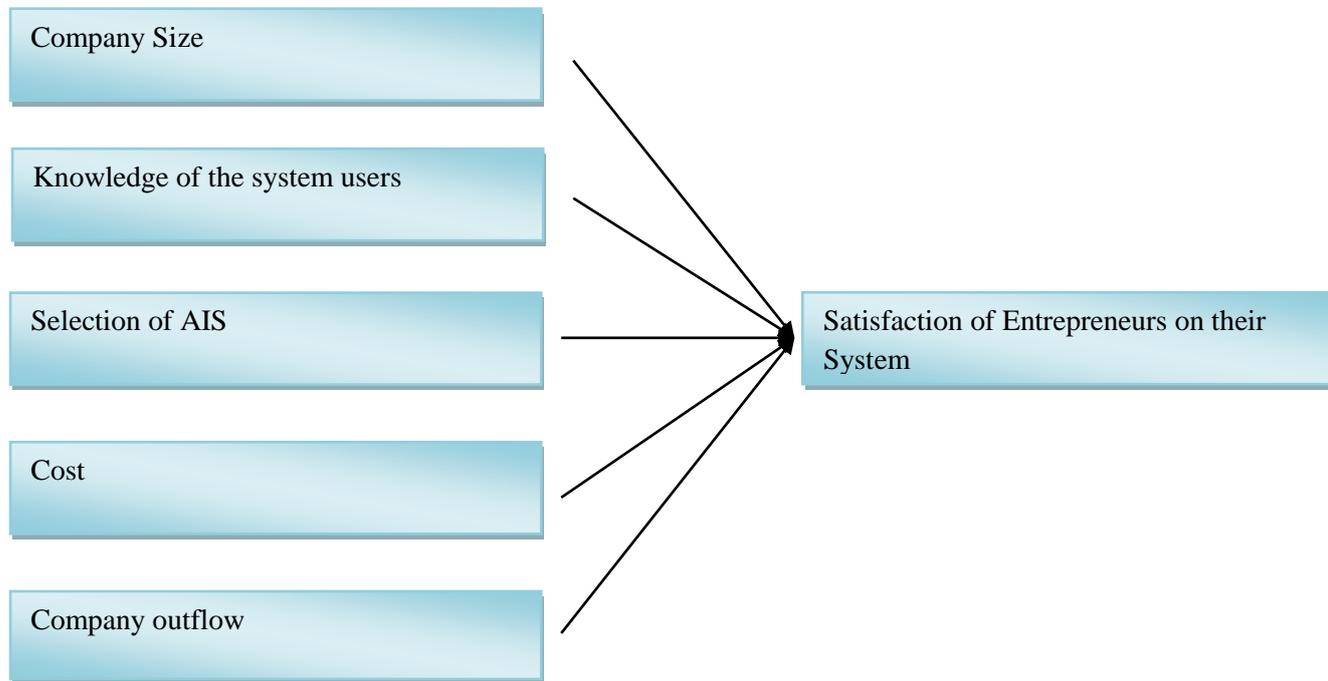


Figure 1: Conceptual Framework

Hypothesis

The identified factors will impact on the success of the Adoption in Accounting Information System in Sri Lanka. Most of factors will implies with the selection of suitable Accounting package to the business. The success of the adoption of accounting information system will be implies with the satisfaction of the entrepreneurs on the system.

For the investigation of Adoption of Accounting Information System Practices by Entrepreneurs, Hypothesis testing was developed as follows,

H 0 : Factors will not impact on the Success of Adoption in AIS

H 1 : Factors will impact on the Success of Adoption in AIS

Table 1:Operationalization of Variables

Concept	Indicator	Measure
Independent variables	Company size	Based on the company size can be measure that how AIS will be using in the daily operations in the business activities and the number of employees as taken to evaluate he variable.
	Knowledge of System Users	The system will be inadequate without having the educated human capital who can operate the system in the business
	Selection of AIS	Selection of AIS is very important because of through the right selection only business can gain higher profit in their operation.
	Cost	Cost of the system operation should be manageable with the outflow of the business.
	Company Outflow	After the implement of new accounting package, how it will contribute to the success of company outflow.
Dependent Variable	Satisfaction of entrepreneur on their system	By investing on the AIS, how much of satisfaction will get by the entrepreneur in their business operations.

DATA ANALYSIS

Factors Impact on the Successfully Adoption in Accounting Information System

The research study examine the degree of success of adaption in Accounting Information System by entrepreneurs in SMEs, with discussing the dependent variables of Knowledge of System Users, Company size, Selection of AIS, Cost and Outflow of the company. The selected data has been interpreting by using frequency, correlation and the multiple regression analysis.

Numeric data

The frequency of the variables has been explained based on the responses of the entrepreneurs are in the sample set. Entrepreneurs were selected randomly from verity of cities in Polonnaruwa District in North Central Province and 150 Questionnaires were issued to the entrepreneurs and responses were the 96.

Table 2: Type of the Company

Criteria	Percentage
Retail	31.2 %
whole sale	25.0 %
Hard ware	18.8 %
Supermarket	10.4 %
Pharmacy	14.6 %

Responds indicate that 31.2% of small businesses are retail shops which are using the accounting information systems. 25.0% of small business are Whole sales business and 18.8% of are Hard ware. 10.4% of small business in the concept of Supermarket and the rest of the small business are pharmacy is 14.6%.

Table 3: Number of Employees

Criteria	Percentage
1-20	91.7 %
21-40	8.3 %
41-50	0 %

Based on the Sri Lankan definition for the Small and Medium Enterprises is “an enterprise with fewer than 50 people and capital investment less than 5 million Rs”, (Department of Small Industries). The World Bank states that, “If any enterprise has below 99 people, it can be defined as an SME”.

Responds indicate that 91.7% of small businesses have a small numbers of employees in their business in between one employee to twenty employees. Other than 8.3% of businesses have the employees in between 21 - 40. There are no employees beyond the 40 numbers of employees in the selected sample of small business. Number of employees indicates the size of the company.

The first independent variable of the research article is the company size and it is measured by the number of employees in the business. The research has been discussed in those are the entrepreneur who is taking part of the small business. Based on the research findings it indicates that 91.7% of accounting using companies handling the numbers of employees in between 1 to 20. It explains that they are tried to reduce the number of employees and transfer the manual works in to the computerized working environment. By using the computerized accounting system in the business can be ensure the security and the efficiency of the transaction rather manual presentation of accounting. Adaption of successful accounting information system is relating with number of operations functioning on business and the number of employees in the business. With compare to then number of employees and the number of daily transaction may led the entrepreneurs to implement a better accounting information system in their business.

Table 4: Classification of Employee and type of Company

Variable	Mean	SD
Employees	1.08	0.278
Company	2.52	1.407

The mean value of the number of employee is 1.08. The SD is 0.278, it explains that the out of the data there is a 0.278 plus or minus variance to the mean value. The length of the mean is between 0.802 to 1.358 and its little bit close to the mean value. The mean value of the type

of the company is 2.52 and the SD is 1.407 and its gives the high variation value to the mean value of 2.52.

Table 5: Age of the Business

Criteria	Percentage
<5	43.8 %
5-10	35.4 %
10-15	20.8 %

43.8% of accounting software using company having the less experiences in their business of five years. And also 35.4% of them are having the experiences in their small business in between five years to ten years. The business are experience in ten years to fifteen years are using accounting software of their business are 20.8%. Responds for the age of the business explain that most of matured small businesses are not familiar with the accounting information systems and most of the young and new developed small enterprises are adopt to use the accounting information systems for their business.

Table 6: System Area Usage

Criteria	Percentage
Billing only	26.0 %
Inventory management only	1.1 %
Credit handling only	1.0 %
All activities	71.9 %

Consideration of adaption of accounting software using by the small business is much considerable when the small business selecting their accounting software system. Rather purchasing a package with the higher cost they are tend the purchase to develop an accounting software which are developed based on their requirements with the lower cost. Basically small business are considering to their transaction on bill receipt, inventory management, credit management and the combination of the all necessary accounting transaction process.

Responds indicate that 26% of business using their system for the purpose of billing receipts. 71.9% of business using the system for the all activities which are facilitate by the system. 1.1% of users are using the accounting information system for the purpose of inventory management only. 1% of them are using the system for only credit management in their business.

Responds indicate that those small business using only billing receipts are most of the retail business owners. They are tried to attract their customer by giving the receipt of bill with clear of print rather giving the manual bill. Most of small businesses are using all features which are generating by accounting system.

Correlation Analysis of variables

Correlation has been discussed in between four independent variables in relating to the Satisfaction of entrepreneur on their system.

Based on the correlation analysis dependent variables and the Satisfaction of entrepreneur on their system are significant, positive and acceptable due to the results of significant values (p value) are less than 0.05.

Employee Knowledge and the Satisfaction in adoption of AIS, p value $0.000 < 0.05$

AIS Selection and the Satisfaction in adoption of AIS p value $0.000 < 0.05$

Cost Reliability and the Satisfaction in adoption of AIS p value $0.000 < 0.05$

Company Outflow and the Satisfaction in adoption of AIS p value $0.000 < 0.05$

The highest amount of correlation is in between the level of company outflow and the level of satisfaction in adoption of AIS in their small business by entrepreneurs. The correlation shows the value 0.624. The next highest correlation shows the variables in between cost reliability and satisfaction in adoption of AIS is 0.560. Selection of AIS and the level of employee knowledge shows the correlation respectively 0.483 and 0.465. According to the Pearson correlation analysis explain that the all independent have the positive correlation in between the dependent variable

Tables 7: Correlation among Variables

		Employee Knowledge	AIS Selection	Cost Reliability	Company Outflow	Satisfaction adaption ASI
Employee Knowledge (Independent variable 02)	Pearson Correlation 1 – Sig. (2-tailed) N	1 .413** 96	.413** .000 96	.495** .000 96	.410** .000 96	.465** .000 96
AIS Selection (Independent Variable 03)	Pearson Correlation Sig. (2-tailed) N	1 96	1 .697** 96	.697** .000 96	.581** .000 96	.483** .000 96
Cost Reliability (independent Variable 04)	Pearson Correlation Sig. (2-tailed) N	1 96	1 .697** 96	1 .000 96	.621** .000 96	.560** .000 96
Company Outflow (Independent variable 05)	Pearson Correlation – Sig. (2-tailed) N	1 96	1 96	1 96	1 .624** 96	.624** .000 96
Satisfaction adaption (Dependent Variable)	Pearson Correlation – Sig. (2-tailed) N	1 96	1 96	1 96	1 96	1 96

Multiple Regression Analysis

One of the most common linear regression analyses is multiple regression analysis. Multiple regression analysis describes the relationship of two or more independent variables with one dependent variable. The research study analysis the multiple regression four independent variables with success of adaption in Accounting Information System by entrepreneurs in SMEs. The independent variables are Knowledge of System Users, Company size, Selection of AIS, Cost and Outflow of the company.

Table 8: Multiple Regression Analysis**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.682 ^a	.465	.442	.471

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	17.559	4	4.390	19.795	.000^a
Residual	20.180	91	.222		
Total	37.740	95			

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	1.098	.354		3.100	.003
Employee Knowledge	.176	.083	.190	2.125	.036
AIS Selection	.037	.109	.038	.341	.734
Cost Reliability	.181	.116	.186	1.562	.122
Company Outflow	.382	.096	.408	3.993	.000

Based on the results of multiple regression analysis, coefficient of determination is 0.465 (R square value); therefore, 46.5% of the variation explains the satisfaction in adaption of AIS by entrepreneurs by four sub variables such as employee knowledge, AIS selection, cost reliability and company outflow. Anova analysis explains that the model of the variables are significant because of significant value is 0.000. The hypothesis testing of the research analysis can be explained as follows;

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$$

$$H_1: \text{at least one } \beta \neq 0$$

The following table explains the Significance Level of independent variables based on the results of coefficient table and the final decision of and the conclusions of the research analysis.

Table 9: Coefficient Decision Table

H0	β	P value	Decision	Conclusion
$\beta_1 = 0$	$\beta_1 \neq 0$.036	Reject H0	Employee Knowledge is significant
$\beta_2 = 0$	$\beta_2 \neq 0$.734	Do not reject H0	AIS Selection is not significant
$\beta_3 = 0$	$\beta_3 \neq 0$.122	Do not reject H0	Cost Reliability is not significant
$\beta_4 = 0$	$\beta_4 \neq 0$.000	Reject H0	Company Outflow is significant

Results of the coefficient decision table generate the conclusion explaining that variable of employee knowledge and the Company outflow are significant and the variable of selection of AIS and the cost reliability are insignificant. While the two variables are shown the insignificant with comparing the significant value, the beta explains the positive impact on the dependent variable based on the correlation ranking in order to the explanation of the correlation analysis.

Estimate model

$$Y^{\wedge} = 1.098 + 0.176 (X_1) + 0.037 (X_2) + 0.181 (X_3) + 0.382 (X_4)$$

Where,

X 1 = Employee Knowledge

X 2 = ASI Selection

X 3 = Cost Reliability

X 4 = Company Outflow

Standardized coefficient of the variables impact on satisfaction in adaption of AIS by entrepreneurs is explains that all independent variable are positively impact on the successful adaption of the Accounting Information System by entrepreneurs in their small business. If the significant values represent the two variables are in significant level, but the beta explain the all four independent variables are have the positive impact of the satisfaction of entrepreneurs in the Accounting information system.

CONCLUSION

Results of this study explain that the company size which has explained the numbers of employees working in the small business are quite small. By using the accounting software for the function of accounting can use to reduce the number of employees working in the organization.

The correlation of company outflow and satisfaction of entrepreneurs of adoption in AIS have the high impact rather comparing with other three independent variables. It explains by the results of the correlation and the coefficient. By implementing an accounting software will help the business to maintain the accounting transaction efficiency rather than the manual accounting.

The second high impact variable is cost reliability. Most of the entrepreneurs are using the software which is less cost and user friendly. Most of them are purchase accounting software which is developed for their requirements.

Employee knowledge for the practices of the system is the next impact variable in the research study. Employees must be capable for the accounting system and it gives the output of the successful implementation.

Selection of the accounting information system is the final variable which give the less correlation and the coefficient value based of the results interpretation. The variable is much important and if the entrepreneurs are failing to select the proper AIS to their business will cause to fail the entire accounting transition process in the business. With the knowledge of the entrepreneurs in the information technology and the practices of the business cause to the successful adoption of the AIS in small business.

Finally it can be conclude that Knowledge of System Users, Company size, Selection of AIS, Cost and Outflow of the company will be impact on the success of adaption in Accounting Information System by entrepreneurs in SMEs. And the level of the degree of impact is varying variable to variable and depends on the perception of the entrepreneurs in their business and the success.

Limitation of Study

There might be some obstacles in collecting relevant needed data for this study and some of this are as follows.

- ✓ This study depends mostly in the view of the entrepreneurs from SMEs in North Central Province in Sri Lanka. The behavior and the thoughts will be varying one to each other.
- ✓ Time factor is another serious constraint.
- ✓ Due various reasons the system users are not giving the all information in their systems and the business. (special the income of the business)

REFERENCES

Augustine Muhindo, Maureen Kapute Mzuza, Jian Zhou, (2014), Impact of Accounting Information Systems on Profitability of Small Scale Businesses: A Case of Kampala City in Uganda, *International Journal of Academic Research in Management (IJARM)*, ISSN: 2296-174, Vol. 3, No. 2, 2014, Page: 185-192,

Briggs R, De Vreede G, Nunamaker J (2003). Special Issue: Information Systems Success. *J. Manag. Inf. Syst.* 19(4):5-8

Eli Hustada, Dag H. Olsen (2013), Critical Issues across the ERP Life Cycle in Small-and-Medium-Sized Enterprises: Experiences from a Multiple Case Study, *CENTERIS 2013 - Conference on Enterprise Information Systems / ProjMAN 2013 - International Conference on Project Management / HCIST 2013 - International Conference on Health and Social Care Information Systems and Technologies*, *Procedia Technology* 9 (2013) 179 – 188

Emad Harash, Suhail Al-Timimi, Ahmed Hussein Radhi, (2014), The Influence of Accounting Information Systems (AIS) on Performance of Small and Medium Enterprises (SMEs) in Iraq, *Journal of Business & Management*, ISSN 2291-1995 E-ISSN 2291-2002

Gwangwawa Edison, Faitira Manuere, Mabvure Joseph , Kuadakwashe Gutu,(2012), EVALUATION OF FACTORS INFLUENCING ADOPTION OF ACCOUNTING INFORMATION SYSTEM BY SMALL TO MEDIUM ENTERPRISES IN CHINHOYI, *INTERDISCIPLINARY JOURNAL OF CONTEMPORARY RESEARCH IN BUSINESS*, OCTOBER 2012 VOL 4, NO 6

Hazar Daoud, Mohamed Triki.(2013), Accounting Information Systems in an ERP Environment and Tunisian Firm Performance, *The International Journal of Digital Accounting Research*, ISSN: 1577-8517, Vol. 13, 2013, pp. 1 – 35

Linda A. Bressler, Martin S. Bressler, *ADOPTION OF MODERN ACCOUNTING PRACTICES BY ENTREPRENEURS*

Mohd Azian Husin, Mohamed Dahlan Ibrahim, (2013), The Role of Accounting Services and Impact on Small Medium Enterprises (SMEs) Performance in Manufacturing Sector from East Coast Region of Malaysia: A Conceptual Paper, *Procedia - Social and Behavioral Sciences* 115 (2014) 54 – 67.

M. W. Madurapperuma, P. M. C. Thilakerathne, I. N. Manawadu (2016), Accounting Record Keeping Practices in Small and Medium Sized Enterprise's (SME's) in Sri Lanka Journal of Finance and Accounting, 2016; 4(4): 188-193, ISSN: 2330-7331 (Print); ISSN: 2330-7323

Rootman C, Kruger J (2010). Adapting SMME Business Functions During Economic Turmoil. Acta Commercial 2010.