

THE INFLUENCING FACTORS TOWARDS THE EFFICIENCY OF ACCOUNTING INFORMATION SYSTEMS OF SMALL AND MEDIUM ENTERPRISES IN BANGKOK

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ABSTRACT

Abstract—This research was aimed to study the factors affecting the efficiency of accounting information systems of small and medium enterprises in Bangkok. The research is a survey; the sample group was 46 top-level management, directors, or heads of accounting. The findings revealed that most of them were female, at the age of 21 – 30 years old, their educational achievement was bachelor's degree, their work experience was 1 – 5 years, other positions were the internal auditor and head of accounting, type of business was the company limited, their business duration was 5 – 10 years, their employees were 5-50, their capital investment was 1,000,000 – 25,000,000 baht, and the data were analyzed by their computers.

1. The findings of the factors affecting the efficiency of accounting information systems of small and medium enterprises in Bangkok revealed that most respondents focused on the organizational structure at the highest level, and the top-level management's support, respectively. Considering each item of the organizational structure revealed that the respondents focused on a good work system will support accounting information systems accurately and timely at the highest level, and the top-level management's support revealed that the respondents focused on the top-level management's support of technology affected the worthiness of the use of accounting information systems at the highest level.

2. The findings of the influencing factors towards the efficiency of accounting information systems of small and medium enterprises in Bangkok revealed that the organizational structure and top-level management's support affected the efficiency of accounting information systems significantly. Considering an effect of the independent variables defined by the regression coefficients of standard scores revealed that the top-level management's support has the highest score of the regression coefficients.

Keywords—Efficiency of Accounting Information Systems, Small and Medium Enterprises

INTRODUCTION

The business competition in the era of globalization has raised drastically both national and international level affects the progress and change of technology and business environment including a higher customer need, and a change in organizational technique and strategy (Damera, Garilli & Ricciardi, 2013). Business management is more complicated, especially a wider scope of the transaction, efficient accounting information system both by computer and manual as the key tool for assessing the efficiency and decision making of business management, relative persons, and financial information center (MCA Nazar, 2020). In consequence, organizational achievement depends on the competency of responding to the business change and the support of the accounting information system as a tool for achieving both internal and external change (Adewole, 2013).

LITERATURE & THEORY

The efficiency of accounting information systems

Royal Institute Dictionary (Royal Institute, 2003), said that efficiency is the ability to achieve work performance, and practice is the operation by discipline to improve the specialization.

Taposh Kumar Neogy (2014), said that an accounting information system is a system for gathering and processing financial data and transactions for all users who are involved in the efficient decision-making process to support the business management accurately and to assess the business performance. The system is developed by using the human resource, computers, and surrounding equipment for recording, processing, and reporting the accounting information for both internal and external users, (Ratchaneeporn Setsakko, 2018).

In consequence, the efficiency of accounting information systems comprises of 1) *decision-making* – a difference of financial data could make difference decision-making either data for forecasting or data for confirmation, 2) *righteous representative* – reliable accounting information without any errors of information, 3) *comparability* – decision-making of the user that related with choosing among various alternatives e.g. selling or holding an investment, or business investment and the information of a business report will be beneficial if it's comparable with other similar business at the specific duration, 4) *verifiableness* – the users of accounting information systems will observe and proof both direct and indirect methods; the direct method is cash counting; and the indirect method is a double-checking of input, model, formula, other techniques, and calculation i.e. a confirmation of the book value of inventory by the input check, 5) *timeliness*, updated information and availability for who is responsible for decision-making that is needed to be specified and assess all trends, and 6) *simplicity* – categorizing, specifying, and reporting information clearly and simply (Federation of Accounting Professions, 2021).

Sawitri Promraksa and Daranee Uachanachit (2021), said that 1) management of accounting information systems on flexibility and availability has a positive effect on the quality of accounting information, 2) management of accounting information systems on availability and accessibility has a positive effect on the organizational performance, and 3) quality of accounting information on decision-making, righteous representative, comparability, verifiableness, and timeliness has a positive effect on the organizational performance. In consequence, the executives who are involved in the accounting of limited companies registered with the Department of Business Development in Thailand should realize and focus on the management of accounting information systems, especially on flexibility and availability for quality of accounting information that benefits the economic decision-making of users both current financial statement and future financial statement including management of accounting information systems on availability and accessibility for the organizational performance. MCA Nazar (2020), said that factors affecting the efficiency of accounting information systems of public companies registered with Colombo Stock Exchange in Sri Lanka revealed that the use of accounting information systems was at the highest level, and the results of the hypothesis test indicated that there was a positive relationship of information technology development's scope, top-level management's support, and efficiency of accounting information systems.

Apinya Duangphakdee (2560), a study of *Factor Influencing Efficiency of Accounting Information System Used for Enterprise Resources Planning: A Case Study of Rubber Wood Company in Thailand* revealed that the efficiency of the accounting information system for the enterprise resources planning was at the highest level, and the factors influencing the efficiency of the accounting information system for the enterprise resources planning were the top-level management's support and quality of accounting information system. Wanwimon Srihirun (2010), a study of *Influence on the Efficiency of the Use of Accounting Information the Top-level managements in the Stock Exchange of Thailand* revealed that the top-level management's support affecting their efficiency of the accounting information system in the Stock Exchange of Thailand. Nantharat Namburi (2018), a study of *An Efficiency Model for Accounting Information System that Affects Competitive Advantage of SMEs in Three Southernmost Provinces of Thailand* revealed that the top-level management's support affected their efficiency of the accounting information system significantly. The top-level management including the chief executive officer, and managing director are the determinant of vision, policy, target, and objectives. In consequence, the top-level management's focus on accounting information systems will drive the middle-level management and lower-level management to support the information technology, including a good attitude of employees on

accounting information systems. On the side of the organizational structure affected the efficiency of accounting information systems significantly which is consistent with the concept of Amporn Tamronglak (2008), said that organizational structure is needed for business management and benefited the communication, responsibilities, and chain of command.

From the literature review, the researcher has defined the conceptual framework as shown in Figure 1;

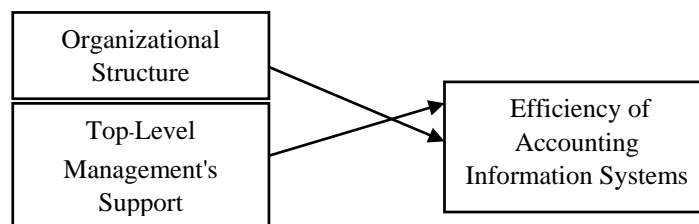


Figure 1 Conceptual framework of factors affecting the efficiency of accounting information systems of small and medium enterprises in Bangkok

OBJECTIVES

1. To study the factors affecting the efficiency of accounting information systems of small and medium enterprises in Bangkok.
2. To study the influencing factors towards the efficiency of accounting information systems of small and medium enterprises in Bangkok.

METHODS

Population and sample group

This research focused on the factors affecting the efficiency of accounting information systems of small and medium enterprises in Bangkok, the sample group was 46 top-level management, directors, or heads of accounting.

Research tools

Data were gathered by using the questionnaire with 4 sections; Part 1 – General information of business: gender, educational achievement, work experience, position, type of business, business duration, number of employees, capital investment, and computers for data processing, Part 2 - The factors affecting the efficiency of accounting information systems, Part 3 – The efficiency of accounting information systems, and Part 4 – Other suggestions. The factors affecting the efficiency of accounting information systems were analyzed by using the 5-point Likert scale which passed the quality proof on content, language, and structure. The questionnaire was tested with 30 sample groups, and the statistically reliable was acceptable (Cronbach's Alpha = 0.925).

Statistics and data analysis

Data were analyzed by using 2 methods; 1) Descriptive method – organizing and analysis on general information of the sample group by the primary statistics: percentage, mean, and standard deviation, 2) Quantitative method - analysis on the influencing factors towards the efficiency of accounting information systems by the t-test, One-Way Analysis of Variance, and regression analysis.

RESULTS

The findings of the factors affecting the efficiency of accounting information systems of small and medium enterprises in Bangkok revealed that most of them were female, at the age of 21 – 30 years old, their educational achievement was bachelor's degree, their work experience was 1 – 5 years, other positions were the internal auditor and head of accounting, type of business was the company limited, their business duration was 5 – 10 years, their employees were 5- 50, their capital investment was 1,000,000 – 25,000,000 baht, and the data were analyzed by their computers.

Table 1: Mean and standard deviation of the factors affecting the efficiency of accounting information systems

The factors affecting the efficiency of accounting information systems	\bar{x}	SD	Result
Organizational Structure			
1. The organizational structure is a determinant of decision-making in the use of accounting information systems.	4.24	0.71	Highest level
2. Accounting information systems are installed by the chain of command, and their responsibilities.	4.39	0.58	Highest level
3. Accounting information systems are useful for communication on both personal and sectional levels.	4.30	0.66	Highest level
4. The good organizational structure affects good accounting information systems.	4.43	0.69	Highest level
5. A good work system will support accounting information systems accurately and timely.	4.52	0.59	Highest level
Total	4.38	0.52	Highest level
Top-level management's support			
6. The top-level management's focus on accounting information systems will benefit the organization.	4.30	0.70	Highest level
7. The top-level management understands on benefit and worthiness of the use of accounting information systems for organizational performance.	4.24	0.60	Highest level
8. The top-level management's support of relative resources affects the worthiness of the use of resources, and the performance of accounting information systems.	4.33	0.60	Highest level
9. The top-level management's communication on employee's role on the performance of accounting information systems.	4.28	0.83	Highest level
10. The top-level management's support of technology affects the worthiness of the use of accounting information systems.	4.43	0.69	Highest level
11. The top-level management's support of the capacity of accounting information systems affects the worthiness of the use of accounting information systems.	4.28	0.78	Highest level
12. The top-level management's support of the employee's training affects the worthiness of the use of accounting information systems.	4.17	0.82	High level
Total	4.29	0.60	Highest level

From Table 1, an analysis of the factors affecting the efficiency of accounting information systems of small and medium enterprises in Bangkok revealed that most respondents focused on the organizational structure at the highest level (\bar{x} =4.38), and the top-level management's support (\bar{x} =4.29), respectively. Considering each item of the organizational structure revealed that the respondents focused on a good work system will support accounting information systems accurately and timely at the highest level (\bar{x} = 4.52), the good organizational structure affects good accounting information systems (\bar{x} = 4.43), accounting information systems are installed by the chain of command, and their responsibilities (\bar{x} = 4.39), accounting information systems are useful for communication on both personal and sectional levels (\bar{x} = 4.30), and the organizational structure is a determinant of decision-making in the use of accounting information systems (\bar{x} = 4.24), respectively. On the side of the top-level management's support revealed that the respondents focused on the top-level management's support of technology affects the worthiness of the use of accounting information systems at the highest level (\bar{x} = 4.43), the top-level management's support of relative resources affects the worthiness of the use of resources, and the performance of

accounting information systems ($\bar{x} = 4.33$), the top-level management's focus on accounting information systems will benefit the organization ($\bar{x} = 4.30$), the top-level management's communication on employee's role on the performance of accounting information systems ($\bar{x} = 4.28$), the top-level management understands on benefit and worthiness of the use of accounting information systems for organizational performance ($\bar{x} = 4.24$), and the top-level management's support of the employee's training affects the worthiness of the use of accounting information systems ($\bar{x} = 4.17$), respectively.

The findings of the influencing factors towards the efficiency of accounting information systems of small and medium enterprises in Bangkok revealed as shown in Table 2;

Table 2: The multiple linear regression of the influencing factors towards the efficiency of accounting information systems of small and medium enterprises in Bangkok

Predictor	B	S.E.	Beta	t	Sig.
Constant	1.197	0.318			
Organizational Structure	0.339	0.119	0.378	2.846	0.007**
Top-level management's support	0.403	0.103	0.518	3.896	0.000*
R = 0.851 Adj R ² = 0.711 R ² = 0.724 F = 56.318 SE = 0.25273 Sig. = 0.000					

** Significant level at 0.01, * Significant level at 0.05

From Table 2, an analysis of the influencing factors towards the efficiency of accounting information systems of small and medium enterprises in Bangkok revealed that the organizational structure and top-level management's support affected the efficiency of accounting information systems significantly. Considering an effect of the independent variables defined by the regression coefficients of standard scores revealed that the highest score of the regression coefficients was the top-level management's support (40.3), and the organizational structure (33.9), respectively at the significance of $F = 56.318$, $S.E. = 0.25273$, and the variance of the efficiency of accounting information systems at 72.40% ($R^2 = 0.724$).

CONCLUSION AND FUTURE WORK

Conclusion and Discussion

The discussions from the results were as follows;

most respondents were female, at the age of 21 – 30 years old, their educational achievement was bachelor's degree, their work experience was 1 – 5 years, other positions were the internal auditor and head of accounting, type of business was the company limited, their business duration was 5 – 10 years, their employees were 5-50, their capital investment was 1,000,000 – 25,000,000 baht, and the data were analyzed by their computers.

An analysis of the factors affecting the efficiency of accounting information systems of small and medium enterprises in Bangkok revealed that most respondents focused on the organizational structure at the highest level ($\bar{x} = 4.38$), and the top-level management's support ($\bar{x} = 4.29$), respectively. Considering each item of the organizational structure revealed that the respondents focused on a good work system will support accounting information systems accurately and timely at the highest level, the good organizational structure affects good accounting information systems, accounting information systems are installed by the chain of command, and their responsibilities, accounting information systems are useful for communication on both personal and sectional levels, and the organizational structure is a determinant of decision-making in the use of accounting information systems, respectively. On the side of the top-level management's support revealed that the respondents focused on the top-level management's support of technology affects the worthiness of the use of accounting information systems at the highest level, the top-level management's support of relative resources affects the worthiness of the use of resources, and the performance of accounting information systems, the top-level management's focus on accounting information systems will benefit the organization, the top-level management's communication on employee's role on the performance of accounting information systems, the top-level management understands

on benefit and worthiness of the use of accounting information systems for organizational performance, and the top-level management's support of the employee's training affects the worthiness of the use of accounting information systems, respectively.

An analysis of the influencing factors towards the efficiency of accounting information systems of small and medium enterprises in Bangkok revealed that the organizational structure and top-level management's support affected the efficiency of accounting information systems significantly. Considering an effect of the independent variables defined by the regression coefficients of standard scores revealed that the highest score of the regression coefficients was the top-level management's support and the organizational structure, respectively which is consistent with Wanwimon Srihirun (2010), Nantharat Namburi (2018), and MCA Nazar (2020), said that the top-level management's support affected the efficiency of accounting information systems significantly as their vision, policy, target, and objectives. In consequence, the top-level management's focus on accounting information systems will drive the middle-level management and lower-level management to support the information technology, employees, and process for the performance of accounting information systems including a good attitude of employees on accounting information systems. On the side of the organizational structure affected the efficiency of accounting information systems significantly, and benefited the communication, responsibilities, and chain of command.

Suggestions for future research

1. Future research of the influencing factors towards the efficiency of accounting information systems of small and medium enterprises in Bangkok should be studied in the various areas of small and medium enterprises to find out their differences and diversities.

2. Future research should be an in-depth study in all sizes of small and medium enterprises including the issues and obstacles of the use of accounting information systems to compare the factors affecting the efficiency of accounting information systems and other issues of those small and medium enterprises as a guideline for accounting information systems development appropriately with a business of each entrepreneur.

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