Analysis of the Factors Affecting Successful Accounting Information of Listed Companies in the Stock Exchange of Thailand

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The objective of this research is to examine the factors affecting successful accounting information of Thai-listed companies. The factors affecting successful accounting information are two variables including accounting professional and accounting information system (AIS) competency. Population and sample of this research is the companies listed in the Stock Exchange of Thailand (SET). A questionnaire mail was used for collecting the data from chief accountant officer of the companies listed in the SET. The results indicate that accounting professional has a positive significant effect on successful accounting information in all dimensions including effective planning, efficient controlling, and promoting decision and communication. Moreover, AIS competency has a positive significant effect on successful accounting information only in dimension of promoting decision and communication. Overall, the results indicate that internal resource and capabilities including accounting professional and AIS competency are the primary factors that influence successful accounting information of Thai-listed companies. Theoretical and managerial contributions are explicitly provided. Conclusions, suggestions and directions for future research are also presented.

Keywords: successful accounting information, accounting professional, AIS competency

Introduction

Accounting information is provided to both external and internal parties who have an interest in activity of the company. Therefore, the primary objective of accounting is to provide information that is useful for decision maker, both external and internal parties (Williams, Haka, Bettner, Carcello, Lam, & Lau, 2012). Currently, the growth of regional trading blocs and economic alliances such as the European Union (EU), the North American Free Trade Agreement (NAFTA) and ASEAN Economic Community (AEC), has served to magnify interest in expanding accounting information users (Meek & Thomas, 2004; Saudagaran & Diga, 2000).

The prior accounting research also found that accounting information provides useful information for decision maker such as investor, creditor, suppliers, regulators manager, owner, employee and others (Socea, 2012; Beyer, Cohen, Lys, & Walther, 2010; Biddle, Hilary, & Verdi, 2009; Baker & Barbu, 2007). In fact, the objective of financial reporting is to provide accounting information about the reporting entity that is useful to existing and potential financial user in making decisions about providing resources to the entity. Furthermore, accounting information quality is relevant to a decision process and it can reduce the uncertainty (Socea, 2012; Wang & Wu, 2011).
From the perspective of accounting research, the researcher found that there has been little empirical evidence of the factors affecting successful accounting information (Abdullah, Almsafir, & Al-Smadi, 2015; Adediran, Alade, & Oshode, 2013; Naser & Nuseibeh, 2003). Thus, this research aims to study the factors affecting successful accounting information of the listed companies in the Stock Exchange of Thailand (SET). For this research, both accounting professional and AIS competency are the antecedents of successful accounting information. In this research, successful accounting information refers to the achievement in three sections of primary objective of both financial and managerial accounting including effective planning, efficient controlling, and promoting decision and communication (Williams et al., 2012; Horngren & Harrison, 2008). The key research question of this research is: “Do accountant professional and AIS competency have an influence on successful accounting information?” Therefore, the main objective of this research is to investigate the effects of both accountant professional and AIS competency on successful accounting information.

This research generates both theoretical and managerial contributions. For the theoretical contribution, this research provides important extension on previous knowledge and relevant literature of accounting information. Moreover, this research applies the resource-based view (RBV) of the firm to explain internal resources and capabilities including accountant professional and AIS competency which can affect successful accounting information. For managerial contribution, the findings of this research provide information for chief accountant officer and managers to identify and justify the key component of successful accounting information in order to gain sustainability and success in the more competitive environment.

The remainder of the paper is organized as follows. The first part provides theoretical foundation. The second part provides a brief literature review and links to hypothesis development. The third section provides research methods including sample and data collection procedure, the variable measurements of each construct, the instrument verification, the statistics, and equations to test the hypotheses are provided. The fourth section provides the results and discussion. The fifth provides both theoretical and managerial implications. The last section provides the conclusion, limitations and suggestions for future research.

Theoretical Foundation

This research applies the RBV of the firm to explain the antecedents of successful accounting information. For this research, internal resources and capabilities including accounting professional and AIS competency are set as the antecedents of successful accounting information (Abdullah et al., 2015; Adediran et al., 2013; Flood & Wilson, 2008; Naser & Nuseibeh, 2003; Preutthipan, 2000). The RBV emphasizes the firm-specific resources that are the sources of competitive advantage and bring better performance (Russo & Fouts, 1997; Barney, 1991). For instance, more valuable resources include various elements that can be used to implement value-creating strategies such as human resources, specific physical assets, and intangible asset (Henri, 2006).

This research has developed the research model as shown in Figure 1 which builds on RBV of the firm and relevant literature. The model depicts the relationships between accountant professional and AIS competency on successful accounting information. The research model and hypotheses are shown as below.
The Antecedents of Successful Accounting Information

Internal resources and capabilities. For this research, internal resource is defined as a stock of available factors owned or controlled by the firm; and capability is defined as the strategic application of competencies used and deployed to accomplish given organizational goals (Peppard & Ward, 2004). The RBV emphasizes the firm-specific resources that are the sources of competitive advantage. The more valuable resources will create sustainable competitive advantage and bring better firm performance (Barney, 1991; Russo & Fouts, 1997; Peppard & Ward, 2004). For this research, internal resources and capabilities focus on both accountant professional and AIS competency. Two variables are proposed as the antecedents of successful accounting information in three dimensions including effective planning, efficient controlling, and promoting decision and communication.

Accountant professional. Accountant professional is defined as an accountant’s existing capacities that help predict competent performance in a certain job that it encompasses knowledge, skills, abilities, and ethical awareness (Abdullah et al., 2015; Adediran et al., 2013; Flood & Wilson, 2008). Prior researches indicated that accountant professional has a significant impact on successful accounting information (Abdullah et al., 2015; Adediran et al., 2013; Bots, Groenland, & Swagerman, 2009; Flood & Wilson, 2008). Thus, the hypothesis is proposed as follows:

Hypothesis 1: The higher the accountant professional is, the more likely that the firms will gain greater successful accounting information: (1) effective planning; (2) efficient controlling; and (3) promoting decision and communication.

AIS competency. AIS competency is defined as the latency of accounting system that provides building accounting information effectiveness. The characteristics of AIS competencies are produce accurate data, timeliness, update, and effective link to other systems (Altamuro & Beattey, 2010; Peppard & Ward, 2004; O’Donnell & David, 2000; Murthy & Swanson, 1992). Moreover, internal control systems are set and designed to protect fraud in financial statement, protect assets loss, and conduct its operation in an efficient and effective
manner (Altamuro & Beattey, 2010). Prior researches indicated that AIS competency has a significant impact on successful accounting information (Altamuro & Beattey, 2010; Peppard & Ward, 2004; O’Donnell & David, 2000; Murthy & Swanson, 1992). Thus, the hypothesis is proposed as follows:

Hypothesis 2: The higher the AIS competency is, the more likely that the firms will gain greater successful accounting information: (1) effective planning; (2) efficient controlling; and (3) promoting decision and communication.

Successful accounting information. The process of producing accounting information in financial report consists of personal, procedures, technology, and records used by company in order to develop accounting information and to communicate such data to decision makers such as investor, creditor, customer, supplier, regulation (external party) owner, manager, officer, and all employees (internal party) (Williams et al., 2012; Berger, 2011). From management perspective, successful accounting information is supporting planning control, and decision-making including specific targets for sale, production, and financing activities (Garrison, Noreen, & Brewer, 2008). To be effective, a good budgeting system must provide information for planning, controlling, and promoting coordination and communication (Horngren & Harrison, 2008). From external party perspective, financial accounting information is also used for making decisions. For example, investors and creditor are always concentrating on accounting data for making decisions such as profit, financial asset, fixed assets and financial ratio (Williams et al., 2012). Thus, accounting information quality is essential for decision makers, both internal and external users. For this research, successful accounting information has three dimensions including effective planning, efficient controlling, and promoting decision and communication.

Effective planning. Planning involves developing goals and preparing various budgets to achieve firm objectives (Garrison et al., 2008). Planning has a benefit to increase revenues or cut expenses of decision maker. For this research, effective planning refers to accounting user that can succeed in planning which includes carefully plan, the budget corresponds to fact, and appropriate planning (Horngren & Harrison, 2008; Garrison et al., 2008).

Efficient controlling. Control involves the steps taken by the manager or individual user to achieve the goals set down at the planning stage (Garrison et al., 2008). For instance, budget made according to the responsibility of a manager or employees who are responsible for subsequent deviations between budgeted goal and actual results (Garrison et al., 2008). For this research, efficient controlling refers to accounting information user that emphasizes follow-up planning, controlling resource, and low cost (Hanson, 1966).

Promoting decision and communication. The basics of financial report include information that describes the financial resource, obligations, and owner equity (statement of financial position), revenue and expense (comprehensive income statement), cash flows statement and disclosure of financial statement that it is important for decision maker (McCartney, 2004; O’Donnell & David, 2000). Moreover, Socea (2012) and Queree (1994) also found that accounting information quality can enhance decision-making effectiveness of users.

Furthermore, successful accounting information is support corporate communication that accounting duty is coordinated and consistent with the long-term goals of the organization (Chenhall & Langfield-Smith, 1998). Besides, accounting data help to ensure that information user is pulling in the direction (Garrison et al., 2008). Thus, the objective of financial statement is to provide communication data to decision maker (Williams et al., 2012). For this research, promoting decision and communication refers to organizations or individuals who focus on using accounting information for decision-making and communicating data to decision maker (Horngren & Harrison, 2008).
Research Methods

Sample and Data Collection Procedure

Population and sample of this research is the companies in the SET. The main reason to choose them for investigation is that they are large firms with hierarchical structure, centralized decision-making, plenty of authorized capital, and process standardization (Pavabutr & Prangwattananon, 2009). Thus, listed companies in Thailand have been chosen as the sample of this research. Accounting controllers or chief accountant officers are chosen as key participants because they have a direct effect on accounting practices in each corporation. SET database (As of October 2016 available from: https://www.set.or.th/tplus2.html) is used for identifying a number of business and companies’ addresses. A mail survey procedure via the questionnaire was used for data collection and when completed, each was returned by the respondents directly to the researcher to ensure confidentiality.

All 523 listed firms of Thailand were selected as the sample size. With regard to the questionnaire mailing, five questionnaires were undeliverable because some firms were no longer in business or had moved to unknown locations. Deducting the undeliverable from the list of database, the valid mailing was 518 questionnaires, from which 105 responses were received. The questionnaires were completed and returned and only 96 were usable. Thus, the effective response rate was approximately 18.53%.

Questionnaire Development and Variable Measurement

Questionnaire development. In this research, a questionnaire consists of five parts. Part one asks for personal information. Part two is for general information of listed companies in the SET. Parts three and four are related to evaluating each construct in the research model designed by a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Part three is the measurement of successful accounting information. Part four is the antecedents of successful accounting information, internal resources and capabilities, including accountant professional and AIS competency. Finally, an open-ended question for chief accountant officer’s suggestions and opinions is included in part five.

Variable measurement. The measurement development procedures involve the multiple items development for measuring each construct in the research model. All constructs are the abstractions that cannot be directly measured or observed and should be measured by multiple items (Churchill, 1979). These constructs are transformed to the operational variables for truly measuring by adapting relevant literature. To measure each construct in the research model, all variables are gained from the survey and are measured by a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Dependent variable. Successful accounting information refers to the attribute of accounting data in financial report that is useful to users in making economic decision and it can be effective communication, planning, and efficient controlling (Williams et al., 2012; Horngren & Harrison, 2008). Thus, successful accounting information has three dimensions including effective planning, efficient controlling, and promoting decision and communication (Tontiset & Kaiwinit, 2015; Socea, 2012; Horngren & Harrison, 2008; Garrison et al., 2008). Successful accounting information is measured using three-item scale modified from Tontiset and Kaiwinit (2015) and Horngren and Harrison (2008).

Independent variables. This research consists of two independent variables of internal resources and capabilities including accountant professional and AIS competency. The measure of each attribute depends on relevant literature which is also detailed.
Accountant professional is referred to as an accountant’s existing capacities that help predict competent performance in a certain job that it encompasses knowledge, skills, abilities, and accountant’s ethical awareness (Abdullah et al., 2015; Adediran et al., 2013; Flood & Wilson, 2008). Accountant professional is measured using four-item scale modified from Abdullah et al. (2015), Adediran et al. (2013), Bots et al. (2009), and Flood and Wilson (2008).

AIS competency refers to the latency of accounting system that provides building accounting information effectiveness. The characteristics of AIS competencies are produce accurate data, timeliness, update, and effective link to other systems (Altamuro & Beattey, 2010; Peppard & Ward, 2004; O’Donnell & David, 2000; Murthy & Swanson, 1992). AIS competency is measured using four-item scale modified from Altamuro and Beattey (2010), Peppard and Ward (2004), and O’Donnell and David (2000).

Control variable. Two control variables are included to account for firm characteristics for the fact that they may influence the hypothesized relationships of both firm age and size. Firm age ($FA$) is measured by number of years that a firm has been in operation, and firm size ($FS$) is measured by total assets of the firm. Successful accounting information may be influenced by both firm age and size because it may be able to achieve high performance (Gotti & Mastrolia, 2012).

Reliability and Validity

Factor analysis was firstly utilized to investigate the underlying relationships of a large number of items and to determine whether can be reduced to a smaller set of factors. The factor analyses conducted were done separately on each set of the items representing a particular scale due to limited observations. With respect to the confirmatory factor analysis (CFA), this analysis has a high potential to inflate the component loadings based on a higher rule-of-thumb at a cut-off value of 0.40 (Hair, William, Barry, Rolph, & Roanld, 2006). All factor loadings are greater than the 0.40 cut-off and are statistically significant. The reliability of the measurements was evaluated by Cronbach alpha coefficients based on the Cronbach alpha coefficients which are greater than 0.70 (Hair et al., 2006). The scales of all measures appear to produce internally consistent results. Table 1 presents the results of both factor loadings and Cronbach alpha for multiple-item scales. Thus, this research expresses an accepted validity and reliability as shown below.

Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor loadings</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective planning ($EP$)</td>
<td>0.76-0.88</td>
<td>0.93</td>
</tr>
<tr>
<td>Efficient controlling ($EC$)</td>
<td>0.81-0.92</td>
<td>0.88</td>
</tr>
<tr>
<td>Promoting decision and communication ($PDC$)</td>
<td>0.90-0.94</td>
<td>0.87</td>
</tr>
<tr>
<td>Accountant professional ($AP$)</td>
<td>0.84-0.91</td>
<td>0.87</td>
</tr>
<tr>
<td>AIS competency ($AISC$)</td>
<td>0.86-0.92</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Statistic Test

The Ordinary Least Squares (OLS) regression analysis is used to test all hypotheses following the research model. Because both dependent and independent variables in this research are categorical and interval data, OLS is an appropriate method for examining the hypothesized relationships to test factors affecting successful accounting information of Thai listed firms (Aulakh, Kotabe, & Teegen, 2000). The relationship among control variables, independent and dependent variables was initially assessed using regression analysis (Frazier, Barron, & Tix, 2004). Thus, the models of the aforementioned relationships are shown in equation models as follows:
\[ EP = \alpha_1 + \beta_1AP + \beta_2AISC + \beta_3FS + \beta_4FA + \varepsilon \]  
\[ EC = \alpha_2 + \beta_5AP + \beta_6AISC + \beta_7FS + \beta_8FA + \varepsilon \]  
\[ PDC = \alpha_3 + \beta_9AP + \beta_{10}AISC + \beta_{11}FS + \beta_{12}FA + \varepsilon \]

(Equation 1)

Results and Discussion

The descriptive statistics and correlation matrix for all variables are as shown in Table 2. The significant relationships between each independent variable are tested by variance inflation factor (VIF) technique. The results show that VIFs range from 1.52 to 4.99, well below the cut-off value of 10 recommended by Neter, Wasserman, and Kutner (1985), indicating that the independent variables are not correlated with each other. Thus, there are no substantial multicollinearity problems encountered in this research.

Table 2
Descriptive Statistics and Correlation Matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>EP</th>
<th>EC</th>
<th>PDC</th>
<th>AP</th>
<th>AISC</th>
<th>FS</th>
<th>FA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.13</td>
<td>3.89</td>
<td>3.84</td>
<td>3.84</td>
<td>3.80</td>
<td>2.34</td>
<td>3.62</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.59</td>
<td>0.70</td>
<td>0.65</td>
<td>0.67</td>
<td>0.67</td>
<td>0.61</td>
<td>0.70</td>
</tr>
<tr>
<td>( EP )</td>
<td>( EC )</td>
<td>( PDC )</td>
<td>( AP )</td>
<td>( AISC )</td>
<td>( FS )</td>
<td>( FA )</td>
<td></td>
</tr>
<tr>
<td>0.825**</td>
<td>0.729**</td>
<td>0.764**</td>
<td>0.593**</td>
<td>0.146</td>
<td>0.067</td>
<td>0.067</td>
<td></td>
</tr>
<tr>
<td>0.746**</td>
<td>0.759**</td>
<td>0.846**</td>
<td>0.519**</td>
<td>0.064</td>
<td>0.060</td>
<td>0.204</td>
<td></td>
</tr>
<tr>
<td>( PDC )</td>
<td>( AP )</td>
<td>( AISC )</td>
<td>( FS )</td>
<td>( FA )</td>
<td></td>
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<tr>
<td>0.764**</td>
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<td>0.519**</td>
<td>0.064</td>
<td>0.060</td>
<td>0.204</td>
<td></td>
</tr>
<tr>
<td>0.593**</td>
<td>0.793**</td>
<td>0.755**</td>
<td>0.333**</td>
<td>0.139</td>
<td>0.197</td>
<td>0.273**</td>
<td></td>
</tr>
<tr>
<td>( AISC )</td>
<td>( FS )</td>
<td>( FA )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.067</td>
<td>0.060</td>
<td>0.204</td>
<td>0.273**</td>
<td>0.220*</td>
<td>0.099</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. **: Correlation is significant at the 0.01 level (2-tailed); *: Correlation is significant at the 0.05 level (2-tailed).

Table 3
Results of OLS Regression Analysis

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>EP</th>
<th>EC</th>
<th>PDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountant professional (( AP ))</td>
<td>0.805***</td>
<td>0.884***</td>
<td>0.576***</td>
</tr>
<tr>
<td>AIS competency (( AISC ))</td>
<td>0.077</td>
<td>0.076</td>
<td>0.408***</td>
</tr>
<tr>
<td>Firm size (( FS ))</td>
<td>-0.137</td>
<td>-0.205</td>
<td>-0.232</td>
</tr>
<tr>
<td>Firm age (( FA ))</td>
<td>-0.704</td>
<td>-0.395</td>
<td>-0.123</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>0.657</td>
<td>0.597</td>
<td>0.774</td>
</tr>
</tbody>
</table>

Notes. *: p < 0.10, **: p < 0.05, ***: p < 0.01; Beta coefficients with standard errors are in parenthesis.

Table 3 presents the results of OLS regression analysis of the antecedents of successful accounting information (accountant professional and AIS competency) on successful accounting information (effective planning, efficient controlling, and promoting decision and communication) in Hypotheses 1 and 2. The results show that accountant professional has significant positive effects on all dimensions of successful accounting information including effective planning (H1a, \( b_1 = 0.805, p < 0.01 \)), efficient controlling (H1b, \( b_5 = 0.884, p < 0.01 \)),
and promoting decision and communication (H1c, $b_9 = 0.576, p < 0.01$). The results indicated that
accountant professional is the primary of internal resource and capability that has an influence on producing
successful accounting information (Abdullah et al., 2015; Adediran et al., 2013; Bots et al., 2009; Flood &
Wilson, 2008). Thus, Hypotheses 1a-c are supported.

Finally, the results in Table 3 also show that AIS competency has significant positive effects on successful
accounting information only in dimension of promoting decision and communication (H2c, $b_{10} = 0.408,
p < 0.01$). However, the results show that AIS competency has an insignificant effect on successful accounting
information in dimensions of effective planning (H2a, $b_2 = 0.077, p > 0.05$) and efficient controlling (H2b,
$b_6 = 0.076, p > 0.05$). Overall, the results imply that AIS competency can support successful accounting
information that is consistent with Altamuro and Beattey (2010), Peppard and Ward (2004), O’Donnell and
David (2000), and Murthy and Swanson (1992). Thus, Hypothesis 2c is supported while Hypotheses 2a and 2b
are not supported.

Conclusion, Implications, and Limitations and Suggestions for Future Research

Currently, accounting research has a lack of empirical evidence for investigating the factors affecting
successful accounting information. Thus, this research aims to empirically investigate the influences of internal
resources and capabilities including accountant professional and AIS competency on successful accounting
information. This research applies the concept of RBV of the firm to help clearly understand this relationship.
Thai-listed companies were selected as a sample and data are collected from chief accountant officer by using a
questionnaire as an instrument. Finally, 96 mail questionnaires were usable.

Overall, the results reveal that internal resources and capabilities including accountant professional and
AIS competency have a significant positive influence on successful accounting information. Specially,
accountant professional is a strong support to successful accounting information implying that accountant
professional plays an important role in explaining and driving successful accounting information. Moreover,
this research also provides both theoretical and managerial contributions to expanding previous knowledge and
literature accounting information and suggesting critical point for researches.

Theoretical Implication

The objective of this research is to gain a vivid understanding of the relationships between internal resource
and capabilities (accountant professional and AIS competency) and successful accounting information. This
research provides important extension on previous knowledge and relevant literature of successful accounting
information. This research applies the resource-based view (RBV) of the firm to explain the antecedents of
successful accounting information. The results indicate that the internal resources and capabilities including
accountant professional and AIS competency have significant effects on successful accounting information.

Managerial Implication

This research helps chief accountant officer and accounting information user identify and justify the key
components of successful accounting information that may help accounting information user succeed in the
long term. Chief accountant officer and accounting information user should effectively manage and utilize the
components of successful accounting information including effective planning, efficient controlling, and
promoting decision and communication to succeed in their decision-making.
Limitations and Suggestion for Future Research

The construct measurement of this research is developed from prior research. Thus, future research should explore the scale by different approaches such as in-depth interview or observation in order to fully understand the constructs measurement. Finally, this research uses only questionnaire for collecting data. Thus, future research may be developing longitudinal data and/or mixed methods designed to observe the factors affecting successful accounting information.

References


