

Strategic Cost Management and Firm Profitability: An Empirical Investigation of Instant Foods and Convenience Foods Businesses in Thailand

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ABSTRACT

This study aims at investigating the influences of strategic cost management on firm profitability of instant foods and convenience foods businesses in Thailand through mediators of cost advantage, cost leadership, and cost efficiency. In this study, 193 instant foods and convenience foods businesses in Thailand are the samples of the study. To test the research relationships, structural equation model (SEM) as a statistical technique is employed. Based on the results of the study, (1) strategic cost management has a positive influence on cost advantage, cost leadership, and cost efficiency, (2) cost advantage is positively related to cost leadership and cost efficiency and (3) cost efficiency positively affects firm profitability. Additionally, only cost efficiency is a mediator of the strategic cost management-firm profitability relationships. According to the research results, strategic cost management becomes a valuable approach that helps firms gain sustainable competitive advantage and achieve superior performance. Thus, executives of firms need to allocate their resources, assets, competencies, and capabilities in order to develop and utilize strategic cost management successfully in the rigorous competitive markets and environments.

JEL Classification: M41

Keywords: strategic cost management; cost advantage; cost efficiency; cost leadership; firm profitability

I. INTRODUCTION

Within the volatile competitive markets and environments, firms need to search for a strategic valuable approach to deal with these business situations and circumstances. The strategic valuable approach can encourage firms to do business efficiently and effectively in order to obtain sustainable competitive advantage and gain superior performance. While there are several valuable approaches, strategic cost management is reasonable considered. In this study, strategic cost management is one of the valuable approaches arising from strategic management accounting (Cadez and Guilding, 2008). It plays an important role in determining, driving and explaining firms' great outcomes. Accordingly, strategic cost management becomes a potential source for building firm profitability. Firms have implemented and utilized the strategic cost management for achieving success, survival and sustainability. The relationships between strategic cost management and firm profitability were empirically investigated.

Strategic cost management is a key determinant of successfully doing business. It is defined as an ability of firms to reduce costs and expenses and strengthen their strategic position in highly competitive environments through using valuable cost management activities and techniques (Cooper and Slamulder, 2003). It provides information on costs and other information for easing firms' decision making in the practical processes of strategic analysis, choice, and implementation for dealing with changing environments and increasing varieties of products and production process (Ilic, Milicevic, and Cvetkovic, 2010). It helps firms effectively manage both financial and competitive advantage and create organizational performance. Firms with successful implementation of strategic cost management are likely to decrease operational expenses and increase business strategies that are linked to their competitiveness and profitability. Also, strategic cost management refers to the deliberate alignment of firms' resources, assets, competencies, and capabilities and associated cost structure with long term strategy and short term techniques for improving performance and increasing profitability (Henri, Boiral, and Roy, 2016). Firms have applied strategic cost management in order to succeed in the competitive markets and environments. More successful strategic cost management tends to efficiently affect firms' better profitability. Thus, this study attempted to empirically investigate the influences of strategic cost management on firm profitability.

In an examination of the strategic cost management-firm profitability relationships, cost advantage, cost leadership, and cost efficiency were hypothesized to mediate these research relationships. Cost advantage is the costs arising from firms' operations, practices, and activities that outperform their competitors in the competitive markets (Dunk, 2004). It presents aggressively lowering costs relative to competitors. Next, cost leadership is the achievement of overall costs in industry through a set of functional policies aimed at this basic objective (Baack and Boggs, 2008). It requires aggressive construction of efficient-scale facilities, vigorous pursuit of cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization in operational activities. Finally, cost efficiency is the maximal output arising from a given set of inputs, namely costs and expenses (Hu et al., 2010). It reflects the use of the inputs in optimal proportions, given their respective prices, and the production technology. Accordingly, cost advantage, cost leadership, and cost efficiency

seem to be mediators of the linkage between strategic cost management and firm profitability. An empirical examination of these relationships was conducted later.

To verify the aforementioned relationships, this study attempts to examine the impacts of strategic cost management on firm profitability of instant foods and convenience foods businesses in Thailand via mediating effects of cost advantage, cost leadership and cost efficiency. The key research question is how strategic cost management affects firm profitability. The specific research questions are: (1) How does strategic cost management have an effect on cost advantage, cost leadership and cost efficiency? (2) How does cost advantage have an influence on cost leadership, cost efficiency and firm profitability? (3) How does cost advantage mediate the strategic cost management-firm profitability relationships? (4) How does cost leadership have an impact on firm profitability? (5) How does cost leadership mediate the strategic cost management-firm profitability relationships? (6) How does cost efficiency have a relationship with firm profitability? and (7) How does cost efficiency mediate the strategic cost management-firm profitability relationships?

The remainder of this study is presented as follows. Firstly, relevant literature reviews of strategic cost management and its consequences are provided and significant research hypotheses development is discussed. Secondly, the research methods used to test the hypotheses are presented. Thirdly, the results and reasonable discussions of the study are indicated. Finally, contributions for theory and management, limitations of the study and directions for future research are provided.

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

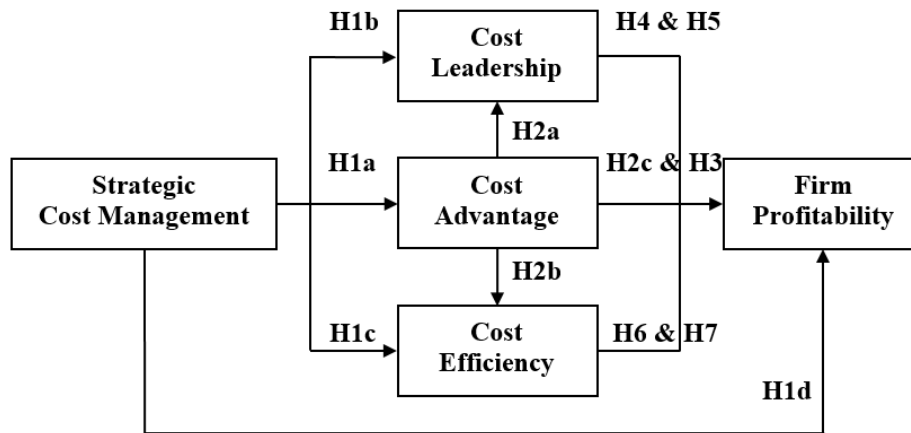
In this study, dynamic capability theory is applied to explain the strategic cost management-firm profitability relationships. According to a study of Teece, Pisano, and Shuen (1997), a dynamic capability as a key source of determining firms' competitive advantage and performance emphasizes creating, adapting, combining, integrating, and reconfiguring skills, resources and abilities to renew competencies to achieve congruence with changing environments. Here, strategic cost management is treated as a dynamic capability for driving cost advantage, cost leadership, cost efficiency, and firm profitability because it is valuable, rare, non-imitate, and non-substitute. The conceptual model of the strategic cost management-firm profitability relationships is presented in Figure 1.

A. Strategic Cost Management

Strategic cost management is one of the approaches of valuable strategic management accounting and it affects firms' gained competitive advantage and increased performance. In this study, strategic cost management is a potential determinant of successfully doing business in the highly rigorous competitive environments and situations. It is defined as an application of cost management techniques in improving firms' strategic positions and reducing their operational costs and expenses (Cooper and Slagmulder, 2003). It becomes a critical survival skill for firms' achieving performance, profitability, and success. In the complex business environments, strategic cost management can affect firms' decision making by providing information on costs and other information in the processes of strategic analysis, strategic choice, and strategy implementation to deal with changing

Figure 1

The conceptual model of the strategic cost management-firm profitability relationships



situations and increasing varieties of products and production processes (Ilic, Milicevic, and Cvetkovic, 2010). In addition, strategic cost management is the deliberate alignment of firms' resources and associated cost structure with a long-term strategy and short-term techniques (Henri, Boiral, and Roy, 2016). It comprises structural cost management (the cost management activities aimed at changing the cost structure of firms) and executional cost management (the cost management activities aimed at improving performance for a given strategy). Firms with effective strategic cost management implementation tend to have sustainable competitive advantage and obtain increased performance.

To achieve firms' competitiveness and profitability, strategic cost management is considered important since it refers to an ability of firms to examine their cost patterns based upon organizational objectives, organizational needs and capabilities, and customer requirements (Lockamy, 2003). It also focuses on an integrative examination of costs relating to firms' fundamental goals and objectives. Accordingly, firms have applied strategic cost management in order to succeed, survive, and sustain in the competitive markets. Here, this study measures strategic cost management by using three dimensions, namely value chain analysis, strategic positioning analysis, and cost driver analysis (Ellram and Stanley, 2008). These dimensions provide a source of firms' competitive advantage and performance. Firstly, firms can decide whether they should implement vertical integration strategy, reduce costs to achieve competitive advantages through the merger of supplier and buyers, and establish the strategic linkage of business operations. Secondly, firms need to analyze strategic environments by clearly determining a direction of cost management and establishing cost management strategy that links to an organization's strategies. Thirdly, firms need to find driver factors of costs to ensure a validity of cost management strategy and control these factors. As mentioned earlier, strategic cost management plays a significant role in determining firms' competitive advantage and performance. In this study, competitive advantage means cost advantage, cost leadership, and cost efficiency while performance refers to firms' profitability. Thus, strategic cost management is considered to have a positive influence on cost advantage,

cost leadership, cost efficiency, and firm profitability. Therefore, the research hypothesis is as follows:

H1: Strategic cost management has a positive influence on (a) cost advantage, (b) cost leadership, (c) cost efficiency, and (d) firm profitability.

B. Cost Advantage

Cost advantage is an important outcome from implementing strategic cost management. It refers to the costs used by firms to outperform their competitors in the competitive markets and environments (Dunk, 2004). It comprises unit cost of manufacturing, costs of business operations, and expenses of selling and administration. Firms with cost advantage can have lower costs of product ownership, costs of customers, and manufacturing cost commitments than the competitors. Thus, cost advantage is beneficial for firms' cost performance and profitability. Likewise, cost advantage can be a result from adopting best practices that focus on production processes, including product design through manufacturing, use, and disposal (Christmann, 2000). These best practices can also affect lower range of other costs, namely potential liability costs, legal fees, and returning costs. Here, one of the best practices is called "strategic cost management." Then, cost advantage explicitly presents aggressively lowering costs relative competitors. In existing literature, cost advantage can enhance firms to pursue cost leadership, increase cost efficiency, and obtain profitability (Garg, Priem, and Rasheed, 2013). More benefits of cost advantage are likely to affect firms' better cost leadership, cost efficiency, and profitability. Firms tend to improve cost advantage in order to gain cost leadership, cost efficiency, and profitability. Accordingly, cost advantage is positively related to its consequences. While cost advantage is a key determinant of firms' outcomes, it is considered a result from successful strategic cost management implementation that is mentioned earlier. Hence, cost advantage can mediate the strategic cost management-firm profitability relationships. Therefore, the research hypothesis is as follows:

H2: Cost advantage has a positive influence on (a) cost leadership, (b) cost efficiency and (c) firm profitability.

H3: Cost advantage mediates the strategic cost management-firm profitability relationships.

C. Cost Leadership

Cost leadership is a consequence of implementing strategic cost management and obtaining cost advantage and it also has an effect on firm profitability. In this study, cost leadership is defined as the achievement of overall costs in an industry through a set of functional policies aimed at the basic objective (Baack and Boggs, 2008). It requires aggressive construction of efficient-scale facilities, vigorous pursuit of cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization of other activities. Firms with cost leadership can maintain high levels of product and service qualities outperforming their competitors in the competitive markets. Thus, cost leadership can allow firms to earn higher profits and to gain bigger market share than average (Stankeviciute, Grunda, and Bartkus, 2012). In

addition, cost leadership seeks to achieve above-average returns over competitors through low prices by driving all components of activities towards controlling production and distribution costs, increasing their capacity utilization, and minimizing other costs of their operations, activities, and practices (Prajogo, 2007). It focuses on cost achievement which places a concentration on relative direct costs, asset use, employee productivity, capacity utilization, and discretionary expenses. Then, cost leadership positively relates to their profitability. As mentioned earlier about the roles of cost leadership in an organization, this study attempted to verify the influences of cost leadership on firm profitability and test the mediating effects of cost leadership on the strategic cost management-firm profitability relationships. Therefore, the research hypothesis is as follows:

H4: Cost leadership has a positive influence on firm profitability.

H5: Cost leadership mediates the strategic cost management-firm profitability relationships.

D. Cost Efficiency

Cost efficiency is a critical determinant that leads to firms' profitability and it is an outcome of strategic cost management implementation. Here, cost efficiency refers to the outputs, products, and services with a minimum resource level required, such as product costs and operational expenses (Rayeni and Saljooghi, 2012). It is an important antecedent of driving firms' profitability. Thus, more cost efficiency is likely to affect better profitability. Firms with cost efficiency tend to achieve superior profitability in the rigorous competitive markets. Likewise, cost efficiency is defined as an effectiveness of resource utilization through given costs and expenses to gain advanced outputs via prices, revenues, and returns. It consists of technical efficiency as obtaining maximal output from a given set of inputs and allocative efficiency as using the inputs in optimal proportions, namely respective prices and production technology (Hu et al., 2010). It becomes a key factor in explaining firms' profitability. Within a situation of cost efficiency, firms can maintain increased profitability continuously. In existing literature, cost efficiency is positively related to firms' profitability (Srairi, 2010). Hence, this study aimed to investigate the influences on cost efficiency on firm profitability and to prove the mediating effects of cost efficiency on the strategic cost management-firm profitability relationships. Therefore, the research hypothesis is as follows:

H6: Cost efficiency has a positive influence on firm profitability.

H7: Cost efficiency mediates the strategic cost management-firm profitability relationships.

E. Firm Profitability

In this study, strategic cost management is a key determinant of firm profitability and it explicitly encourages firms to obtain cost competitiveness and again superior profitability. A success of strategic cost management implementation is likely to increase firm profitability. Accordingly, firm profitability is a significant outcome of implementing strategic cost management. It refers to an outcome of firms' well operating and doing business effectively and efficiently in highly competitive markets and environments

(Pugliese, Minichilli, and Zattoni, 2014). It reflects positive feedback, growth, and sales growth and also signals the achievement of superior market position with an increasing demand for firms' outputs. Here, market share, overall performance, a number of new customers, and innovative operations are considered as effective measurements of firm profitability. Thus, greater profitability is a result from more effectiveness of valuable operational approach implementation, such as strategic cost management. Firms with successful strategic cost management implementation tend to achieve their outstanding profitability.

III. RESEARCH METHODS

A. Data Collection

In this study, all 840 instant foods and convenience foods businesses in Thailand from Department of Business Development, Ministry of Commerce are chosen as the samples of the study. A mail survey procedure via questionnaire developed from existing literatures of accounting and related fields is implemented. Accounting executives including accounting directors, accounting managers or accounting heads, are the key informants because they have taken the highest responsibilities of accounting functions and other related activities in an organization. Deducting the undeliverable mailing, the valid mailing is 809 surveys, from which 211 responses are received. Of the surveys completed and returned, there are 193 usable questionnaires. The effective response rate is approximately 23.86% which is considered acceptable for the response rate for a mail survey because it is greater than 20% (Aaker, Kumar, and Day, 2001). Thus, these usable questionnaires are empirically utilized to measure validation of the research instrument and analyze data for the research results.

To verify potential and non-response bias, a comparison of the first and the second wave data via firm age, firm size and firm capital is conducted as recommended by Armstrong and Overton (1977). There are no statistically significant differences between first and second groups at a 95% confidence level as firm age ($t = 0.121$, $p > 0.05$), firm size ($t = 0.113$, $p > 0.05$) and firm capital ($t = 0.109$, $p > 0.05$). According to this regard, neither procedure explicitly shows significant differences.

B. Measurements

All constructs are measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), except from firm age, firm size and firm capital. These measurements of all variables are presented in Appendix A. Firstly, four-item scale of strategic cost management is issued to assess how firms strategic improve their strategic positions and reduce their operational costs and expenses via an application of cost management techniques (Cooper and Slagmulder, 2003). Secondly, three-item scale of cost advantage is developed to gauge how firms utilize the costs to outperform their competitors in the competitive markets and environments (Dunk, 2004). Thirdly, three-item scale of cost leadership is initiated to measure how firms achieve overall costs in an industry through a set of functional policies aimed at the basic objective (Baack and Boggs 2008.). Fourthly, three-item scale of cost efficiency is introduced to evaluate how firms gain the outputs, products, and services with a minimum resource level required, such as product

costs and operational expenses (Rayeni and Saljooghi, 2012). Finally, four-item scale of firm profitability is established to assess how firms obtain market share, overall performance, a number of new customers, and innovative operations. To test the control variables of this study, firm age (FAG) is measured by the number of years a firm has been in existence, firm size (FSZ) is measured by the number of employees in the firm, and firm capital (FCP) is measured by the amount of money a firm has invested in doing business.

C. Instrument Test

In this study, factor analysis, item-total correlation and Cronbach alpha are conducted to prove the quality of the research instrument. Firstly, factor analysis is conducted separately on each set of the items representing a particular scale due to limited observations and it has a high potential to inflate the component loadings and all factor loadings as values of 0.78-0.92 are greater than the 0.40 cut-off and are statistically significant (Nunnally and Bernstein, 1994). Secondly, discriminant power is utilized to gauge the validity of the measurements by item-total correlation as values of 0.74-0.92 being greater than 0.30 (Churchill, 1979). Finally, the reliability of the measurements is evaluated by Cronbach alpha coefficients as values of 0.82-0.88 being greater than 0.70 (Nunnally and Bernstein, 1994). Thus, the scales of all measures appear to produce internally consistent results and they are deemed appropriate for further analysis as they express an accepted validity and reliability in this study. Table 1 presents the results of measure validation for multiple-item scales used in this study.

Table 1
Results of measure validation

Items	Factor Loadings	Item-total Correlation	Cronbach Alpha
Strategic Cost Management (SCM)	0.78-0.90	0.74-0.86	0.82
Cost Advantage (CAV)	0.82-0.90	0.82-0.90	0.83
Cost Leadership (CLD)	0.88-0.92	0.89-0.92	0.88
Cost Efficiency (CEF)	0.89-0.91	0.89-0.91	0.88
Firm Profitability (FPF)	0.80-0.85	0.80-0.86	0.84

To investigate the strategic cost management-firm profitability relationships, structural equation model (SEM) is conducted because all variables in this study were neither nominal data nor categorical data. The results of this study are presented in the next section.

IV. RESULTS AND DISCUSSION

In Table 2, descriptive statistics and correlation matrix for all variables are provided. To verify the multicollinearity problems of the study, multicollinearity might occur when inter-correlation in each predict variable is more than 0.80, which is a high relationship (Hair et al., 2010). The correlations ranging from 0.44 to 0.68 at the $p < 0.05$ level, which means that the possible relationships of the variables in the conceptual model could be tested.

Table 2
Descriptive statistics and correlation matrix

Variables	SMC	CAV	CLD	CEF	FPF
Mean	4.20	3.46	3.90	3.58	3.58
s.d.	0.64	0.76	0.73	0.78	0.73
SMC					
CAV	0.44***				
CLD	0.50***	0.62***			
CEF	0.48***	0.62***	0.68***		
FPF	0.44***	0.53***	0.53***	0.60***	

***p<.01

Table 3
Results of path coefficients and hypotheses testing

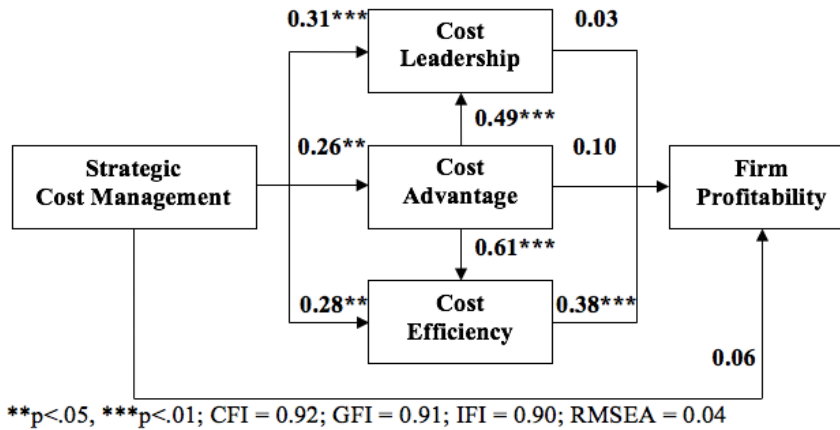
Hypotheses	Relationships	Coefficients	t-value	Results
H1a	SCM → CAV	0.26**	1.99	Supported
H1b	SCM → CLD	0.31***	3.02	Supported
H1c	SCM → CEF	0.28**	2.46	Supported
H1d	SCM → FPF	0.06	0.67	Not supported
H2a	CAV → CLD	0.49***	4.66	Supported
H2b	CAV → CEF	0.61***	4.95	Supported
H2c	CAV → FPF	0.10	0.67	Not Supported
H3	SCM → CAV	0.26**	1.99	Not Supported
	CAV → FPF	0.10	0.67	
	SCM → FPF	0.06	0.50	
H4	CLD → FPF	0.03	0.21	Not Supported
H5	SCM → CLD	0.31***	3.02	Not Supported
	CLD → FPF	0.03	0.21	
	SCM → FPF	0.06	0.50	
H6	CEF → FPF	0.38***	2.69	Supported
H7	SCM → CEF	0.28**	2.46	Fully Supported
	CEF → FPF	0.38***	2.69	
	SCM → FPF	0.06	0.50	

p<.05, *p<.01

Table 3 presents the results of the strategic cost management-firm profitability relationships by using structural equation model (SEM). A summary of the strategic cost management-firm profitability relationships is shown in Figure 2. In this study, the goodness of fit of the models, including the goodness of fit index (GFI), the comparative fit index (CFI), the incremental fit index (IFI), and the root mean square error of approximation (RMSEA) are considered (Herda and Lavelle, 2012). Here, the initial test of the measurement model resulted in a good fit to the data (CFI = 0.92; GFI = 0.91; IFI = 0.90; RMSEA = 0.04). CFI values always lie between 0 and 1, with values over 0.90 indicating a relatively good fit (Bentler, 1990). Next, GFI value is an index that ranges from 0 to 1, with value over 0.90 indicating a relatively good fit (Byrne, 1998) and IFI values exceeding 0.90 indicate a relatively good fit (Kline, 1998). Finally, a RMSEA value of less than 0.05 indicates a close fit and less than 0.08 suggests a marginal fit (Bollen and Long, 1993).

Figure 2

A Summary of the strategic cost management-firm profitability relationships



Strategic cost management is a significant determinant of cost advantage ($b = 0.26$, $p < 0.05$), cost leadership ($b = 0.31$, $p < 0.01$), and cost efficiency ($b = 0.28$, $p < 0.02$). It applies cost management techniques in improving firms' strategic positions and reducing their operational costs and expenses (Cooper and Slagmulder, 2003). It is a critical survival skill by providing information on costs and other information for providing strategic analysis, strategic choice, and strategy implementation in dealing with changing situations and complex environments (Ilic, Milicevic, and Cvetkovic, 2010). Firms with successful implementation of strategic cost management can explicitly gain cost benefits, namely cost advantage, cost leadership, and cost efficiency. Thus, strategic cost management has a positive influence on cost advantage, cost leadership, and cost efficiency. In contrast, strategic cost management is not related to firm profitability ($b = 0.06$, $p < 0.62$). In existing literature, strategic cost management directly affect firm profitability and it has a positive effect on firm profitability (Lockamy, 2003). Here, the strategic cost management-firm profitability relationships do not occur because strategic cost management may need to have a mediator as cost efficiency for helping link to firm profitability according to Hypothesis 7. Then, it has an indirect effect on firm profitability. Therefore, Hypotheses 1a-1c are supported, but Hypothesis 1d is not.

In addition, cost advantage has a positive impact on cost leadership ($b = 0.49$, $p < 0.01$) and cost efficiency ($b = 0.61$, $p < 0.01$), but it has no relationship with firm profitability ($b = 0.10$, $p < 0.51$). Based on existing literature, cost advantage results from adopting best practices that focus on production processes, including lower range of other costs, namely potential liability costs, legal fees, and returning costs (Christmann, 2000). Firms with effective cost advantage can provide costs of products and operations to outperform their competitors in the competitive markets and environments (Dunk, 2004). In this study, the best practice is "strategic cost management." Thus, cost advantage positively affects both cost leadership and cost efficiency. Surprisingly, cost advantage does not relate to firm profitability because it has an indirect influence on firm profitability via cost efficiency as a mediator. Hence, firms can provide cost advantage

to indirectly achieve their profitability through a mediating effect of cost efficiency. Therefore, Hypotheses 2a-2b are supported, but Hypothesis 2c is not.

Cost leadership does not affect firm profitability ($b = 0.03$, $p < 0.84$). While cost leadership is the achievement of overall costs in an industry through a set of functional policies aimed at the basic objective, it helps maintain high levels of product and service qualities outperforming their competitors in the competitive markets (Baack and Boggs, 2008). Thus, it has an effect on firm profitability. However, this study finds no relationships between cost leadership and firm profitability. Accordingly, cost leadership may not be a valuable tool to help firms gain profitability. Other valuable tools, such as differentiation and innovation, may enhance them to obtain better profitability in highly rigorous competitive markets and environments. Therefore, Hypotheses 4-5 are not supported.

Finally, cost efficiency is a critical factor in determining firm profitability and it has a positive relationship with firm profitability ($b = 0.38$, $p < 0.01$). Accordingly, cost efficiency focuses on the outputs, products, and services with a minimum resource level required, such as product costs and operational expenses (Rayeni and Saljooghi, 2012). It helps firms obtain maximal output from a given set of inputs and use the inputs in optimal proportions, namely respective prices and production technology (Hu et al., 2010). Firms with increased cost efficiency can continuously maintain superior profitability. Thus, cost efficiency definitely plays a significant role in driving, explaining, and determining firm profitability. Likewise, it explicitly mediates the strategic cost management-firm profitability relationships. Cost efficiency is a consequence of implementing strategic cost management and it also leads to firm profitability. Therefore, Hypotheses 6-7 are supported.

V. CONTRIBUTIONS AND DIRECTIONS FOR FUTURE RESEARCH

A. Theoretical Contribution and Directions for Future Research

This study attempts to investigate the effects of strategic cost management on firm profitability through mediators of cost advantage, cost leadership, and cost efficiency. It empirically confirms that strategic cost management became a main source of determining, driving and explaining firm profitability being congruent with the dynamic capability theory. In addition, only cost efficiency explicitly mediates the strategic cost management-firm profitability relationships. To verify and expand the research relationships, future research needs to do more literatures relating to the direct effects of strategic cost management on firm profitability and the mediating effects of both cost advantage and cost leadership on the strategic cost management-firm profitability relationships. Likewise, structural equation model (SEM) should be conducted to test the research relationships. Future research may need to apply other statistical techniques including partial least squared (PLS) and regression analysis, in order to confirm the results of existing research. To prove the generalizability of the study, future research needs to collect data from either different populations or larger samples, and from various countries through the use of comparative study.

B. Managerial Contribution

Strategic cost management is important in doing business. Executives of firms must pay attention the ways to develop, create, manage, and utilize the strategic cost management in order to help firms gain sustainable competitive advantage and superior performance. They need to allocate their valuable resources, assets, competencies, and capabilities in supporting the implementation and application of strategic cost management in an organization. Next, executives of firms need to search for new techniques, approach, procedures, and methods that can help firms obtain a success of strategic cost management in the uncertain competitive markets and environments via efficiency, effectiveness, quality, and excellence of their operations, practices and activities. To make a valuable approach of strategic cost management, executives of firms need to set vision, policy and leadership relating to a system of strategic cost management by establishing its committee in order to handle duties, responsibilities and functions of managing their costs and expenses efficiently and effectively.

VI. CONCLUSION

Firms have done business within the rigorous competitive markets and environments. They need to apply and implement a valuable approach for obtaining success, survival and sustainability in these situations. Strategic cost management as one of beneficial business methods is utilized to gain sustainable competitiveness and achieve great operational outcomes. Accordingly, this study aims at examining the influences of strategic cost management on firm profitability of instant foods and convenience foods businesses in Thailand through mediating effects of cost advantage, cost leadership, and cost efficiency. In this study, 193 instant foods and convenience foods businesses in Thailand are the samples of the study. The results indicate that strategic cost management had a positive influence on cost advantage, cost leadership, and cost efficiency. Additionally, cost advantage has a positive effect on both cost leadership and cost efficiency while only cost efficiency has a positive impact on firm profitability. To test the mediating effects of the strategic cost management cost-firm profitability relationships, cost efficiency plays a significant mediating role which affected the research relationships. To verify and expand the existing research, future research need to do more literatures relating to strategic cost management and its consequences and moderators. Likewise, data collection from other populations and statistical techniques need to be provided. Executives of firms need to pay attention to the application and implementation of strategic cost management through firms' vision, policy and leadership and via supporting their resources, assets, competencies, and capabilities to this system.

Appendix A
Measurement of all variables

Items
Strategic Cost Management (SCM)
<ol style="list-style-type: none"> 1. We believe that strategic cost management is important and it can help firms gain sustainable competitive advantage and achieve superior performance. 2. We pay attention to the analysis of all costs in an organization that are linked to firms' operational techniques and organizational strategies in obtaining competitiveness and profitability. 3. We emphasize an integration of value added activities for achieving efficiency, effectiveness and excellence and creating firms' valuable outcomes. 4. We attempt to search for good cost drivers that affect levels of changing costs, manage and utilize these cost drivers through deleting, reducing or benefiting the cost drivers.
Cost Advantage (CAV)
<ol style="list-style-type: none"> 1. We have accurate costs of products and services for competing in the rigorous markets and environments. 2. Our costs of product and services can help firms gain competitive advantage in various situations. 3. We can successfully make a great decision through firms' costs of products and services.
Cost Leadership (CLD)
<ol style="list-style-type: none"> 1. We have lower costs of products and services than those of our competitors. 2. Our costs can reflect competencies and capabilities of firms' products and services. 3. We can utilize firms' costs occurring from real processes of products and services efficiently and effectively.
Cost Efficiency (CEF)
<ol style="list-style-type: none"> 1. We can reduce costs of products and services and decrease operational expenses outstandingly. 2. We can delete non-necessary costs in an organization's operations and explicitly increase control efficiency of necessary costs. 3. We can make a balance between operational inputs and performance outputs effectively and excellently.
Firm Profitability (FPF)
<ol style="list-style-type: none"> 1. We have gained continuous market share increase compared with competitors. 2. We have new customers recommended by existing customers who continuously join our business operations, activities and practices. 3. We have innovative operations different from those of our competitors that continuously present to the markets. 4. We always have overall performances better than competitors.

REFERENCES

- Aaker, D.A., V. Kumar, and G.S. Day, 2001, *Marketing Research*. New York: John Wiley and Sons.
- Armstrong, J.S., and T.S. Overton, 1977, "Estimating Non-Response Bias in Mail Surveys." *Journal of Marketing Research*, 14(3), 396-402.
- Baack, D, and D.J. Boggs, 2008, "The Difficulties in Using a Cost Leadership Strategy in Emerging Markets." *International Journal of Emerging Markets*, 3(2), 125-139.
- Baron, R.M., and D.A. Kenny, 1986, "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations." *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bentler, P.M., 1990, "Comparative Fit Indices in Structural Models." *Psychological Bulletin*, 107, 238-246.
- Bollen, K.A., and J.S. Long, 1993, *Testing Structural Equation Models*. Sage Publications, California.
- Byrne, B.M., 1998, *Structural Equation Modeling with LISREL, Preliis and Simplis: Basic Concepts, Applications and Programming*. L. Erlbaum Associates, New Jersey.
- Cadez, S., and C. Guilding, 2008, "An Exploratory Investigation of an Integrated Contingency Model of Strategic Management Accounting." *Accounting, Organizations and Society*, 33, 836-863.
- Christmann, P., 2000, "Effects of "Best Practices" of Environmental Management on Cost Advantage: The Role of Complementary Assets." *Academy of Management Journal*, 43(4), 663-680.
- Churchill, G.A., Jr., 1979, "A Paradigm for Developing Better Measures of Marketing Constructs." *Journal of Marketing Research*, 16(February), 64-73.
- Cooper, R., and R. Slagmulder, 2003, "Strategic Cost Management: Expanding Scope and Boundaries." *Journal of Cost Management*, 17(1), 23-30.
- Dunk, A.S., 2004, "Product Life Cycle Cost Analysis: The Impact of Customer Profiling, Competitive Advantage, and Quality of IS Information." *Management Accounting Research*, 15, 401-414.
- Ellram, L.M., and L.L. Stanley, 2008, "Integrating Strategic Cost Management with a 3DCE Environment: Strategies, Practices, and Benefits." *Journal of Purchasing and Supply Management*, 14, 180-191.
- Gard, V.K., R.L. Priem, and A.A. Rasheed, 2013, "A Theoretical Explanation of the Cost Advantages of Multi-Unit Franchising." *Journal of Marketing Channels*, 20, 52-72.
- Hair, J.F., W.C. Black, B.J. Babin, and R.E. Anderson, 2010, *Multivariate Data Analysis: A Global Perspective. 7th Edition*. New Jersey: Person Prentice Hall.
- Herda, D.N., and J.J. Lavelle, 2012, "The Auditor-Audit Firm Relationship and Its Effect on Burnout and Turnover Intention." *Accounting Horizons*, 26(4), 707-723.
- Henri, J., O. Boiral, and M. Roy, 2016, "Strategic Cost Management and Performance: The Case of Environmental Costs." *The British Accounting Review*, 48, 269-282.
- Hu J., C. Chiu, H. Shieh, and C. Huang, 2010, "A Stochastic Cost Efficiency Analysis of International Tourist Hotels in Taiwan." *International Journal of Hospitality Management*, 29, 99-107.

- Ilic, B., V. Milicevic, and N. Cvetkovic, 2010, "Strategic Cost Management and the Product Life Cycle Concept." *Megatrend Review*, 7(1), 193-208.
- Kline, R.B., 1998, *Principles and Practices of Structural Equation Modeling*. The Guilford Press, New York.
- Lockamy, A., III, 2003, "A Constraint-Based Framework for Strategic Cost Management." *Industrial Management and Data Systems*, 103(8/9), 591-599.
- Neter, J., W. Wasserman, and M. H. Kutner, 1985, *Applied Linear Statistical Models: Regression, Analysis of Variance, and Experimental Designs*, 2nd Edition. Homewood: Richard D. Irwin, Inc.
- Nunnally, J.C., and I.H. Bernstein, 1994, *Psychometric Theory*. New York, NY: McGraw-Hill.
- Prajogo, D.I., 2007, "The Relationship between Competitive Strategies and Product Quality." *Industrial Management and Data Systems*, 107(1), 69-83.
- Pugliese, A., A. Minichilli, and A. Zattoni, 2014, "Integrating Agency and Resource Dependence Theory: Firm Profitability, Industry Regulation, and Board Task Performance." *Journal of Business Research*, 67, 1189-1200.
- Rayeni, M.M., and F.H. Saljooghi, 2012, "Equitable Allocation of Fixed Costs and Its Effect on Technical and Cost Efficiency: Case Study in Universities." *African Journal of Business Management*, 6(4), 1263-1269.
- Srairi, S.A., 2010, "Cost and Profit Efficiency of Conventional and Islamic Banks in GCC Countries." *Journal of Production Analysis*, 34, 45-62.
- Stankeviciute, E., R. Grunda, and E.V. Bartkus, 2012, "Pursuing a Cost Leadership Strategy and Business Sustainability Objectives: Walmart Case Study." *Economics and Management*, 17(3), 1200-1206.
- Teece, D.J., G. Pisano, and A. Shuen, 1997, "Dynamic Capabilities and Strategic Management." *Strategic Management Journal*, 18(7), 509-533.