

Influencing of Marketing Competency in Aviation Industry

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ABSTRACT

In view of rapidly changing economic conditions, competition in the aviation industry in the Kingdom of Thailand (Thailand) has strongly intensified. In addition, the ramifications of recent natural disasters have had adverse effects on the conduct of business in Thailand, accompanied by higher operational costs. Therefore, if a business organization wants to compete effectively, it must adopt conducive strategies to maintain a competitive edge over its rivals.

Accordingly, in this research investigation, the researchers inquire into the effects of supply chain strategy on the marketing competency of aviation industry firms. In carrying out this investigation, the researchers apply a conceptual framework derived from various theories of competition.

The methodological approach adopted by the researchers comprises quantitative and qualitative research methods. As such, the research instruments utilized by the researchers to collect apposite data were twofold; viz, an interview form and a questionnaire. The data were obtained from 120 aviation industry administrators from different administrative levels.

The data collected were subsequently analyzed using the structural equation modeling (SEM) technique. Using confirmatory factor analysis (CFA), the researchers validated the items in the questionnaire in terms of accuracy and reliability. In determining the weight of factors derived from testing the construct validity of the factors, the researchers found the following: chi-square (χ^2) = 88.39; degrees of freedom (df) = 71; probability-(p)-value = .08; χ^2/df = 1.24; root mean square error of approximation (RMSEA) = .01; goodness of fit index (GFI) = 0.91; adjusted goodness of fit index (AGFI) = 0.99; normed fit index (NFI) = 0.99; non-normed fit index (NNFI) = 0.97; incremental fit index (IFI) = 0.96; relative fit index (RFI) = 0.99; comparative fit index (CFI) = 0.98; and Hoelter's critical "N" (CN) = 329.45 (n = 120).

In addition, the analysis revealed that competition strategy, leadership strategy, and supply chain strategy were explanatory of variances in marketing competency at 69.5 percent ($R^2 = 0.695$). Furthermore, competition strategy and leadership strategy were explanatory of variances in supply chain strategy at 54.2 percent ($R^2 = 0.542$). When an organization encounters problems, it can adopt the aforementioned three strategies to resolve these issues and it can also bring to bear thirty major factors for it.

Keyword: Marketing Competency, Aviation Industry

1. Introduction

At present, the aviation industry is highly competitive in view of changing economic conditions. An untoward political environment in conjunction with natural disasters has brought business operations to a standstill from time-to-time. Overall profits for entrepreneurs have therefore decreased. The profitability of enterprises vis-à-vis the aspects of operational costs and management expenditures must be directly addressed. In business operations, various techniques and methods have been employed to maintain consumer market share. Consumers have an array of options in using airlines and so airlines must be responsive to their needs by keeping prices low and providing satisfactory services. As such, these business organizations must consider how to conduct business appropriately. If mistakes are made, it will result in lowered returns as well.

Hence, organizations must consider which business practices are conducive to cost reductions and higher returns. In practice, however, entrepreneurs are often uncertain as to which strategies are the most appropriate in the sense of being most advantageous to achieve maximum benefits. There is also uncertainty about how to rank the strategies in respect of to decide which one to use. Hence, in this research investigation, the researchers are concerned to establish the business strategys that is most favorable to maximize benefits for organizations upon implementation. This research investigation accordingly strives to answer the research question whether supply chain strategy has effects on the marketing competency of aviation industry firms.

2. Theories and Relevant Literature

Competitive Theory: The theory of competitive advantage incorporates three important principles governing the business success of industries: (1) competitive strategy; (2) competitive advantage; and (3) international competitive advantage [12]. As such, successful business organizations by definition have selected and applied appropriate strategies for solving problems.

In addition, other important strategies that conduce to make businesses successful are as follows:

Supply Chain Strategy : SCST Competitive capability is patently a function of marketing competence. Marketing competence, however, is dependent upon mutual cooperation between businesses that conduct commercial relations with one another. [7, 9, 15].

Business organizations must also take account of work-related problems connected with relations with other business organizations. *Au fond* the question involves the application of principles that can be used to ensure cooperation. Important principles that can be utilized in such cases are subsumed under the rubrics of (1) business alliances; (2) work cooperation; and (3) communication among organizations [3, 9,17]. Details are as follows:

1. Business Alliances in Supply Chain [3]. Parties have to enter into alliances for the sake of operational continuity. If carried out properly, this should lead to business expansion with the sharing of benefits and resources, thereby allowing cost reductions and clear agreements [8, 9,11,17].

2. Collaboration. Scholars have shown that operational effectiveness results from clear mutual goals [6, 11].

3. Communication External Organization. Technology must be used as a tool in communication [4, 7] in order to reduce work steps. Technology must be improved in its application to work so as to be compatible with intra-organizational conditions and existing resources. Environmental changes must also be taken into account [6,9,10].

H1 : Supply Chain Strategy affects Marketing Competency positively

Competitive Strategy : COST In accordance with the concept of competition, any business organization must have an appropriate structure if it wants to compete successfully with competitors. The most basic competitive strategy is using a strategy whereby costs are lowered. The reduction of costs requires to examine all particularized costs *seriatim* to the end to eventually reduce the overall costs of operations. In addition, combining business operations with other firms and utilizing a division of labor strategy can be highly promotive to gain advantage over non-participating rival businesses and to achieve overall success. [12,13,14]

H2 : Competitive Strategy affects Marketing Competency positively

H5 : Competitive Strategy affects Supply Chain Strategy positively

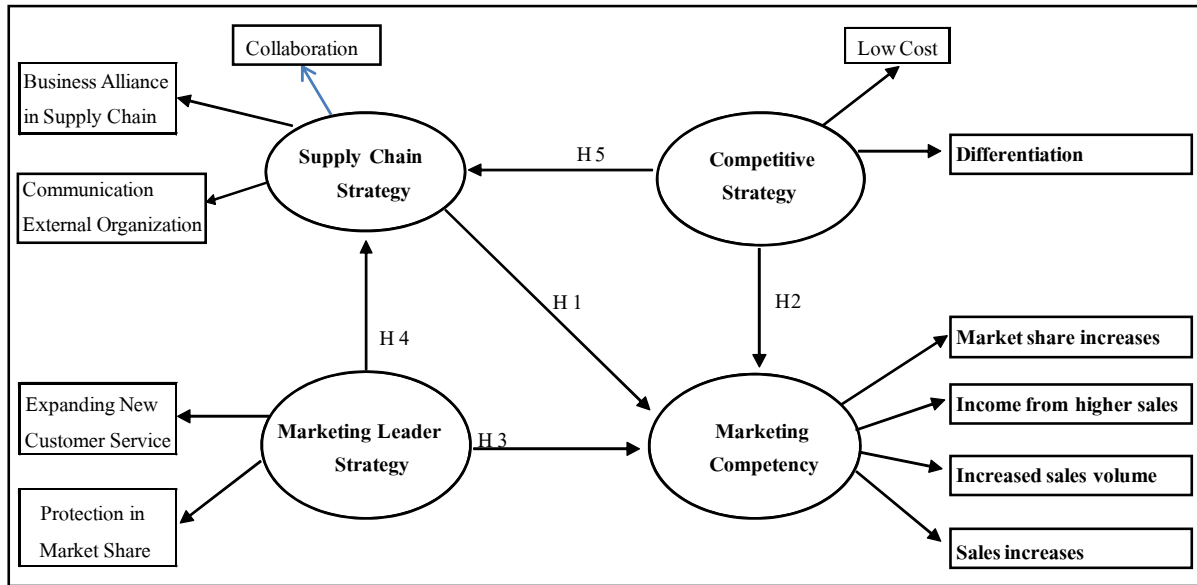
Market Leader Strategy: LMST In order to select particular market strategies, it is essential for firms to take into account the size and ranking of their organizations vis-à-vis rival organizations. Large organizations may have more advantages than small ones insofar, that they can use strategies that small organizations cannot imitate. Conversely, small organizations will have flexibility in using strategies that are inapplicable to large organizations. Industrial firms with only a single entrepreneur can yet be a market leader. Normally, market leaders deem on such numbers like market share. In the market, there are market leaders, challengers, followers, and players in particular roles. To be a market leader can be advantageous if it is possible to determine price mechanisms and market direction. [6,12]

The principles that market leaders should practice are the following: (1) market leaders must find ways to stimulate consumer needs so that they will have more market share by catering to these needs. (2) Market leaders must protect their market share and be ready to fight to regain market share if it declines.

H3 : Marketing Leader Strategy affects Marketing Competency positively

H4 : Marketing Leader Strategy affects Supply Chain Strategy positively

Figure 1: Conceptual Framework



3. Research Methodology

The researchers used both qualitative and quantitative methods in carrying out this research investigation. Therefore, the research instruments were twofold. The qualitative research instrument involved conducting in-depth interviews in order to obtain relevant facts and elicit information to show the precise relationships among variables. Upon collecting this information, the researchers were thereupon able to construct a questionnaire to be used in the quantitative research phase of the investigation.

The quantitative research investigation required using a questionnaire constructed on the basis of a review of the relevant literature and conducting in-depth interviews. As such, the research instruments were used to investigate (1) supply chain strategy; (2) competitive strategy; (3) market leader strategy; and (4) market competency.

The data were obtained from 120 aviation industry administrators from different administrative levels, collected and subsequently analyzed using the structural equation modeling (SEM) technique. The researchers validated the items in the questionnaire in terms of accuracy and reliability using confirmatory factor analysis (CFA). The weight of factors were derived from testing the construct validity of the factors.[5,16]

4. Findings

4.1 Means of Factors Influencing Marketing Competency

In analyzing the means of pertinent factors, the researchers found these factors influenced marketing competence as shown in the following table:

Table 1: Means of Factors Influencing Marketing Competency

Variable	Mean	S.D.	result
Supply Chain Strategy : SCST			
Business Alliances in Supply Chain : STSRE			
Organizations have to share the profit.	4.17	0.48	mostly
Organizations have to share resources.	3.22	0.37	most
The organization is mutually beneficial	4.36	0.38	mostly
The cooperation agreement is clear.	3.99	0.55	most
Collaboration : SCSCO			
The share ideas used in the operation.	4.01	0.37	mostly
The principle of operation is the same goal.	3.27	0.53	most
The organization problem is solved in the workplace.	3.78	0.32	most
The organizations improve collaboration.	3.86	0.22	most
Communication External Organization : SCSTE			
The use of communication technology.	3.88	0.47	most
To share information between organizations.	3.19	0.37	most
The technology used in the recording.	3.01	0.28	most
The e-Commerce system is used in operation.	3.65	0.46	most
The technology is constantly improving.	3.68	0.39	most
Market Leader Strategy : LMST			
Expanding New Customer Service : LMSSE			
Expanding new product for high price product	3.95	0.25	most
Reduction ticket price for high quantity sale	3.81	0.44	most
Expanding new product for new customer	3.22	0.47	most
Expanding new product for reduction price product	4.11	0.38	mostly
Protection in Market Share : LMSPR			
The same group of customers that travel frequently.	3.15	0.48	most
Has issued a request to the client, such as bonus mileage.	3.99	0.65	most
The use of communication to ensure customer product recognition.	3.28	0.36	most
The same position as my passenger food service.	4.52	0.35	mostly
The event to attract more sales.	4.18	0.33	mostly
Competitive Strategy : COST			
Used Low Cost : COSLO			
There is a practice that costs less.	4.16	0.27	mostly
Reducing the use of resources by bringing innovation into practice.	4.22	0.36	mostly

Reducing to the redundancy.	4.65	0.47	mostly
Reducing staff costs by controlling working hours.	4.88	0.37	mostly
Used Differentiation : COSDI			
With open channels to purchase - sale easier.	3.76	0.33	most
Increase the service quality is distinguished from competitors	3.99	0.65	most
Adjusted by the time waiting for a flight for less than the competition.	4.66	0.54	mostly
Marketing Competency : MKCO			
Market share increases.	4.32	0.52	most
Income from higher sales.	3.15	0.45	most
Increased sales volume.	3.71	0.59	most
Sales increases.	3.95	0.68	most

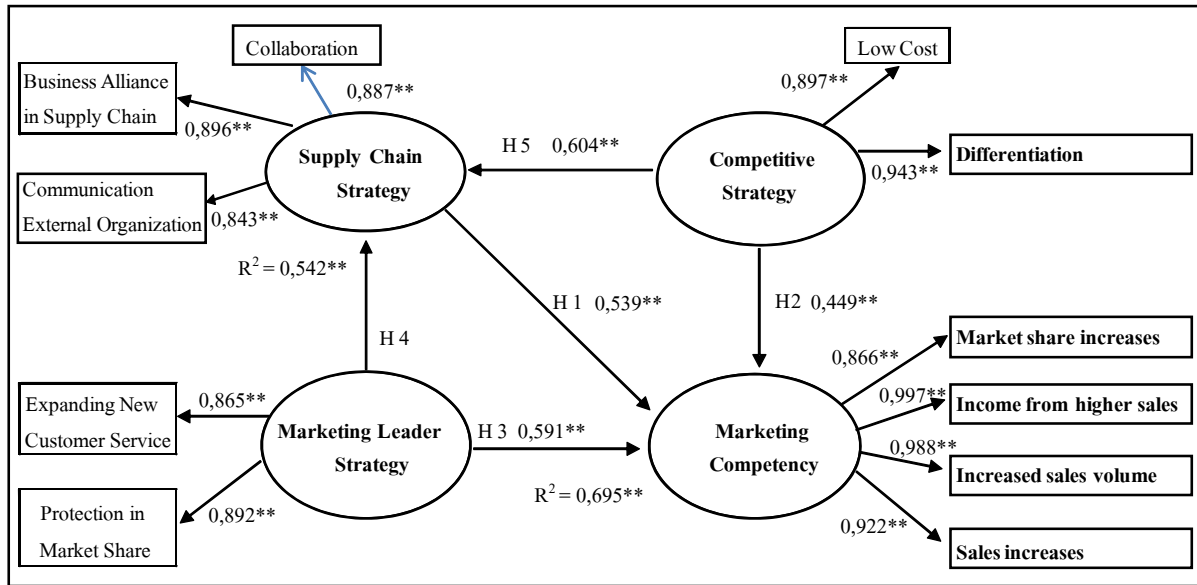
4.2 Analyzing Causal Relationships Involving Marketing Competency

In analyzing the relationships between opposite variables to determine whether the empirical data were congruent with the theory and in accordance with research hypotheses, the researchers found the following:

Using the structural equation modeling (SEM) technique by reference to the conceptual framework adopted by the researchers, it was found that the results were congruent with the empirical data.

In hypothesis testing, the researchers found that the factors of supply chain strategy, competitive strategy, and market leader strategy influenced marketing competency and were explanatory of variances in marketing competency at 69.5 percent ($R^2 = 0.695$) at the statistically significant level of 0.000. The factors of market leader strategy and competitive strategy influenced supply chain strategy and were determined to be explanatory of supply chain strategy at 54.2 percent ($R^2 = 0.542$) at the statistically significant level of 0.000.

Figure 2: The Results of Data Analysis Conducted Using the Structural Equation Modeling Technique



Chi-Square = 88.39, df = 71, p-value = 0.08, $\chi^2 / df = 1.24$, RMSEA = 0.01, GFI = 0.91, AGFI = 0.99, NFI = 0.99, NNFI = 0.97, IFI = 0.96, RFI = 0.99, CFI = 0.98, CN = 329.45 (n = 120),

*means the statistically significant level of .05 ($1.960 \leq t\text{-value} < 2.576$)

**means the statistically significant level of .01 ($t\text{-value} \geq 2.576$)

Hypotheses testing

$$MKCO = \beta_0 + \beta_1 SCST + \beta_2 LMST + \beta_3 COST \zeta_1 \dots\dots\dots(1)$$

$$SCST = \beta_4 + \beta_5 LMST + \beta_6 COST \zeta_2 \dots\dots\dots(2)$$

Table 2: Results of Hypotheses Testing

Path	Path coefficient	t-stat	p-value	result
H1 : Supply Chain Strategy effects Marketing Competency	0.532	5.397**	0.00	support
H2 : Competitive Strategy effects Marketing Competency	0.443	7.636**	0.00	support
H3 : Market Leader Strategy effects Marketing Competency	0.491	5.399**	0.00	support
H4 : Market Leader Strategy effects Supply Chain Strategy	0.449	8.775**	0.00	support
H5 : Competitive Strategy effects Supply Chain Strategy	0.504	7.695**	0.00	support

Table 3: Result of Testing for Path Influences

Variable Result	Marketing Competency (MKCO)			Supply Chain Strategy (SCST)		
Variable Caused	DE	IE	TE	DE	IE	TE
Supply chain strategy: SCST	0.532**	-	0.532	-	-	-
Competitive Strategy: COST	0.443**	0.268**	0.666	0.504**	-	0.304
Market leader Strategy: LMST	0.491**	0.238**	0.721	0.449*	-	0.449
R ²	0.695			0.542		

The Results of Hypotheses Testing

Inspecting the results, it can be inferred that there is an overall influence on marketing competency. As can be shown, depicting the mutual influence between causal variables in each path will provide the means whereby the testing of hypotheses will allow the answering of research questions.

4.3 Analysis Involving Construct Validity

Using analysis involving construct validity, the researchers found the following: The test validating the measurements used in this inquiry suggested that the indicators utilized measured the same construct. The criteria for evaluation used in this connection were that the indicators must have a loading value higher than 0.707 concomitant with a Cronbach’s alpha (α) greater than 0.700 [5], and an average variance extracted (AVE) greater than 0.50 concomitant with a statistically significant level result found upon testing convergent validity. Findings are as follows:

Table 4: The Results of an Analysis of Factorial Construct Validity

Indicator	loading	t-stat	CR	AVE
Supply Chain Strategy: SCST				
SCSRE : Business Alliances in Supply Chain	0.896	11.083	0.882	0.652
SCSCO : Collaboration	0.887	7.857		
SCSTE : Communication External Organization	0.843	10.294		
Market Leader Strategy: LMST				
LMSSE : Expanding New Customer Service	0.885	10.364	0.899	0.611
LMSPR : Protection in Market Share	0.892	11.232		
Competitive Strategy: COST				
COSLO : Used Low cost	0.897	10.997	0.885	0.637
COSDI : Used Differentiation	0.943	9.375		

Marketing Competency: MKCO

MKCTA : Market Share Increases.	0.866	12.336	0.876	0.709
MKCIN : Income from Higher Sales.	0.997	10.011		
MKCQU : Increased Sales Volume.	0.988	12.127		
MKCSA : Sales Increases.	0.992	9.86		

The results from conducting an overall analysis of the measurement model showed construct validity for hidden variables, supply chain strategy, competitive strategy, market leader strategy, and marketing competency. This was equivalent to the relationship path between observed exogenous variables and hidden exogenous variables (λ -X [LAMDA-X]) and the relationship path between observed endogenous variables and hidden endogenous variables (λ -Y [LAMDA-Y]), while taking into account t-values governing the computation of the weight of the factors of concern. All observed variables were validated as being mutually correlated in accordance with the set hypotheses postulated for this investigation.

5. Conclusion

It can be concluded that the strategies that aviation industry administrators should pay greatest heed to are, in the following descending order: supply chain strategy, competitive strategy, and market leader strategy. The statistical values that were explanatory of market competency variances were found to hold at 69.5 percent ($R^2 = 0.695$). Competitive strategy and market leader strategy were determined to be explanatory of variances in supply chain strategy at 54.2 percent ($R^2 = 0.542$).

In addition, it would be well if administrators considered the most appropriate strategy: supply chain strategy with the following ranked in importance: business alliance; communication among organizations; and performance cooperation. Next, in descending order, was the competitive strategy with the following ranking in importance: the use of a low cost strategy and a strategy of differences. Lastly was the market leader strategy with the following ranking in importance: protecting old market share and concomitantly expanding a new customer base. Finally, important factors to be used in the industry were altogether thirty in number.

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