

# Structure, Strategy, and Performance of Indonesian Airlines Toward Open Sky Policy

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**Abstract**— The purpose of the study was to test the relationship between organizational structure, competitive strategy, and the airline's performance with the approach of the resource-based view. The purposive samples method used 72 elections airline manager-level respondents in Soekarno-Hatta airport - Jakarta, Juanda airport - Surabaya, I Gusti Ngurah Rai airport - Denpasar, and Sultan Hasanuddin Airport - Makassar. Primary data measure the organizational structure of variable size (dimensions- centralization, existence, enforcement, and complexity), and competitive strategy variables (dimensions- low-cost, differentiation, and full service), to the airline's performance variables (dimensions-operating, financial, market, and system information). The results of the partial least squares analysis showed that the organizational structure gave a great impact on competitive strategy and so did the competitive strategy to an airline performance. The organizational structure didn't give a direct impact on the performance. The organizational structure was influenced positively by the dimensions of centralization and complexity, and strategies positively influenced by the dimensions of differentiation and full service.

**Index Terms**— Airline performance, strategy, structure.

## 1 INTRODUCTION

The role of air transport in Indonesia is very important because as an archipelago state which has more than 13 thousand islands, including sea, land and air as the unity of the archipelago, with an area more than 1.9 million square kilometers and two thirds oceans, and also a government areas as much as 34 provinces and 514 districts / cities, so that the function of the speed of air freight is very strategic.

In 2014, Indonesian's population was more than 250 million, which was ranked as the fourth largest country in the world, and over 40% of the population in the Association of Southeast Asian Nations (ASEAN) region. Indonesian's air transportation facilities is not less than 233 public airports, including eight primary airports, 19 secondary airports and 41 tertiary airports [1], is a potential market of air transportation.

The potential market and the adequate support of air transportation should provide opportunities in the air freight business to flourish with sustained performance, but the empirical data show that some businesses airline bankruptcies, which is caused by financial performance or mismanagement, as listed in Table 1.

The great potential market for Indonesian's air transportation has a significant effect on the tourism sector and will affect the economic development of the country [2], and the industry will be rapidly changing and hyper-competitive with plans to implement an open sky policy in late 2015 because the study of open sky policy in various countries would increase the competition, improve efficiency, reduce costs, lower market prices, and lower profits for the incumbent airline [3], so it needed to prepare a strategy deal with the achievement of the airline performance.

Airline performance with the environmental conditions which rapidly changing, hyper-competitive and turbulent with unstable customer preferences, in the approach of resource-based view (RBV) can explain the advantage of competitive source [4], with the resources and capabilities are the main consideration in formulating strategy, as well as the process of formulating a strategy with organizational structure is interdependent in ensuring the best performance. Relations of strategy, structure, and performance in the literature can be explained by two approaches: (1) resource-based view that the organizational structure will affect the performance through strategy, while (2) contingency that strategy affect the performance through organizational structure [4], the empirically resource-based view has a stronger influence.

Table 1: Indonesian Airline Suspended Operations

Airline	Establish	Suspended
Adam Air	2003, Dec.	2008, Mar.
Awair	1999, Sep.	2004, Jun.
Batavia Air	2002, Jan.	2013, Jan.
Bouraq Indonesia Airways	1970, Apr.	2005, Jan
Indonesia Airline	1999, Mar.	2003, Apr
Jatayu Airlines	2001, May.	2008, Apr.
Linus Air	2004, Jun.	2009, Apr.
Mandala Airlines	2001, Apr.	2012, Apr.
Sempati Air	1968, Dec.	1998, Jun.
Star Air	2000, Jun	2008, Sep.

Source: Researchers (2016), From various publications.

The research objective was to obtain the variable empirical results that affect the performance of Indonesian airline, in preparation for the implementation of the open sky policy in the ASEAN region, to test whether the organizational structure and competitive strategy affect the airline performance.

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## 2 THEORETICAL FRAMEWORK

### 2.1 Theory Review

The approach of resource-based view (RBV) is to formulate the strategies by understanding the relationship between resources, capabilities, advantage of competitive and profitability in particular, with maximize exploitation the unique characteristics of the company, the design strategy of the company is very important to gain competitive advantage and improve performance [4], the unique characteristics of companies within the structure will affect strategy and optimum performance, aligned with the paradigm structure - strategy - performance.

While in the approach of contingency that the change in the company strategy will cause the changes in the organizational structure in order to achieve optimal

performance, so that the organizational structure be an important element for the implementation of the strategy [5], which is aligned with the paradigm of strategy - structure - performance, and this type of research as seen in Figure1, will test the three variables (constructs) with dimensions of measurement, the airlines or Indonesian airline.

### 2.2 Model Research

Assessment of the research type as seen in Figure 1, includes three testing groups influence variables and dimensions, namely: (1) testing group of the effect of variables (constructs) according paradigm structure – strategy – performance, (2) testing group of influence the dimensions of organizational structure, and (3) testing group of influence strategy dimension.

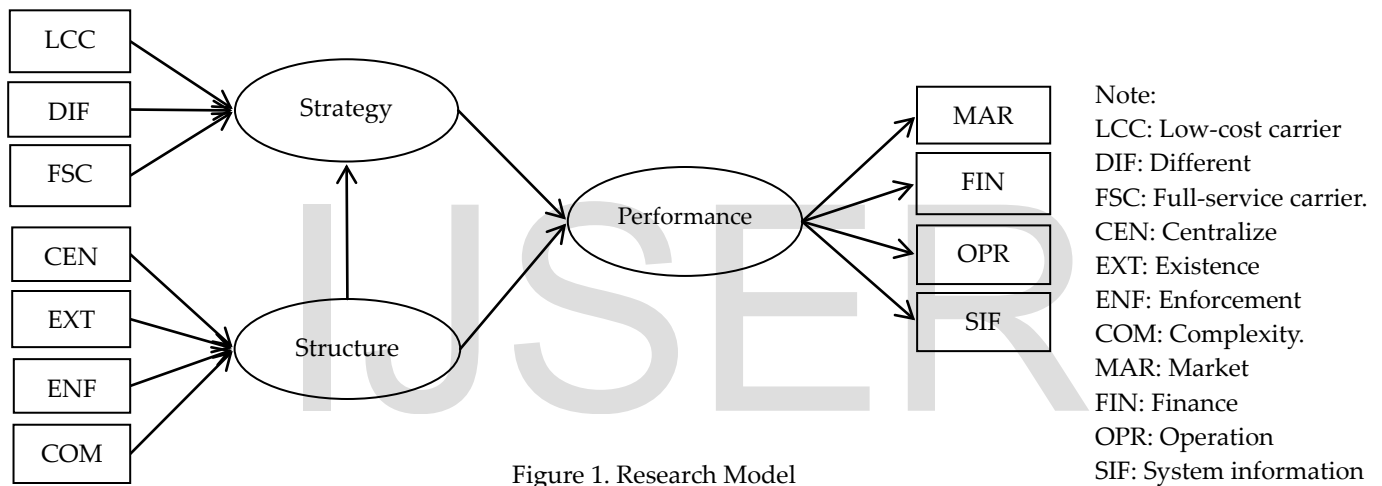


Figure 1. Research Model

Assessment the effect of organizational structure variables (constructs) of the resource-based view approach, based on the organizational structure as a meta-resources and meta-capabilities [6], with a rare character's not easily imitated and not traded. The rare character of complexity of intra-organizational relationships in the design and the specific skills of each airline, and not easily imitated characters such as patents, image, and information systems are a process in the design of an organizational structure that cannot be imitated by other competitors, also not traded character that the particular organizational structure airline cannot be easily transferred because the competitive market is unavailable in the organizational structure. Therefore, the organizational structure contribute to the strategy formulation to fulfill the customers needed better than the competitors, the exploitation of the combination of valuable resources and capabilities [7], so that the organizational structure can affect the strategy, but it does not directly affect the performance [8], then compiled the hypothesis:

H1a: The organizational structure has a positive influence on strategy.

In the contingency approach explain that the organizational structure is an important element of strategy implementation and strategy changes will be caused the changes in the organizational structure [5], so that the organizational structure will affect the performance, because the organizational structure for the implementation of the strategy, then compiled hypothesis:

H1b: The organizational structure has a positive influence on performance.

Strategies in the exploitation of the combination of valuable resources and capabilities is the key to achieving an advantage competitive, with an effort to fulfill the customers needed better than other competitors, will improve performance [9], and intangible resources are the most important resources in the air transport industry [10], with exploitation through competitive strategy and differentiation strategy has a direct positive impact on performance [11]; [12], then compiled the

hypothesis:

H1c: Positive effect of strategy on performance.

Assessment of the dimensional effect of the organizational structure is based on the organizational structure's design of each carrier (airline) is different, and it used four dimensions such as: (1) centralization, (2) existence, (3) enforcement, and (4) complexity which affect the organizational structure's design [4], because the stronger dimensional effect of the construct, indicating that the choice of organizational structure's form is the most appropriate or run the company, then compiled a hypothesis:

H2a: Positive effect of centralization dimensions on the organizational structure.

H2b: Positive effect of existence dimensions on the organizational structure.

H2c: Positive effect of enforcement dimensions on the organizational structure.

H2d: Positive effect of complexity dimensions on the organiza-

tional structure.

Assessment the dimensional effect of the strategy, based on that each carrier (airline) has a different competitive strategy, which in studies using dimensions [4] with modifications such as (1) low cost, (2) differentiation and (3) full service. The stronger dimensional effect of the constructs, shows that the type of competitive strategy used the airline, then compiled hypothesis:

H3a: low-cost dimensions affect the competitive strategy.

H3b: differentiation dimensions affect the competitive strategy.

H3c: full-service dimensions affect the competitive strategy.

### 3 RESEARCH METHOD

This study uses primary data with the operational definition of variables (constructs) of the structure – strategy – performance in Table 2, which replicated previous research.

Table 2. Variable Dimensions Performance, Strategy, and Organizational Structure

Variable & References	Dimensions Construct	Questionary Indicators	Likert Scale
Airline Performance [13], [15]	- Operations	14 items	1 – 10
	- Market	18 items	1= very low,
	- Financial	10 items	10= very high
	- Systems Informasi	9 items	
Strategy [4]	- Low cost	6 items	1 – 7
	- Market differentiation	6 items	1= very low
	- Full service	5 items	7= very high
Organizational Structure [4], [14]	- Centralization	8 items	1 – 7
	- Existence formal	6 items	1 = very low
	- Enforcement formal	4 items	7 = very high
	- Complexity	5 items	

Performance is a measure of the success of airline in managing the company reflected by the dimensions of operations, market, financial and systems information, the modified research [13], [15] with the instrument 51 indicators questionnaire in Likert scale from 1 (very low) to 10 (very high). The strategy is a current competitive strategy that is run by airline formative influenced by the dimensions of the low-cost, differentiation and full-service, modified research [4] with the instrument 17 indicators questionnaire in Likert scale from 1 (very low) to 7 (very high). The organizational structure is the current design of the organizational structure airline that formative influenced by the dimensions of centralization, existence, enforcement and complexity, a modified research [4], [14], with the instrument 23 questionnaires in Likert scale from 1 (very low) to 7 (very high).

The analysis of this study using structural equation modeling (SEM) method of partial least squares (PLS) with software SmartPLS, which test the model structure - strategy - performance in the two evaluations, namely: (1) the evaluation

of the measurement model (outer models) and (2) evaluation of structural models (inner models).

Evaluation of the measurement model (outer model) at dimensions / reflective of the performance construct indicators using: (a.) Convergent validity with parameter loading factor >0.70, (b.) Discriminant validity with cross loading parameter >0.70 between each variable, and (c.) reliability with the reliability of composite parameter >0.70, while the dimensions / formative indicators of the structures construct and strategies construct in this study, it is not necessary the outer models [16] as a formative construct a regression relationship of indicators / dimensions to construct, the evaluation using the coefficient significance to the evaluation of the structural model (inner models). Evaluation of structural models (inner models) is an interpretation of an effect between constructs of the exogenous latent to the endogenous variables, in testing the hypothesis with the parameters: (1) the value of R<sup>2</sup> to the power of influence and (2) the significance test value of t-statistic of each latent variable exogenous.

### 4 RESULT AND DISCUSSION

The research object is the manager airline in Indonesia at eight airports hub primer activity that has more than 5 million passengers a year, out of a total of 233 airports in Indonesia, including 68 airports collector (hub), which comprises 41 hub – secondary airports with passenger one up to five million a year, and the hub – tertiary airports with passenger 500 thousand up to one million a year, and the rest is a feeder airport (spoke) [17]. Total population airline managers at eight airports hub – primary airport as many as 224 managers from 28 domestic airlines plus 20% of the foreign airline managers, bringing the total population of not less than 270 airline managers who have a depth understanding of airline activity.

The research samples using *Purposive* sampling method at four airports in Jakarta, Surabaya, Denpasar and Makassar, which is the hub – primary airport with highest number of passenger services on airline managers of domestic and foreign commercial category schedule, by sending a questionnaire to 90 managers and 93.3% responded and 80% or 72 respondents used such as Table 3.

Table 3. Respons Rate Research Sample

Questionary	Total	Percent
Total delivery questionnaires	90	100%
Not responds questionnaires	6	6,7%
Questionnaires responded	84	93,3%
Incomplete	12	13,3%
Questionnaires can be used	72	80,0%

Source: Researchers (2016), Research data processing.

Respondents 72 who used this study, the gender composition of 86% male respondents that are characteristic of the aviation industry that more employed men.

The age composition as much as 51% of respondents aged 40-50 years and 49% of them over 50 years, the regenerated airline managers have ready within the next five years.

The composition of the post as of respondents as much as 68% is station manager and the operations manager, and the rest of the financial managers and others, which illustrates that respondents understand more flight operations, it is the goal of this research, and reinforced by the composition of the work experience of respondents, 56% had worked over 5-10 years and 36% over 10 years.

The descriptive statistics for the three constructs of the performance, strategy and structure, in this research that the construct of performance with the four dimensions of a scale of 1-10, the average (mean) 7.21 lowest on the dimensions of operation and the highest of 7.25 on the financial dimension, and construct a strategy to compete with the three dimensions on a scale of 1-7 on average (mean) 5.33 lows in the low-cost and differentiation and the highest 5.60 in the full-service, as well as the organizational structure with the four dimensions of a scale of 1-7 is the average (mean) the lowest and the highest 5.00 on enforcement of 5.42 in existence formalization.

Evaluation of the model as shown in Figure-2 that the tests conducted on: (1) the evaluation of the measurement model (outer models) to test the validity and reliability of measurement, and (2) the evaluation of the structural model (inner models) to test the hypothesis of the influence of latent variable exogenous to the latent variables endogenous.

Evaluation of the measurement model (outer models) on a reflexive construct performance indicators, show that the validity test convergent of the fourth dimension has the lowest loading factor of 0.923 and 0.987 and the highest average variance extracted (AVE) of 0.924 or have a value >0.70 which means that all indicators valid on convergent validity.

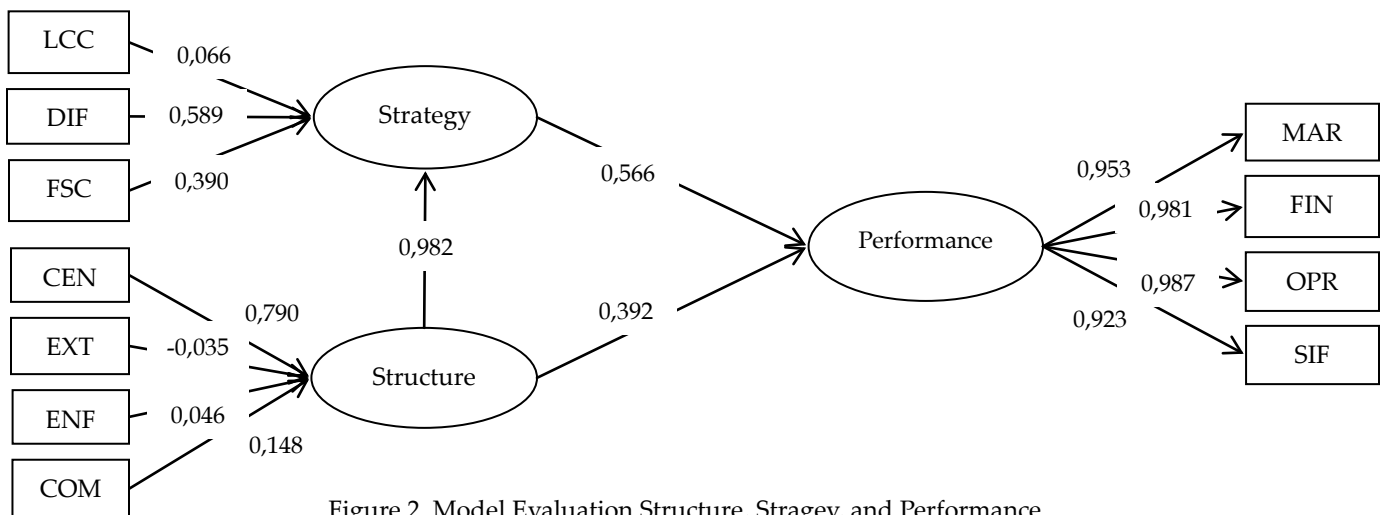


Figure 2. Model Evaluation Structure, Stragey, and Performance



Discriminant validity test using the square root of cross loading and AVE, which in the model is only one-dimensional constructs with reflective performance, so it is not necessarily across loading value, and the value of the square root of AVE is  $\sqrt{0.924} = 0.789$  or  $>0.70$ , which means that the construct of performance valid. Reliability testing shows a composite reliability value of 0.980 or  $>0.70$ , so it can be summed up all the reflexive construct indicators are reliable.

Evaluation of structural models (inner models) on the construct of the structure - strategy - performance as shown in

Table 4, that the  $R^2$  test indicates latent variable endogenous performance has an  $R^2$  value of 0.964 and latent variables endogenous strategy has an  $R^2$  value of 0.909, and  $R^2$  values above 0.75 and above it can be concluded that the model is strong and represents the number of variants of constructs that can be explained by the model or 96.4% of variability the performance construct can be explained by constructs strategies, and 90.9% of variability the construct strategies can be explained by constructs organizational structure on the airline.

Table 4. Model Evaluation Structure (Inner Models)

Constructs	Coefficients	Correlations	Mean Samples	Std Deviation	T-Statistics	Result
Structure -> Strategy	0.982		0.983	0.004	236.033	Sign <sup>*)</sup>
Strategy -> Performance	0.566		0.611	0.246	2.302	Sign <sup>*)</sup>
Structure -> Performance	0.392		0.349	0.241	1.622	Not Sign

Source: Output PLS (2015). bootstrapping.inner\_weights. \*)Level of sign 0.01

Hypothesis testing the effect of the construct structure - strategy - performance in Table 4, with the results of the structural path coefficients and t-statistics, showing the influence of structure the strategy has a coefficient of 0.982 and t value  $>1.965$  or significant at 0.05, hypothesis (H1a) is accepted, then the influence of the structure on the performance has a coefficient of 0.392 and t value  $<1.965$  which means that the hypothesis (H1b) was rejected, and the effect of the strategy on the performance has a coefficient of 0.566 and the value of  $t > 1.965$  or significant at 0.05, which means that the hypothesis (H1c) received.

The hypothesis of formative indicators to construct an organizational structure in Table 5, four-dimensional show that: (1) the dimensions of centralization (CEN) influence to construct an organizational structure has a coefficient of 0.790 and  $t > 1.965$  or significant at 0.05, hypothesis (H2a) received, which means CEN is valid to measure the structure construct, (2) the dimensions of existence (EXT) positive effect on the organizational structure has a coefficient of -0.035 and  $t < 1.965$ , then the hypothesis (H2b) rejected, (3) the dimension's enforcement (ENF) positive effect on the organizational structure has a coefficient of 0.046 and  $t < 1.965$ , then the hypothesis (H2c) was rejected, and (4) the dimensions of complexity (COM) positive effect on the organizational structure has a coefficient of 0.148 and the value  $t > 1.965$  or significant at 0.05, then hypothesis (H2d) is received, which means that the dimensions of complexity construct valid measure of organizational structure.

The hypothesis of formative indicators to construct a strategy to compete in Table 5, from three-dimensional show that: (1) the dimensions of the low-cost (LCC) effect on the performance of airline has a coefficient of 0.066 and  $t < 1.965$ , then the hypothesis (H3a) rejected, (2) the dimensions of differentiation (DIF) positive effect on airline performance has a coefficient

of 0.589 and  $t > 1.965$  or significant at 0.05, then hypothesis (H3b) is received, which means that the dimensions of differentiation construct valid measure airline performance, (3) the dimensions of a full-service (FSC) positive effect on airline performance has a coefficient of 0.390 and  $t > 1.965$  or significant at 0.05, then hypothesis (H3c) is received, which means that the dimensions of a full-service airline performance construct valid measure.

The effect of the organizational structure of the competitive strategy is a significant positive. Supports the findings [4], which compares the effect of organizational structure on the strategy to approach resource-based view to influence the strategy of the organizational structure with the approach of contingency, and found that the effect of the organizational structure to strategy RBV approach is stronger than the effect of the strategy on the organizational structure contingency approach, although both approaches are equally significant.

Research approach RBV with the consideration that the strategy in the aviation industry in the survey is an indicator of competitive strategy in the face of the open sky policy that would apply in Indonesia, as well as competitive strategy is more flexible compared with the company strategy required a fundamental change in strategy changes therefore design organizational structure as internal resources in formulating competitive strategy as a meta-resource companies that cannot be assessed by the customer, can be a source of competitive advantage [4].

The effect of the organizational structure of the performance is not significant, supporting the findings [4], that the testing approach to resource-based view and the approach contingency were both found not significant, which means that the organizational structure cannot directly affect the airline's performance but through strategy. The effect of strategy on performance airline significantly positive,

supporting the findings [4], that the testing approach to resource-based view is stronger, which means that the competing strategies affect the performance of airline directly, and be a mediator of the structural organization.

The effect of four dimensions formative on the structure of the organization, that influences the dimensions of centralization and complexity construct valid measure of organizational structure, while the dimensions of existence and enforcement has no effect on the construct of organizational

structure, these findings support the research [18] that the industry structure determines the characteristics of the organization. Empirical evidence of respondents use airline branch manager in Jakarta, Surabaya, Denpasar, and Makassar, with airline centralized organizational structure (centralization) is still in progress in practice, and the strategic policy into the realm of headquarters.

Table 5. Model Evaluation Structure and Strategy (Formative)

Constructs / Indicators	Orig.sample estimate	mean of subsamples	Std deviation	T-Statistic	Results
<b>Strategy:</b>					
Low-cost carrier	0.066	0.063	0.041	1.599	Not sign
Different carrier	0.589	0.566	0.073	8.022	Significant*)
Full-service carrier	0.390	0.415	0.083	4.728	Significant*)
<b>Structure:</b>					
Centralize	0.790	0.805	0.092	8.592	Significant*)
Existence	-0.035	-0.045	0.076	0.468	Not sign
Enforcement	0.046	0.041	0.068	0.676	Not sign
Complexity	0.148	0.127	0.076	1.939	Significant*)

Source: Output PLS (2015). Bootstrapping.outer\_weights. \*) Level of sign 0.01.

The effect of the third dimension of the formative competitive strategy that the dimensions of the low-cost no effect, and the second dimension of differentiation and valid measure the construct full-service competitive strategy. The results of this survey provide confirmation that the airline in Indonesia is not fully using the strategy of a low-cost and empirically that some airline using the full service also at the same low cost such as aircraft ownership with the type of diverse, but also does not fully implement the full service as well as between select market differentiation. These findings support the [19] that the business model airline is stuck in the middle, or the study [4], which shows the strategy choices airline ambiguity does not focus on one dimension of a particular strategy, for example, low-cost, differentiation or full-service. Empirical evidence shows that the competitive strategy of low-cost airline, with advertisement promo ticket (low-cost), but on other airlines provide full service.

## 5 CONCLUSION

The results showed that: (1) the organizational structure affects the airline's competitive strategy, (2) the organizational structure does not affect performance, and (3) competitive strategy affect airline performance.

Airline organizational structure dimensions with centralization design and complexity, and not the design of existence and enforcement. Dimensions competitive strategy chosen airline differentiation and dimensions full service, while the low-cost strategy is not a strategy focused airline, or the airline

strategies are ambiguous or stuck in the middle, do not focus on one particular strategy dimension.

Limitations of the sample of this study was the branch manager of the four airports location (Jakarta, Surabaya, Denpasar, and Makassar) target respondents, has its limitations: (1) strategic decision making more done by the head office airline and of the number of managers airline in Indonesia, (2) other airports are being targeted are still relatively plentiful in Indonesia, there are 26 airports which that is an international airport, so it is advisable to consider the respondent of directors (board) for a more in-depth understanding of competitive strategy.

The future researchers need to consider the factor of innovation to strengthen the effect of strategy on performance approach to resource-based view, because in the environment of the airline industry is changing very rapidly upon the enforcement of the open sky policy, the manager airline must be flexible with changes in competitive strategy, and to get the competitive advantage required unique resources and capabilities of the organization.

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## REFERENCES

- [1] B. Saraswati and S. Hanaoka, "Aviation policy in Indonesia and its relation to ASEAN single aviation market," *J. East. Asia Soc. Transp. Stud.*, vol. 10, pp. 2161–2176, 2013.
- [2] I Gusti Ngurah Irwan Dharmawan, "The Effect of Air Transport on Economic Development in Indonesia," Erasmus University of Rotterdam, 2012.
- [3] V. Alves and R. Forte, "A Cournot model for analyzing the effects of an open skies agreement," *J. Air Transp. Manag.*, vol. 42, pp. 125–134, Jan. 2015.
- [4] E. M. Pertusa-Ortega, J. F. Molina-Azorín, and E. Claver-Cortés, "Competitive strategy, structure and firm performance," *Manag. Decis.*, vol. 48, no. 8, pp. 1282–1303, 2010.
- [5] F. Okumus, "A framework to implement strategies in organizations," *Manag. Decis.*, vol. 41, no. 9, pp. 871–882, Nov. 2003.
- [6] U. Ljungquist, "Core competency beyond identification: presentation of a model," *Manag. Decis.*, vol. 45, no. 3, pp. 393–402, Apr. 2007.
- [7] S. L. Newbert, "Value, rareness, competitive advantage, and performance: a conceptual-level empirical investigation of the resource-based view of the firm," *Strategy Manag. J.*, vol. 29, no. 7, pp. 745–768, Jul. 2008.
- [8] B. Eriksen, "Organization design constraints on strategy and performance," in *Organization Design*, R. M. Burton, B. Eriksen, D. D. Hakonsson, and C. C. Snow, Eds. Springer Science+Business Media, LLC, 2006, pp. 165–180.
- [9] S. L. Newbert, "Value, Rareness, Competitive Advantage, and Performance: A Conceptual-level Empirical Investigation of the Resource-Based View of the Firm," *Strategic Manag. J.*, vol. 29, no. 7, pp. 745–768, 2008.
- [10] J. M. W. Low and B. K. Lee, "Effects of internal resources on airline competitiveness," *J. Air Transp. Manag.*, vol. 36, pp. 23–32, 2014.
- [11] R. D. Banker, "Does a differentiation strategy lead to more sustainable financial performance than a cost leadership strategy?," *Manag. Decis.*, vol. 52, no. 5, pp. 872–896, 2014.
- [12] P. Tavitiyaman, H. Qiu Zhang, and H. Qu, "The effect of competitive strategies and organizational structure on hotel performance," *Int. J. Contemp. Hosp. Manag.*, vol. 24, no. 1, pp. 140–159, Feb. 2012.
- [13] V. S. Gudmundsson, "Airline failure and distress prediction: a comparison of quantitative and qualitative models," *Transp. Res. Part E Logistics. Transp. Rev.*, vol. 35, no. 3, pp. 155–182, Sep. 1999.
- [14] D. Miller, "Successful change leaders: What makes them? What do they do that is different?," *J. Chang. Manag.*, vol. 2, no. 4, pp. 359–368, Dec. 2001.
- [15] M. J. Carastro, "Nonfinancial Performance Indicators For U.S. Airlines: A Statistical Analysis," A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Business Administration. University of Phoenix, 2010.
- [16] N. P. Podsakoff, W. Shen, and P. M. Podsakoff, "The Role of Formative Measurement Models in Strategic Management Research," *Res. Methodol. Strategy Manag.*, vol. 3, pp. 197–252, 2006.
- [17] S. Hanaoka, M. Takebayashi, T. Ishikura, and B. Saraswati, "Low-cost carriers versus full-service carriers in ASEAN: The impact of liberalization policy on competition," *J. Air Transp. Manag.*, vol. 40, pp. 96–105, 2014.
- [18] J. Andersén, "Strategic resources and firm performance," *Manag. Decis.*, vol. 49, no. 1, pp. 87–98, Feb. 2011.
- [19] M. Franke, "Innovation: The winning formula to regain profitability in aviation?," *J. Air Transp. Manag.*, vol. 13, no. 1, pp. 23–30, Jan. 2007.