

Building Model of Company Positional Advantage Based on Industry Environmental and Service Portfolio

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ABSTRACT

Company positional advantage is important for airports in Indonesia. But there are still facts about the problem in this regard. In addition, there are phenomenon related to service portfolios and in adapting the industry environment. Therefore, this study aims to examine the effect of the industry environment and service portfolio on the company positional advantage in the airport industry in Indonesia.

The type of research used in this study is verification. The unit of analysis is airports in Indonesia. The observation unit is airport management in Indonesia. The research data is collected in the time horizon of cross section / one shoot. The population in this study is all airports in Indonesia. Samples is taken as many as 50 airports. The causality analysis in this research uses Partial Least Square.

The results show that company positional advantages is more dominantly formed by services portfolio, supported by the industry environment. The results of this study have implications for airport management that the development of company positional advantages can be done by developing the services portfolio, especially in terms of service retirement, followed by sourcing, introducing, maintaining, bundling, and commercialization. Meanwhile, the adaptation of the industry environment, needs to be prioritized on the aspects of micro environment.

Keywords

industry environmental, service portfolio, company positional advantage.

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Introduction

The total aircraft movement in Indonesia has increased from 2013 to 2017, with an average growth of 5%. The growth of air transportation from year to year shows that the mode of air transportation is the community's first choice by considering relatively predictable travel time. The average passenger movement throughout Indonesia in one year is 188 million people with an average growth of 5.5% (five point five percent). Of course, these figures for business people and the government sector in moving the economic wheel is a pretty good potential. The air cargo industry has a good opportunity. In Indonesia, this industry is mostly transported by commercial aircraft/passenger aircraft. Over the past 5 (five) years (2013-2017), there was an average of 1,436,029 kg of the air cargo movement in Indonesia or an average growth of 4.1% (four points one percent).

It is important for airports to have a positional advantage. Understanding positional advantage is a superior position in the market that is able to provide superior customer value and achievement of relatively lower costs [13]. The concept of positional excellence is a complex collection of skills that can lead to position superiority [7]. The positional advantage based on dimensions of cost advantage, promotion advantage, and sales excellence [13].

The observations indicate that there are factual problems in terms of company positional advantages for airports in Indonesia, such as the costs of business actors (Cost of Good Sales) that are too large so that make them uncompetitive. In addition, the efforts to promote the strategy of infrastructure and services that are owned are also less optimal, so they are less attractive to visitors.

Building competitive advantage begins with a thorough analysis of the strategic situation that includes an

understanding of the external and internal business environment [4]. This implies that airport managers are able to understand the developing industry environment related to airport. The industry environment is a set of factors that directly influence a company and its competitive actions and responses which include: the threat of new entrants, supplier strength, buyer strength, threat of substitute products, and intensity of competition among competitors [10]. The interaction between the five factors determines the profit potential of an industry, and in turn, the profit potential of industry influences the company's choices in terms of competitive action and response

The results of observations note that there are still phenomena related to the environmental industry, based on a study of existing concepts, such as: the support from political stability that can have an impact on the attractiveness of using airplane transportation modes. The relative power of other stakeholders which includes various stakeholder groups from the task environment, such as government, local communities, creditors, trade associations, specific interest groups, unions, shareholders, and complementary forces [17]. This seems to be still not fully adapted, because it is related to existing regulations and poor coordination with related parties. Economic development can cause a decrease in the number of passengers.

The airport needs to have the appropriate service portfolio in order to be able to produce superior service performance, in order to carry out the functions of safety, security, fluency, and order flow of aircraft, passenger, cargo and/or postal traffic, places of intermodal movement and to improve the national and regional economic growth. Companies who want to have the best performance, must use several

portfolio tools with clear and well-defined rules that consistently apply to all ideas and projects [1].

However, based on the observations in accordance with the concept of service portfolio, it is found that there is problem phenomena such as in some portfolio tools that do not yet have clear and well-defined rules so that they have not been able to be consistently applied to all services. There still any change of gate for boarding. Often the gate changes are made suddenly or by a short time boarding, while the gate change information is only voiced once through the speaker. This indicates a problem in coordinating passenger services. Based on this background, this study aims to examine the effect of the industry environment and service portfolio on the company positional advantages of airports in Indonesia.

Literature Review

Industry Environment

Th external forces are divided into five broad categories, namely: (1) economic power, (2) social, cultural, demographic, and environmental forces, (3) political, government, and legal forces, (4) technological strength, (5) competitive strength [6]. The external environment includes the macro environment and the micro environment [2]. The industrial environment is a set of factors that directly affect the company and its competitive actions and responses which include: the threat of new entrants, supplier strength, buyer strength, threat of substitute products, and intensity of competition among competitors [10]. Based on the comparison of these dimensions, according to the unit of research analysis namely the airport industry, the construct dimension is most suitable for measuring the Industry Environment are the macro environment and microenvironment.

Service Portfolio

Companies who want to have the best performance must use several portfolio tools with clear and well-defined rule that consistently apply to all ideas and projects [1]. Service Portfolio provides three levels of views, namely conceptual views, logical views, and physical views [3]. The conceptual view supports the conceptualization of services and governance needs, while the logical view provides an architectural component for conceptualized services; while the physical view identifies the physical implementation component of a service. Services portfolio may not exist in organizations as formal "things", but are ideal if they exist [15]. However, with or without service portfolios, customers, users, and other stakeholders develop perceptions about what service providers have in pipelines, catalogs and collections of retired services. The tasks of the SPM system include: Introduce, Maintain, Service retirement, Bundling, Sourcing, Commercialization [11]. Based on the description of the concept, the service portfolio in this study is tested with dimensions: Introduce, Maintain, Service retirement, Bundling, Sourcing, Commercialization.

Company Positional Advantage

The effectiveness of business practices, excellence in value creation, operational innovation efficiency, strategic advantage, and corporate profitability are positional advantages that lead to company success [5]. Positional advantages based on dimensions: cost advantage, promotion advantage, and sales excellence [13]. Cost advantages include a reduction in the relative costs of producing and marketing valuable offers, which correlate with the actual selling price, and payment and credit terms. Promotional excellence occurs when consumers are familiar with brands and have unique brand associations in memory. Promotional advantages consider brand image, brand awareness, share of mind, and brand personality. Sales excellence considers service before and after sale in terms of support, availability, expertise and quality of service. Dimensions and indicators used are [13]:

- a. Cost advantages: raw material costs, actual selling prices, payment and credit terms.
- b. Promotion advantages: image, brand awareness, share of mind, and brand personality.
- c. Sales advantage: Pre- and After sales technical support, Pre-and After-sales service availability, Pre-and After-sales service expertise, Pre-and After-sales service quality.

Positional advantage is achieved from effectiveness advantage and/or efficiency advantage [14]. The effectiveness advantage is achieved by creating more value than its competitors at comparable costs. While efficiency gains are achieved by creating comparable values at lower costs than competitors. For the purposes of this study, company positional advantage, measured by dimensions consisting of: cost advantage, promotion advantage, and sales advantage.

Hypothesis Development

Building competitive advantage begins with a thorough analysis of the strategic situation that includes the understanding of the external and internal business environment [4]. So based on this research it can be said that the industry environment influences company positional advantage. Marketing capabilities will enable companies to provide better products and services than competitors [13]. Marketing ability was found to have an effect on position superiority. So based on this research it can be said that service portfolio influences company positional advantage. Based on the two studies, the following hypothesis is arranged:

H: industry environmental and service portfolio have an effect on company positional advantage.

Methodology

The type of research used in this study is verification. The purpose of verification is to determine the relationship of each variable in the study by using hypotheses to be carried out in the field. The survey method applied is an explanatory survey conducted to determine the characteristics of variables by studying samples.

The analysis unit in this study is airports in Indonesia. The observation unit is airport management in Indonesia. The research data collected is within the time horizon of a cross

section / one shoot, meaning that the information or data is collected directly at the scene empirically at one particular time.

Population is a combination of all elements that have a set of similar characteristics [12]. While the sample definition is a sub-element of the population selected to participate in the study. Based on this understanding, the population in this study is all airports in Indonesia. Samples were taken as many as 50 airports.

Causality analysis in this study is used to obtain an evidence of a causal relationship between variables. This analysis is to answer the research objectives by using Partial Least Square (PLS) which is one of the multivariate techniques that examines the series of dependency relationships between latent variables.

Results and Findings

In this section will be presented the results of analysis based on PLS method.

Result of Model Analysis Using PLS

Evaluation of Measurement Model (Outer Model)

The outer model is the part of the model that describes a relationship among latent variables and manifest. Tests performed on outer models include:

- Convergent Validity is assessed by examining the average variance extracted (AVE), which provides the sum of variance that a construct gains from its items in relation to the amount of the variance due to the measurement error. Table 1 shows that the values of average variance extracted (AVE) of all the constructs are greater than 0.50 at the construct level. Hence, the measurement model's convergent validity is acceptable.

- Composite Reliability, measures of construct reliability include Cronbach's alpha and composite reliability. The study reported both Cronbach's alpha and composite reliability recommended that researchers examine Cronbach's alpha, composite reliability to assess reflective construct properties. Table 1 shows that all of the values of Cronbach's alpha and composite reliability are greater than or equal to 0.70, suggesting acceptable reliability. Data that has composite reliability > 0.7 has high reliability.

Table 1 : Evaluation of Measurement Model (Outer Model)

Construct	AVE	Composite Reliability	Cronbach Alpha
INDUSTRIAL ENVT	0.540	0.927	0.912
SERVICE PORTOFOLIO	0.678	0.962	0.956
COMPANY POSITIONAL ADVTG	0.701	0.959	0.952

By definition loading factor is a large correlation between the indicator and its latent construct. In many social studies, the measurement of a construct is very often done indirectly through its indicators. Indicators with high loading factors have a higher contribution to explain the latent construct.

Conversely, indicators with low loading factors have weak contributions to explain the latent construct. In most references a factor weight of 0.50 or more is considered to have validation that is strong enough to explain latent constructs [8].

Table 2 : Convergent Validity Dimension-Indicator (1st order)

Indicator-Dimension	λ	SE	t value
IE1 <- Macro Environment	0.827	0.038	21.633
IE2 <- Macro Environment	0.876	0.033	26.459
IE3 <- Macro Environment	0.806	0.049	16.552
IE4 <- Macro Environment	0.781	0.058	13.472
IE5 <- Micro Environment	0.799	0.041	19.281
IE6 <- Micro Environment	0.828	0.052	15.893
IE7 <- Micro Environment	0.709	0.061	11.533
IE8 <- Micro Environment	0.856	0.025	34.121
IE9 <- Micro Environment	0.916	0.015	59.862
IE10 <- Micro Environment	0.656	0.055	11.894
IE11 <- Micro Environment	0.770	0.046	16.791
SP1 <- Introduce	0.943	0.012	80.853
SP2 <- Introduce	0.944	0.011	82.086
SP3 <- Maintain	0.836	0.043	19.539
SP4 <- Maintain	0.908	0.016	57.695
SP5 <- Maintain	0.893	0.023	39.201
SP6 <- Service retirement	0.933	0.019	50.061
SP7 <- Service retirement	0.917	0.020	46.696
SP8 <- Service retirement	0.901	0.018	49.139
SP9 <- Bundling	1.000		
SP10 <- Sourcing	0.936	0.017	56.621
SP11 <- Sourcing	0.931	0.020	47.421
SP12 <- Commercialization	1.000		
CPA1 <- Cost advantage	0.944	0.016	59.681
CPA2 <- Cost advantage	0.951	0.016	59.011
CPA3 <- Cost advantage	0.931	0.013	69.551
CPA4 <- Promotion advantage	0.943	0.011	82.574
CPA5 <- Promotion advantage	0.960	0.012	79.850
CPA6 <- Promotion advantage	0.939	0.010	92.985
CPA7 <- Sales advantage	0.879	0.022	39.478
CPA8 <- Sales advantage	0.933	0.015	63.279
CPA9 <- Sales advantage	0.873	0.028	31.206
CPA10 <- Sales advantage	0.948	0.010	90.470

The value of convergent validity is the value of the loading factor in the latent variable with its indicators. The value of loading factor > 0.7, means that each indicator is a valid measuring tool in measuring latent variables in first order.

Table 3: Convergent Validity of Latent Variables – Dimensions (2nd order)

Variable-Dimension	λ	SE	t value
COMPANY POSITIONAL ADVTG - > Cost advantage	0.858	0.028	30.308
COMPANY POSITIONAL ADVTG - > Promotion advantage	0.890	0.024	36.399
COMPANY POSITIONAL ADVTG - > Sales advantage	0.940	0.014	67.637
INDUSTRY ENVT -> Micro Environment	0.952	0.007	126.982
INDUSTRY ENVT -> Macro Environment	0.849	0.039	21.649
SERVICE PORTOFOLIO -> Bundling	0.870	0.028	31.523
SERVICE PORTOFOLIO -> Commercialization	0.770	0.044	17.646
SERVICE PORTOFOLIO -> Introduce	0.894	0.026	34.516
SERVICE PORTOFOLIO -> Maintain	0.883	0.027	32.929
SERVICE PORTOFOLIO -> Service retirement	0.922	0.026	35.985
SERVICE PORTOFOLIO -> Sourcing	0.902	0.018	48.979

The value of convergent validity is the value of the loading factor in the latent variable with its indicators. The value of loading factor > 0.7, means that each indicator is a valid measuring tool in measuring latent variables in second order.

Evaluation of Structural Model (Inner Model)

The evaluation of inner model can be done through three ways, namely by viewing the value of R², Q² and GoF.

Table 4 : Evaluation of Structural Model (Inner Model)

	R-Square	Q-square	Goodness of Fit (GoF) Index
INDUSTRY ENVT		0.519	0,652
SERVICE PORTOFOLIO		0.668	
COMPANY POSITIONAL ADVTG	0.680	0.689	

The value of GoF small = 0.1, GoF medium = 0.25 and GoF large = 0.38 [16]. From the testing of R², Q² and GoF, it is seen that the model formed is robust. So that hypothesis testing can be done.

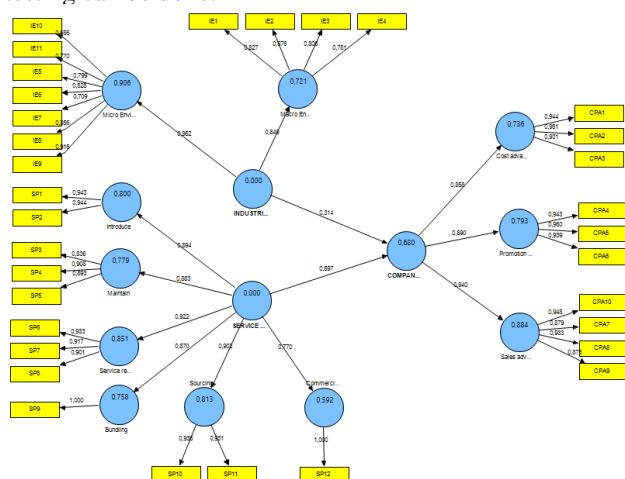


Figure 1 : Complete Path Diagram of Research Model

Based on the research framework, then obtained a structural model: $\eta_1 = 0.314\xi_1 + 0.597\xi_2 + \zeta_1$
 η_1 = Company positional advantage
 ξ_1 = Industry environmental
 ξ_2 = Service portfolio
 ζ_1 = Residual

Hypothesis Testing

Below is the result of hypothesis testing partially.

Table 5: Partial Testing of Hypothesis

Hypothesis	γ	SE(γ)	t	R ²	Conclusion
INDUSTRY ENVT -> COMPANY POSITIONAL ADVTG	0,314	0,069	4,571*	0.211	Hypothesis accepted
SERVICE PORTOFOLIO -> COMPANY POSITIONAL ADVTG	0,597	0,069	8,616*	0.469	Hypothesis accepted

* significant at $\alpha=0.05$ (t table =2.05)

Table 5 shows that partially, industry environmental and service portfolio are influential significantly to company positional advantage which is service portfolio has a greater influence (R²= 0.469).

The test results show the support for the hypothesis that the industry environmental and service portfolio influence the company positional advantage. Company positional advantage is more dominantly influenced by the service portfolio and supported by the industry environmental. The service portfolio dimension that has the highest influence is the aspect of service retirement, followed by sourcing, introducing, maintaining, bundling, and commercialization. Meanwhile, on industry environment variables, the dimensions of the micro environment have a greater influence than the macro environment.

This finding is in line with the other results who found that marketing capabilities will enable companies to provide better products and services than competitors [13]. Marketing ability is found to have an effect on position superiority, which illustrates that portfolio service affects position superiority.

The findings also reveal that the industrial environment also influences position superiority. As such, this is in line with other research findings that building competitive advantage begins with a thorough analysis of the strategic situation that includes understanding the external and internal business environment [4].

Conclusion and Recommendation

Based on the results of hypothesis testing, it can be concluded that the industry environmental and service portfolio have an effect on company positional advantage. Company positional advantage is more dominantly influenced by the service portfolio, which is supported by the industry environmental. Service retirement, is the service portfolio aspect that has the highest influence, followed by sourcing, introducing, maintaining, bundling, and commercialization. While in the industry environmental variable, the micro environment has a greater influence than the macro environment.

The results of this study have implications for airport management in Indonesia, that the efforts to increase the positional advantage can be done by increasing the service portfolio that is supported by the adaptation of the industry environmental. Therefore, it is recommended to increase improvements in terms of:

a. Strengthening service portfolio, which is related to:

- Service retirement, i.e. in terms of the implementation of service mapping that has reached the end of economic or technical competitiveness, providing information to the active service user base on services that are terminated, and service evaluations which is dismissed.

- Sourcing, namely in terms of the ability to identify the services provided by the organization (insourcing) and the ability to identify the services purchased from external providers (outsourcing).

- Introduce, namely in terms of the implementation of the link between new services and existing services and analysis of how does new services impact other services from the portfolio.

- Maintain, namely in terms of the implementation of market analysis and service feasibility analysis.

- Bundling, which is in terms of the ability to identify services that can (and should) be packaged together.

- Commercialization, namely in terms of the implementation of service commercialization.

b. Industry environmental adaptation, namely in terms of:

- Microenvironment, which includes: regulators, customers, intermediation institutions, suppliers, and local government.

- Macro environment, which includes: cultural, social, political, demographic, economic, and technology.

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