

The Influence of External Factor on Organization Capability of Schedule Airline in Indonesia¹

Jaka Pujiyono² Nunung Nuryartono³ Mangara Tambunan⁴ Setiadi Djohar⁵

1. Part of the Dissertation

2. Student of IPB doctoral programs , Institute Pertanian Bogor, Indonesia

3. Chief of Advisory Committee and the teaching staff of Institute Pertanian Bogor. ,Indonesia

4. Member of Advisory Committee and the teaching staff of Institute Pertanian Bogor.,Indonesia

5. Member of commission Advisors and faculty DMB Institute Pertanian Bogor, Indonesia

Abstract

Derugulation in airline sector in 2001 and the issue of Airline Regulation of 2009 resulted in changes in the structure of airline industry in Indonesia. This changes led to the emergence of new scheduled airlines and thus caused tighter competition in this industry/business. The number of passengers kept increasing from year to year reaching the average growth of 15% annually within ten years. However, some scheduled airlines went bankrupt as a result of this. Airlines that were able to anticipate changes managed to survive or improve the performance of their companies while those failing to thrive had to face degrading performance. There were two variables used in this research consisting of External Environment and organization capability . The hypothesis of the research was that external environment could affect organization capability on Indonesian schedule airline. The Methodology of the research was Mix Methods and sequential explanatory. The respondents of the research were 34 executives of scheduled airlines . The analysis was done using PLS, and validity and reliability tests were done on the variables being studied. The result indicated validity and reliability of the instrument used. Meanwhile, the result of the test on the hypothesis was: The coefficient value of external environment against organizing capability of company was 0.447 with t calculation of 17.773 where t calculation value was bigger than t table of 1.96 and thus there was a direct positive effect of external value on organization capability

Keywords: External Factor, Organization Capability, Corporate Performance, Scheduled Airline

1. Introduction

Air transport is a strategic option for a good flow in transporting goods and individual's mobility as Indonesia is an archipelagoes country. Air transport itself can be classified into commercial transport and that of non-commercial. The commercial transport (business) is classified into scheduled and non-scheduled one.

Early in 2001, the minister of transport issued a minister decree of KM 11/2001 which facilitated establishment of airline companies. This decree was considered as a deregulation stage in the business of air transport that significantly affected the airline industry in Indonesia. The change in the regulation, especially that concerning easy access for private sectors to start their airline businesses became the early stage of changes in airline industry. There were 22 scheduled airlines in 2011. The number of passengers, prior to the change (1999), was 7 million while in 2013 grew into 74 million passengers. Meanwhile, the number of planes being operated before the regulation (KM 11/2001) was 180, and it changed to 782 planes after the regulation in 2013. There were also changes in other related activities such as ticketing, the number of routes, the number and the growth of catering businesses for airlines, etc.

Table 1. Data of scheduled airline companies and the number of airplanes in 2007-2012.

Year	2007	2008	2009	2010	2011	2012
Company	14	16	16	19	22	18
Airplane	304	560	737	1.118	1.323	1.434

Source: Statistical Data of Department of Transport of 2011.

Table 2 Data of industrial passengers (million passengers) and their growth (%) years 2007-2012)

Year	2007	2008	2009	2010	2011	2012	2013
Number of passengers	39.182	37.405	43.808	51.775	60.197	71.421	74.3
Growth (%)	15.13	-4.49	11.86	38.42	16	18.9	

Source :Statistical Data of Department of Transport 2013

Problem Formulation

Based on the data above, the problem can be formulated as follows:

How does external environment affect the organization capability of scheduled commercial airline industry in Indonesia?

2. Literature Review/Study

2.1.Strategic Management

Strategic management is a set of management decisions and actions determining a company's long term performance. (Wheelen & Hunger, 2006 : 3). Strategic management enables a company to gain a clear vision of the company, sharpen the focus, and makes it more flexible in dealing with changes in the environment.

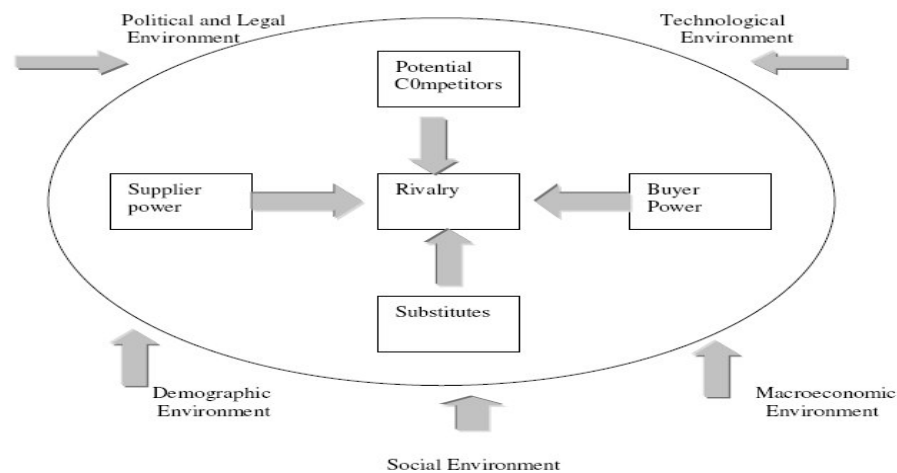


Figure 1: The role of the macro environment

2.2.Industrial Environment

According to Porter, there are 5 strong elements affecting competition in an industry ; (1) a threat from new comers, (2) bargaining position of suppliers, (3) bargaining position of buyers, (4) threat of substitution products, and (5) competition in industry.

2.3.Organization Capability

Collis(1995), proposes three levels of capability which are of static, dynamic, and metaphysic respectively. Static capability reflects a company's ability to conduct main functional activities, design of the business/plant, logistic, and advertising, which are all more efficient than its competitor. Dynamic capability is related to dynamic innovation in a company's activities ora company's ability to learn, adapt, and change, and conduct continues innovation. Methaphysic capability is related to strategic orientation enabling a company to understand or comprehend intrinsic values of other resources or to develop new competitive strategies (in Elu, 2002). Based on that concepts, organization capability includes operational and managerial aspects (Kaplan and Norton, 1996), (Menguc and Auh, 2006, (Ansofff, 1990).

2.4. Review on Previous Research

Thomas wton in his article "Managing Proactively in Turbulent Time" classifies the levels of service in an airline company into two segments having different characteristics as shown in Figure 8 as follows :

Low Fare Airline: Simple brand-low fare, online and direct booking, simple ticket price structure and ticketless check-in, use of secondary, low-charging airports, high aircraft utilization, quick gate turnaround time, point-to-point service, simple product-all additional services and facilities charged for.e.g. credit card bookings, late check-in, meals, focus on ancillary revenue generation-advertising (" the plane as a billboard"), on board retailing (more common in Europe), mainly short-haul focus, common fleet type acquired at very good rates.

Full-fare Airline: Complex brand-price+service, mainly travel agents, complex fare structures, focus on primary airports, lower utilization on short haul, interlining important part of service, complex integrated service product, e.g. ticket flexibility, business lounges, frequent flyer program, focus on primary product, short and long haul, mixed fleet.

The two segments of the service (low fare airline, and full fare airline) compete tightly in an airline business including that in Indonesia. In observing this competition structure, Jim A Kling (Identifying Strategic Groups in the US Airline Industry) proposes that competition structure in airline industry can be approached using a competition structure technique by Michael Porter..

Previous research on the case of Singapore Airline was also conducted by Heracleous (2009) examining the company strategy and competition power, organization competence supporting excellent service presentation using effective cost.

3. Research And Methodology

3.1. Location, Time and Design

The research was conducted in Indonesia as it was focused on Indonesian airline industry. The corporate data were collected from offices of airline companies while customer data were collected from several airports related to several airlines. The data collection was conducted during the period of August 2012 to May 2014. The method used in the research was Mixed Method with *Sequential Explanatory Approach*. Quantitative approach was used first before the application of that of qualitative and then the conclusion of the research was made.

The research needed data related to both secondary and primary ones. Those data included those from regulators such as Ministry of Transportation, agencies of airline transport such as PAP (Airport Provider in Indonesia), airline companies, and Indonesian National Air Carriers Association (INACA).

3.2. Development of Variables and Data Collection Technique.

Two variables were chosen as the focus of the study and further developed into the classification of dimension, indicator, and the scale. The both variables were external environment and organization capability. Data Collection: questionnaires, interview, observation, documentation study.

3.3. Technique in Sampling Taking

Technique: "non probability sampling" "purposive sampling". Population: all scheduled commercial airline companies in Indonesia. Samples of elements taken were decision makers at scheduled airline companies. Sampling Frame: the data include companies holding licenses/certificates of airline operation (AOC) and contain lists of executives of each of these airline companies. Sampling Size: 34 scheduled national airline companies.

3.4. Technique of Data Processing and Analysis

3.4.1. Descriptive Analysis, Validity Test, and Reliability Test

Descriptive analysis was to describe data and present them including determination of statistical values, the making of diagrams and figures of something related for better understanding. The descriptive analysis were mainly related to describing or presenting information related to particular data or condition or phenomena without making any conclusion. When conclusions are needed, they should be referred to the existing data collected.

3.4.2. Partial Least Square (PLS)

The statistical technique used to test the hypothesis in this research was Partial Least Square (PLS) as the samples met the requirement of PLS based on the following assumptions:

- Ten times the number of formative indicators (ignoring reflexive indicators)
- Ten times the number of paths referring to structural model
- Sample size: small

PLS Steps: planning on structural and measurement, constructing path diagram, converting path diagram into an equation system, estimation, path coefficient, loading, evaluation on goodness and fit, test on hypothesis

4. Analysis and Discussion

4.1. Indonesian Scheduled Commercial Airline Industry

There was an average annual growth of passengers of 15%. The number of domestic passengers in 2013 was 74 millions. Along the line, some new scheduled airlines were emerging and some were collapsing (12 airlines for the last 10 years). The market shares of domestic passengers were Lion Air 43%, Garuda: 22%, Sriwijaya: 12%, Citilink: 7%, Wing Air: 4.5%. and so on.

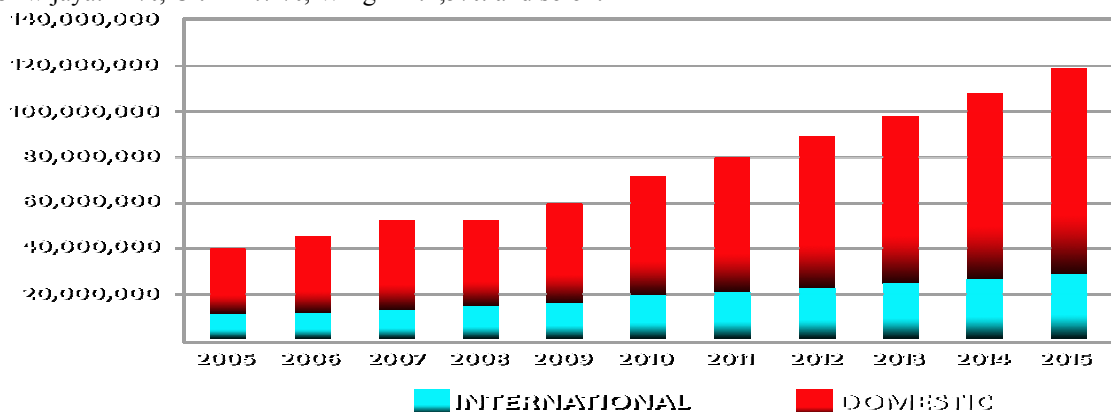


Figure 2: International and Domestic Passenger Growth in Indonesia Airline Industry

Competition among those airline companies become tighter resulting in bankruptcy of some companies unable to face the competition. In term of market domination, 90 % were dominated by 3 big groups of airline companies consisting of Lion Air Group (included Wing Air and Batik Air), Garuda with Citilink, Sriwijaya with Nam Air.

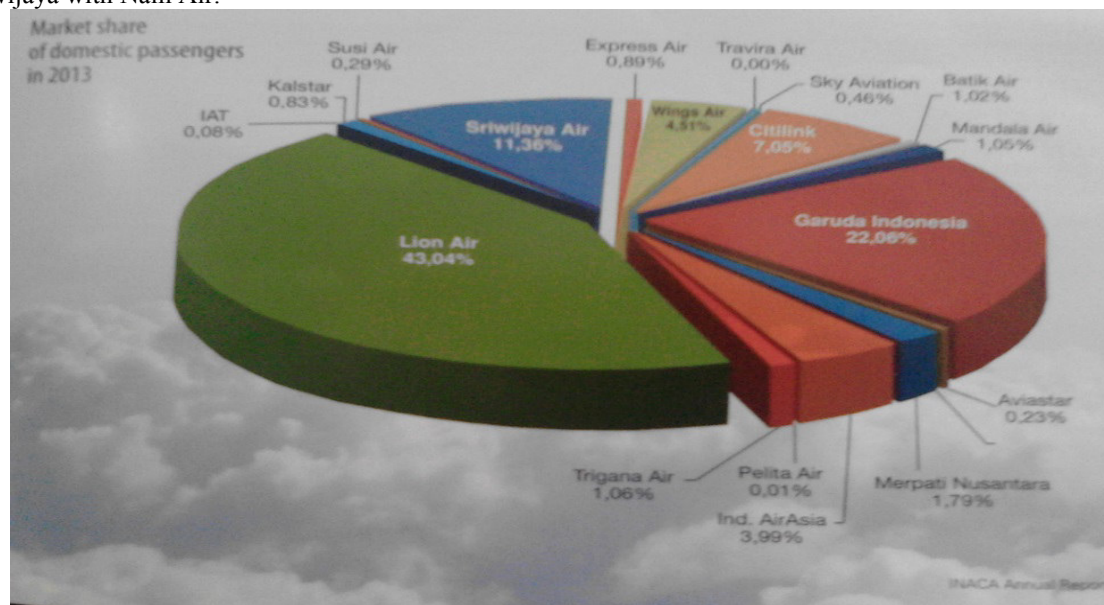


Figure 3: Market Share of Indonesia Airline Industry

4.2. Description of Respondents

The respondents consisted of 34 executives of airline companies, 72 % of whom had more than 10 years of experience, 91% had experience in operating more than 10 airlines, and 94% had been in service for more than 10 routes a day. Respondent profile searching was classified based on “cluster analysis” of 3 clusters with n : 13 in cluster 1, average : 3.75, n : 5 in cluster 2, average : 3.97, and n : 16 in cluster 3 and average : 4.25 respectively.

4.3. Descriptive Analysis of Variables

Based on validity and reliability tests, the probability values of all variables (external environment and organization capability) were all smaller than alpha (?) 5%, which means that all of the questions have met the validity requirement and all variables had an alpha cronbach value of bigger than 0.7 leading to the conclusion that the instrument used was reliable.

4.4. The Influence of External Environment on Organizational Capability Model:

Legend:

- X : External Environment (LE)
- X1 : Macro Environment : LEM
- X2 : Environment Industry: LEI
- Y2 : Organizational Capability : KO
- Y2.1 : Management Capability : KOM
- Y2.2 : the operational capability : KOO

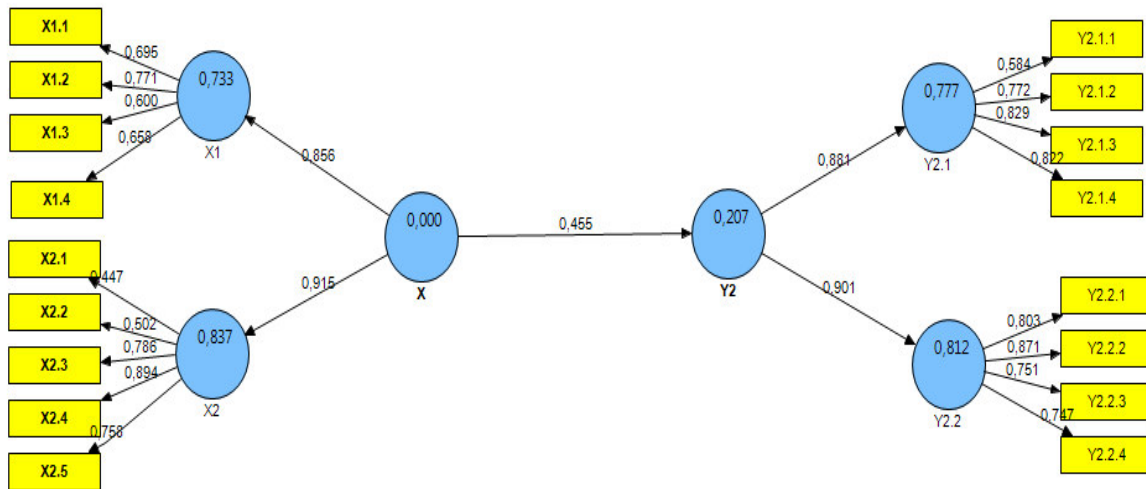


Figure 4: Standardized loading factor model

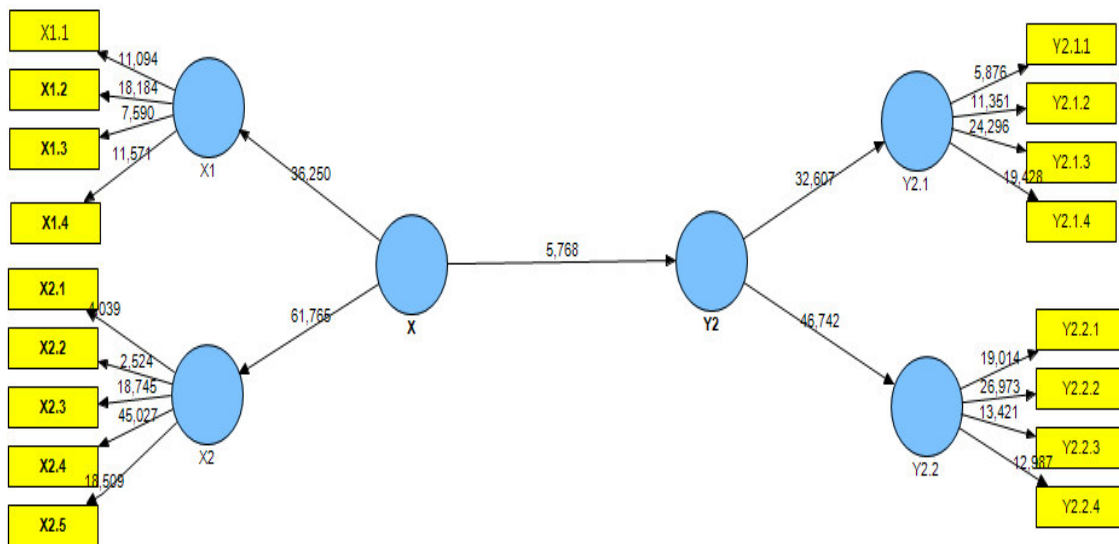


Figure 5: T-calculated

Test Reliability Model:

In this study a variable is said to be sufficient reliability when variables has composite reliability value greater than 0.7 and has a value greater than 0.5 AVE . Here are the results of testing the reliability of each latent variable with the help of software SmartPLS .

Variable	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
X1	0,5	0,777	0,733	0,618	0,468	0,339
X2	0,5	0,818	0,837	0,72	0,489	0,408
Y2.1	0,5	0,877	0,207	0,838	0,478	0,098
Y2.2	0,6	0,842	0,777	0,751	0,575	0,443

Based on the results of the above table , it can be concluded that for the latent exogenous variables X1 (LEM) , X2 (LEI) has a value $AVE \geq 0.5$ and $CR \geq 0.7$ as well as endogenous latent variables Y2.1 (KOM) and Y2.2 (KOO) has value $AVE \geq 0.5$ and $CR \geq 0.7$, it can be concluded that the indicators used are the variables have a fairly good reliability or able to measure the construction. . In other words that the macro environment latent variable (LEM) and industrial environments (LEI), which is an endogenous latent variables have a fairly good reliability and can be said to be capable of measuring the construction of variable external environment (LE).While variables management capabilities (KOM) and operational capability (KOO) which

is an endogenous variable has a fairly good reliability or can be said to be capable of measuring the construction of variable organizational capabilities (KO) .

Test Table Hypothesis:

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
X -> Y2	0,4553	0,4675	0,0789	0,0789	5,7675

Based on the test table Hypothesis direct influence of the external environment to the capabilities of the Organization produces a coefficient of 0.4553. 5.7675 t-count value is greater than t table (1.96) means to reject H0. The external environment significant and positive impact on organizational capabilities. To see the effect of the indicators of organizational strength factors that most influence can be seen in the following table. Can be described that the changes occurring in the environment, both in terms of the macro environment and industry environment, has an influence on both organizational capability management capabilities and operational capabilities. For example: with the issuance of Ministerial Decree (KM) No. 11/2001 which facilitate the establishment of the airline, Garuda anticipate the segmentation set with taken is an upper middle class by positioning as Full Service Airline. And to anticipate potential competitor at Low Cost (low cost) founded Citilink to face competitors, low-cost airline (LCC) and capture the market potential in this segment

Test Table Hypothesis:

Hypothesis	Original Sample	Sample Mean	Standard Deviation	Standard Error	T Statistics	Keterangan
X1	0,856	0,859	0,024	0,024	36,25	Significant
X2	0,915	0,918	0,015	0,015	61,765	Significant
Y2.1	0,881	0,881	0,027	0,027	32,607	Significant
Y2.2	0,901	0,902	0,019	0,019	46,742	Significant

Based on the table above , it can be seen that the macro environment (X1) and environmental industry (X2) significant and positive as well as the factors that most influence the external environment is an industrial environment with the coefficient of 0.915 . On the capabilities of the company , organization capability (Y2.1) and managerial capabilities (Y2.2) significant and positive as well as the most influential factor is the managerial capabilities of the coefficient 0.901 .

5. CONCLUSION

- 1.The condition of Indonesian Airline Industry is classified “approaching unhealthy competition”, according to 90% market share is dominated by The three largest Indonesia Airlines.
2. Of all the parameters indicators of external environment variables , most respondents (94 % or more) agreed that these parameters affect the external environment .
3. Of all the parameters indicators of organizational capability variables , most respondents (94 % or more) agreed that these parameters affect the external environment
4. It is evident that the external environment affect against organizational capability in the aviation industry in Indonesia scheduled .

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6.AVE: Average Variance Extracted

7. CR: Composite Reliability

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