

## Performance Analysis: The Case of Directorate General of Civil Aviation Using Balanced Scorecard

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*The Directorate General of Civil Aviation (DGCA) is a government organization under the Indonesian Ministry of Transportation carrying out the function of coaching the airport operators and air transport as well as other stakeholders. Methods for measuring performance carried out by the DGCA does not reflect how far the organization has undertaken efforts to achieve strategic and operational goals and objectives in order to fulfil its vision and mission. In the context of government institutions, the balanced scorecard is expected to create a transparent government, which is accountable, competitive, focused on performance and can meet the expectations of the people. This study is aimed at providing meaningful thoughts to policy makers in DGCA or the parties involved in determining the strategic policy based on a success or failure obtained from the mapping of the balanced scorecard matrix. It can also be used as a reference in conducting the government performance evaluation. The results of this performance study of the DGCA as a whole is almost good. For comparison, the result of the government performance evaluation conducted by the Indonesian Ministry of Administrative Reform provides predicate C which is somewhat low.*

**Keywords:** Organizational Performance, Balanced Scorecard, Good Governance

### 1. Introduction

The role of air transport in Indonesia becomes very important today as reflected by the increasing need for air transportation services for the mobility of people and goods within the country and from abroad. By recognizing the role of transportation, aviation administration should be laid out in a single integrated national transportation system and be able to realize a balanced provision of transport services with the needs, safety, effectiveness, and efficiency. In the Act No. 1 of 2009 on Aviation said that airlines are part of the national transportation system that has the characteristics of being able to move quickly, using high-tech, capital-intensive, reliable management and it requires guarantees of optimal safety and security. The development of national and international strategic environment requires the implementation of aviation which is in harmony with the development of science and technology, the change of paradigm and the strategic environment, and the competition at regional and global levels community. As an aviation regulator, the DGCA is carrying out the functions of coaching airport operators and air transport as well as other stakeholders.

Public sector organizations are governmental institutions that run the government with legitimacy derived from public sources. Therefore, the trust given by the people to the government administrators must be balanced with the good governance.

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Good governance are characterized by three main pillars which are related to basic elements (Prajogo, 2001). The three basic elements are participation, transparency and accountability. A good government should open the door as wide as possible so that all parties involved in the government is able to participate and run the government in a transparent and accountable manner.

In order to create good governance, each state official should compose a Government Accountability Report Performance (GARP) to fulfil the need for accountability which is reported at the end of each fiscal year. In principle, GARP is the portrait of government agencies in the implementation of its duties and functions. In the performance of the government accountability system, strategic planning is the first step to measure the performance of government agencies. Strategic planning is a government agency integration between human resource expertise and other resources to be able to answer the demands of the national and global strategic developments and remain in the order of management system nationwide. To improve the efficiency and effectiveness of the program, as well as the ability to exist and excel in the increasingly fierce competition in the rapidly changing environment, a government agency must always make changes toward improvement. These changes need to be arranged in a systematic pattern in the form of strategic planning with consistent and continuous phases so as to improve accountability and performance - oriented achievement (result oriented).

The measurement of DGCA performance is carried out by comparing the plan (with the desired level of performance) with the realization of the goals achieved according to the vision and mission of the organization to assess the success or failure of the implementation of activities in accordance with a predetermined program. It is possible that a number of deviations exists on evaluation and analysis of the achievement against the performance plan, so that it is necessary to perform improvement strategies to realize better performance in the future.

The method of performance evaluation currently conducted by the DGCA does not reflect how far the organization has undertaken efforts to achieve the strategic and operational goals and objectives in order to fulfil its vision and mission. The existing government performance measurement systems that have been used only concentrate on the cost in the form of expenditures or government budget absorption, regardless of the quality and speed of the process. In other words, the measurement system now ~~is~~ only looks back at the past, not into the future. So far, government organizations measure their achievement merely on financial aspects (whether or not the budget can be absorbed or not) but ignore their performance in meeting community needs as a customer. High absorption (utilization) does not necessarily reflect the establishment of a reliable air transport organization, competitiveness and providing added value such as the vision embodied the DGCA if the society as a final customer (end user) is still feeling less satisfied with airport operators and airline companies' service.

Government institutions in the era of globalization need to adopt a balanced scorecard method because the present government both central and local are expected to be: accountable, competitive, people friendly, and focused on performance. Government organizations are also challenged to meet the expectations of different groups of stakeholders (i.e. service recipients, employees, lending institutions / grants, communities, and taxpayers). This guidance requires

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government organizations to act professionally as it is conducted by private organizations.

Previous researches on the performance analysis of government institutions in Indonesia using balanced scorecard was not specific studying Civil Aviation. This research was supported by the adequacy of the data and thorough observations over the years since the author is an employee who handles reporting of the DGCA's performance accountability.

The government, particularly the central government, should not assess organization performance based solely on the financial aspects but more focused on the customer aspects due to the philosophy of the existent government: to provide service to the public as taxpayers. Tax is a major contributor to the government's budget so that it is compulsory for the taxpayers to get benefits of what they have paid. A balanced Scorecard is ideal to be used as a management tool in the performance evaluation because it can assess the performance of the DGCA from overall four perspectives: customer, internal business process, learning and growth and financial. With the balanced scorecard, it will be easier to identify success or failure of the DGCA's performance in achieving its vision and mission.

In this study, researchers focus on variables which are related to the performance of the DGCA:

1. How is the performance of the DGCA, if viewed from the aspect of customer satisfaction as measured by the level of air transport and airport service quality and the level of flight safety?
2. How is the performance of the DGCA, if viewed from the aspect of internal business processes, namely in terms of the institutional (organizational) and administration (management)?
3. How is the performance of the DGCA, if viewed from the aspect of learning and growth as measured by employee skill levels and capabilities of information systems?
4. How is the financial performance of the DGCA, as measured by the Budget Utilization Report and Balance Sheet?

This paper is supported by theories relevant to the study, research methods, research instruments, analysis, findings and summary of research results and conclusions.

## 2. Literature Review

### 2.1. Performance

Pamungkas (2000) explains that the performance is a mean to produce a result that is obtained by the activity achieved with the performance. Thus, the performance of an organization is the main concept that shows how far the level of implementation of the tasks have been carried out in order to achieve organizational goals. The evaluation of performance by Simanjuntak (2005:103) is a method and process assessment task execution (performance) of a person or group of people or work units within a company or organization in accordance with the performance standards or objectives set in advance. The performance evaluation is also called "performance evaluation" or "performance appraisal".

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There are roughly two main requirements to conduct effective performance appraisals: (1) the performance criteria that can be measured objectively, and (2) the existence of objectivity in the evaluation process (Gomes, 2003). Sondra Siagian (2002) explains that for the organization, the results of performance evaluation is very important in relation to decision-making on various issues such as the identification of the needs of education and training programs, recruitment, selection, induction programs, placement, promotion, remuneration systems, as well as various other aspects of human resource management process. Based on the usability, the good judgment should be formally defined by a set of criteria applied rationally and objectively and are systematically documented.

Yuwono (2003) says that the performance measurement is a measurement of the actions carried out against a variety of activities in the value chain that exists in the company. In general, performance measurement can be summed up as a strategic management method that can be used to measure and to evaluate the success of a company through the work done thoroughly and the performance measurement results can be used by the management as a feedback for improvement and adjustment or to be used as a review of the strategy set and programs to be implemented.

Unlike private organizations, public organizations performance measurements are difficult as yet to find an appropriate performance measurement. The difficulty in measuring the performance of public organizations arose in part because the goals and mission of public organizations are often not only very vague, but it is multidimensional. Public organizations have stakeholders far more numerous and complex than private organizations. Stakeholders from public organizations often have interests that conflict with one another. As a result, the size of the performance of public organizations in the eyes of stakeholders also vary. Bureaucratic officials, for example, often puts the achievement of targets as a measure of performance while public service users prefer to use service quality as a measure of performance.

The Performance of Government Agencies under Presidential Decree No. 7 of 1999 on the Performance Accountability, the Government states that in order to further improve the implementation of the government to become more efficient, effective, clean and responsible, it is necessary to report the performance accountability of government agencies to determine its ability to achieve the vision, mission and organizational goals. Target System Performance Accountability Government are: a. Making the government accountable so that it can operate efficient, effective and responsive to the aspirations of the people and the environment; b. The transparency of government agencies; c. The realization of community participation in the implementation of national development; d. The maintenance of public confidence in the government.

The Implementation of a Performance Accountability System preparation of the Government with the performance evaluation: a. Analyzing the results of performance measurement; b. Interpret the data obtained; c. Make weighting (rating) the successful achievement of the program; d. Comparing the achievement of the program with the vision and mission of government agencies.

## 2.2. Balanced Scorecard

The balanced Scorecard is used to measure the performance of the company by developing a model of recording a scorecard or multidimensional scorecard that includes four-dimensional perspective of the principal or called customer, financial, internal business process, and learning and growth. The word refers to the concept of balanced equilibrium between the various perspectives while the scorecard refers to the plan as well as organizational performance measure quantitatively. A balanced scorecard is believed to show the performance results in a more accurate and complete way. At first, this method is used to measure the performance of the company in its development, but it can also be used to measure the performance of the public sector with certain modifications. But now is more than a tactical or operational measurement system. Innovative companies use the scorecard as a strategic management system, to manage the long-term strategy and to generate management processes such as: a. Clarify and translate vision and strategy. b. Communicate and link strategic objectives and measures. c. Plan, set targets, and align strategic initiatives. d. Enhance strategic feedback and learning.

Kaplan and Norton as the originator of the Balanced Scorecard (1996:5) suggests a balanced scorecard as: A set of measures that gives managers a fast but comprehensive view of business ... includes financial measures that tell the result of actions already taken ... complements the financial measures with operational measures on customers' satisfaction, internal processes, and the organization's innovation and improvement activities operational measures that are drivers of future financial performance. Meanwhile, Anthony et. Al. (1997) defines the Balanced Scorecard as "a measurement and management system that views a business unit's performance from four perspectives: financial, customer, internal business process, and learning and growth".

In the Balanced Scorecard, all the strategic objectives defined measuring tool for both strategic objectives in financial and non-financial perspective. Nevertheless as a theory, the balanced Scorecard also has some limitations: a).The primary measure of the proposed use is not necessarily relevant in all units / companies and often requires adjustments in its application. This concept is likely designed to be applied to the company's earnings, while in the non-profit enterprises, cooperatives and government agencies require adjustments to existing conditions. Even in some companies that are profit-oriented one, the main measure requires adjustment before it can be implemented in the company. b) The company held a turnover less daring. This is most likely to occur in companies that use the Balanced Scorecard as a result of the primary measure employee retention in learning and growth perspective. c) The primary measure proposed tended appropriately applied to companies that have an intensive strategy. The balanced scorecard has evolved into a more strategic management stage. In 1992, Norton changed the function of the Balanced Scorecard from a performance assessment tool into a core system strategic management. In 2000, the Balanced Scorecard has become a core strategic management system for all employees of the company.

In addition to the balanced scorecard, coordination in realizing various strategic objectives that have been set can be implemented. According to Rohm and Halbach (2005), a balanced scorecard is a performance measurement system which can be applied to either large companies or in a small company that serves to connect the vision-mission of an organization with the company's operations and needs of

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consumers, organize and evaluate business strategies, monitor the improvement in efficiency operations, establish organizational capacity, and communicate them to all employees.

### 3. The Methodology and Model

The aim of this research is to analyze the performance of the DGCA through the 4 (four) perspective balanced scorecard; customer, internal business process, learning and growth and financial perspectives.

This research conducted at the Office of the Directorate General of Civil Aviation in Jalan Medan Merdeka Barat No. 8 Central Jakarta, in January 2010 to September 2010.

Research Methods, which are descriptive, are used to examine the condition of natural objects where the researcher is a key instrument, sampling data sources conducted by purposive.

To determine the performance of the customer's perspective as measured by Customer Satisfaction, the data was obtained through secondary data since the customer survey was carried out by the DGCA before. The survey results were then analyzed by quantitative analysis using statistical methods (analysis of average and standard deviation) as well as a qualitative analysis refers to McDrury in Moleong (2007:248)

The performance of the internal business process is measured through the capacity of organization and the internal management process. The organization capacity is measured by the capacity of organization at the Central Office as well as at the Technical Unit Offices throughout Indonesia. Furthermore, the capacity of the internal management process is measured through achievement of the restructuring program and strengthening of the organization, an increase of performance accountability, and quality of public services. Measuring the performance of both capacities is referred to the performance to be achieved by the government in order to reform the bureaucracy.

The indicators used by the authors to measure the performance of growth and learning consists of an employee ability level and information systems ability level. The employee ability level is measured by the employee satisfaction level and the employee competency level. The information system ability level is measured by the availability of information needed, the level of speed and accuracy of information.

Obtaining data for each indicators:

- a. Level of employee satisfaction. To determine the level of employee satisfaction, the authors used the Minnesota satisfaction questionnaire consisting of 23 questions.
- b. To measure the level of employee competency, the authors distributed questionnaires which consist of several questions. Questions that were asked in the questionnaire were: whether the employee's main task is now in accordance with their competency (educational background and expertise). The first question has two (2) preferred answers: yes and no. If the answer is

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no then the employee may proceed to the second question (two). The first option weighs higher than the second option.

- c. To determine the information systems ability level, the authors used a questionnaire that consists of three (3) questions: first regarding the availability of information, second about the accuracy of the information provided, and third is the rate at which information is available.

Financial performance in government agencies, including the DGCA is measured by the comparison between budget utilization and the targets set before. The higher the percentage of budget absorption, the better the financial performance is improved. The measurement of the financial performance had been done by analysing the financial data in the form of budget utilization report. Then the result is connected to the effectiveness and efficiency of the use of a budget such as increased safety facilities at the airport, decreased accident/incident rate ratios, an increase in aircraft movements, increasing the terminal capacity to meet air transport demand, and quality improvement of human resources.

The instruments used in this study are: 1. The Minnesota Satisfaction Questionnaire to obtain data for learning and growth performance. 2. A guided Observation to obtain data for Internal Business Process and Financial Performance.

### 4. The Findings

#### 4.1. Customer Perspective

Performance indicators of customer perspective are customer service quality of air transport and airports as well as the aviation safety. In order to measure the performance of the customer aspect, authors use secondary data on consumer surveys conducted by DGCA in three (3) aviation industry representing three (3) categories of service, PT. Garuda Indonesia represents the full service category, PT. Metro Batavia represent medium service category, and PT. Indonesia Air Asia has a no frills category. The survey took a random sample made to 106 (one hundred and six) airline passengers.

**Table 1: Customer Performance Measurement Indicators**

Balanced Scorecard	Indicator	Sub Indicator
Customer	Quality of air transport services	Pre flight In flight Post flight
	Quality of service at the airport	Services at the terminal
	Quality of aviation safety	Rate ratio plane crash Audit Internasional

#### a. Quality of Air Transport Services

There are three (3) categories of the quality of air transport services: full service, medium service, and no frills in general are good, but there are several variables of services that must be improved based on the user's perception. Therefore, the government should set minimum service standards to be adhered by the

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airline companies. These are the overall results of air transport services quality: 1) The quality of ticketing service especially in the ease of getting information about the facilities and services as well as changes in flight schedules and ease aspects of claims in case of cancellation is good. 2) In general, the quality of check-in service gets a good perception from full service and no frills users. 3) The quality of service needs to be improved is boarding compensation in case of delay. 4) In general, the quality of in-flight services is good. 5) The Post-flight service quality needs to be improved is the baggage checker and complaint officer's presence. At no frills service categories the need to be improved is the availability of facilities / transportation from aircraft to the arrivals lounge.

### **b. Quality of Airport Service**

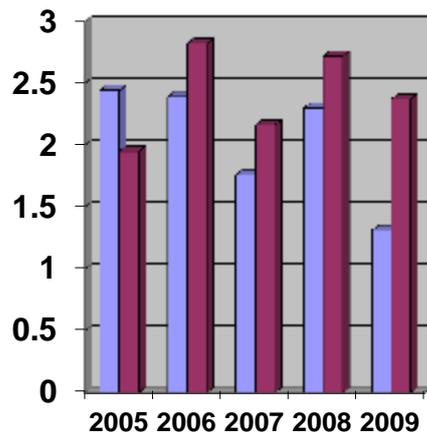
At the four (4) airports (Soekarno-Hatta, Juanda, S.M. Badaruddin II, and Ngurah Rai) managed by state owned company, PT. Angkasa Pura, the survey results indicate that the quality of service at the airport according to the user's perception is good. The survey result at Sentani Airport, which is managed by DGCA, is good while at other DGCA airport (Mutiara) the survey result is not good. We have to keep in mind that in Indonesia, the airports managed by state owned company (number 25 airports) have been operated based on the principles of business management of airports or in other words, profit-oriented. However if we look at the existence of airports across Indonesia, we will get the fact that most airports are airports managed by the DGCA (163 airports). The management of many DGCA airports is of course far from the principles of the airport management business because of its duty to hold service functions to open the transport nodes in all regions to stimulate economic growth. In other words, DGCA airports are service oriented and is operated using state budget. The services should remain to be done although their spending is much greater than their income.

As a benchmark survey that was conducted by the DGCA is the result of a survey conducted by the Indonesian Consumers Foundation (YLKI) in January 2008 in three (3) major cities of Padang, Jakarta, and Medan. Based on the results of a survey conducted by YLKI said that the service aspects such as cleanliness and comfort are the users most complained at Soekarno Hatta Airport. This is presumably due to the gap between the capacity of the airport infrastructure and facilities that are not proportional to the number of passengers. PT. Angkasa Pura action as the manager of the airport in anticipation of the passengers due to the government's policy on the application of multi-airline system felt very less. This is evidenced by the emergence of a variety of user complaints related to aviation services terminal cleanliness and comfort.

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## c. Quality of Aviation Safety

**Graphic 1: Accident and Serious Incident /1 million Passengers.**



Based on the graphic above can obtained the fact that the ratio of accident is still high.

In the period of 2005 to 2009, the highest death toll was in 2005 that there were 130 passengers died. Highest toll was at Mandala Airlines plane crash in Polonia Medan airport which took 111 lives. The second highest was at January 2007 Adam Air missing in water near Sulawesi at the time en route from Surabaya to Manado: 102 people were missing. Still in 2007, Garuda Indonesia plane crash at Yogyakarta airport Adisutjipto: 122 injured and 21 people died. In 2009, Merpati Nusantara Airlines plane crashed in Oksibil-Sentani took 15 lives.

The results of the international institutions audit found the following explanation:

a). There are 21 open findings ICAO USOAP (International Civil Aviation Organization Universal Safety Oversight Audit Program) results in August 2009 that have not been acted upon by Indonesia. They are generally associated with regulatory issues in the field of navigation, aircraft, and airports. If compared with other countries in the world, Indonesia has recorded significant progress. This shows the seriousness of the government in increasing compliance with regulations. b). Results of FAA IASA (Federal Aviation Administration (FAA) International Aviation Safety Assessment (IASA)) Indonesia was downgraded to category 2 from category 1 meaning that in the category of low flight safety country. c). After a series of aircraft accidents that occurred in Indonesia, which took hundreds of lives, eventually European Union (EU) banned Indonesian airlines to fly to various European countries. This is a very sharp blow to the world of aviation in Indonesia. Through a very long struggle ended in July 2009, the EU lifted a ban on four (4) Indonesian airlines that already meet aviation safety standards based on the recent release of the EU Commission on 30 April 2010.

### **4.2 Internal Business Processes Perspective.**

Indicators of internal business processes are categorized into 2 (two) which are institutional (organizational) and administration (management) refers to the process of Bureaucracy Reforms that have been implemented by the DGCA.

Results of the study on two (2) internal business process indicators get the

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following; a. The institutional aspect. DGCA had already made a clear roadmap of the organization up to 10 (ten) years in the future. What organizations should be set up as well as any organization that must be transformed into another form in anticipation of changes in the world of aviation has been well mapped. However, since the formation or transformation of other ministry organizations require approval and negotiations with stakeholders then the process is very slow. Researchers who have been involved in the negotiation process with other ministries felt that lobbying did in order to smooth the formation of a new organization run very slow. b. The administration aspects consist of four (4) indicators: structuring and strengthening increased performance of accountability and quality of public services. Indicators that have been executed well is the restructuring and strengthening of the organization. Indicators that are run fairly is governance arrangement while the low and poor are performance accountability, quality of public services, and human resources management system. It can be concluded that the organizational, governance arrangements, the structuring of human resource management as well as internal business processes DGCA is likely to be less common good.

In 2008 is marked by a change in the nomenclature of directorates in DGCA becomes Directorate of Airport, Directorate of Flight Safety, Directorate of Air Navigation, Directorate of Airworthiness and Aircraft Operation and Air Transport Directorate. Although the number of directorate remained, but there are 2 (two) new directorates namely the Directorate of Air Navigation and Aviation Security Directorate. These changes must be made to follow up the results of the Universal Safety Oversight Audit Program conducted by the International Civil Aviation Organization (ICAO).

The jurisdiction of the DGCA is covering all airports used for civil aviation throughout Indonesia. Most of the airports (163 airports) operated by the Technical Unit of the DGCA, while others (25 airports) operated by PT. Angkasa Pura I and II as a government-owned enterprises. In order to shorten the span of control, the DGCA formed Airport Administrator organization that has the task of ensuring security, safety, and comfort of passengers at all airports. Airport Administrators has been established in five (5) locations: Jakarta, Surabaya, Ujung Pandang, Bali, and Medan. Actually, it has been proposed to be at 25 (twenty five) airports, but with budget considerations, ultimately the Ministry of Administrative Reform approved only 5 (five).

**Table 2: Internal Business Processes**

Implemented	In Progress	Will be implemented
Law No. 1 on Aviation	ATS* Single Provider	BLU * Calibration Flight Facility
Organization and Work Headquarters	Airports Authority	BLU * Electronics
Establishment of Airport Administrator	Airport Operator Unit	BLU * Flight Health
Structuring Airport Technical Unit		BLU* Flight Safety

Source: Summarized by the author

Description \*: BLU (Public Service Board), ATS (Air Traffic Services)

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Aspect of management is divided into 4 (four) indicators: structuring and strengthening of the organization, structuring governance, human resources management system, structuring and increasing the accountability of performance and quality of public services.

Structuring and strengthening of the organization consists of redefinition of the vision, mission and strategy, restructuring, and strengthening public service executive unit. Structuring governance consists of the preparation of the Standard Operational Procedures for each unit of work, the development of e-government, and deregulation, harmonization and synchronization of product legislation. Improved performance accountability and quality of public services consist of preparation of Key Performance Indicators, performance management systems, and service standards. Structuring the HR management system consists of workload analysis, position evaluation, employee competency profiles, and job grading and job pricing.

**Table 3: Internal Business Process Management**

Indicator	Activity
Structuring and strengthening organization	Redefinition of the vision, mission and strategy, restructuring, and strengthening public service work units
Structuring governance	Standard Operational Procedures in the preparation of each unit of work, the development of e-government, and deregulation, harmonization and synchronization of product legislation
Improved performance accountability and quality of public services	Preparation of Key Performance Indicators, performance management systems, service standards, and deregulation of investment services
Structuring the HR management system	Workload analysis, position evaluation, competency profiles

Based on indicators in the table 3, currently DGCA is preparing a Strategic Plan (Medium Term Development Plan) in which there are activities on redefining vision, mission, and strategy. Restructuring the organization has been implemented by revising Transportation Minister Decree No. 20 of 2008 on the Organization and Administration of the DGCA, which is the system, processes and procedures of governance arrangement. The second activity is the preparation of SOP (Standard Operational Procedures) on each unit. Currently, some units have not SOP yet. Work units that have SOP is associated with the service. The implementation of e-government cannot be done due to problem of organizational culture. The third activity is deregulation, harmonization and synchronization of product legislation. As has been enacted in Law No. 1 of 2009 on Aviation, DGCA shall follow some

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derivatives regulations. Principles of preparation of the regulation is orderly, not-overlapping and conducive.

However, documentation of regulation product is still not good. Some regulation is not known, and if it is still exist the validity is being questioned. It requires a system of electronic documentation for regulatory documents (e-archive).

The third indicator of process management is to increase accountability for performance and quality of public services. The first activity carried out in this aspect is the preparation of key performance indicators. In the Strategic Plan document, DGCA has made a few key performance indicators, but is still limited for echelon I level (Directorate General), while performance indicators at the level of echelon II (Directorate and Secretariat) as required by the Ministry of Administrative Reform is not yet formulated. The second activity is a performance management system which is not yet implemented. The third activity is the preparation of the standard of service that has been largely implemented. The fourth activity is the deregulation of investment services in the form of airport management Public-Private Partnership. Last aspect is the arrangement of human resources management system. In this aspect, there are several activities: workload analysis, position evaluation, employee competency profiles, job grading and job pricing. Based on observations of the authors, this last aspect is the weakest that there is not implemented yet.

In relation to the implementation of Bureaucracy Reforms, Division of Human Resources has focused on the activities to be completed in 2011. Reforms in progress are job analysis and evaluation of the position intended for competency profiles and weighting and ranking positions that would determine the remuneration system for employees in order to create competent, professional, high-performing and well-being human resources. In 2010, in order to reform the system of human resource management is the assessment of individual competencies, building performance assessment systems, developing systems procurement and selection, developing training and development, strengthening rotation pattern and transfer/promotion, reinforcing career patterns, and strengthening the employee database. Currently being implemented is restructuring programs of HR management system.

### **4.3: Learning and Growth Perspective**

Human resource is the only resource that has the ability to learn and grow. The rapid development of information technology resulted in personnel with greater autonomy and authority. This demand by employees profound impact on the organization. Organization turned into a learning and the boundary less organization. Learning organization is an organization that all members have the ability to learn quickly (both learning new things and learn from the failures) and to share knowledge effectively.

Level of employee capability is analogous as employee satisfaction levels with the assumption that employee satisfaction is an important aspect for the organization. Satisfied employees is the basic capital to create professional and have high integrity public servants.

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## a. Employee Ability Level

Employee ability level is the basic capital in creating a professional and high integrity of civil servants are divided into several measurable indicators, namely: the level of employee satisfaction and employee turnover.

**Table 4: Employee Satisfaction**

NO	STATEMENT	SCORE					TOTAL	
		1	2	3	4	5		
1	Always busy working all the time	5	31	47	138	14	235	
		2.13	13.19	20	58.72	5.96	100	%
2	The chance to work alone on the job	1	17	46	157	14	235	
		0.43	7.23	19.57	66.81	5.96	100	%
3	Opportunity to make decisions related to their own work	0	20	39	163	13	235	
		0	8.51	16.60	69.36	5.53	100	%
4	Sense of satisfaction gained in completing the work	4	15	29	111	76	235	
		1.70	6.38	12.34	47.23	32.34	100	%
5	Benefits of education and training that has been given by the company	3	52	36	108	26	225	
		1.33	23.11	16	48	11.56	100	%
6	The opportunity to do something new from time to time	4	67	53	95	16	235	
		1.70	28.51	22.55	40.43	6.81	100	%
7	Opportunity to work by using the capabilities	1	22	32	151	29	235	
		0.43	9.36	13.62	64.26	12.34	100	%
8	Opportunity to thrive in the current work	11	27	64	116	17	235	
		4.68	11.49	27.23	49.36	7.23	100	%
9	The freedom to use their own judgment	6	64	76	77	12	235	
		2.55	27.23	32.34	32.77	5.11	100	%
10	The opportunity provided by the company to the employee to be promoted to a higher position	26	49	92	54	14	235	
		11.06	20.85	39.15	22.98	5.96	100	%
11	Opportunity to become an important part in the working group	7	29	34	137	28	235	
		2.98	12.34	14.47	58.30	11.91	100	%
12	The opportunity to help colleague get the job done	4	5	39	163	24	235	
		1.70	2.13	16.60	69.36	10.21	100	%
13	The opportunity to tell co-workers what to do	4	16	42	154	19	235	
		1.70	6.81	17.87	65.53	8.09	100	%
14	Harmony among co-workers	6	24	31	86	88	235	
		2.55	10.21	13.19	36.60	37.45	100	%
15	How leaders handle subordinates	4	37	39	104	51	235	
		1.70	15.74	16.60	44.26	21.70	100	%
16	Direct superior ability in making decisions	0	16	53	122	44	235	
		0	6.81	22.55	51.91	18.72	100	%
17	Attention superior to the warmth of interpersonal relations with subordinates	1	31	53	92	58	235	
		0.43	13.19	22.55	39.15	24.68	100	%
18	The current work is to provide life assurance	10	22	76	93	34	235	
		4.26	9.36	32.34	39.57	14.47	100	%
19	Doing work that does not fit with the inner	14	84	97	31	9	235	
		5.96	35.74	41.28	13.19	3.83	100	%
20	Remuneration associated with workload	32	44	86	73	0	235	
		13.62	18.72	36.60	31.06	0	100	%
21	Working conditions (comfort and work facilities)	8	49	34	144	0	235	
		3.40	20.85	14.47	61.28	0	100	%

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22	Rewards or sanctions are acceptable if a job well done or poorly	19	66	86	64	0	235	
		8.09	28.09	36.60	27.23	0	100	%
23	The balance between the rights and obligations	18	54	58	101	4	235	
		7.66	22.98	24.68	42.98	1.70	100	%
TOTAL		188	841	1242	2534	590	5395	
		3.48	15.59	23.02	46.97	10.94	100	%

Sources: Authors Research, 2010.

From the table 4 above it can be seen that from question 1 s / d 23 as much as 46.97% of respondents said that satisfaction is the highest number. The second order that the respondents are quite satisfied with the answer as much as 23:02%. Third of respondents are not satisfied with the answer as much as 15:59%. Furthermore, the fourth of respondents were very satisfied with the answer as much as 10.94%, while the fifth or the last thread that the respondents are not satisfied with the answer as much as 3.48%.

### b. Employee Turnover

**Table 5: Employee Turnover Rate Year 2008 – 2009**

YEAR	START	TURN OVER	RETIREMENT	TOTAL
2007	806	-	99	6054
2008	305	106	133	6597
2009	1200	112	179	6825

Sources: Division of Human Resources Secretariat DGAC

Based on the author questions whether the vision and mission of the Directorate General of Civil Aviation, the majority of employees who claimed to know the vision and mission turns answering incorrectly. Based on these facts, it can be said that most of the officials at the Directorate General of Civil Aviation did not know the vision and mission. The cause of this ignorance are: vision and mission has never been a guide in everyday work and lack of socialization on the vision and mission officials since formally accepted as a civil servant.

The extent to which information systems;1).The availability of information needed based on the perception of respondents was good. Nearly 80% of respondents said nearly well and good. However, the percentage of respondents who said the availability of information is not well in the amount of 11.5% indicates that some employees find it difficult to obtain the required information. Difficulty obtaining information likely due to bureaucratic organizations which tend to be not transparent in providing information. In addition, the capacity of the website as a means to obtain a variety of information is very limited. 2) The accuracy of the information provided. More than half (51%) of respondents thought that the level of accuracy of the information provided is the most accurate. While 37% of respondents said that the level of accuracy of the information provided is accurate. This shows the accuracy of the information is commonly tend to be good. The possibility of this is caused by the slow updating of data and information and lack of clarity or confusion of information sources so that the respondent does not know whether the information is correct or not. 3) The time required to obtain the information 62% of respondents said it is almost fast.

## 4.4 Financial Perspective

The data regarding the financial statements used in this study covers fiscal year 2007, 2008, and 2009. The audit results by Audit Agency (BPK) in 2007, the Ministry of Transport (MOT) Financial Statement predicate is disclaimer meaning that BPK cannot give an opinion. In 2008 and 2009, MOT was awarded the title of Fair With Exception (WDP). The assessment can be considered applies to the Financial Statements of the DGCA.

Based on the analysis of DGCA financial statements report showed that the budget utilization during the period 2007 to 2008 are on the right track or can be said to be good while in 2009 was in a state of alert (warning). Position of assets, liabilities, and equity funds contained in the balance sheet in 2007 through 2008 showed an increase in assets, decrease in liabilities and increase in the fund equity. Whereas in 2008 to 2009 there was a decline in the assets due to handed over to the state owned company. It caused a few assets, liabilities cannot be reported, and a decrease in equity funds. Analysis of the performance financial aspects is a pretty difficult thing to do given the figures obtained from the Book of Financial Statements for the period of 2007 to 2009 are inconsistent and there is no explanation in the Notes to the Financial Statements for the lack of reports on Non-Tax Revenue, decrease in the number of assets, and a decrease in budget realization. Financial Audit Board (BPK) cannot provide an opinion on the 2007 Financial Statements (disclaimer), whereas in 2008 and 2009 given a qualified opinion (WDP). This assessment is in line with the analysis that has been done by the authors.

The findings that have been presented in the previous section can be analyzed as follows:

### 1) Customer Aspects

- a) Quality of airline operators in 3 (three) categories: full service, medium service, and no frills in general is good, but there are several variables that must be improved based on user perceptions. Therefore, the government should set minimum service standards (SPM).
- b) Quality of ticketing service primarily on aspects of ease of getting information about the facilities and services as well as changes to flight schedules at ease aspects of claims in case of cancellation needs to be improved. SPM should set about the ease of 24-hour call center service, route and fare information.
- c) Check-in service quality in general get a good perception of users in full service and no frills. Unless the medium service still needs to be improved.
- d) Quality of service needs to be improved is boarding compensation in case of delay. Currently, it has been enacted Decree of the Minister of Transportation (KM) No. 25 of 2008 on the Implementation of Air Transport. In KM has been set the compensation to be given by the airline in case of delays. The government needs to know that the delays are not always caused by the airlines, but sometimes caused by the airport operator or other things that are unexpected such as natural disasters. Therefore, in addition to delays caused by airlines should be regulated in the Decree of the Minister.
- e) Quality of in-flight service is generally good.
- f) Post-flight service quality needs to be improved is luggage complaints and complaints officer. In the category of no frills service needs to be improved is the availability of transportation into the arrivals hall.

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- g) Airport Operator Quality Service at airports managed by state-owned PT. Angkasa Pura perceived good while the airports managed by the UPT (Technical Unit) DGCA is less. However when referring to the Airport Operational Performance Standards set by the DGCA all airports surveyed are in the category of less. Aspects which received the lowest score based on the perceptions of service users is the lack of powerful visual flyers/brochures, workers hospitality in the terminal, the number of trolley, and Airport Tax deemed is incompatible with the quality of services provided. Based on the analysis of the author, airports managed by PT. Angkasa Pura had not already provided maximum service to users are the absence of competitors that allows users to switch to another airport. Characteristics of the monopolistic management of airport causes managers to provide services that are not up to the customer needs. In Indonesia, although in Law No. 1 on Aviation has set up the possibility for the private sector to manage the airport, but its application in the field is not what easy. Until now, all public airports in Indonesia are managed by either the state company or DGCA. At the airports managed by DGCA, the constraints are ineffective and inefficient management of the airport budget. Government budget is generally only used for the construction of such buildings and the extension of the runway while other aspects such as capacity building and airport management systems have not been properly managed.
- h) Quality of aviation safety. The fact that the accident rate ratio and the ratio of the number of passengers injured or killed is still high, the zero accident is something that is very difficult to achieve given the geography of Indonesia consists of thousands of islands, flight navigation service that has not been seamless, bad and unpredictable weather conditions and as in Papua, airline operators, the level of compliance with regulations is low and quality of human resources (HR) is still low. The DGCA should implement corrective measures in order to reduce the accident rate, especially in terms of supervision and law enforcement.

### 2) Aspects of Learning and Growth

- a) Employee Satisfaction level is marked with the percentage of employees who are satisfied. The above data showing that nearly half of respondents said they were satisfied. So, it can be said that the employee satisfaction is good.
- b) Employee Turnover Rate. The analysis conducted by the author of the index shows that employee turnover employee turnover rate is low.
- c) Information Systems Ability. Based on the analysis of the findings in the previous section have been obtained clarification that the level of information availability as perceived by the respondents is good, the accuracy of the information tend to be good, and the time required to obtain the information is good. It can be concluded that the level of information systems at the DGCA tend to be good.

### 3) Aspects of Internal Business Processes

The results of the study on two (2) indicators of internal business processes and the institutional aspects of management get the following results:

- a) From the institutional aspects there is a clear roadmap of the organization to 10 (ten) years. What organizations should be set up as well as any organization that must be transformed into another form in anticipation of changes in the aviation world has been mapped properly.

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- b) From the aspect of management there are four (4) indicators: restructuring and strengthening of the organization, structuring governance, human resources management system structure and increasing the accountability of performance and quality of public services. Of all the indicators are indicators that have been executed by both the restructuring and strengthening of the organization, which is run by the usual indicators of course means there are already implemented and there is not yet governance arrangements while the less good is the improvement of performance accountability, quality of public services and structuring HR management system. It can be concluded that the internal business processes tends to be low.

#### **4) Financial Aspects**

Based on the analysis of financial statements report showed that during the period of the Budget Actual 2007 to 2008 was on the right track or can be said to be good while in 2009 in a state of alert (warning). The position of assets, liabilities, and equity funds contained in the balance of 2007 through 2008 showed that an increase in assets, decrease liabilities and increase in equity funds. While in the year 2008 to 2009 due to a decline in assets handed some government assets to the state, the short-term liabilities cannot be reported, and a decline in equity funds. The analysis of the financial aspects of performance appraisal based on the author is pretty hard to do considering the numbers obtained from the Book of Financial Statements for the period of 2007 to 2009 are inconsistent and there is no explanation in the Notes to the Consolidated Financial Statements for the absence of the non-tax state revenues, decrease in total assets, and a decrease in budget realization. Audit Board (BPK) cannot provide an opinion on the consolidated financial year 2007 (disclaimer), while in 2008 and 2009 given the subjective Naturally With Exception (WDP). This assessment is in line with the analysis that has been done by the author.

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**Tables 6: Overall Performance Measurement Results**

MEASURED ASPECTS	MEASURED RESULT	SCORE (1-5)
I. Customer Performance		
1. Service quality of Airline	Good	4
2. Service quality of airport	Almost Good	3
3. Quality of Flight Safety	Almost Good	3
<b>Total Score (Aspect I)</b>		<b>10</b>
II. Learning and Growth Performance		
A. Employee Ability		
1. Level of employee satisfaction	Satisfied	4
2. Level of employee turnover	Very Low	5
B. Information System Ability		
1. Level of information availability	Good	4
2. Level of information accuracy	Almost Good	3
3. Level of speed to get the information	Almost Good	3
<b>Total Score (Aspect II)</b>		<b>19</b>
III. Internal Business Process Performance		
1. Institutional	Good	4
2. Management	Almost Good	3
<b>Total Score (Aspect III)</b>		<b>7</b>
IV. Financial Performance		
1. Budget realization report	Almost Good	3
2. Balance	Almost Good	3
3. Notes to financial statements	Low	2
<b>Total Score (Aspect IV)</b>		<b>8</b>
<b>TOTAL (Aspect I, II, III, IV)</b>		<b>44</b>

Outlined in Table 6 measurement results and scores for all aspects assessed. For the customer aspect, the Directorate General of Civil Aviation obtained a total score of 10. This aspect consists of 3 (three) components and each component has the lowest score is 1 (one) and the highest score is 5 (five), the lowest total score is 3 and the highest total score is 15. Measurements using a Likert Scale is the lowest score (number 1) is not good, number 2 is less good, number 3 is almost good, number 4 is a good, and the number 5 is very good. So for this aspect, performance criteria are as follows:

- Total Score from 3 to 5.4 = not good
- Total score from 5.5 to 7.8 = low
- Total score from 7.9 to 10.2 = almost good
- Total Score 10.3 to 12.6 = good
- Total Score 12.7 to 15 = very good

Of the range of scores in the above, it can be said that the performance aspect of the Directorate General of Civil Aviation customers is almost good.

For learning and growth aspects of the Directorate General of Civil Aviation obtained a total score of 19. This aspect consists of 5 (five) components and each component has the lowest score is 1 (one) and the highest score is 5 (five), then the total is the lowest score and 5 the highest total score is 25. So for this aspect, performance criteria are as follows:

- Total Score 5-9 = not good
- Total score from 9.1 to 13 = low
- Total Score 13.1 to 17 = almost good

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Total Score 17.1 to 21 = good

Total Score 21.1 to 25 = very good

Of the range of scores in the above, it can be said that the performance aspects of learning and growth DGCA is good.

To aspects of internal business processes, the Directorate General of Civil Aviation obtained a total score of 7. This aspect consists of 2 (two) components and each component has the lowest score is 1 (one) and the highest score is 5 (five), then the total is the lowest score and 5 the highest total score is 10. So for this aspect, performance criteria are as follows:

Total Score 5-6 = not good

Total score from 6.1 to 7 = low

Total score from 7.1 to 8 = almost good

Total score from 8.1 to 9 = good

Total score from 9.1 to 10 = very good

Of the range of scores in the above, it can be said that the performance of the internal business process aspect DGCA is low.

For the financial aspect, the Directorate General of Civil Aviation obtained a total score of 8. This aspect consists of 3 (three) components and each component has the lowest score is 1 (one) and the highest score is 5 (five), then the total is the lowest score and 5 the highest total score is 15. So for this aspect, performance criteria are as follows:

Total Score from 3 to 5.4 = not good

Total score from 5.5 to 7.8 = low

Total score from 7.9 to 10.2 = almost good

Total Score 10.3 to 12.6 = good

Total Score 12.7 to 15 = very good

Of the range of scores in the above, it can be said that the performance of the financial aspects of the Directorate General of Civil Aviation is almost good.

When the overall aspects of the above sum will be obtained by a total score of 44. Total score is derived from 13 components, each of which the lowest to the highest score is 1 to 5. So that the lowest score was 13 and the highest score was 65. Overall performance criteria can be measured as follows:

Total score 13 to 23.3 = not good

Total Score 23.4 to 33.7 = low

Total Score 33.8 to 44.1 = almost good

Total Score 44.2 to 54.5 = good

Total Score 54.6 to 65 = very good

Of the range of scores in the above, it can be said that the performance of the Directorate General of Civil Aviation as a whole is good.

## 5. Summary and Conclusions

Measuring the performance of the Directorate General of Civil Aviation to use the Balanced Scorecard approach can provide an overall picture of organizational performance from the perspective of the financial and non-financial aspects of the customer, learning and growth, internal business processes, and financial.

- 1) The performance aspect of customers is almost good.

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- 2) The performance aspects of learning and growth is good.
- 3) The performance aspects of internal business processes is low.
- 4) The performance of the financial aspects of the Directorate General of Civil Aviation is almost good.
- 5) The performance of the Directorate General of Civil Aviation as a whole is almost in good condition. When compared with the results of the evaluation of the performance of government agencies conducted by the Ministry of Administrative Reform Ministry of Transportation awarded where C is somewhat low than the measurements made by the authors is slightly different. This is because the measurements made by the Ministry of Administrative Reform did not use performance indicators such as the organizational aspects of the customer, growth and learning, and internal business processes but only focus on the financial aspects that are considered to represent the performance of the organization as a whole. The results of the analysis of the performance by using a balanced scorecard approach to obtain a total score of 44 means that the organization's performance is good.

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