

The Evaluation Index System of Airlines' Comprehensive Ability

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Abstract: This article structure the evaluation framework of airlines' comprehensive ability and select the evaluation indexes at all levels. Establishing the evaluation index system to evaluate airlines' comprehensive ability, which can make the airlines grasp own competitive advantages and achieve rapid development in the competition.

Keywords: evaluation index system, comprehensive ability.

1. INTRODUCTION

The airline is the main body of economic operation of the civil aviation and a central part of the civil aviation transport production. In recent years, the airlines' cost get higher, the new airlines appear constantly what make the competition more intense. In the fierce competition, airlines begin to attach great importance to the growth of their comprehensive ability gradually. How to evaluate airlines' comprehensive ability become a hot topic . The airlines can improve their insufficient and comprehensive ability by the results of their comprehensive ability evaluation to succeed in the competition. The intense competition of the airline is not only in the internal, but also faces competition with other transportation. If the airlines want to gain advantages in the competition, they should establish the evaluation system of their comprehensive ability and improve comprehensive ability.

Comprehensive ability of the airlines has been done in the study of the quantitative and qualitative analysis, but knowledge of airlines comprehensive ability mostly stays on the qualitative analysis of abstract, how to analyzes comprehensive ability of the airlines specifically and quantificat the enhancement of airlines' comprehensive ability? We need to evaluate the comprehensive ability of airlines firstly and analysis different operating condition of the airlines ^[1].

2. THE EVALUATION INDEX SYSTEM

2.1 The necessity of establishing evaluation system

It is necessary for airlines to establish a comprehensive evaluation index system, first of all airlines is an important part of air transportation and air management systems, it will be affected by various aspects of attention and evaluation. In order to make the assets and competitiveness of company grow rapidly, establishing and improving the evaluation system of the comprehensive ability is necessary, it can not only show the operating results of company ,but also various aspects of the company has carried on the specification .

Secondly it provides the reliable basis for the decisions and development of company in the future with the establishment of evaluation index system which will highlight the disadvantages of airlines' development and economic benefits in all fields, thus can improve the shortage to lay the foundation for the development strategy of the future.

2.2 The development of evaluation system

2.2.1 The development of evaluation system in the western countries

The first stage: cost performance evaluation period

With the emergence of commodity economy, early ideas of cost also appear, the early ideas of the cost is a kind of simple calculation for profit, the main character of this evaluation system is statistics. Since then the appearance of standard cost idea brought the significant changes to the cost idea.

The second stage: financial performance evaluation period

At the beginning of the 20th century, capitalism began to develop steadily, monopoly competition age has gone, free competition became the mainstream pattern, also provided an important prerequisite for the development of evaluation system. DuPont company was founded in 1903 and put forward the investment return rate which is an important indicator, it marked that evaluation system of the financial performance established.

The third stage: a new era of enterprise performance evaluation system

In the 1990s, the enterprise has developed rapidly, the competition is increasingly intense, enterprise must focus on the future from the view of strategy and innovation development for survival and development. In order to develop better in the future. This highlight the importance of the evaluation system ,advanced evaluation system bring strategic advantages to enterprise and make enterprise have stronger core competitiveness. However, the original evaluation system can not be able to complete, evaluation system entered a new developmental era of innovation.

2.2.2The development of evaluation system in China

The first stage: a single financial evaluation system

After the founding of China, Chinese government established basic and complete national economic system, but after the war, China can only imitate the Soviet union and practiced a highly centralized planned economic system. Thus the Chinese government established a single financial evaluation system. With the development of the economic system, financial indicators of evaluation system also had some changes.

The second stage: improving financial evaluation system

After the reform and opening up, Chinese economic system and economic development model had great changes, the enterprise developed more scientific, the evaluation system developed rapidly. Compared with the original evaluation system, many aspects of the new evaluation system have made great changes, but it influenced by traditional financial evaluation system, some traces of planned economy system has not been erased. The new evaluation system can not adapt to deepen the reform of the economic system of our country, it had obvious flaws in many aspects.

The third stage: economic benefit evaluation system to the performance evaluation system

In 1993, the third plenary session of the fourteenth center committee emphasized the conversion of economic system, then Chinese government established modern enterprise system which can adapt

to market economy, therefore, it's necessary to develop a new economic benefit evaluation system in accordance with the modern enterprise system which covered a multitude of new index. The new evaluation system was more comprehensive compared with the all aspects of original evaluation system , but it had some shortcomings, so the evaluation system did not have large-scale application in practice.

The fourth stage: financial indicators attach equal importance to non-financial indicators of performance evaluation system

With the rapid development of China economy, the government made a new specification to the state enterprise evaluation system and issued a series of documents, it also attributed all kinds of indexes to 32 indicators, preliminary formed that the financial indicators attach equal importance to non-financial indicators of performance evaluation system, the emergence of this evaluation system for China performance evaluation system provided a standard, although it had insufficient but adapted to the needs of the development of China.

2.3 The design principle of evaluation system

The design of the evaluation system is largely influenced by many factors, which makes the evaluation system needs to formulate organizational structure and strategic goals according to the business environment of enterprise. Considering the feasibility of the evaluation system, evaluation system should follow the following basic principles:

Adaptive principle

Comprehensive ability evaluation is not only the transverse comparison with other enterprises, but also longitudinal compared with their own. If the evaluation standards are often changed which will make unable to evaluate in a long term, so the evaluation system should have relative stability. But certain indicators do not represent that it can't be changed, because the evaluation system is very sensitive to enterprise changes and can respond quickly to changes, so it can make corresponding adjustment, adapt to requirements of changes.

Conciseness and easy operation principle

When designing evaluation index, we should be as far as possible to select the main aspects and index which the most can reflect the characteristics of airlines comprehensive ability .We should also use concise and clear description to define the content of the evaluation index. Not to liste up all aspects of airlines comprehensive ability^[2].

Comprehensive and balanced principle

The evaluation system of airlines is a huge system, you can't just rely on a single index to evaluate. This may make that the evaluation system can't fully reflect the comprehensive ability of airlines. Therefore we need a variety of indicators to evaluate the airlines' comprehensive ability. Specifically: (1) the combination of financial indicators and non-financial indicators;(2) the combination of internal and external indicators;(3) the combination of process index and result index^[3].

The benefit and cost principle

In the evaluation system, benefit evaluation can highlight the strength of the airlines' comprehensive ability, but it can not be ignored what it costs before getting benefit. The establishment of the

evaluation system is also in order to let the airlines have more benefits , or the establishment of the evaluation system will be meaningless.

3. THE ESTABLISHMENT OF THE AIRLINES' COMPREHENSIVE ABILITY EVALUATION SYSTEM

3.1 Evaluation index of the airlines' comprehensive ability

Airlines developed rapidly in recent years, competition has intensified, comprehensive ability is the important embodiment of airlines' power. This article evaluated comprehensive ability of airlines in business operation, quality of service, human resources and economic benefits.

Business operation

Business management includes five indicators as freight volume, transport capacity and load factor, income and cost. Transport capacity response transportation supply ability of airlines which is consisted of Available Seat Kilometer, AFTK and Available Tonne Kilometers. Available Seat Kilometer sums the number of available seats and sector distance after the product of airlines' each route segment, also known as available passenger kilometer. AFTK sums available cargo weight and sector distance after the product of each route segment. Available Tonne Kilometers sums aircraft can provide the biggest business capacity and segment distance after the aggregation. Freight volume is consisted of passenger volume and freight volume. The rate of quest seat in use, cargo load factor and comprehensive load factor consist of load factor. It is mainly used to reflect the utilization efficiency of airlines' transportation resource. Income and cost index of business operation is made of passenger, freight and total number index.

Quality of service

Air and ground service constitute quality of service. Air service quality is decided by the flight attendant service, in-flight meals, cabin facilities, in-flight entertainment and the service of flight delay. The ground service depends on luggage service, check-in and leave port service.

1.Human resources

The evaluation index of human resource are system coordinating, human resource efficiency and effect. System coordinating is the unification of the enterprise's internal and external coordination, the human resource efficiency design recruitment of the company what can make better talent people get into the company. It also can decide the wages and benefits what they can get after entering the company and how to evaluate the work , train and develop in the future. Effect is consisted of the employee, the organization and the customer's satisfaction.

Economic benefits

Economic efficiency is influenced by the enterprise profitability, operation efficiency, enterprise debt paying ability and development ability. Profitability is refers to the ability of enterprise to gain profit, it also can reflect that the stand or fall of the business operation is the source of enterprise development, it is the important embodiment of economic benefit. Operating efficiency refers to the enterprise turnover of capital speed which reflects the enterprise's operations and profitability. Enterprise debt paying ability is also known as the ability to resist risks, the enterprise debt paying ability is to reflect the operating risk of an enterprise and the ability to gain profit when using debt to engage in business

activities. It can also reflect quality of assets and the management risk[5].Enterprise development capacity refers to the increase of economic strength, it is the foundation of enterprise development.

Table 1:The evaluation index system of airlines’ comprehensive ability

Target layer	First class indexes	Second class indexes	Third class indexes
The evaluation of comprehensive ability	Business operation	Freight volume	Passenger volume
			Freight volume
		Transport capacity	Available Seat Kilometer
			AFTK
			Available Tonne Kilometers
		Load factor	Passenger load factor
			Cargo load factor
			Comprehensive load factor
		Income	Passenger kilometers income
			Freight kilometers income
			Total kilometers income
		Cost	Passenger kilometer cost
	Tonne kilometer cost		
	Available Seat Kilometer cost		
	Available Tonne Kilometer cost		
	Service quality	Air service	Flight attendant service
			In-flight meals
			Cabin facilities
in-flight entertainment			
The service of flight delay			
Check-in and leave port service			
Ground service	Luggage service		
Target layer	First class indexes	Second class indexes	Third class indexes
The evaluation of comprehensive ability	Human resources	System coordinating	Internal coordination
			External coordination
			Human resources planning
		Human resource efficiency	Recruitment
			Wages and benefits
			Incentive measures
			Performance appraisal
			Training and development
			Employee satisfaction
		Effect	Organization satisfaction
			Customers satisfaction
			Return on total asset
	Economic benefits	Enterprise profitability	Ratio of profits to cost
			Rate of Return on Common Stockholders' Equity
			Total Asset Turnover Ratio
		Operation efficiency	Inventory turnover ratio
		Enterprise debt paying ability	Quick asset ratio
			Asset-liability ratio
Enterprise development ability		Growth of roe	
		Asset value increment rate	
	Main business profit growth rate		

3.2 The establishment of the evaluation index system

According to the evaluation index mentioned above, in order to fully display the evaluation process of airlines' comprehensive ability, the evaluation index is divided into three-level to evaluate the airline's comprehensive ability mainly from business operation, service quality, human resources and economic benefit of airlines which will be split to obtain a series of second class indexes, then select

representative third class indicators from second class indexes. It aims at making the evaluation system of airlines more comprehensive and perfect, can fully reflect the strength of the airline's comprehensive ability, establishment of the evaluation index system as shown in table 1:

4. CONCLUSION

The development of airlines the enterprise changes with each passing day and makes the institutions of enterprise more complex, it also brings more standard of diverse evaluation to enterprise. Comprehensive ability is the important embodiment of airlines power and an important link in the development of airlines competition, comprehensive ability is not only the competitive advantage of the airlines, but also will influence strategic choice and development of the company. So it has great effect to establish a more advanced comprehensive ability evaluation index system of airlines to improve and progress which cannot be ignored.

Now the evaluation index system of our country is based on financial indicators and non-financial indicators of evaluation system and innovate on the basis of constant, this article evaluated the airline's comprehensive ability from the business management, service quality, human resources and economic benefits. Through these goals to evaluate the airline's comprehensive ability on the basis of the current mainstream evaluation system to cover all aspects of the evaluation index system. Airlines can improve their own deficiencies from the evaluation, seize their own competitive advantages and choose suitable for their own strategic choice for better development.

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