

**MANAGEMENT AND DEVELOPMENT OF LABOUR  
IN THAI AVIATION INDUSTRY**

**Squadron Leader Watana Manon**

**A Dissertation Submitted in Partial  
Fulfillment of the Requirement for The Degree of  
Doctor of Philosophy (Population and Development)**

**School of Applied Statistics**

**National Institute of Development Administration**

**2010**

**MANAGEMENT AND DEVELOPMENT OF LABOUR  
IN THAI AVIATION INDUSTRY  
Squadron Leader Watana Manon  
School of Applied Statistics**

---

Professor *Prachoom Suwattee* Major Advisor  
(Prachoom Suwattee, Ph.D)

Associate Professor *Suwanlee Piampiti* Co-Advisor  
(Suwanlee Piampiti, Ph.D)

The Examining Committee Approved This Dissertation Submitted in  
Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy  
(Population and Development)

*Jawalaksana Rachapaetayakom* Committee Chairperson  
(Jawalaksana Rachapaetayakom, Ph.D)

Assistant Professor *Preecha Vichithamros* Committee  
(Preecha Vichithamros, Ph.D)

*Lersan Bosuwan* Dean  
(Lersan Bosuwan, Ph.D)

December 2010

## ABSTRACT

<b>Title of Dissertation</b>	Management and Development of Labour in the Thai Aviation Industry
<b>Author</b>	Squadron Leader Watana Manon
<b>Degree</b>	Doctor of Philosophy (Population and Development)
<b>Year</b>	2010

---

The objectives of this research are to study the current situation of management and development of labour in the Thai aviation industry and to present the guidelines for competency increasing of employees especially those working in the airlines, at the airport and at the site of air cargo. The target population in this study is employees in Thai Airways International Public Company Limited, Airports of Thailand Public Company Limited and Bangkok Flight Services Company Limited. Primary data was collected from 585 samples employed in these three companies.

The sample consisted of 68.5 percent males and 31.5 percent females. About 55 percent are in an age group of between 31 and 50 years old, followed by 21-30 year olds making up 34.4 percent. The majority (64.6 percent) of employees had an educational level to bachelor degree while 19 percent of the sample population held a master degree. Almost one-half (44 percent) of the employees have an income of between 10,001-30,000 baht and those with an income of between 30,001-60,000 baht numbered some 38 percent. In terms of working positions held by those in the sample, about 76 percent are staff level, 13 percent are primary executives and 8 percent are middle executive level. About 48 percent of the sample population has been working in their organization for more than 10 years and 34 percent have been working in their organization for between 3-10 years.

Concerning the organization management, most of the sample population are quite satisfied especially on the matter of staff orientation for new employees and the

compensation system, i.e. salary, wages and other incentives are appropriate. But only one-half of the sample indicated that the recruitment procedures have standards and fairness. About 58 percent agreed that their department has appropriate human resource planning. As for labour development on training aspect, those in the sample indicated the highest satisfaction on training that gives employees knowledge, skills and experience that helps them to perform tasks efficiently and effectively. But the employees have training in technology related to the organization at moderate level. The satisfaction levels on labour development in educational aspects are relatively low. The employees were supported on continuing education at the vocational field below middle average level. The samples indicated that the budget arrangements are not appropriate, especially for employees having an opportunity to get education from abroad and to study in other organizations that have modern technology innovations.

In terms of development, most of the samples have moderate agreement on the activity the organization offer, i.e. the employees have various information technology for personnel development and they are promoted to organize social activities for the organization. The employees have opportunity to change their duty or position according to the knowledge, ability and experience at the moderate average agreement.

Finally, the study presents guidelines for improving labour development in various aspects. On organization management, improvement should be focused on the recruitment and selection procedures, including promotion which should be considered by knowledge, ability and experience of the employees. On the whole, the organization should improve human resource planning for every department. In terms of training aspects, the organization should improve the development in information technology and provide knowledge from the department both internally and outside the organization. Education opportunities for employees should be emphasized both from abroad and also to study in other organizations that have modern innovations especially in technology advancement. The organizations should improve the scholarship schemes and have an appropriate budget for employee's education. Lastly on development, the organization must improve various activities that are currently offered to the personnel in the organization to develop the skills, knowledge and perception more efficiency for long-term personnel development in the organization.

## **ACKNOWLEDGEMENTS**

The Dissertation in Management and Development of Labour in the Thai Aviation Industry is successful with the help, consultations, support and cooperation of many individuals.

Therefore, my deepest gratitude goes to my dissertation committee, Professor Dr. Prachoom Suwattee, Associate Professor Dr. Suwanlee Piampiti, Dr. Jawalaksana Rachapaetayakom, and Assistant Professor Dr. Preecha Vichithamaros. Additionally, my gratitude goes to Dr. Lersan Bosuwan, Dean of Applied Statistics Faculty who contributed precious time to consult and offer suggestions to students..

I wish to thank the employees of Thai Airways Public Company Limited., Airports of Thailand Public Company Limited., and Bangkok Flight Services Company Limited for their valuable cooperation in answering the questionnaires for this study as well as officials in the Faculty of Applied Statistics, National Institute of Development Administration (NIDA) and officials of the Civil Aviation Training Center who helped and provided the convenience in the making of this dissertation.

Lastly, I would like to thank my family, Mrs Jitprapa Manon, my wife, and Mr. Racha Manon, my son, for their support, encouragement and various other help to make this dissertation successful.

Squadron Leader Watana Manon

December 2010

## **TABLE OF CONTENTS**

	<b>Page</b>
<b>ABSTRACT</b>	<b>iii</b>
<b>ACKNOWLEDGEMENTS</b>	<b>v</b>
<b>TABLE OF CONTENTS</b>	<b>vi</b>
<b>LIST OF TABLES</b>	<b>viii</b>
<b>LIST OF FIGURES</b>	<b>xi</b>
<b>CHAPTER 1 INTRODUCTION</b>	<b>1</b>
1.1 Statement of the Problem	1
1.2 Objectives of the Study	12
1.3 Scope of the Study	12
1.4 Expected Contributions	13
1.5 The Operational Definitions	13
1.6 The Dissertation Presentation	14
<b>CHAPTER 2 LITERATURE REVIEW</b>	<b>15</b>
2.1 Labour and Management and Development	15
2.2 Factors Affecting Management and Development of Labour	31
2.3 Management and Development of Labour Research in Thailand	38
2.4 The Proposed Research Hypothesis	40
<b>CHAPTER 3 RESEARCH METHODOLOGY</b>	<b>41</b>
3.1 Research Design	41
3.2 Sources of Data	41
3.3 Sampling Procedure	42
3.4 Research Instruments	43
3.5 Field Procedures	52
3.6 Data Analysis Techniques	52

<b>CHAPTER 4 DATA ANALYSIS OF THE FACTORS AFFECTING MANAGEMENT AND DEVELOPMENT OF LABOUR IN THAI AVIATION INDUSTRY</b>	<b>57</b>
4.1 Data Analysis	57
4.2 The Statistical Analysis of the Variables in Management	61
4.3 Factors Affecting Management and Development of Labour in Thai Aviation Industry	69
<b>CHAPTER 5 SUMMARY AND RECOMMENDATIONS</b>	<b>83</b>
5.1 Summary	83
5.2 Recommendations	85
<b>BIBLIOGRAPHY</b>	<b>87</b>
<b>APPENDIX</b> Questionnaire for Management and Development of Labour in Thai Aviation Industry	93
<b>BIOGRAPHY</b>	102

## LIST OF TABLES

Tables	Page
1.1 Summary of the Volume of the Air Transportation Year 2007-2009 Numbers of the Commercial Flights Departure - Arrival (Flights)	3
1.2 Summary of the Volume of the Air Transportation Year 2007 -2009 Number of the Passengers' Departure – Arrival (Persons)	3
1.3 Summary of the Air Transportation Year 2007-2009 Volume of the Air Cargo and Postal Parcels In – Out (Tons)	4
1.4 Departments and Numbers of Labour in Thai Aviation Industry	10
1.5 Current Market Outlook 2009 – 2028	11
2.1 Numbers of Airplanes of the Airlines in Thailand	18
3.1 Population and Sample Size of Labour in Aviation Industry In Thailand	42
3.2 Description and Levels of Variable Measurement in the Study	44
3.3 Reliability Coefficient of Management and Development Labour In Thai Aviation Industry	47
4.1 Sample Size and Percentages by Characteristics	57
4.2 Number and Percentage of the Samples Classified by Factors of the Organization Management in the Thai Aviation Industry	60
4.3 Mean and Standard Deviation of the Samples Opinion Concerning Labour Development on Training Aspect in the Thai Aviation Industry	62
4.4 Mean, and Standard Deviation of the Samples Opinion Concerning Labour Development on Education Aspect in the Thai Aviation Industry	64
4.5 Mean and Standard Deviation of the Samples Opinion Concerning the Organization Development in the Thai Aviation Industry	66
4.6 Comparison in Personal Factor (Genders) that has the Impact on Labour Management in Thai Aviation Industry, which Performed in the Airlines, Airports, and Air Cargo	69



- 4.7 The Comparison of the Personal Factor (Age) that has the Impact on 70  
the Labour Management in Thai Aviation Industry that Performed in  
the Airlines, Airports, and Air Cargo
- 4.8 The Comparison of the Personal Factor (Education) that has the 71  
Impact on the Labour Management in Thai Aviation Industry that  
Performed in the Airlines, Airports, and Air Cargo
- 4.9 Comparison in Socio-Economics Factor (Income) that ha the Impact 72  
on Labour Management in Thai Aviation that Performed in the Airlines,  
Airports, and Air Cargo
- 4.10 The Comparison of the Factor in Performing the Job (Under the 73  
Agency) that has the Impact on Labour Management in  
Thai Aviation Industry that Performed in the Airlines, Airports,  
and Air Cargo
- 4.11 The Comparison of the Factor in Performing the Job (Position) that 74  
has the Impact on Labour Management in Thai Aviation Industry  
that Performed in the Airlines, Airports, and Air Cargo Labour  
Management in Development Plan, Recruitment, and Selection  
that had no Difference in Statistical Significance
- 4.12 The Comparison of the Factor in Performing the Job (Work Period) 75  
that has the Impact on Labour Management in Thai Aviation Industry  
that Performed in the Airlines, Airports, and Air Cargo
- 4.13 The Comparison of the Factor in Performing the Job (Gender) that 76  
has the Impact on Labour Management in Thai Aviation Industry that  
Performed in the Airlines, Airports, and Air Cargo
- 4.14 The Comparison of the Factor in Performing the Job (Age) that has 77  
the Impact on Labour Management in Thai Aviation Industry that  
Performed in the Airlines, Airports, and Air Cargo
- 4.15 The Comparison in Socio-Economics Factor (Level of Education) 78  
that has the Impact on Labour Development in Thai Aviation Industry  
that Performed in the Airlines, Airports, and Air Cargo

- 4.16 The Comparison in Socio-Economics Factor (Income) that has the Impact on Labour Development in Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo 79
- 4.17 The Comparison of the Factor in Performing the Job (Under the Agency) that has the Impact on Labour Management in Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo 80
- 4.18 The Comparison of the Factor in Performing the Job (Position) that has the Impact on Labour Management in Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo 81
- 4.19 The Comparison of the Factor in Performing the Job (Work Period) that has the Impact on Labour Management in Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo 82

## LIST OF FIGURES

<b>Figures</b>	<b>Page</b>
2.1 O* NET Content Model	26
2.2 David Easton's Factors	31
2.3 General Pattern of the External and Internal Factors that Have the Impacts on the Recruitment	36
2.4 Conceptual Framework of Factors Affecting Labour in Thai Aviation Industry	38

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Statement of the Problem**

Since the world's first ever flight by the Wright brothers at Kitty Hawk Airport, North Carolina, U.S.A. on 17<sup>th</sup> December 1903 until now 2010, the aviation industry has developed and grown rapidly particularly in commercial aviation, which is now responsible for transporting more than a billion passengers a year over a distance of about 1.5 billion kilometers. However, air transportation having increased so dramatically, has ultimately created huge problems at the international level. Such problems one country cannot solve alone, rather the entire industry relies on cooperation from many countries around the world. Accordingly, there is a real need to establish an international organization that regulates world standards in terms of airport construction, navigation support, world weather forecasting, as well as setting international standards regarding job functions in order to reduce and minimize errors or misunderstandings which can ultimately lead to accidents.

At the present time, air transportation plays an important role and is highly utilised because the very nature of air transportation is rapid, convenient, and safe when compared to other means of transportation. It is a public service that is important and necessary for the survival of humans and it also plays an important role in developing a country in terms of economy and investment among many countries such as international affairs, especially international air transportation. At present, the aviation industry in Thailand is growing rapidly. We can see the "Open Sky Policy", which actively promotes and cooperates with air transportation in order to make Thailand the hub of Southeast Asia (Ministry of Transportation, 2008) for both domestic and international flights, is one stimulus for this growth. The government seeks to create competition among airline companies to provide services to consumers

and to create business opportunities for new airline ventures. We have witnessed an increase in “Low Cost Airline” start-ups such as; Thai Air Asia, Nok Air, and One to Go etc., all which add to the expansion of air transportation services, in turn increasing the demand for qualified labour to support the aviation industry.

According to statistics of the Air Transportation Association, the findings show that the volume of international transportation is higher than that of domestic air transportation. In 2007, passengers used air services to travel internationally departing from Suvarnabhumi Airport, Don Mueang Airport, Chiang Mai Airport, Phuket Airport, and Hat Yai Airport totaling 57,155,149 people. Air freight transportation and postal parcels totaled some 1,242,972 tons (Airports of Thailand Public Company Limited, 2009)

Airports of Thailand Public Company Limited (AOT) provides services from 6 airports in Thailand namely, Don Mueang Airport, Chiang Mai Airport, Hat Yai Airport, Phuket Airport, Chiang Rai Airport, and Suvarnabhumi Airport. In the 2009 fiscal year budget, permanent services were provided by 103 airlines, of which 91 are mixed services, taking care of passengers and transporting air freight. Twelve airlines provided services for transporting air freight only. The number of arrivals and departures at the 6 airports operated by AOT totaled 346,538 flights, decreasing 12.06%. This comprised of 196,680 international flights and 149,858 domestic flights, decreasing 10.87% and 13.57% consecutively. The AOT company provided services to 50,080,826 passengers in total, decreasing 14.10%. International passengers comprised 30,607,132 people, a decrease of 16.91%, and domestic passengers comprised 19,473,694 people, a decrease of 9.29%. The volume of air freight transported in and out was 1,040,891 tons, decreasing 22.66% that represented the international transportation 952,179 tons, decreasing 23.44%, and the domestic freight totaled 33,712 tons, a decrease of 13.10%. These significant reductions of air traffic overall in the 2009 fiscal year budget were a result of aviation being impacted by the world economic crisis, which affected business sectors globally, including airlines who earned lower revenues due to the decreasing numbers of travelers and the occurrence of the H1N1 disease, shown on table 1.1-1.3.

**Table 1.1** Summary of the Volume of the Air Transportation Year 2007-2009  
Numbers of the Commercial Flights Departure-Arrival (Flights)

<b>Airports</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Don Mueang + Suvarnabhumi	307,244	311,435	273,072
Don Mueang	39,689	55,317	31,110
Suvarnabhumi	267,555	256,118	241,962
Chiang Mai	26,708	25,400	22,882
Hat Yai	11,748	10,270	9,043
Phuket	38,368	40,218	35,995
Chiang Rai	6,232	6,734	5,546
Total	390,300	394,057	346,538

**Source:** Airports of Thailand Public Company Limited, 2008 -2009.

**Table 1.2** Summary of the Volume of the Air Transportation Year 2007-2009  
Numbers of the Passengers' Departure-Arrival (Persons)

<b>Airports</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Don Mueang	3,188,950	5,751,662	2,783,737
Suvarnabhumi	41,934,995	41,180,456	37,051,203
Chiang Mai	3,370,690	3,276,309	3,872,346
Hat Yai	1,335,679	1,380,086	1,283,172
Phuket	5,478,137	5,943,468	5,441,585
Chiang Rai	711,662	772,786	648,783
Total	56,020,113	58,304,267	51,080,826

**Source:** Airports of Thailand Public Company Limited, 2008-2009.

**Table 1.3** Summary of the Air Transportation Year 2007-2009  
Volume of the Logistics and Postal Parcels In-out (Tons)

<b>Airport</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Don Mueang + Suvarnabhumi	1,207,968	1,291,931	993,769
Don Mueang	16,112	32,246	15,650
Suvarnabhumi	1,191,856	1,259,685	978,119
Chiang Mai	23,429	22,438	17,617
Hat Yai	10,141	10,407	11,150
Phuket	17,498	18,542	16,068
Chiang Rai	2,909	2,527	2,287
Total	1,261,945	1,345,845	1,040,891

**Source:** Airports of Thailand Public Company Limited, 2008-2009.

The situation nowadays of the transportation sector in the transportation primary plan, 2004 -2006, presents summary data in the aspect of the managerial perspectives reflecting the result of performance of the transportation sector in various dimensions, i.e. airport network of transportation routes and the air traffic at the present. There were 36 airports in total comprised of 6 international airports, and 30 domestic airports in the year 2006, the new Bangkok Airport was operated, so called Suvarnabhumi Airport which has helped to reduce the conditions of the traffic congestions of Bangkok airport and substantially helped to increase the capability in establishing the center of air transportation in Thailand. In overview, the airport network at the present time has been functioning quite well including supporting the domestic demand and the Hub that links the demand to Indo-China countries. However, the amount of traveling and some domestic air transportation routes are not feasible operating from some airports, which do not gain any benefits. Some provincial airports cancel some routes and cannot maximize the number of routes, therefore may need to be studied to determine the best business positioning of those airports in order to make better use of them.

Regarding the status of airport users, it is noted that international air logistics has its' main center at Suvarnabhumi Airport. Exports directly from local airports are few and when we compare the ratios of total logistics between Suvarnabhumi Airport and local ones, the local airports represent a mere 5%-6% of Suvarnabhumi Airport's. The reason being, the limited capability to support transportation at the local airports; the basic structural systems of the local airports are simply unable to support international transportation, i.e. large commercial airplanes cannot land at local airports because the structure of the runways cannot support the weight of the aircraft etc. Thus, exports through local airport channels cannot be executed so readily. Accordingly, Suvarnabhumi Airport must carry heavy loads from almost all of the international exportation points.

The government realized and acknowledged the problems, and accordingly, expedited construction work at Suvarnabhumi Airport in order to help resolve the traffic congestion problem at the old Bangkok Airport. The first phase, of Suvarnabhumi Airport completed in 2006 supports some 45 million passengers and 3 million tons of freight per year. It is considered that it's capability helps solve the economic problem in the aspect of transporting freight in the short to middle term. In the future, when the expansion of the airport is completed, it will support up to 100 million passengers a year. This proposed expansion will go some way to solving the long term problems. Ultimately the new airport has the expansion potential to be the main airport in Asia employing an increasing number of personnel to carry out the jobs in various positions within the aviation industry. Because of this, management and human resource development in the aviation industry are vitally important and necessary.

At the present time, Thailand is in a period of changing the system of managing the country in order to develop itself to be a country of strength in both the economy and social status permanently. Thus, the government has a specific method in managing the country by emphasizing the implementation according to the direction and the national strategic plans set out in 2005 – 2008. These plans constitute the main road to maneuver the economy and social systems of the country to develop clearly and viably so as to increase the strength of the country's economy and improve the quality of life for the citizens. As we can see from many government projects, both newly commenced projects and recently completed ones, they include



policies that highlight the need to be ready for change, competition, and growth of the world economy also.

Meanwhile, the aviation industry is one of the key industries that has crucial potential to maneuver the economy both domestically and internationally in a multitude of varied services. Also, the government sees aviation as playing a key role in having an overall impact on the country and the local regions. There is a policy to develop the national logistics systems according to the strategic issue number 3, the development of the economic structure to be balanced and competitive, where the pattern of the policy will push Thailand forward to be the centre of the aviation in this region because Thailand has a geographic advantage for aviation over its neighbours'. A system that provides services both domestically and internationally has the main service pattern, namely, passenger travel and air logistics, from which the services are an important mechanism to link the country's transactions with other countries' in the region, such as the business sector, real estate, tourism, production, land logistics, shipping, and the basic development including services for military and general public as well.

Therefore, strategic development in the international aviation system needs to be upgraded in quality for the aviation industry to have international standards to support growth in the aviation industry. The demands of labour in the world aviation industry have increased which includes those personnel such as are pilots, flight attendants, and ground support personnel, who are service personnel, management personnel that organize freight to be air transported, air traffic controllers, airplane mechanics, communication device mechanics, and airport personnel etc. The development of abilities of those personnel in the national aviation workforce will support the nation's policy in human and social development for a good quality that will go along with the national management policy as well as developing the national logistics.

From the reasons of growth in the aviation industry, domestic and international factors that occur consecutively, there is great opportunity for personnel to work in the aviation industry in many departments due to knowledge and ability, with no gender or age discrimination. Everyone can choose to pursue their job freely according to their skills and personal interests. When those employees are recruited

they have the right to be covered to get safety during their working period. They are entitled to earn fair pay and have opportunities to get promoted fairly. The rights in the workplace include having break times, also the law allows workers to have some break times during day, days off during the working week, and reasonable paid vacation each year, and whether those workers are females or males, they all have equal rights. So, any discriminating conditions to being employed in terms of gender, hiring, considerations in criteria of compensation or promotion cannot be applied, because those are against the constitution and the labour law. Any kind of job that males can do, females have the right to get that kind of job as well and vice versa. Employers must consider such conditions prior to recruiting. Other than this, both females and males have the chance to be promoted in their careers and have the right to earn fair compensation. And in the case of the same job, females will receive the same remuneration as males.

In growing of the aviation industry up until now, there is need for a lot of personnel, those who perform various jobs in construction, maintenance, transportation, airport tasks etc., and which are necessary to have knowledge and ability that will be the successful result in implementing those specific tasks also that will create the network for Thailand and neighboring countries in the region and some other countries that utilise our national geography to the maximum in order to support Thailand to be the hub of the transportation in the region (Department of Air Transportation, 2003). Other than this, the government will develop the quality of the air transportation service in order to respond to the demand of customers. After opening Suvarnabhumi Airport, the government implemented the Open Skies Policy, which gained support from many countries by way of bilateral relationships, which has helped to increase the numbers of flights and passengers that travel to Thailand. therefore supporting the role of Thailand as the regional aviation local centre (Department of Civil Aviation, 2003).

The aviation industry is an industry which has both males and females working as specialists in their fields. These personnel work in an industry, where we may say that the quality of services provided corresponds to the quality of the workforce. The development in Thailand to be prosperous and to become the centre of the aviation includes developing international transportation in air logistics system

using strategies to develop the international airport to be a world gateway (Ministry of Transportation, 2008). The method to develop the system that is used to support the growth of air transportation, has an important factor, that of human resources. Another word, the workforce will be the variation for continuing development in the aviation industry.

The development of air transportation service quality, in order to support the country being the centre of the aviation in the local region, after opening the Suvarnabhumi Airport for services, the number of the passengers, and the air logistics are expected to increase substantially. Thus, the researcher has an interest to study how to manage and develop the Thai workforce and study the facts of those workers to produce information to continue managing the human resources in the aviation industry further more.

The data regarding the number of the passengers and the volume of air logistics indicates daily increases. In 2007, there were passengers that utilised services to travel internationally from Suvarnabhumi Airport, Don Mueang Airport, Chiang Mai Airport, Chiang Rai Airport, Phuket Airport, and Hat Yai Airport totaling 55,631,782 people. Air cargo and postal parcels totalled 1,242,972 tons in volume (Department of Civil Aviation, 2008), which simulated the workers to do the job responsible on tasks as mentioned much more than previously. Those personnel were educated employees who attended training and seminars from many institutions including from companies and organizations, which sometimes did not meet the standard according to the International Civil Aviation Organization (ICAO) or International Aviation Transportation Association (IATA)'s regulations (Department of Civil Aviation, 2003).

Thailand's economy has been growing stably since 2001, the economy growth rate of the country expanded more than 6.7%, which is considered one of the fastest growth rates in Asia or we may even say, in the world, and in that year the economy growth was set at 8%, which many people saw as impossible to achieve or it might be too much of a hot rush. However, the impact from the oil crisis and other uncontrollable factors tend to indicate that the growth of the economy in Thailand might be 6.5%-7% (Bank of Thailand, 2002). During the period of success in the economy, one of the important factors was the good quality of management strategy

that had a human resource management policy with quality to train personnel to increase the quality of work in order to keep up with the progress being experienced in the aviation industry. It will be the result of the success in implementing the task also. Since 1970, many industries in Thailand have been developing very fast, which gives the result in the positive change of the Gross National Products(GNP), i.e., during 1993 – 1996 , the GNP increased to the average of 7.9%. Even though, the following year Thailand had to face an economic crisis, it bounced back to what it is now. Since 2001, the rate of the economic growth in Thailand has been expanding more than 6.7%.

In 2008, there were many world crises, but economic growth in Thailand was still expected to reach more than 4.5% (Bank of Thailand, 2008). In the future, the Thai government ought to place importance on the standard infrastructures of the country, which will create the quality and expansion of the efficiency to produce products including those of the Thai aviation industry, as well as mass transportation and its system, air transportation that will lead to the cost of management efficiently and increase the competitive edge in the Thai industry. The commercial shipping business and the deep seaports should be developed and maintained to reach international standards at high levels. The government should build a transportation and communication network in order to link neighbouring countries and other countries further afield so that we can use our geographic characters to the maximum to support Thailand to be the centre of the transportation in the local region, also (Ministry of Transportation, 2007).

The main factor that results in air transportation services being popular for customers is the convenience of speed with few complications in receiving services, coupled with the more recent drawcard of reasonable pricing as a result of several airlines offering low cost air services. So, with more passengers flying the skies, there is clearly a need for an increased number of workers in the industry. However, industry personnel today have to develop themselves while realizing that there are ongoing changes in the world in terms of knowledge and technology. Because of this, the industry needs personnel who are knowledgeable, able, and have initiative and creativity that will ensure changes faced by the organization move along cohesively with changes in today's world. Personnel in the aviation industry should not be

discriminated against through gender if he or she has the knowledge and capability required by the recruitment process of each organization. People can perform their job with pride in positions matching their knowledge and experience.

Therefore, as a result of these considerations, the researcher possesses an interest to study the management and development in the aviation industry in 3 environments, namely; airline, airport and air cargo by studying sample groups in Thai Airways Public Company Limited, Airports of Thailand Public Company Limited, and finally Bangkok Flights Services Company Limited, as shown in Table 1.4

**Table 1.4** Departments and Numbers of Labour in Thai Aviation Industry

<b>Departments</b>	<b>Numbers of Workers (People)</b>
Thai Airways Public Company Limited	28,000
Airports of Thailand Public Company Limited	4,400
Bangkok Flights Services Company Limited	2,800

**Source:** Civil Aviation Training Center, 2009.

Following the opening of Suvarnabhumi Airport and the consequential development of the quality of the services offered by the aviation industry in order to be the centre of the local region, it is expected that the number of passengers and air cargo will continue to increase substantially. This factor is important in promoting and developing the growth of the economy, social, tourism and tourism support services as well as many other aspects of the country. The first phase of Suvarnabhumi Airport accommodates 45 million passengers with a maximum frequency of 76 flights an hour, 3 million tons of air cargo a year and when fully developed to its final capacity, the airport will be able to support up to 100 million passengers a year, 112 flights an hour, and up to 6.4 million tons of air cargo per year.

The Global Aviation Industry Trend is a business cycle that varies and self-adjusts in certain periods (Association of Asia Pacific Airlines, 2009), for which the

aviation industry has a period that enjoys profit for about 7-8 years and a period of loss for about 2-3 years, where the mentioned business is impacted by the crises that affected the world over, i.e., the down-turn in the economy, terrorism in U.S.A., the war in Iraq, and the prevalence of communicable diseases. Regardless, the aviation industry depends on consumer demand and growth of the world economy. The Boeing Company, the world's big aircraft manufacturer predicts the trend will follow the same direction it has in past years, for the next 20 years (year 2028). The growth in air traffic for airlines all over the world will be about 4.9% a year. The growth in air travelers will be about 4.1% a year, and air cargo will grow about 5.4% a year as shown in Table 1.5

**Table 1.5** Current Market Outlook 2009 - 2028

<b>Key Indicators 2008 -2028</b>		<b>Demand by Region 2009 - 2028</b>		
<b>Growth Measures</b>		<b>Region</b>	<b>New Airplanes</b>	<b>Value (\$B)</b>
World Economy	3.1 %	Asia Pacific	8,960	1,130
1. Gross Domestic Product (GDP)		North America	7,690	680
		Europe	7,330	800
Airplane Fleet	3.2 %	Middle East	1,710	300
Number of Passengers	4.1%	Latin America	1,640	150
Airline Traffic	4.9 %	Russia&CentralAsia	1,050	90
2. Revenue Passenger-Kilometers (RPK)		Africa	620	70
Cargo Traffic	5.4 %			
3. Revenue Tonne-Kilometers (RTK)				
		Total	29,000	3,220

**Source:** Boeing : Current Market Outlook 2009 – 2028, 2009.

As with other countries in the world, the Thai aviation industry is still facing factors that caused the crisis. The main factors that impacted growth as mentioned are the fluctuation in prices of oil, the problems of internal politics and the export & tourism sectors decelerating. However, the Department of Civil Aviation, Ministry of Transportation, who is responsible for air transportation policies in Thailand, has determined the direction of many issues in order to create a strength to direct and oversee by emphasizing the development of law and personnel. At present, producing Thai aviation personnel is being done by both public and private institutions to recruit various kinds of personnel, i.e., pilots, airplane mechanics, aviation managers, and airplane maintenance specialists etc. to go along and continue supporting the growth in different kinds of tasks etc.

In conclusion, the background and importance of the problems mentioned earlier gave the researcher an interest to study labour in the Thai aviation industry, focusing specifically on the development of the labour by acquiring academic data, which will be useful for those concerned with human resource development in the aviation industry.

## **1.2 Objectives of the Study**

1.2.1 To study the present situation of management and development of labour in Thai aviation industry, specifically those working in the airlines, at the airport, and at the site of air cargo.

1.2.2 To study the guidelines for increasing competency of management and development of labour in the Thai aviation industry, specifically those working in the airlines, at the airport, and at the site of air cargo.

## **1.3 Scope of the Study**

This research is conducted only on the sample of personnel at the basic to mid-managerial level, performing job tasks in Thai Airways Public Company Limited (28,000 people), Airports of Thailand Public Company Limited (4,400 people), and Bangkok Flight Services Company Limited (2,800 people).

## **1.4 Expected Contributions**

1.4.1 To obtain data to study the factors affecting the development of labour in the Thai aviation industry.

1.4.2 To develop a knowledge base concerning the labour data in the Thai aviation industry which will be useful for people involved in helping and supporting, protecting and solving problems, and be a guideline for ongoing study and research on other related issues in the future.

## **1.5 Operational Definitions**

1.5.1 Aviation Industry means the task that the organization operates according to the goals of the establishment due to an aspect or the others, i.e., manufacturing, commercial air, carriers, and general aviation etc.

1.5.2 Labour in Thai Aviation Industry means the personnel who perform tasks of production, i.e., design, maintenance, commercial air carriers, namely, airline management, airport service, general aviation, namely, survey aviation, agricultural purpose aviation, civil aviation, sport aviation, and pilot training aviation, etc.

1.5.3 Management and Development of Labour means the activities of the executives to recruit personnel who have competency to join the organization and develop them to have the ability to perform the jobs, including giving him or her the persuasion to have the initiatives and readiness on the job, or problem solving abilities in the organization, which the recruitment of those personnel can be done by finding and selecting, following up, evaluation, compensation, and paid career development course.

1.5.4 Human Resource Development means adjustment of the ability and competency in acquiring the knowledge at the existing level to the level that the organization expects in order to make those personnel have progress in performing the jobs.

1.5.4.1 Training means the activity that the organization offers or gives the opportunity to let the personnel in the organization to develop the skill, knowledge, perception, to gain the ability to a better job at the present.



1.5.4.2 Education means the activity that the organization offers or gives the opportunity to let the personnel in the organization to develop the skills, knowledge, perception, to gain the ability to a better job in the near future.

1.5.4.3 Development means the activity that the organization offers or gives the opportunity to let the personnel in the organization to develop the skills, knowledge, perception, for the personnel to have progress within themselves, which is the long term in personnel development of the organization.

## **1.6 The Dissertation Presentation**

This dissertation is divided into 5 chapters as follows;

Chapter 1 Introduction

Chapter 2 Literature Review

Chapter 3 Research Methodology

Chapter 4 Data Analysis of Factors Affecting Management and  
Development of Labour in Thai Aviation Industry

Chapter 5 Summary and Recommendations

## **CHAPTER 2**

### **LITERATURE REVIEW**

In this Chapter, the researcher reviews related literary work by dividing the first part into 3 topics, namely; (1) labour, management and development, (2) the factors that impact the management and development of labour in the Thai aviation industry, (3) research on management and human resource development in Thailand. The second part considers the boundaries of thought in the research which develop from the review of the literary work.

#### **2.1 Labour Management and Development**

##### **2.1.1 Labour**

Labour is a factor of production. It is a human asset which is important at any level. from micro to macro economics. Micro economics encompasses labour in many production sectors, such as the agricultural, manufacturing, and service sectors. At the macro economics level of the country labour is important because if labour in the production sector requires knowledge, ability and competency then it should ideally result in an efficiency and quality of production to develop that particular sector. There follows direct results towards the total development of the country therefore labour represents great value to a country's development. A country's labour force should be given reasonable care such that employee's dignity and ability to spend their lives equally within any group of people in society is preserved. However, reasons why labour varies due to the nature of the production sectors, results from different styles of management and the occurrence of labour exports. Thailand in particular has scattered labour in the agriculture, manufacturing, commercial and service sector branches of production which makes labour management complicated. It is up to each production sector to deal with the different contexts. Accordingly, the researcher must focus importance broadly and deeply into details of the labour in each

production sector throughout this study. Labour in each manufacturing sector is categorized into several levels, i.e., skilled workers, semi-skilled workers, and unskilled workers. Other than this, labour is connected to several broad aspects of a country such as economics, social, political, and also in relationship to many groups of social institutions.

In particular, labour in the manufacturing sector has connections on a bilateral basis between labour and the employer investors, and on a trilateral basis among the labour, investors, and the government. So, a detailed study relating to labour must incorporate knowledge regarding the exact meaning of labour at many levels, knowing the factors and how they affect, also how much the meaning covers to what extent to make the researcher understand the nature of the labour in order to lead to the labour relationship efficiently. The word “labour” is a term that is used widely in terms of both broad and specific meaning. Therefore, we should first understand the meaning of “labour”. Some people have suggested the meaning of labour into 2 definitions (Nattaphan Keajonnun, 2005) as follows:

2.1.1.1 General definitions are general meanings that are used generally in society, which have different specific levels according to the situation, for example: 1) Labour means all manpower of the workforce derived from citizens of working age that will benefit the country 2) Labour means manpower of the working age group 3) Labour means workers who use physical energy

2.1.1.2 The definition of “management” is the meaning that is used by the general public and has different limits due to each individual situation, where the specific meaning of management can be described as follows: 1) Labour means the manpower that an organization employs to benefit the economy, in which the mentioned labour might join the present organization or groups of people, brought together to work when the organization needs them.

### **2.1.2 Labour in Thai Aviation Industry**

Labour in the aviation industry means personnel who perform jobs according to the definition of the Federal Aviation Administration (FAA) of The United States of America. Labour performs in manufacturing, commercial air carriers, and general aviation activities (Todsaporn Hongsanun, 1995), which is detailed as follows:

2.1.2.1 Manufacturing means research, development, design, operation, system of making parts, airplane sales, engine parts, accessories, rockets, aerospace, including maintenance, modifications, and overhaul.

2.1.2.2 Commercial air carriers means air transportation of airline routes, specific service rates, rules, regulations and enforcement.

2.1.2.3 General aviation activities means the general aviation business beyond the meaning of commercial and military aviation, which can be business aviation, i.e., air taxis, rented aviation, aviation for a special purposes, namely, survey aviation, agriculture aviation, personal aviation, sports aviation, and pilot training aviation, etc.

Air transportation today is an important factor of doing business, investments, commerce, and international tourism. In general, traveling or freight logistics from one country to another can be achieved by land, sea, and air transportation. Air freight logistics is considered an important and popular business commercially, for investment and for international travel because it offers convenience and speed as well as reliable flight schedules. Freight can be transported to any corner of the world because there are many flights worldwide which are able to take passengers or merchandise to their final destinations, near and far in almost the same time. Aside from this, risk rates for safety of the merchandise itself or on safety during transportation is considered low. With air freight logistics between consumers and sellers, buyers seek convenience and speed. Thus, sellers choose to send their goods by air courier because it is the most convenient and quickest method available. However, business transactions for both domestic and international freight logistics require manpower in the form of aviation personnel who have knowledge and efficiency to match the growth and demand now faced in this mentioned industry.

The expansion of the aviation industry all over the world has resulted in an increased demand for aviation personnel because the policy from the public sector wants Thailand to be the aviation hub. Added to that, there are several low cost airlines operating which makes flying far more accessible to more people. The opening of Suvarnabhumi Airport in the year 2006 and the expansion in the aviation industry in the local regions including the opening of the Open Skies Policy has created new and fierce competition. Foreign airlines came into the country,

established themselves, and created joint-ventures with local Thai investors, which has caused an expansion of the aviation centre that has flights departing to other countries. Thus, the expansion of this industry has created a demand for pilots, airplane mechanics, air traffic personnel, etc. There is a study on the demand of numbers of pilots which used assumptions from the Federal Aviation Association. The ratio of the number of pilots for a U.S. international airplane equals 12.19 pilots. For the airplane mechanics, there was a study done by Human Resource of CAAC Maintenance System 2008 (Civil Aviation Training Center, 2009), which studied the Republic of China Airlines and found the average rate of the number of the airplane mechanics per airplane equals to 24.81 people. The number of airlines and airplanes in Thailand are shown on table 2.1 as follows:

**Table 2.1** Numbers of Airplanes of the Airlines in Thailand

<b>Logistics Operators</b>	<b>Number of Airplanes (Airplanes)</b>
Thai Airways Public Company Limited	92
Bangkok Airways Company Limited	20
Thai Air Asia Company Limited	17
Nok Air Company Limited	2
Orient Thai Airlines Company Limited	16
Other Commercial Airlines	89
Total Airlines	236

**Source:** Civil Aviation Training Center, 2009.

The Thailand economy needs high quality, skilled labour and needs to be involved with the world economy so much so, that they cannot be separated from one another. In the meantime, unskilled labour or less valuable employees may face termination or lay off due to an organization running at a loss, or even closing down. It is accepted that humans are the most important resource. A business or any operation in either the public or private sector including the agriculture or manufacturing

sectors, aims to develop the efficiency of its workers. Thus, manpower is an important factor and has an influence on increasing production. The process begins with recruitment and selection of the right workers who have qualifications that fit their respective posts. Labour is a country's valued resource because it is a key factor that produces merchandise and services. Many countries are currently facing problems of optimising their human resources, developing their economy, and other related social aspects. These problems are growing more important because nowadays, many developing countries face problems of imbalance between supply and demand in labour. Almost every country has an imbalance because often population increases create an over supply of labour for the current job market.

So, the aviation industry, which is continuously growing has a number of international and domestic passengers, including air freight logistics to other countries from Thailand. Also, domestic air freight logistics has been increasing in volume as well. So the employment of labour in the aviation industry is tending to increase each year (Department of Labour Protection and Welfare, 2003). The Department of Air Transportation is a powerful driving mechanism in the international market. Nevertheless, there is an expectation for the total growth revenue of air freight logistics to be 4.4% representing 2.3 trillion dollars. In fact, there is a business target that air freight logistics will actually grow to 6.7% in the next 20 years or three times the present growth. According to the principle, logistics and turn key businesses in express airline logistics operate efficiently and are viable if the operations centre is located in a strategic location.

As previously mentioned, the operation of aviation's Open Skies Policy has resulted in low cost airlines popping up in the marketplace both in and outside the country, which has generally created lower airfares. Low cost airlines are often the preferred choice as people can now access air services and air freight logistics far more than before. It has made air travel that was once impossible - now possible for many Thai's because airfares now are not that much different than fares for other means of transport. Airlines that provide regular services often have direct competitors that force them to improve themselves to provide better services at a higher level in order to meet various demands of the people and stay competitive. Nevertheless, the public sector must have regulations to enforce and look after to set a

good aviation standard which gains people's confidence in safety and guarantees that people will receive services from air logistics that are not less than what it is offered at the present time. In addition, ways to maximize airport use in order to get the best economy of scale must be considered. The implementation of the Open Skies Policy has brought good benefits to all citizens in terms of the quality and types of services offered for air travel today and the policy has provided Thailand with an increased ability to become the centre of aviation in the local region. The policy however, requires sincerity from the public sector and must be cooperated with by all sectors as well. If this can be done, the policy can meet its targets and can answer questions as to whether the groups which will reap the highest benefits, are the citizens. The Open Skies Policy has clearly had a significant impact on the aviation industry. It arose in Asia after an instigating push from the World Trades Organization, a group of Asian countries who declared the establishment of ASEAN Free Trade Area (AFTA) in order to improve the cooperation in economies and eliminate commercial problems within the group. To open free trade and services, Thailand has used the international and domestic Open Skies Policy. On the international side, a promotion exists that cancels the frequency ceiling by not limiting the number of flights. On the domestic side, the Thai Commercial Airlines can apply for permission to fly abroad on all routes, as well. The expansion of the aviation industry in the whole local region has created a high demand on labour for pilots as well other personnel involved in the aviation industry. With the opening of Suvarnabhumi Airport on the 28<sup>th</sup> September 2006, for the purpose of supporting 45 million passengers a year and millions of tons of air logistics a year, the numbers and demand on labour in the aviation industry are rising accordingly.

### **2.1.3 Management and Human Resource Development**

#### **2.1.3.1 Human Resource Development**

Human Resource Development means the process where executives who have the duty to manage tasks concerning personnel and/or the persons that have jobs involving personnel in the organization, work together by applying knowledge, skills, and experience in order to source, select and recruit personnel who have the

appropriate qualities to be employed by the organization. As well, human resource management involves maintaining and developing personnel in order to make personnel in the organization have the competencies suitable to perform the jobs, and a quality of work life (QWL) that is decent, as well as creating a guarantee for member workers that retire from the organization to live happily in society in the future. From the above mentioned definitions, we see that Human Resource Management performs activities that are involved with personnel or members of the organization in 3 aspects (Nattaphan Keajonnun, 2005) as follows:

- 1) Before entering the job, the Human Resource Department of the organization must plan the human resources, recruit, and encourage people who have knowledge, quality, and suitability for the jobs that they desire, to join the organization. The target group that the organization aims to recruit is very important. So, human resource personnel in each organization should have knowledge, understanding, and can get into the group that the organization wants to work with appropriately. The stimulus to entice people to join an organization may occur from many factors supporting one another. These will be described in detail in terms of recruitment and selection. Beyond the attention that the organization can draw from the people to have an interest to join in, human resource still has to select people or a group of people who are the most suitable to work in the organization because qualified workers ultimately help to progress and promote the organization.

- 2) Maintenance. Other than recruiting personnel who are knowledgeable and qualified to join the organization, another human resource task is to maintain the members of the organization such that they enjoy a quality of work life and feel part of the organization. This is done by providing them with fair and appropriate compensation, ongoing training and development, fringe benefits, and promoting health care in job activities. As well, helping them set guidelines to progress in their careers, making sure personnel are ready for the task physically and mentally, all of which ideally results in personnel giving their all, physically and psychologically to work the best that they can for the organization.

- 3) Once working together, Human Resource Management relies on the personnel working in the organization until their retirement or until they leave the job due to reasons other than serious misconduct, by preparing the readiness



in order to allow those personnel to live in society happily, for example, with gratuities, pensions, back-up money, rewards, or other types of compensation.

#### 2.1.3.2 The Purpose of Human Resource Management

In the past, personnel administration had a very narrow and specific purpose by considering the permanent job of the personnel department. It held the duty of recruiting and maintaining personnel to work together with the organization to get the most benefit for the organization only. Nowadays, the human resource task is gaining recognition and expanding the boundaries of the operation more and more, having goals to meet the demand in different areas as follows:

- 1) Social. Human resource task of the organization has a goal to meet social demands because normally each social group wants its members to live decent lives peacefully and to be able to develop their social aspects to exist through the future. The Human Resource Department of the organization will have involvement with recruiting appropriate people to work in the organization, which creates jobs for members of society. Other than this, human resources still have to promote fair compensation as well as the development of the personnel to have knowledge, skills, and ability to perform with efficiency and to be good citizens. Lastly, human resources have the duty to set the guidelines and the guarantees for personnel who retire from the organization when the time for retirement arrives or leaves for other reasons aside from serious misconduct in order to allow them to live in society happily. This is considered a part of social responsibility for the organization.

- 2) Organization. The main goal of human resources of every organization is to ensure that the organization operates efficiently and grows continuously at an appropriate rate. As mentioned earlier, the Human Resource Department has duties involving personnel from the day before they join the organization, during work, and even after all the work that they have done for the organization. In order to give confidence to the organization that there will be personnel with knowledge, skills, experience, and ability at certain levels of the organization who are good enough to be working with at all times ensuring that those people are loyal and dedicated in their jobs.

3) Personnel. An important reason why most people have to work is as simple as survival for themselves and often their families. This is followed by a need for a decent quality of life by having the four necessities of life, safety, and finally being accepted in society at an appropriate level. Human Resource Management has a goal to meet at various levels for each personnel from basic level of needs through to high level of needs by considering the tasks of the personnel department starting from the employment of those personnel, appropriate and fair compensations, bonus, training and development, moving to higher levels, such as promotions, career plans and guidelines for the future, also, quality time activities, in which all these events are a part of promoting quality work life and a better standard of living in their individual lives.

We can say that the human resource task has efficiency, which contributes in helping members in the organization to understand the organizational goals, unity, and cooperation to the maximum of ability in order to make the organization be able to grow continuously and stably. Such performance aims to reach the goal and the understanding together and tends to result in the appropriate use of the human resources. When many organizations can employ their human resources to the maximum of ability, then efficiency occurs in producing merchandise and services for society, which in turn makes members of society able to consume high standard merchandise and services, promote better life quality and competency in order to give society a competitive edge to be able to compete with other societies. So, we can see that Human Resource Management is considered as contributing towards promoting security for society both directly and indirectly. The Human Resource Department performs duties in data preparation that are important involving human resources presenting to executives, supervisors; also participating in developing the policies in terms of the overview and more specifically concerning each organization. Other than this, when there is an expansion or other adjustment in the organizational structure, the Human Resource Department is involved in planning and setting personnel to fit the new positions, duties, or work structures. Maintaining equality among personnel and creating a balance in the organization by separating the human resource tasks that have to do with the organization into 4 categories can be done as follows:

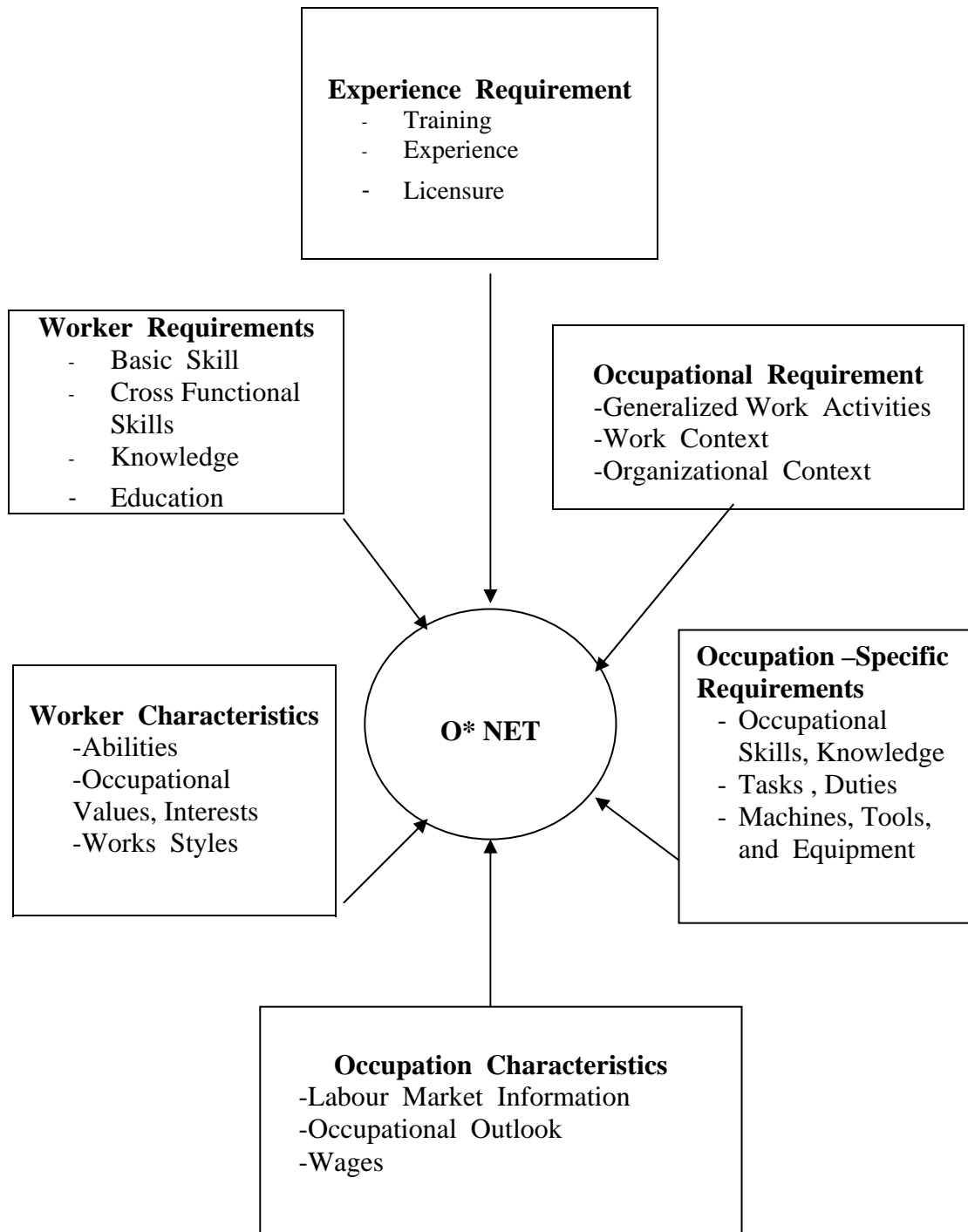
1) Setting Policy. The Human Resource Department has duties concerned with the overall personnel policy and individual units within the organization. Human Resource Department will perform duties such as preparing data which is important for the Human Resource Department to present to executives as well as participating in policy making regarding the overview of all labour in the organization and each unit within the organization.

2) Recommendations. The Human Resource Department has the same concerns as other units in the organization, i.e., finance, marketing, and engineering, etc. That means each unit will possess skills in performing tasks, for jobs that are related to the Human Resource Department starting from drawing attention, recruitment, selection, employment, training, evaluation as well as tasks involved in compensations, fringe benefits, safety, and labour relations of personnel within the organization. So, when high level executives, other units, or the general public have problems concerning human resource tasks, they can ask for recommendations from the Human Resource Department directly, i.e., reducing or increasing the demand of labour, fringe benefit queries, or having problems with the labour law, etc.

3) Services. The Human Resource Department characteristically supports other units by giving support and consultation to the main line of management when problems arise or when labour is needed, advising on fringe benefits in the organization, issuing magazines, or special notices, etc.

4) Control. Manpower Control is considered to be an important human resource task. For the reason, if an organization has too many personnel for the certain amount of work, expenses will be too high. Alternatively, if the organization has less personnel than needed, this could result in a reduction of services being offered. Other than this, the Human Resource Department may organize many kinds of services at the organizational level, unit, or personnel level, i.e., training and personnel development, consultations to solve problems, life planning for personnel, receiving complaints, campaigning for safety or increasing the efficiency of work performance, by overseeing delays of work, over work for each personnel, which cause lack of efficiency, dangers in working period, stress and burn out, which cause negative long term impacts to the organization. So, the Human Resource Department has to perform duties of reviewing and developing work plans concerning personnel in the organization to appropriately fit the demand at all times.

Work Analysis and Design has developed O\*Net (The Occupational Information Network) to be a data base for gathering the descriptions and presenting all kinds of occupational data such as tasks, characters, abilities, skills, knowledge, and other detailed information by categorizing into 6 aspects, which determine the boundaries to explain job descriptions (H., John Bernardin, 2003) as shown on figure 2-1



**Figure 2.1** O\* NET Content Model

**Source:** Peterson, 2001: 458.

Sirisopak Bhuraphadecha (1991) studied Human Resource Management by realizing the work analysis, which is a process of studying and gathering information about the nature and character of each task, one thing or the other. This process allows management to know if they will have to use knowledge, skills, and responsibility, the one who performs, that will get the task done.

Phayom Wongsansri (1995) studied Human Resource Management, by considering which unit responsible for personnel will have the duty to support and maintain in order to make the personnel work with the organization for the reason of getting the most benefit only, which reaches the goal that meets the demand at many levels, i.e., social level, organization level, and personnel level.

Aranya Somkeaw (2003) studied capability, which gets into every process in the recruitment, selection, development, evaluation as well as compensation. Everything will be based on the idea of capability.

Nattaphan Keajonnun (2005) studied Human Resource Management by saying that recruitment and selection are duties of the Human Resource Department that must do the process in order to be sure that the organization is able to select the personnel that have knowledge, ability, perception, and experience for the positions efficiently.

Thongchai Somboon (2006) studied Human Resource Management in the organization, finding that the best management is developing motto base or idea, but this is the result that comes from the understanding, knowing well and knowing in depth. Therefore, human development should be developed in the direction of a way of thought, analysis, sorting and linking. However, people have to be into “intellect” and reasoning that will create more value of self-development.

Milkovich and Boudreau (1991) mentioned about Human Resource Management that human resources will be the producers of the merchandise and services, quality control, marketing, finance, strategy setting, and the goal for the organization.

De Cenzo and Robbins (1993) studied Human Resource Management in the aspect of work analysis, which is an activity that has to be done for each task. The systematic analysis will be a technical procedure that is brought to use in setting duties, responsibilities, and the boundaries of each task.

Fisher , Schoenfeldt and others (1993) have seen Human Resource Management relates to all the management decision making and the practices that has the result or influence to those personnel or human resource that work for the organization.

Tompkins (1995) studied the work analysis process, which is done systematically for gathering, recording, and analyzing information relating to each task.

Gomez – Mejia, and others (1995) studied Human Resource Management by saying that job evaluation, which is a direct duty of supervisors, which these people have a duty and responsibility in the work management on behalf of themselves in order to reach the goal well by establishing a board of evaluation or letting other people take part in personnel evaluations, i.e., supervisors, colleagues, subordinates and customers.

Mondy, Noe and Premeaux (1999) set the definition of Human Resource Management as to making use of human resource in business in order to reach the goals of the organization.

Dessler (1999) set the definition that it is the policy and conduct in using human resources in business to reach the goals of the organization.

Byars and Rue (1997) set the definition of Human Resource Management as the activity which is designed to provide cooperation with the human resources of the organization.

Ivancevich (1998 ) studied Human Resource Management and concluded that it is the duty of the organization, which makes the maximum effectiveness from using its employees to reach the goals of the organization and individual goals

### 2.1.3.3 Personnel Development

Personnel development may be used in many terms, which have the same meanings, i.e., “Personnel Resource Development”, “Human Resource Development”, “People Development”, and “Personnel Development”. In English, Human Resource Development or abbreviated, HRD, most scholars agree to the meaning “Organizing the experience of knowledge systematically in a specified period of time in order to increase the opportunity for personnel in the organization to have higher ability and be able to perform the given task to get the good result, which will cause the progress of the individuals and the organization’s” .

Human Resource Development is a way to use training, organization development, and career development integration in order to increase the affects from personnel, work groups, and the organization. Human Resource Development will help in developing key competencies that make personnel in the organization able to perform the task now and in the future by going through “Planned Learning Activities”, which help make the work group in the organization able to get new ideas to manage and change and create coordination between the needs of the organization and the personnel.

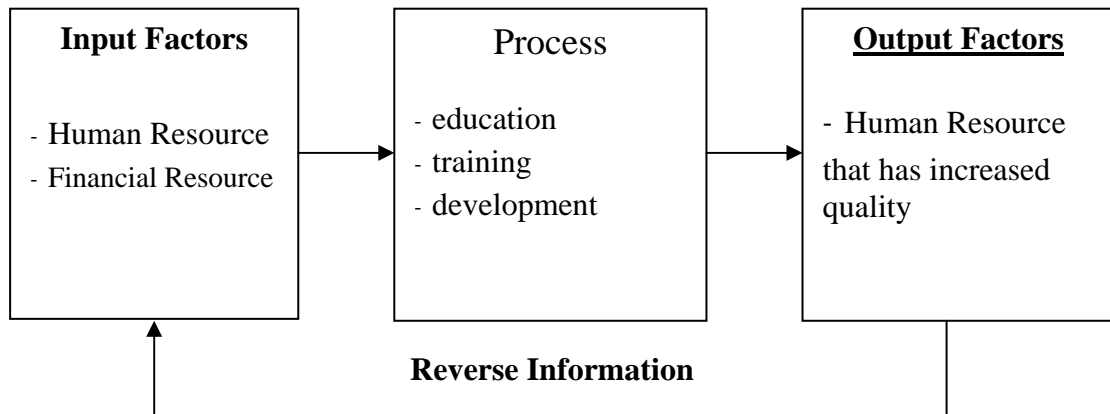
The different meaning of personnel management is due to the culture in each country. In France, the word “social development” tends to be the substitution of the abbreviation, HRD, in Germany. The related branches in personnel development or HRD will be concerned with training in the manufacturing sector, the skilled consultant and skilled personnel management in Netherlands. Personnel development will relate to criteria, training, and developing, which are provided to create and upgrade skills of personnel within the organization. In Russia, personnel development coordinates with the method of selecting and training personnel by emphasizing at manpower management or the overview of the personnel more than helping them to develop individually. In Great Britain, personnel development consists of procedures and activities, which impact on the learning of the organization as well as on personnel.

#### 1) Human Resource Development in the organization

Human Resource Development (HRD) is an attempt to increase quality, production, and satisfaction from personnel in the organization. The goal of Human Resource Development is to upgrade the level of life quality to the best for personnel, production, and services, which have high quality in the possible environment of the organization and will have to relate to the process of development, namely, individual development, career development, and organizational development as follows: 1) Individual Development the organization will concentrate on providing knowledge experience to the individual in order to reach the organizational goals. We can sort the kind of experiences into 3 types, namely; training, education, and development to consider the needs of sorting the knowledge experiences into different types as follows: 1) Training is the process that is provided for personnel to learn and



create skills, which have a goal or another to upgrade the standard of the responsible performance to be better, which will make the company reach the set goals at the same time. It is expected to have the change of behavior and/or the perception of work performance that those personnel do. In training, the main goal is to make personnel gain competencies, knowledge, skills, needed by the organization. Usually, the goal of training is creating knowledge and understanding in policies, work plans, goals and targets of the organization at each level, giving information relating to the best method of performing the tasks in order to solve defect problems relating to past performance. 2) Education. It is the preparation of personnel for future performance and still involving the task, but in order to make the difference from training, the authority must realize that the education emphasizes on personnel for other tasks not the present tasks. Most education is used to prepare personnel for getting promotions, future tasks that we have had already, or at least there is the job description for the authority and those personnel to have necessary information for new positions. The time to make use of the provided education is in the future. 3) Development is the process that uses methods to expand the world vision to perform and act at work or in society for those personnel, which includes the giving of extra work, showing how to work, consultations, introducing how to be a trainer, rotation of work duties, field trips, studying operations at other organizations, being assigned to be in a conference on behalf of someone, and being assigned to participate in social activities. If all the methods mentioned are blended with the 2 processes earlier, this will help the personnel development system of the organization reach a better completion. The emphasized point of view of the development depends on the organization. Experience tells us that general organizations will grow and change for the survival of the organizations which has to move due to the time period. Human Resource Development, according to the thought of the factors of the system that belongs to Davis Easton, states that the system of Human Resource Development contains important factors, namely; input factors, which are people, capital, process of processing, namely, education, training seminars, development, and output factors which are qualified personnel as shown in figure 2.2.



**Figure 2.2** David Easton's Factors

## **2.2 Factors Affecting Management and Development of Labour**

Developing human resources in the organization is the duty and responsibility of its executives. Thus, the executives aim to ensure personnel in the organization perform at full competency in order to result in production, which is up to the volume and quality to achieve the goals of the organization. Managing the organization to have efficiency, executives rely on 3 conditions, namely; individual conditions, economy and social conditions, and management conditions, in which all 3 conditions lead to decision making in Human Resource Management, which is the result of personnel behavior in the organization. The 3 conditions stated earlier have a relationship as follows;

### **2.2.1 Individual Factors**

#### **2.2.1.1 Gender**

Usually, the number of males that enter the workforce is quite stable and the numbers tend to be higher than that of females'. In contrast, female rates fluctuate more than male's, but the rate is lower (United Nations, 1990). In the aviation industry workforce, males tend to number more than females because this industry, often transports heavy merchandise. Thus, it is more necessary to rely on male labour especially in areas used for specific performance such as aircraft

maintenance, warehouse, or around areas where airplanes are. Aside from this, female labour is predominately found performing tasks in ground services and in inflight services, management, accounting, Human Resource Management, etc. The study found that female labour in the aviation industry tends to perform these above mentioned jobs (Thai Airfreight Forwarders Association, 2004).

#### 2.2.1.2 Age

Age is an indicator of the relationship between maturity and responsibility that matches the duties and designated time to work. The labour force in Thailand at the present time means individuals 13 years of age and over (National Statistical Office, 2003), which is in the week of survey. An individual may be on the job or not. If holding down a job, an individual has to work an hour and earn a wage or salary, benefits, dividends, or compensation in cash or kind or if the individual has not been working, but still has duties, business, owns an agricultural field where the work has been stopped temporarily, due to illness or injury, taking a break, the work place is closed, or bad weather conditions prevent work from being carried out.

Information on manpower within the air freight logistics industry suggests an age range of between 18-65 years, where age has a relationship with the performance plan and duties responsibilities. Most personnel are aged between 30-50 years, and it was found that the mentioned labour has ability and puts in the maximum effort to performing the jobs (Thai Airfreight Forwarders Association, 2004).

### **2.2.2 Socio-Economic Factors**

#### 2.2.2.1 Education

Educational levels of the labour has great impact on the behavior labour development. More problems in labour behaviors are found in lower educated labour than in higher educated employees. Investment in education and training is a way to increase knowledge, skills, and experience, which is an additional investment on human to increase the power to earn income that is matching the study of World Bank (1995), which found that some of the skills and abilities that are found in the individuals or manpower, came from education and training. The level of education dictates to some degree the entry level income of an individual. People who have 12 years education or who have graduated from high school may have an entry level income less than an individual with 16 years of education or being a college graduate.

#### 2.2.2.2 Income

Work may generate income and that income often relates to the employee's education. Workers with a higher education may earn a higher income. Income or salary of the positions tends to result in offering job applicants, who make the labour selection more chance to choose individuals to fill the positions or in the area that has a lot of positions and has enough income at the higher rate for making a living. This tends to result in the number of potential employees choosing that field, which in turn impacts that chosen field afterwards. Increasing the income may benefit the family by promoting life quality of labour and their family to a higher level. Labour in the air freight logistics industry that receives lower income tend to work more hours in order to increase their income for themselves and family (International Air Transport Association, 2002)

#### 2.2.2.3 Marital Status

A workers' marital status will play a role in labour offer or job applications. If the applicant is single, living alone and without dependants, that person will likely be the sole decision maker as to whether they will accept the job, automatically. If the person is part of a family unit or has family dependants, the decision to take a job is likely to be made in consultation with the family, because family members not only depend on their own income, but they may also depend on other family member's income (Boonkong Hunjansit, 2001). Marital status has a relationship with labour offers; males who are married will likely have more responsibility towards their family duties, such as their role as a father, and husband than those males who are not married

#### 2.2.2.4 Affiliated Departments

Departments may have important duties in performing the main tasks of the organization in order to carry out the policy and development strategy for the country creating a strength in society and the economy and increasing abilities in various given tasks in order to increase the competency of the competitive edge to catch up with the world dynamics. (Waret Hukkayanon, 2003)

#### 2.2.2.5 Positions

Position is an important basis of personnel management in the organization by concentrating on work status, i.e., recruiting and selecting employees,

allocating tasks, evaluation, compensation management, etc. Executives, supervisors, personnel, who have knowledge and understanding concerning patterns of thought, methods to develop correct job descriptions as well as applying these in a normal workday. We may add the indication of the successful work of the positions, which helps to clarify the target, workers' expectations at work including clear performance evaluation and matching that with the expectation of the organization (Thailand Productivity Institute, 2007)

#### 2.2.2.6 Work Period

Work period is the direct result from work. If the work contract expires at any point in time, the work period may stop at that point. So, the work period of an employee is according to civil law, namely, contract law (but the criterion of counting work period is in the labour law). According to the principles of the contract, an employee's work period may be counted according to the period of contract. Whenever a contract of employment commences, the work period of that employee begins then. Hiring; it is considered that the employee becomes the company's employee at the beginning and has an effect to the right to get the employee benefits due to the nature of hiring (Waret Hukkayanon, 2003)

### 2.2.3 Management Factors

Management and Human Resource Management are fields of work of a private or public sector organization because however the organization improve themselves in any aspect involves people totally. It could be said that an indication of stable success of the organization depends on the quality of the people belonging to that organization. In that organization, people who are perceived to be only a factor of production or given the recognition to be at labour level only or manpower as the human resource or human capital.

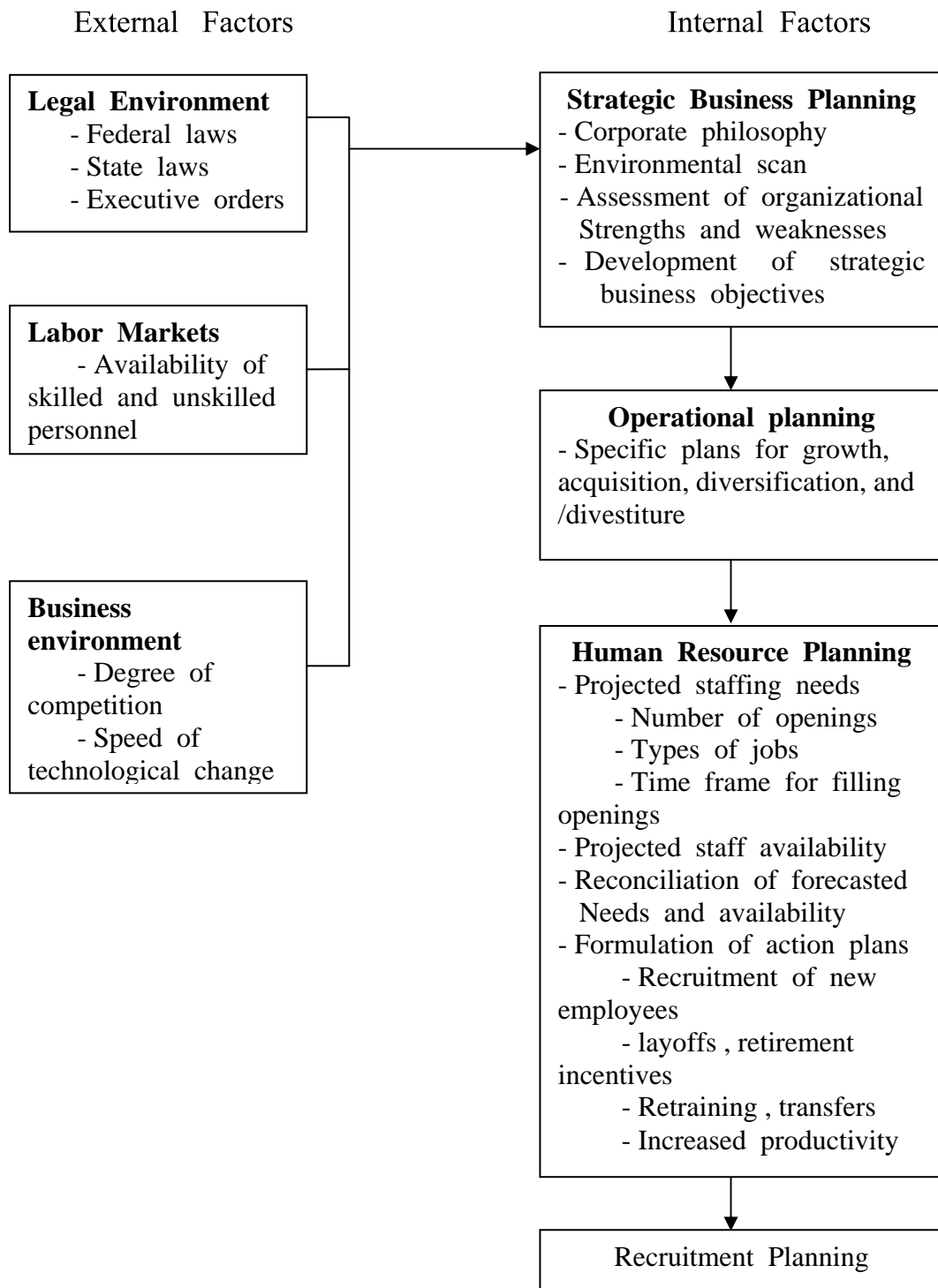
#### 2.2.3.1 Labour Development Planning

Labour Development Planning has the activity to schedule personnel development plans on many issues, i.e., to determine the boundaries of manpower development by appointing the methods to develop manpower in order to solve problems or the organization by assigning the work or work outline, for example, training, sending personnel for continuing education training, cooperation visits,

developing by the process of performing jobs, self development, team work development, or organization development (Ministry of Labour, 2009).

#### 2.2.3.2 Recruitment and Human Resource Planning

Recruitment is the process of finding and persuading job applicants who have the ability to join the organization (Bernardin, 2003), starting with finding prospective people to work and ending when those individuals apply for jobs in the organization. The process that is considered in recruiting is the organization policies; human resource plans that ensure recruiters receive the necessary information on employees and promotion for employees. Recruiters may know whether potential applicants should be found internally or externally. The important considerations for those responsible personnel in Human Resource Management of the organization are human resource planning and accepting applications. These are processes in the expectation of the demand in human resource according to the organization's business plan by realizing that the change in environmental conditions in the short to moderate term and the long-term also all the while considering the efficiency of the main business. Hiring applicants to work in an organization has accompanying procedures, such as the selection process, which involves taking applications that will have the impact from the processes and procedures of the other tasks as shown in figure 2.3.



**Figure 2.3** General Pattern of the External and Internal Factors that Have Impacts on Recruitment

**Source:** Breugh, 1992.

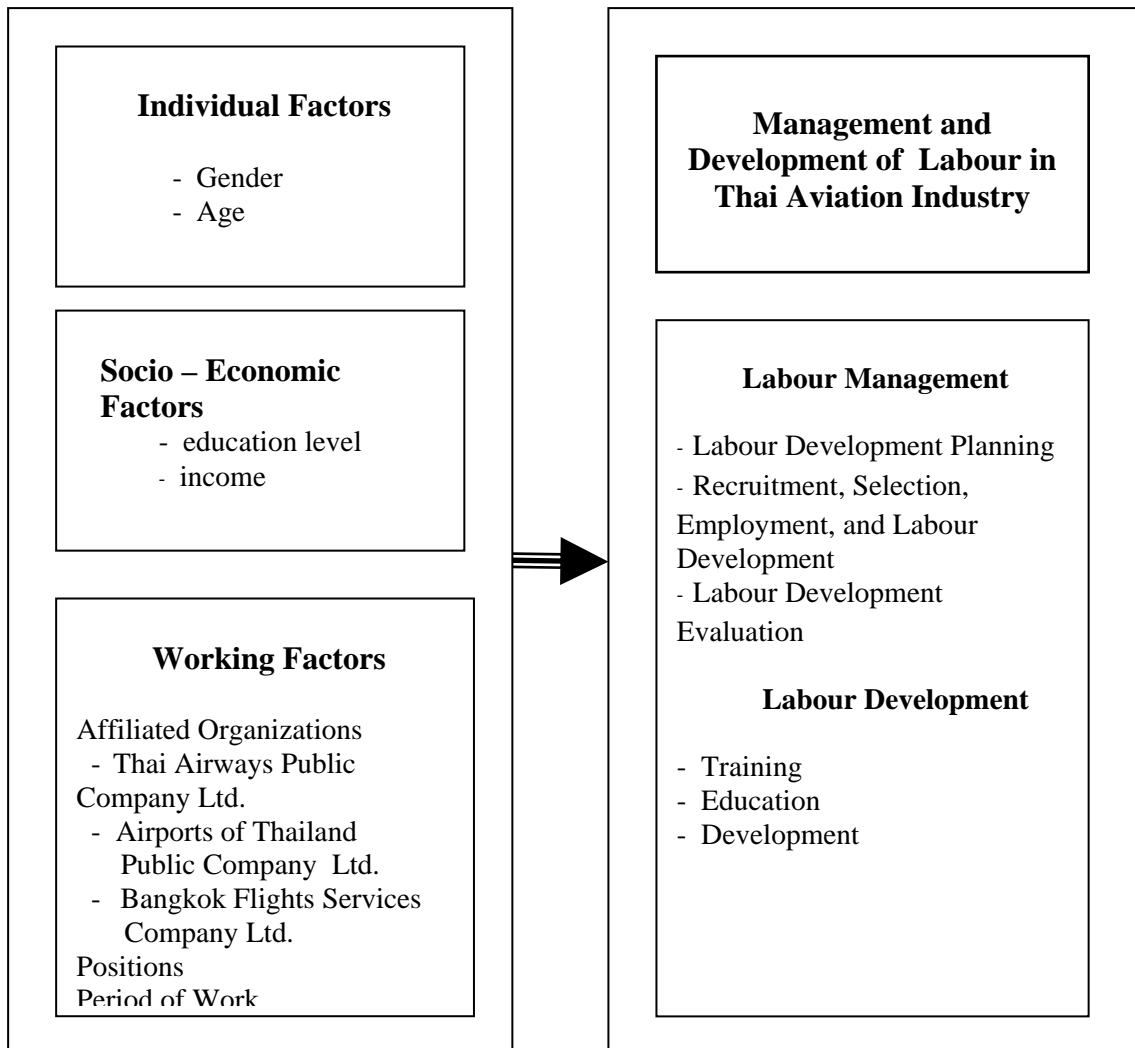
Selection is a process where a company uses certain tools to select from many applicants to meet the numbers that the company requires. So selection needs certain criteria in order to set boundaries for consideration to recruit people who have qualifications that match the job opening.

#### 2.2.3.3 Labour Development Evaluation

The process of personnel development is a planned process to develop personnel according to an assigned period of time or work calendar, follow-up and evaluation, development of manpower in various methods as per a designated plan,. Thus, the process is accomplished according to a determined work plan, goals and targets.

The growth of the world economy has resulted in a growth of air freight logistics, which in this mentioned industry, is composed of passenger transportation and air logistics. Therefore, the demand on labour to satisfy the Human Resource Development in the Thai aviation industry must depend on many factors that can be concluded in a conceptual framework as shown in figure 2.4





**Figure 2.4** Conceptual Framework of Factors Affecting Management and Development of Labour in Thai Aviation Industry

### 2.3 The Study and Research on Management and Development of Labour in Thailand

The study of research on management and labour development in the Thai aviation industry is quite limited. Most research has been on employee satisfaction including labour life quality. Todsaporn Hongsanun (1995) studied the factors that influence career choice in the aviation industry to be a commercial pilot by being a pilot student of Civil Aviation of Thailand Institution. From the results of the study,

findings indicated that the decision and factors regarding the student pilot him or herself, is that the student pilot takes time to carefully consider before making a final decision in choosing the career. People around the prospective student pilot appear to have some influence in the decision making process to enter into an education program in the aviation field. Other than that, ability, skills, and basic knowledge, are used to determine along with the decision in choosing to enter into a commercial pilot career, also.

Nattaya Changchuawong (2001) studied and researched privatization transforming of the Airports of Thailand Public Company Limited for the study purposes of 1) the communication characters of the employees relating to the privatization of Airports of Thailand Public Company Ltd. (AOT), 2) compare the comments relating to the impact from privatization of AOT due to the characters of the citizens, 3) relationships among knowledge factors, understanding of privatization, work satisfaction, characteristics of employee communications, and comments from the Bangkok Airport related to the impact of Airports of Thailand Public Company Ltd.(AOT) privatization, 4) factors that have an influence on the comments from the Bangkok Airport employees to AOT privatization.

Kamonman Ouppapan (2008) studied stress management of check-in staff for Thai Airways passengers by studying the nature of the work, level of stress, factors that cause stress, and stress management of check-in staff for Thai Airways passengers at Chiang Mai Airport and created a pattern for stress management of check-in staff for Thai Airways passengers. The sample population used for the research was employees from Phoenix S&C Partnership Company Limited who had duties of checking-in Thai Airways passengers.

Ratchanok Moonket, other (2008) studied job satisfaction of staff of Thai Airways International (Public Company Limited). This analysis had the purpose to study job satisfaction of employees at the level of performing, and studied the level of employee job satisfaction as categorized in the characteristics of the population.

Chaianan Samutwanich (2009) studied minimizing company expenses of Thai Airways (Public Company Limited), for example, expenses incurred by flight attendants, which their period of time abroad had been reduced by 1-2 days, flying hours reduced and bonuses were stopped being paid out. This saved the company

about 20%-30%, in expenses in terms of flight attendants and including reducing other expenses from restructuring management by terminating about 100 staff at director level and also terminating about 2-3 people at an even higher level, namely, Executive Vice-President (EVP).

## **2.4 The Proposed Research Hypotheses**

The proposed research hypotheses set boundaries for the analysis as follows;

2.4.1 Individual factors (gender, age) have an affect on the management and development of labour in the Thai aviation industry.

2.4.2 Socio – Economic factors (level of education, income) have an affect on the management and development of labour in the Thai aviation industry.

2.4.3 Working factors; affiliated organizations; Thai Airways Public Company Limited, Airports of Thailand Public Company Limited, Bangkok Flights Services Company Limited, positions, work period all have an affect on the management and development of labour in the Thai aviation industry.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

This research is quantitative research. It has been accomplished by researching information gathered from a sample group of labour employed in the Thai aviation industry. The procedures for this research are stipulated below.

#### **3.1 Research Design**

The purpose of the research was to study the present situation of management and labour development in the Thai aviation industry including factors that impact the management and labour development in the Thai aviation industry. The model used in the research is Documentary Research, which researches on a documentary basis to study the information, annual reports and other related research to support information for the researcher. Another model is Cross-Sectional Research, which is done during the period of time by studying the situation by not looking forward to the future or looking backwards to the past. This research is a study of the general situation and considers factors that impact the management and labour development of the Thai aviation industry by finding the relationship of the independent variables, which are the personal characters and dependent variables that are from the management and labour development data in the Thai aviation industry in order to examine which kind of variable has more relationship to become the factor impacting the management and labour development.

#### **3.2 Sources of Data**

The data that is used to study and research is both primary and secondary data. The primary data is sourced from responses to the questionnaire that is conducted on

labour in the aviation industry with employees of Thai Airways Public Company Ltd., Airports of Thailand Public Company Ltd., and Bangkok Flight Services Company Ltd. The secondary data is gathered from many departments from within the Thai aviation industry, i.e., 2008 Annual Report of the Ministry of Transportation.

### 3.3 Sampling Procedure

#### 3.3.1 Target Population

The target population in this research is the labour in the Thai aviation industry (staff level up to middle level managers) employed in Thai Airways Public Company Ltd., Airports of Thailand Public Company Ltd., and Bangkok Flight Services Company Ltd., which have a combined total of 35,200 employees.

#### 3.3.2 Sample Size

The sample size which is studied from the labour in 3 companies totals 600 personnel. The researcher specified the sampling from Thai Airways Public Company Limited at 300 people, Airports of Thailand Public Company Limited at 200 people, and Bangkok Flight Services Company Limited at 100 people. The details of the sample size are shown in Table 3.1 as follows;

**Table 3.1** Population and Sample size of Labour in the Aviation Industry in Thailand

	Population Size			Sample Size				
	Thai Airways	AOT	BFS	Total	Thai Airways	AOT	BFS	Total
	28,000	4,400	2,800	35,200	300	200	100	600

**Source:** Civil Aviation Training Center, 2009.

**Remarks:** TG – Thai Airways International Public Company Limited.

AOT – Airport of Thailand Public Company limited.

BFS – Bangkok Flight Services Company.

## **3.4 Research Instruments**

### **3.4.1 Variables in the Study**

The researcher has reviewed various literature, annual reports and other relevant research in order to specify the ideas and boundaries of the study to measure the personal characteristic data, which includes independent variables and data from the management and labour development in the Thai aviation industry. This consists of labour development factors in training, education and organization development, which are the dependent variables in the study of the target population, research on middle level staff to middle level managers for labour in the Thai aviation industry categorized by each department.

### **3.4.2 Construction of Questionnaires**

The questionnaires in the research asked respondents to place a check mark in the blank of the sentence that had the most fact as follows:

3.4.2.1 Step 1 Personal characteristic data consisting of gender, age, education level, income, marital status, line of duty in the aviation industry, present position, work period and training, seminars from their department, both internal and outside the organization.

3.4.2.2 Step 2 Organization management data consists of human resource planning, recruitment and selection, hiring for positions, new staff orientation, promotions, raises, job appraisals, changes of position or terminations, compensation, and incentives (i.e., salary, wages, bonuses), organization structure, and organization chart.

3.4.2.3 Step 3 Data in labour development in the Thai aviation industry. This is done by using closed-end questionnaires comprised of 45 questions and asking respondents to indicate their level of opinion according to 5 levels, which are; 0 = never, 1 = the least, 2= less, 3 = moderate, 4 = a lot, 5 = the most. The indication of the factors of the labour development is categorized into 3 topics, which are training (14 questions), education (10 questions), and organization development (21 questions).

3.4.2.4 Step 4 Suggestions which are open ended data for which the researcher hopes will reflect the real situation in depth from the people who give the information on the management and development in the Thai aviation industry as it is and as such, be able to be used as a guideline in developing further in the future.

### 3.4.3 Level of Measurement

The level of measurement in the independent and dependent variables of the study and research are the topics on the assumption of the statistics measurement in the test of the assumption as shown in Table 3.2.

**Table 3.2** Description and Levels of Variable Measurement in the Study

<b>Variables</b>	<b>Description</b>	<b>Measurement Level</b>
<b>1. Independent Variables</b>		
<b>Demographic Variables</b>		
GE	Gender	Nominal
AG	Your age at the present time	Ordinal
<b>1.1 Socio-Economic Variables</b>		
EL	Education level	Ordinal
IN	Income	Ordinal
MS	Marital status	Nominal
LI	Line in the aviation industry	Nominal
PP	Present position	Ordinal
WA	Work period	Ordinal
TA	Training/seminars/business field trips or knowledge development from the outside or inside the organization	Nominal
<b>2. Dependent Variables</b>		
<b>2.1 Administrative and Managerial Variables</b>		
HP	Human resource planning	Nominal
RE	Recruitment and selection	Nominal
PO	Position hiring	Nominal
OR	Orientation	Nominal
PR	Promotion and raise	Nominal
AP	Appraisal	Nominal
MO	Move or staff termination	Nominal
IN	Incentives	Nominal

**Table 3.2** (Continued)

<b>Variables</b>	<b>Description</b>	<b>Measurement Level</b>
OS	Organization structure	Nominal
MP	Management plan	Nominal
<b>2.2 Training</b>		
TK	Training for knowledge, skills, and experience	Ordinal
TP	Training for performing with efficiency and effectiveness	Ordinal
TB	Training for changing personal behavior	Ordinal
TS	Training for developing management skills	Ordinal
TA	Cost material useful to apply at work	Ordinal
TC	Documentation in training has full and clear material	Ordinal
TT	Training period	Ordinal
TF	Satisfaction on the conveniences	Ordinal
TI	Able to expand knowledge for the same implementation	Ordinal
TE	Employees receive training from specialists in many aspects continuously	Ordinal
TM	Employees receive training in technology relating to the task of the organization appropriately	Ordinal
TO	Employees receive training on a performance basis for presentation and development in information technology of the organization continuously	Ordinal
TN	Follow up and appraisal on performance of the trainee in each course	Ordinal
TV	Training, seminars, and business field trips or increasing knowledge from inside and outside the organization	Ordinal
<b>2.3 Education</b>		
ES	Supporting continuing education for specific occupation	Ordinal
ER	Education in the constitution for subjects related to the organization task	
EC	Receive consultations from specialists in performing tasks	Ordinal
EO	Opportunity for education in organization management at basic and high level	
EV	Visits, field trips abroad relating to business and bring back knowledge to perform	Ordinal
EI	Study and field trips in many departments that have modern innovations especially in advanced technology	Ordinal
EB	Budget for the scholarships to employees	Ordinal
ET	Level of education, training, and experience are the qualifications that determine the level of compensation for employees	



**Table 3.2** (Continued)

<b>Variables</b>	<b>Description</b>	<b>Measurement Level</b>
EP	Plan to give scholarships to employees	Ordinal
EM	Providing education is the main policy of the organization	Ordinal
<b>2.4 Development</b>		
DS	Promote and support to be able to use the basic and advanced computer programmes	Ordinal
DM	Mixed media is used for personnel development	Ordinal
DA	Promote activities for employees in many occasions	Ordinal
DR	The organization promotes and supports religious activities and respects	Ordinal
DO	Promote and support suggestions and determination	Ordinal
DK	Employees possess special ability in aviation industry	Ordinal
DU	Labour Union is important and useful for development and progression of the organization	Ordinal
DP	Promote the organization analysis and bring the results to perform	Ordinal
DH	Human Development Plan of the organization has flexibility and suitability for the present situation	Ordinal
DT	Mentor System is used to transfer knowledge and skills from one generation to the new generation	Ordinal
DC	Employees that have knowledge, ability, and experience receive opportunities at work and have progress	Ordinal
DW	Arranging benefits for employees	Ordinal
DQ	Cultivate and have campaigns for health and safety in the work place	Ordinal
DF	Labour Union stimulates a strong culture in the organization	Ordinal
DJ	Employees have responsibility to society	Ordinal
DI	Support the security of the employees who are out of work	Ordinal
DE	Employees have the chance to rotate duties, positions due to knowledge and ability	Ordinal
DL	Develop the organization to be a learning organization	Ordinal
DG	Equality between males and females exists in the consideration of career path	Ordinal
DY	Performance Appraisals conducted at least once a year regularly	Ordinal
DB	Employees receive promotions and support to have good morale at work	Ordinal

### 3.4.4 Tools for Gathering Data

Questionnaires are the tools that gather primary data from the labour sample group from staff level to middle level managers who are performing tasks in Thai Airways Public Company Limited, Airports of Thailand Public Company Limited, and Bangkok Flight Services Company Limited. All questionnaires contain 4 parts; part 1 is personal data, part 2 contains questions relating to the organization management data, part 3 incorporates questions relating to the data of labour development in the Thai aviation industry, in which the factors of labour development are divided into 3 aspects namely; training, education, and organization development, and finally part 4 is reserved for suggestions.

### 3.4.5 Test of Research Tools

The tools in the research have been pre-tested in order to assess the validity or measurement of anything that we want to measure if it indicates precisely as the fact or the purpose of the research. It is done by a research consultant professor. The level of Reliability, which is the level of the confidence on the tools in the questionnaires are calculated by computer with the Cronbach's Method. Management and labour development have been measured by way of questionnaires in order to get them correct and accurate. The value of level of confidence in management and labour development as mentioned has the value as alpha 0.925 and in order to find the value of level of confidence in all 3 aspects, which have the value between 0.921-0.928 as shown in the data in Table 3.3 Reliability Coefficient of Management and Development Labour in the Thai Aviation Industry by Cronbach's Method.

**Table 3.3** Reliability Coefficient of Management and Development Labour in Thai Aviation Industry

Variables	Reliability Coefficient Cronbach's Alpha
-----------	--

#### 1. Organization Management Data

1. Do you think that your department has appropriate labour planning? .927

**Table 3.3** (Continued)

<b>Variables</b>	<b>Reliability Coefficient Cronbach's Alpha</b>
2. Recruitment and selection in labour have standards and fairness.	.927
3. Hiring and filling positions are due to knowledge, ability, and experience.	.927
4. The organization has orientations for new employees given by high level executives, Human Resource Department and direct line of management.	.927
5. Promotions, raises, due to knowledge, ability, and experience.	.927
6. Employee's performance appraisal is standard and used to accompany the consideration of the employee's competency.	.927
7. Moved or resigned from the job due to procedures, rules, and fairness.	.927
8. The organization has the system of compensation such as salary wages and other fringe benefits.	.927
9. The organization has an appropriate structure and efficiency for management	.927
10. What do you think, regarding the organizational management in general whether it should be in what pattern?	.927

## **2. Data in Labour Development in Thai Aviation Industry**

### **2.1 Training**

1. Training gives employees knowledge, skills, and experience.	.922
2. Training makes the employees perform the job efficiently and effectively.	.921
3. Training creates a change in personnel behavior.	.926
4. Training creates development in management skill.	.924
5. Material and curriculum are useful for applying on the real job.	.922

**Table 3.3** (Continued)

<b>Variables</b>	<b>Reliability Coefficient Cronbach's Alpha</b>
6. Training documents have full and clear material.	.923
7. The period of training is appropriate.	.923
8. People who are in training are satisfied with the conveniences.	.922
9. After training, knowledge can be expanded for the same guidelines in performance.	.923
10. The employees receive training from specialists in many aspects continuously.	.921
11. Employees receive training on technology relating to the task of the organization appropriately.	.922
12. Employees receive training in performance to present and develop information technology of the organization regularly	.923
13. Follow up and performance appraisals on employees who receive training in each course seriously and continuously	.924
14. Employees receive training, seminars, and field trips or increase knowledge from the outside agency and within the organization	.923
<b>2.2 Education</b>	
15. Employees receive support for continuing education in their vocational job to be useful and bring back to perform the task	.922
16. Allow employees to get education in the institution that arranges the subject relating to organization tasks.	.921
17. Employees receive consultations from specialists in performing the job to develop work quality.	.922
18. Employees have the opportunity in organization management at basic level, middle level, and high level.	.923
19. Employees have the opportunity to travel abroad relating to the business and bring back to use in the organization.	.925

**Table 3.3** (Continued)

<b>Variables</b>	<b>Reliability Coefficient Cronbach's Alpha</b>
20. Employees have an opportunity to go on field trips in companies that have modern innovations, especially advanced technology.	.923
21. The organization has sufficient and appropriate budgets to give scholarships to employees.	.923
22. The organization uses the level of education, training, and experience to be the criteria to determine the level of compensation for employees.	.922
23. There is a plan to give scholarships to employees clearly and appropriately.	.922
24. Providing education to employees is the main policy of the organization.	.921
<b>2.3 Organization Development</b>	
25. All employees receive promotion and support to be able to use basic and high level computer programmes.	.923
26. Employees use mixed media for personnel development.	.922
27. Promote the employees to have social activities occasionally such as to do merit, offer food to the monks, donations to disabled children, and senior citizen homes.	.923
28. Organization promotes and supports religious activities due to the belief and respects of employees.	.924
29. Employees receive promotion and support on suggestions and determination of the direction in developing the organization.	.923
30. Employees have special knowledge and ability in the aviation industry.	.924

**Table 3.3** (Continued)

<b>Variables</b>	<b>Reliability Coefficient Cronbach's Alpha</b>
31. Labour Union is important and useful for the development and progression of the organization.	.924
32. Employees receive support in organization analysis and bring the results to perform in order to increase the efficiency/ effectiveness in the organization.	.922
33. Planning on Human Resource Development of the organization has flexibility and suitability for the present situation.	.923
34. Mentor System is used to transfer knowledge and skills in performance from one generation to new members.	.924
35. Employees with knowledge, ability and experience receive an opportunity to get a job and progression.	.925
36. There is an arrangement to give benefits to employees appropriately and enough.	.921
37. Employees have been taught and rally on health and safety at work.	.922
38. Labour Union stimulates a strong culture within the organization.	.923
39. Employees take part in responsibility to society in the organization.	.922
40. There is support to have security for employees who are out of a job to allow to survive in society such as back-up funds, pension, and compensation.	.922
41. Employees have a chance to rotate positions due to knowledge, ability and experience.	.922
42. There is action to develop the organization to be a learning organization.	.922
43. Employees have equality between males and females in being considered for a career path.	.922
44. There is a performance appraisal on employees at least once a year regularly.	.924
45. Employees receive promotion and support to have good morale at work.	.921

### **3.5 Field Procedures**

Gathering field data is done by using questionnaires to obtain data from the target group totaling 600 people who work in various departments of the aviation industry, namely, Thai Airways Public Company Limited, Airports of Thailand Public Company Limited., and Bangkok Flight Services Company Limited, as shown in the in Table 3.2. Gathering field data as mentioned started when the questions are in the target group's hands and we made them understand the method of how to answer the questions. After the target group answered the questions, the researcher and the team gathered them by collecting back a total of 585 sets which calculates to be 97.5% of all questionnaires.

### **3.6 Data Analysis Techniques**

The methods that are used in data analysis are as follows;

#### **3.6.1 Basic Elementary Data Analysis**

Basic elementary data analysis is done by using data from the sample group, showing the value in forms of frequency, percentage, average, and standard errors in order to describe the general characters of personnel, Social-Economic factors, work factors, organization management data, including the data of labour development in the Thai aviation industry.

#### **3.6.2 Data Analysis in the Factors That Have Effecting on Management and Development of Labour in the Thai Aviation Industry**

Data analysis to study the individual factors (gender, age), Socio-Economic factors (level of education, income), and working factors (agency, position, and work period) that have an impact on labour management in the Thai aviation industry in terms of (1. Planning and labour developing has 1 question, which is number 10 part 2 of the questionnaire, 2. Recruitment and selection, hiring, and performing labour development tasks contains 4 questions, which are numbers 15-18 part 2 of the questionnaire) and the impacts on the labour development in the Thai aviation industry

in terms of (2.1 Training, containing a total of 14 questions, which are numbers 1-14 part 3 of the questionnaire 2.2 Education totaling 10 questions being numbers 15-24 part 3 of the questionnaire 2.3 Organization development has a total of 21 questions that are numbers 25-44 part 3 of the questionnaire), which are analyzed by using a statistics tool to get the value so called Independent-Sample T Test in order to analyze and compare the difference of the 2 variables that are independent from each other. The statistics tool with the value so-called ANOVA is used to compare the differences among the variables that are more than 2 by analyzing the one way variability. The statistics tool that has the value so-called Chi-Square to compare and find the relationship among the variables and Phi to get the level of concentration of the relationship by the analyzing methods as following;

3.6.2.1 Individual Factors Analysis that have an impact on the management and labour development in Thai aviation industry.

Individual factors analysis in terms of gender to examine whether the factor of gender aspect has an impact on the management and labour development in the Thai aviation industry. We used a statistical tool with the value so-called Independent- Sample T Test to analyze and compared the differences between 2 variables by using the determination of important statistics value at the level .05. If the value calculated is less than .05 it shows the personal factor in gender aspect has to do the management and labour development in the Thai aviation industry differently. If the value calculated is from .05 and up, it shows that the individual factors in gender aspect has to do the management and labour development in the aviation industry with no differences. After this, researcher used a statistical tool with the value so-called Chi-Square to compare in order to find the relationship between the variables by specifying the important statistics value at the level .05. If the calculated value has a value less than .05, it shows that the individual factors in gender aspect has an impact on management and labour development in the Thai aviation industry. If the calculated value has a value from .05 and up, it shows that the personal factor in gender aspect does not have an impact on the management and labour development in the Thai aviation industry. We also find that value of Phi to measure the level of relationship of the variables. The researcher has specified the value calculated  $<0.3$  has the lower level of relationship,  $\geq 0.3$  but  $<0.7$  has the moderate relationship and  $\geq 0.7$  has the high level of relationship.



Individual factors in age aspect to examine whether the age factor has an impact on management and labour development in the Thai aviation industry. We used a statistical tool with the value so called ANOVA to analyze and compare the differences among the variables more than 2 by specifying the important statistics value at the level .05. If the value calculated is less than .05, it shows that the personal factor in age aspect has to have management and labour development in aviation industry differently. If the calculated value has the value .05 and up, it shows that the personal age factor has no difference in management and labour development in the aviation industry. After that, we use a statistical tool with Chi-Square to compare and find the relationship between the variable by specifying the important statistics value at the level .05. If the value calculated has the value less than .05, it shows that the personal age factor has an impact on the management and labour development in the Thai aviation industry. And if the value calculated has the value from .05 and up, it shows that the personal age factor does not have any impact on management and labour development in the Thai aviation industry. We also find the Phi value to measure the level of the relationship of the variables. The researcher has specified the value calculated  $<0.3$  has low level of the relationship,  $\geq 0.3$  but  $<0.7$  has moderate relationship, and  $\geq 0.7$  has high level of relationship.

3.6.2.2 Socio-Economics Factor Analysis that has an impact on management and labour development in the Thai aviation industry

Socio-Economics factor analysis in the aspect of the education level to examine whether the education factor has an impact on the management and labour development in the Thai aviation industry. We used a statistical tool with the value so called ANOVA to examine and compare the difference between the variables that are more than 2. We specify the important statistics value at the level 0.5. If the value calculated has the value less than .05, then the Socio-Eco factor in the aspect of education level has different management and labour development in the Thai aviation industry. If the value calculated, has the value from .05 and up, then the Socio-Economics factor in education level aspect has no difference in management and labour development in the Thai aviation industry. After that, we used a statistical tool with the value so-called Chi-Square to compare and find the relationship among the variables by specifying the important statistics value at the level .05. If the

calculated value is less than .05 then the Socio-Economics factor in the education level aspect has an impact on management and labour development in the Thai aviation industry, and if the value calculated has the value from .05 and up, then the Socio-Economics factor in education level aspect does not have an impact on management and labour development in the Thai aviation industry.

Socio-Economics income analysis to examine whether the income factor has an impact on management and labour development in the aviation industry. We used a statistical tool with the value so called ANOVA to analyze and compare the differences between more than 2 variables by specifying the important statistical value at level .05. If the value calculated is less than .05, then the Socio-Economics income factor has different management and labour development in the aviation industry. If the value calculated has the value from .05 and up, then the Socio-Economics income factor does not have different management and labour development in the Thai aviation industry. After that, we use the statistical tool with the value so called Chi-Square to compare to find the relationship among the variables by specifying the important statistical value at level 0.5. If the calculated value has the value less than .05, then the Socio-Eco income factor has an impact on the management and labour development in the Thai aviation industry, and if the calculated value has the value from .05 and up, then the Socio-Economics income factor does not have an impact on the management and labour development in the Thai aviation industry.

3.6.2.3 Working Factors Analysis that has an impact on management and labour development in Thai aviation industry working factors analysis in being under the agency, the researcher has analyzed the sample groups from 3 companies; Thai Airways Public Company Ltd., Airports of Thailand Public Company Ltd., and Bangkok Flight Services Company, Ltd. to examine whether the agency has any impact on management and labour development in the aviation industry. We have used a statistical tool with the value so-called ANOVA to analyze and compare the differences among the variables more than 2 by specifying the important statistical value at level .05. If the calculated value has a value less than .05, then the work factor of being under the agency that the person works for has different management and labour development in the Thai aviation industry. If the calculated value has the

value from .05 and up, then the work factor of being under the agency does not have any different management and labour development in the Thai aviation industry.

Working factor analysis in position aspect to examine whether the position factor has an impact on management and labour development in the Thai aviation industry. We used a statistical tool with the value so called ANOVA to analyze and compare the differences between more than 2 variables by specifying the important statistical value at level .05. If the value calculated is less than .05, then the Socio-Eco position factor has different management and labour development in the Thai aviation industry. If the value calculated has a value from .05 and up, then the Socio-Eco position factor does not have different management and labour development in the Thai aviation industry. After that, we used a statistical tool with the value so called Chi-Square to compare to find the relationship among the variables by specifying the important statistical value at level 0.5. If the calculated value has the value less than .05, then the Socio-Eco position factor has an impact on the management and labour development in the Thai aviation industry, and if the calculated value has a value from .05 and up, then the Socio-Eco position factor does not have an impact on the management and labour development in the Thai aviation industry.

Working factor analysis in work period aspect to examine whether the work period factor has an impact on management and labour development in the Thai aviation industry. We have used a statistical tool with the value so called ANOVA to analyze and compare the difference between more than 2 variables by specifying the important statistical value at level .05. If the value calculated is less than .05, then the Socio-Eco work period factor has different management and labour development in the Thai aviation industry. If the value calculated has the value from .05 and up, then the work period factor does not have different management and labour development in the Thai aviation industry, and if the calculated value has a value from .05 and up, then the work period factor does not have an impact on the management and labour development in the Thai aviation industry.

## CHAPTER 4

### DATA ANALYSIS ON MANAGEMENT AND LABOUR DEVELOPMENT IN THE THAI AVIATION INDUSTRY

This chapter presents the situation of management and labour development in the Thai aviation industry which is performed in airlines, airports and air cargo organizations. The sample population encompasses 585 persons working in Thai Airways International Public Company Limited (TG), Airport of Thailand Public Company Limited (AOT), and Bangkok Flight Services Company Limited (BFS). The results of the study are as follows:

#### 4.1 General Characteristics of the Sample Population

The results are shown as follows in table 4.1

**Table 4.1** Number and Percentage of the sample classified by General Characteristics (n = 585)

General Characteristics	Number	Percentage
<b>Gender</b>		
Male	401	68.5
Female	184	31.5
<b>Total</b>	<b>585</b>	<b>100.0</b>
<b>Age</b>		
Younger than 20 years old	2	0.3
age 21 - 30 years old	201	34.4
age 31 - 40 years old	160	27.3
age 41 – 50 years old	162	27.7

**Table 4.1** (Continued)

<b>Personal Characteristics</b>	<b>People</b>	<b>Percentage</b>
Older than 50 years old	60	10.3
<b>Total</b>	<b>585</b>	<b>100.0</b>
<b>Education Level</b>		
Lower than Bachelor Degree	90	15.4
Bachelor Degree	378	64.6
Master Degree	111	19.0
Other	6	1.0
<b>Total</b>	<b>585</b>	<b>100.0</b>
<b>Income</b>		
Less than or 10,000 Baht	14	2.4
10,001 - 30,000 Baht	257	43.9
30,001 - 60,000 Baht	222	38.0
More than 60,000 Baht	92	15.7
<b>Total</b>	<b>585</b>	<b>100.0</b>
<b>Marital Status</b>		
Single	247	42.2
Married	305	52.1
Widowed/Divorced	19	3.3
Separated	14	2.4
<b>Total</b>	<b>585</b>	<b>100.0</b>
<b>Position</b>		
Staff	443	75.7
Primary Executive Level	75	12.8
Middle Executive Level	48	8.2
Other	19	3.3
<b>Total</b>	<b>585</b>	<b>100.0</b>

**Table 4.1** (Continued)

<b>Personal Characteristics</b>	<b>People</b>	<b>Percentage</b>
<b>Work Period</b>		
Less than 3 years	101	17.3
Between 3 - 5 years	117	20.0
Between 6 - 10 years	85	14.5
More than 10 years	282	48.2
<b>Total</b>	<b>585</b>	<b>100.0</b>

From the data shown in table 4.1 above, demographic characteristics of the sample in the gender aspect include 401 males, (68.5 percent), and 184 females, (31.5 percent). Most (201 persons) are aged between 21 and 30 years old, representing 34.4 percent, second to this age group are those who are aged between 41 and 50 years old made up of 162 persons representing 27.7 percent of the sample, and the next group between 31 and 40 years old, is made up of 160 persons representing 27.3 percent. The smallest group is made up of those over 50 years of age consisting of 60 persons or 10.3 percent of the sample population.

In terms of educational levels, the majority (378 persons or 64.6 percent) of the sample have a bachelor degree. Second to that are those who hold a master degree This group consists of 111 persons, or 19 percent of the sample and the smallest group is made up of those whose education is lower than a bachelor degree, numbering 90 persons and representing 15.4 percent of the sample population.

As for income, most of the sample population earns between 10,000 and 30,000 baht, made up of 257 persons or 43.9 percent. Next are the those who had an income of between 30,001 and 60,000 baht, which is 222 persons or 37.9 percent, and the smallest group made up of 92 persons or 15.7 percent are those who have an income of more than 60,000 baht,.

The aspect of marital status, indicates that about one-half (305 persons or 52.1 percent) of the sample population are married. A smaller group of 247 people are single representing 42.2 percent of the sample and the smallest group made up of those who are widowed or divorced consists of 19 persons or 3.2 percent of the total population.

As for the working position of the sample population, the majority (433 persons or 75.7 percent) are staff, the primary level administrators consists of 75 persons or 12.8 percent of the sample and the middle level administrator group consists of 48 persons or 8.2 percent. In terms of working period, almost one-half (282 persons or 48.2 percent) of the sample had been working in the organization for more than 10 years. The second group consists of those with between 3 and 5 years service, 117 persons or 20.0 percent. This group is closely followed by those who have worked for the organization for less than 3 years made up of 101 persons or 17.3 percent. Lastly, the smallest group is made up of those who have worked in their organization for between 6 and 10 years, consisting of 85 persons, or 14.5 percent of the total sample population

## 4.2 Statistical Analysis of the Variables in Management

**Table 4.2** Number and Percentage of the Samples Classified by Factors of the Organization Management in the Thai Aviation Industry

The factors of the Organization Management	Yes		No	
	Number	%	Number	%
1. The department has appropriate human resource planning	338	57.78	247	42.22
2. The recruitment and selection processes have standards and fairness.	319	54.53	266	45.47
3. Hiring position due to knowledge and experience.	353	60.34	232	39.66
4. The organization has the new staff orientation provided by the high level executive, Human Resource Department and, and direct line of authority.	459	78.46	126	21.54
5. Promotion, raise due to knowledge, ability, and experience.	350	59.83	235	40.17
6. Work appraisal has standards and uses data to consider the employee's competency.	377	64.44	208	35.56

**Table 4.2** (Continued)

<b>The factors of the Organization Management in the Thai aviation industry</b>	<b>Yes</b>		<b>No</b>	
	<b>People</b>	<b>%</b>	<b>People</b>	<b>%</b>
7. Move and resign from the company due to the procedures and fairness.	362	61.88	223	38.12
8. The department has the compensation system, i.e., salary, wages, other incentives that are appropriate and fair.	431	73.68	154	26.32
9. The organization has an appropriate structure and efficiency for management.	363	62.05	222	37.95

From table 4.2, the data shows that more than half of the sample (57.78 percent) felt that the organization had appropriate human resource planning. In considering the recruitment and selection of staff, 54.53 percent, felt that standard criteria and fairness are applied. And 60.34 percent of the sample felt that hiring for positions is due to knowledge, and experience. Moreover, some 78.46 percent of the sample population believed that the organization arranged for new employees to receive an orientation from a high level executive from human resource department and direct line of duty As for the promotion of staff, 59.83 percent of the sample indicated that they felt promotions are attained due to knowledge, ability, and experience. In terms of working appraisal, 64.44 percent of the sample thought that the organization has standards and used relevant data to consider an employee's competency ,The data shows that 61.88 percent felt that the procedures for resigning of staff are fair, and 73.68 percent of the sample population felt the compensation system, i.e. salary, wages, often incentives are appropriate and fair. Those that felt the organization has an appropriate structure and efficiency for management number 62.05 percent.

In short, most of the sample population are satisfied with their organization's management especially on the staff orientation for new employees, the recruitment and selection procedures have standards and fairness. The samples are also satisfied with the promotion system, working appraisal and the compensation are appropriate and fair for the employees as indicated in the data above.



**Table 4.3** Mean and Standard Deviation of the Samples Opinion Concerning Labour Development on Training Aspect in the Thai Aviation Industry (n = 585)

<b>Factors in Labour Development on Training Aspect</b>	<b><math>\bar{X}</math></b>	<b>S.D.</b>
1. Training gives employees knowledge, skill, and experience.	3.89	.812
2. Training helps employees to perform the task with efficiency and effectiveness.	3.85	.822
3. Training makes the change in behavior of the personnel.	3.51	.905
4. Training makes the development in skills of management.	3.59	.949
5. The course material is useful for applying to the real task.	3.61	.496
6. The training materials have clear and full information.	3.46	.774
7. The training period is appropriate.	3.37	.807
8. Participants are satisfied with the facilities	3.37	.777
9. After training, knowledge can be expanded for the task on the same guideline.	3.48	.813
10. Employees receive the training from the specialist in many aspects continuously.	3.32	.891
11. Employees have received the training in technology related to the organization tasks appropriately.	3.25	.911
12. Employees have received training in performing in order to present and improve the development in the information technology of the organization constantly.	3.18	.933
13. Follow up and performance appraisal of the trainee in each course seriously and continuously.	3.09	1.068
14. The employees have received training, seminar, and other organization visit or increasing the knowledge from the department inside and outside the organization.	2.99	1.201

From the table 4.3, data shows the opinions of the sample population in various aspects of training. Most of all they think that training gives employees knowledge, skill, and experience at the average 3.89, and training helps employees to perform the task with efficiency and effectiveness at the average agreement of 3.85. Moreover, training makes the development in skills of management at the average agreement of 3.59, and training can change personal's behavior at 3.51

As for course material in training, the sample indicated that it is useful for applying to the real task at the average agreement at 3.61, the materials have clear and full information at 3.46 and the training period is appropriate at 3.37. However, the sample populations are satisfied with the facilities on training only at the average level of 3.37.

After training, it is found that knowledge can be extended for the task on the same lines at the average of 3.48 but they attain the training from the specialist in various aspect continuously on the average at 3.32.

In terms of training in technology related to the organization, the employees indicate that the training is at moderate level 3.25, the employees have received training to improve the development in the information technology of the organization constantly at the level of 3.18 follow up and performance appraisal of the training in each course seriously and continuously = 3.09. The least one is the employees have received training, seminars, and other organization visits or increased the knowledge from within the department or outside department average at only 2.99.

To summarize, factors in labour development in the aviation industry in training aspects which has the highest satisfaction was the training that gives employees knowledge, skills, and experience that help them to perform tasks efficiently and effectively.

**Table 4.4** Mean, and Standard Deviation of the Samples Opinion Concerning  
Labour Development on Education Aspect in the Thai Aviation Industry  
(n = 585)

<b>Factors in Labour Development on Education Aspect</b>	<b><math>\bar{X}</math></b>	<b>S.D.</b>
1. Employees are supported on continuing education in the vocational field	2.78	1.304
2. Employees receive education in the field relating to the tasks of the organization.	2.86	1.193
3. The employees get consultations from specialists in performing the task for the work quality development.	2.97	1.091
4. The employees have a chance to get the education in organization management at the primary level, middle, and high level.	2.83	1.247
5. The employees have a chance to get education from abroad	2.27	1.396
6. The employees have a chance to study in other organizations that have modern innovation especially the on technology advancement	2.43	1.387
7. The organization has appropriate budget for employees education	2.38	1.381
8. The organization uses the level of education, training, and experience qualifications to determine an employee's compensation.	2.52	1.265
9. Scholarship plans for the employees are clearly appropriate	2.41	1.440
10. Providing education for employees is one of the main organization policies.	2.73	1.336

From the table 4.4, it can be seen that the samples satisfaction on labour development in educational aspects are relatively low. They indicate that the employees had supported on continuing education at the vocational field at the average level of 2.78, and having education in the field relating to the task of the organization at the average of 2.86. Furthermore, the employees get consultation from the specialists in performing the task on the average at 2.97. The employees have a chance to get education in organization management at all levels, the average is 2.83.

The lowest level of satisfaction is on the employees who have a chance to get education from aboard at the average of 2.27. This might be due to budget constraints, the samples thought that it is appropriate only at the average of 2.38. In addition, the employees have a chance to study in other organizations that have modern innovation in technology at the average of 2.43. They also indicate that scholarships planning for employees are clearly appropriate only at the average of 2.41. The organization uses the level of education, training and experience qualifications to determine the employees compensations at the average of 2.52 and lastly the respondent samples indicate that one of the main policies of the organization is to provide education for employees at the average of 2.73.

On the whole, data from table 4.4 shows that the employees satisfaction on labor development in the educational aspect is slightly below the average level. The average opinion concerning education range between 2.97 and 2.27. Thus the executives of the organization in the Thai aviation industry should concentrate on this aspect, by providing more budget for education aboard and education in the vocational field for employees more effectively than existing support.

**Table 4.5** Mean and Standard Deviation of the Samples Opinion Concerning the Organization Development in the Thai Aviation Industry (n = 585)

<b>Factors in Organization Development</b>	$\bar{X}$	<b>S.D.</b>
1. The employees are promoted to operate the computer programme at basic and high level.	3.01	1.249
2. The employees have various information technology for personnel development.	3.00	1.126
3. Promote the employees to organize the activities occasionally, i.e., do merit, offer food to the monks, donations to disabled children, and senior citizen homes.	3.10	1.085
4. The organization promotes and supports the religious activities due to the employees' belief and respect.	3.09	1.026
5. Every employee gets the promotion and support in making suggestions and determining the direction of the organization development.	2.91	1.176
6. The employees have the special knowledge and ability in the aviation industry.	3.53	.874
7. The Labour Union is important and useful for the development and progress of the organization	2.98	1.131
8. The employees are promoted in the organization research and could be implemented to increase the efficiency and effectiveness of the organization.	2.84	1.109
9. Human resource planning in the organization has flexibility and is suitable for the present situation.	3.05	1.023
10. Mentor System is used for transferring knowledge and skills in performing the task from one generation to new members.	3.19	1.124
11. The employees that have knowledge, ability, and experience receive the opportunity in the job and having progression.	3.13	1.036

**Table 4.5** (Continued)

<b>Factors in Organization Development</b>	<b><math>\bar{X}</math></b>	<b>S.D.</b>
12. Social welfare for employees is appropriate.	3.23	.992
13. The employees know about occupational health in the work place.	3.34	.971
14. The Labour Union has a role in stimulating a strong organization culture.	2.79	1.136
15. The employees take part in the social responsibility of the organization.	3.21	1.095
16. There is promotion of security for employees that lose their job in order for them to be able to survive in society, i.e., back-up fund, pension, and compensations.	3.51	.983
17. Employees have opportunity to change their duty or positions according to their knowledge, ability, and experience.	2.99	1.059
18. There is an implementation plan for developing the organization to be a learning organization.	3.06	1.054
19. Employees are equally comparable between gender in the consideration for a career path.	3.30	.947
20. There is a performance appraisal of employees at least once a year regularly.	3.61	.925
21. Employees are promoted and supported to have the morale in performing the task.	3.03	1.224

Data from table 4.5 indicate the employees opinion in various aspects on organization development to operate the computer program at basic and high level at the average level of agreement at 3.01; the employees have various information technology for personal development at the average of 3.00. The organization promotes employees to organize social activities occasionally the average opinion is 3.10 and the organization promotes and supports religions activities due to the employees belief and respect at 3.90. The employees are supported in working

suggestion the direction of the organization development the average agreement is only 2.91.

The respondent sample agree that the employees are specialists and have ability in the aviation industry at the average of 3.53 while the Labor Union is important and useful for the development of the organization only at average 2.98. The employees are promoted in the organization research that could be implemented to increase the efficiency and effectiveness of the organization, the average agreement is only 2.84 and human resource planning in the organization has a flexibility at the average of 3.05.

In addition, the Mentor System is used for transferring knowledge and skills in performing the tasks from one generation to new members at the average agreement of 3.19. The employees that have knowledge, ability and experience have the opportunity in the job and having progression at the average of 3.19. Social welfare for employees are appropriate at 3.23 and employees know the concept of occupational health in the workplace at the average 3.34. But the Labor Union has the role in stimulating organization culture at average agreement only 2.79. Employees can take part in social responsibility of the organization, the average agreement is 3.21.

The respondent samples agree that there is promotion of security for the employees that lose their job at the average 3.51. In performing their work, employees have a chance to change the duty or position according to their knowledge ability and experience at the average agreement 2.99; also there is an implementation for developing the organization to be a learning organization at the average of 3.06. The employees are equally comparable between gender in the consideration of a career path with the average agreement at 3.30; they are also promoted and supported to have the morale in performing the task at the average of 3.03. Finally, the highest average agreement is that is a performance appraisal of the employees is conducted at least once a year regularly at 3.61.

To summarize, most of the respondent samples have moderate agreement on the various aspects of organization development . The average agreement on the role of the organization is about 3.00 in many activities, thus the organizations have to bring this information for further administrative improvement in the future.

### 4.3 Factors Affecting Management and Development of Labour in Thai Aviation Industry

From the study, it was found that the factors that have an impact on the management and labour development in the Thai aviation industry are as follows;

**Table 4.6** Comparison in Personal Factor (Genders) that has an Impact on Labour Management in the Thai Aviation Industry, which Performed in the Airlines, Airports, and Air Cargo

Management	Male		Female		t & P		Chi-Square	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	t	P_Value	P. (2-sided)	Phi (Value)
Development Plan	1.43	.496	1.40	.491	.844	.399	.398	-.035
Recruitment, selection, hiring	1.46	.499	1.43	.496	.609	.543	.542	-.025
Appraisal of the development	1.45	.498	1.35	.479	2.156	.032	.034	-.088
Total	1.44	.497	1.39	.488				

From the table 4.6, considering t-Test it was found that the sample group that had difference in genders would have difference opinion on labour management that had the statistical significance level at .05 in the performance appraisal of the labour development, but in the sample group that had different gender had no difference in management for development plan significantly.

From the table 4.6, considering Chi-Square it was found that the personal factor in genders resulted the factor in labour management in the aspect of labour development appraisal, which had the statistical significance at level .05 and had a little relationship, but personal factor in genders did not result in the management in aspect of labour development plan and recruitment, selection, hiring, performing labour development with statistical significance.



**Table 4.7** The Comparison of the Personal Factor (Age) that has an Impact on the Labour Management in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Management	Source of Variance	ANOVA				
		Df	SS	MS	F	P_Value
Development Plan	Between groups/	4	3.746	.937	3.909	.004
	Within groups	580	138.965	.240		
	Total	585	142.711			
Recruitment, selection, hiring	Between groups/	4	5.308	1.327	5.523	.000
	Within groups	580	139.352	.240		
	Total	585	144.660			
Development appraisal	Between groups/	4	3.239	.810	3.379	.010
	Within groups	580	138.990	.240		
	Total	585	142.229			
Total	Between groups/	4	12.293	3.074	4.270	.005
	Within groups	580	417.307	.720		
	Total	585	429.600			

From the table 4.7, considering ANOVA it was found that the sample group that had difference in age would have different opinion on labour management with statistical significance level at .05 in every aspect, namely, labour development plan, recruitment, selection, hiring, performing labour development, and labour development appraisal.

**Table 4.8** The Comparison of the Personal Factor (Education) that has the Impact on the Labour Management in Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Management	Source of Variance	ANOVA				
		<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>P_Value</i>
Development Plan	Between groups/	3	2.077	.692	2.860	.036
	Within groups	581	140.634	.242		
	Total	584	142.711			
Recruitment, selection, hiring	Between groups/	3	1.151	.384	1.553	.200
	Within groups	581	143.509	.247		
	Total	584	144.660			
Development appraisal	Between groups/	3	1.755	.585	2.420	.065
	Within groups	581	140.474	.242		
	Total	584	142.229			
Total	Between groups/	3	4.983	1.661	2.278	.100
	Within groups	581	424.617	.731		
	Total	584	429.600			

From the table 4.8, Considering ANOVA it was found that the sample group that had difference in education would have different opinion on labour management with statistical significance level at .05, in the aspect of labour development plan, but the sample group that had difference in education would have no difference in recruitment, selection, hiring, performing labour development, and labour development appraisal with statistical significance.

**Table 4.9** Comparison in Socio-Economics Factor (Income) that had an Impact on Labour Management in Thai Aviation that Performed in the Airlines, Airports, and Air Cargo

Management	Source of Variance	df	SS	ANOVA		
				MS	F	P_Value
Development Plan	Between groups/	3	3.070	1.023	4.258	.005
	Within groups	581	139.641	.240		
	Total	584	142.711			
Recruitment, selection, hiring	Between groups/	3	4.873	1.624	6.752	.000
	Within groups	581	139.787	.241		
	Total	584	144.660			
Development appraisal	Between groups/	3	3.458	1.153	4.825	.003
	Within groups	581	138.771	.239		
	Total	584	142.229			
Total	Between groups/	3	11.401	3.800	5.278	.003
	Within groups	581	418.199	.720		
	Total	584	429.600			

From the table 4.9, Considering ANOVA it was found that the sample group that had different income would have different opinion on labour management in the aspect of recruitment, selection, hiring, and labour development appraisal with statistical significance level at .05, but the sample group that had different income would have no difference in labour management in the aspect of labour development plan with statistical significance.

**Table 4.10** The Comparison of the Factor in Performing the Job (Under the Agency) that has the Impact on Labour Management in Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Management	Source of Variance	Df	SS	ANOVA		
				MS	F	P_Value
Development Plan	Between groups/	2	4.171	2.085	8.760	.000
	Within groups	582	138.541	.238		
	Total	584	142.711			
Recruitment, selection, hiring	Between groups/	2	4.563	2.282	9.478	.000
	Within groups	582	140.097	.241		
	Total	584	144.660			
Development appraisal	Between groups/	2	4.035	2.018	8.497	.000
	Within groups	582	138.194	.237		
	Total	584	142.229			
Total	Between groups/	2	12.769	6.385	8.912	.000
	Within groups	582	416.832	.716		
	Total	584	429.600			

From the table 4.10, Considering ANOVA it was found that the sample group that was under the authority of different agencies would have different labor management with the statistical significance level at.05 in ever aspect, namely, labour development plan, recruitment, selection, and labour development appraisal.

**Table 4.11** The Comparison of the Factor in Performing the Job (Position) that has an Impact on Labour Management in Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Management	Source of Variance	Df	SS	ANOVA		
				MS	F	P_Value
Development Plan	Between groups/	3	1.818	.606	2.499	.059
	Within groups	581	140.893	.243		
	Total	584	142.711			
Recruitment, selection, hiring	Between groups/	3	1.298	.433	1.753	.155
	Within groups	581	143.362	.247		
	Total	584	144.660			
Development appraisal	Between groups/	3	3.629	1.210	5.071	.002
	Within groups	581	138.600	.239		
	Total	584	142.229			
Total	Between groups/	3	6.745	2.249	3.108	.072
	Within groups	581	422.855	.729		
	Total	584	429.600			

From the table 4.11, considering ANOVA it was found that the sample group that had different positions would have different opinion on labour management in the aspect of labour development appraisal with the statistical significance level at .05, but the sample group that had different positions would have different labour management in development plan, recruitment, and selection that had no difference in statistical significance.

**Table 4.12** The Comparison of the Factor in Performing the Job (Work Period) that has an Impact on Labour Management in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo.

Management	Source of Variance	ANOVA				
		<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>P_Value</i>
Development Plan	Between groups/	3	1.705	.568	2.342	.072
	Within groups	581	141.006	.243		
	Total	584	142.711			
Recruitment, selection, hiring	Between groups/	3	2.742	.914	3.742	.011
	Within groups	581	141.917	.244		
	Total	584	144.660			
Development appraisal	Between groups/	3	.087	.029	.118	.950
	Within groups	581	142.142	.245		
	Total	584	142.229			
Total	Between groups/	3	4.534	1.511	2.067	.344
	Within groups	581	425.065	.732		
	Total	584	429.600			

From the table 4.12, considering ANOVA it was found that the sample group that had difference in work period would have different opinion on labour management in the aspects of recruitment, selection, and hiring with the statistical significance level at .05, but the sample group that had different work periods would have no difference in labour management in the aspects of development plan and development appraisal with the statistical significance.

**Table 4.13** The Comparison of the Factor in Performing the Job (Gender) that has an Impact on Labour Management in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Labour Development	Male		Female		t & P		Chi-Square	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	t	P-Value	P. (2-sided)	Phi (Value)
Training	47.26	9.41	49.48	8.61	-2.814	.005	.073	.121
Education	24.52	11.03	29.72	10.05	-5.681	.000	.000	.232
Development	63.71	16.72	70.67	15.14	-4.998	.000	.000	.209
Total	135.49	33.82	149.92	30.65	-5.118	.000	.024	.187

From the table 4.13, considering t-Test it was found that the sample group that had different genders would have different labour development with statistical significance level at .05 in the aspect of training, education, and labour development, which a female had the mean of labour development in all 3 aspects, namely, training, education, and development more than a male.

From the table 4.13, considering Chi-Square it was found that the personal factor in gender resulted in labour development factors in the aspects of education and development with the statistical significance at the level .05 and had a little relationship, but the personal factor in gender would not result in the development in training with the statistical significance.

**Table 4.14** The Comparison of the Factor in Performing the Job (Age) that has an Impact on Labour Management in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Labour Development	Source of Variance	df	ANOVA			P_Value
			SS	MS	F	
Training	Between groups/	4	1003.829	250.957	2.997	.018
	Within groups	580	48574.27	83.749		
	Total	584	49578.10			
Education	Between groups/	4	2736.713	684.178	5.840	.000
	Within groups	580	67943.53	117.144		
	Total	584	70680.25			
Development	Between groups/	4	8617.670	2154.418	8.259	.000
	Within groups	580	151288.2	260.842		
	Total	584	159905.8			
Total	Between groups/	4	30661.43	7665.359	7.113	.000
	Within groups	580	625016.1	1077.614		
	Total	584	655677.6			

From the table 4.14, considering ANOVA it was found that the sample group that had different ages would have different labour development with the statistical significance level at .05 in the aspects of training, education, and development.



**Table 4.15** The Comparison in Socio-Economics Factor (Level of Education) that has an Impact on Labour Development in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

<b>Labour Development</b>	<b>Source of Variance</b>	<b>df</b>	<b>SS</b>	<b>ANOVA</b>		
				<b>MS</b>	<b>F</b>	<b>P_Value</b>
Training	Between groups/	3	748.458	249.643	5.889	.001
	Within groups	581	24624.46	24.245		
	Total	584	25373.35			
Education	Between groups/	3	1627.642	542.547	4.565	.004
	Within groups	581	69052.60	118.851		
	Total	584	70680.25			
Development	Between groups/	3	6075.569	2025.190	7.649	.000
	Within groups	581	153830.3	264.768		
	Total	584	159905.8			
Total	Between groups/	3	23380.66	7793.554	7.161	.000
	Within groups	581	632296.9	1088.291		
	Total	584	655677.6			

From the table 4.15, considering ANOVA it was found that the sample group that had different level of education would have different development with statistical significance level at .05 in the aspects of training, education, and development.

**Table 4.16** The Comparison in Socio-Economics Factor (Income) that has an Impact on Labour Development in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Labour Development	Source of Variance	df	SS	ANOVA		
				MS	F	P_Value
Training	Between groups/	3	629.693	209.898	2.491	.059
	Within groups	581	48948.40	84.249		
	Total	584	49578.10			
Education	Between groups/	3	1534.417	511.472	4.298	.005
	Within groups	581	69145.83	119.012		
	Total	584	70680.25			
Development	Between groups/	3	5298.301	1766.100	6.637	.000
	Within groups	581	154607.5	266.106		
	Total	584	159905.8			
Total	Between groups/	3	18033.98	6011.328	5.477	.001
	Within groups	581	637643.6	1097.493		
	Total	584	655677.6			

From the table 4.16, considering ANOVA it was found that the sample group that had different income would have different labour development with statistical significance level at .05 in the aspects of education and development, but the aspect of training had no difference in statistical significance.

**Table 4.17** The Comparison of the Factor in Performing the Job (Under the Agency) that has an Impact on Labour Management in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Labour Development	Source of Variance	<i>df</i>	<i>SS</i>	ANOVA		
				<i>MS</i>	<i>F</i>	<i>P_Value</i>
Training	Between groups/	3	1891.748	630.583	7.683	.000
	Within groups	581	47686.35	82.076		
	Total	584	49578.10			
Education	Between groups/	3	9981.299	3327.100	31.846	.000
	Within groups	581	60698.10	104.473		
	Total	584	70679.40			
Development	Between groups/	3	8816.267	2938.756	11.301	.000
	Within groups	581	151089.6	260.051		
	Total	584	159905.8			
Total	Between groups/	3	55084.76	18361.585	17.763	.000
	Within groups	581	600592.8	1033.723		
	Total	584	655677.6			

From the table 4.17, considering ANOVA it was found that the sample group that was under the authority of the different agencies would have different labour development with the statistical significance level at .05 in the aspects of training, education, and development.

**Table 4.18** The Comparison of the Factor in Performing the Job (Position) that has an Impact on Labour Management in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Labour Development	Source of Variance	Df	SS	ANOVA		
				MS	F	P_Value
Training	Between groups/	3	1217.350	405.783	4.875	.002
	Within groups	581	48360.75	83.237		
	Total	584	49578.10			
Education	Between groups/	3	1529.864	509.955	4.285	.005
	Within groups	581	69150.38	119.020		
	Total	584	70680.25			
Development	Between groups/	3	3241.406	1080.469	4.007	.008
	Within groups	581	156664.4	269.646		
	Total	584	159905.8			
Total	Between groups/	3	16439.33	5479.77	4.981	.002
	Within groups	581	693238.2	1100.238		
	Total	584	655677.6			

From the table 4.18, considering ANOVA it was found that the sample group that had different positions would have different labour development with the statistical significance level at .05 in the aspects of training, education, and development.

**Table 4.19** The Comparison of the Factor in Performing the Job (Work Period) that has an Impact on Labour Management in the Thai Aviation Industry that Performed in the Airlines, Airports, and Air Cargo

Labour Development	Source of Variance	Df	SS	ANOVA		
				MS	F	P_Value
Training	Between groups/	3	502.902	167.634	1.985	.115
	Within groups	581	49075.19	84.467		
	Total	584	49578.10			
Education	Between groups/	3	2479.760	826.587	7.042	.000
	Within groups	581	68200.49	117.385		
	Total	584	70680.25			
Development	Between groups/	3	6064.263	2021.421	7.634	.000
	Within groups	581	153841.6	246.788		
	Total	584	159905.8			
Total	Between groups/	3	21899.82	7299.941	6.692	.000
	Within groups	581	63377.7	1090.839		
	Total	584	655677.6			

From the table 4.19, considering ANOVA it was found that the sample group that had different work periods would have different labour development with the statistical significance level at .05 in the aspects of education and development, but in the training aspect had no difference in statistical significance.

## **CHAPTER 5**

### **SUMMARY AND RECOMMENDATIONS**

This study of management and development of labour in the Thai aviation industry is cross-sectional research covering three organizations namely; Thai Airways International Public Company Limited (TG), Airports of Thailand Public Company Limited (AOT), and Bangkok Flight Services Company Limited (BFS). The target population in this research are employees from these three companies. The sample size totals 585 persons. The results of the study are summarized below.

#### **5.1 Summary**

##### **5.1.1 Characteristics of Sample Groups**

The majority (68.5 percent) of the sample are males and about 55 percent are aged between 31-50 years old. Most (64 percent) have an education to bachelor degree level. Those having an income of between 10,001-30,000 baht per month, number 43.9 percent and some 38 percent have an income of between 30,001-60,000 baht. Just over one-half (52 percent) of the employees are married. The majority (75.7 percent) of the sample are employees, primary executive level comprise 12.8 percent and middle executive level make up 8.2 percent. Those who have been working in their organization for more than 10 years number 48.2 percent, those with between 3-10 years service number about 34.5 percent, and those with less than 3 years service number just 17.3 percent.

##### **5.1.2 Summary of the Study on Factors Affecting Organizations**

###### **Management in Thai Aviation Industry.**

Findings from the study indicate that more than half of the sample felt that their organization had appropriate human resource planning. Recruitment and selection of staff is carried out by applying fair and standard criteria, filling available

positions according to knowledge and experience. The organization arranges for new employees to receive organizational orientations from executive level personnel from within the human resource department and direct line on duty. Promotion of staff is based on knowledge, ability and experience. Work appraisals have standards and use specific data to consider an employee's competency. The procedures for staff resignations are fair, the compensation system and incentives are also fair and appropriate. In short, the organization has an appropriate structure and efficiency for management.

### **5.1.3 Summary of the Study on the Factors Affecting Labour Development in Thai Aviation Industry.**

Study on the factors affecting labour development on training, education, and development. The majority of the sample strongly that training gives employees knowledge, skills and experience, and that training helps employees perform tasks with efficiency and effectiveness. Moreover, training develops management skills and can positively change personal behavior. However, the samples also indicated that training in technology related to the organization is at a moderate level. They also received training to improve development in the organization's information technology constantly.

As for educational aspects, employee satisfaction is generally rated relatively low. They indicated that employees receive a rather low level of support for continuing education in the vocational field and education in the field relating to organizational tasks. However, the lowest level of satisfaction was indicated for employees undergoing education from abroad. This might be due to budget limitations and scholarship planning for the employees not being appropriate enough. On the whole, employee satisfaction levels regarding labour development in educational aspects are below average in many categories.

In terms of development, employees are promoted to operate computer programs, using information technology for personnel development. They indicated that human resource planning in the organization has flexibility and is suitable for the present situation. A mentor system is used for transferring knowledge and skills in performing tasks from one generation to new members, social welfare is appropriate

and employees are aware of occupational health concepts in the work place. The labour union is important and useful for the development and progress of the organization but the role in stimulating the organization culture is selectively low. Employees can also take part in social responsibility of the organization. On the whole, most of the respondents in the sample had moderate agreement on the various aspects of organization development, thus the organization has to bring this information for further administrative improvement in the future.

## **5.2 Recommendations**

The study present guidelines for improving labour development in various aspects. On organization management, improvement should be focused on the recruitment and selection procedures, including promotion which should be considered by knowledge, ability and experience of the employees. On the whole , the organization should improve human resource planning for every department. In term of training aspects, the organization should improve the development in information technology and provide the knowledge from the department both inside and outside the organization. Education opportunity for employees are also should be emphasized both from abroad and to study in other organization that have modern innovation especially on technology advancement. The organization should improve the scholarship and have appropriate budget for employees education. Lastly on development, the organization must improve various activities that currently offered to the personnel in the organization to develop the skill, knowledge and perception more efficiency for long term personnel development in the organization.

### **5.2.1 Policy Point of View**

5.2.1.1 Various companies should determine their short, medium and long term policies; in order to allow the Human Resource Department to perform systematically according to the policies and needs of labour in the organization.

5.2.1.2 Enforce the policy concerning the guidelines of implementation including a follow-up and evaluation summary to obtain a measurement to be used for improvements in the developing process, and which is considered the main policy and is applied continuously.



## **5.2.2 Management Point of View**

5.2.2.1 Suggestion for activities, benefits beyond the usual benefits according to the law, health insurance, work compensation for accidents on the job, social security, activities that boost employee morale and suggestions for educational field trips abroad.

5.2.2.2 Suggestion for orientations before employees perform actual tasks, which are suggested and explained fully to employees to help them understand the policies and organizational goals as well as giving them a chance to know about the department that the employees will ultimately work for, to take care of the responsibility and the benefits. Thus, employees will have knowledge and understanding and be able to adapt themselves in the organization happily. Such orientations should reduce problems in misunderstandings and eliminate possible future conflicts.

5.2.2.3 Suggestions for the advancement of computer training, which has the highest demand in information technology by engaging an institution that has standards and course outlines related to the job in order to increase overall efficiency and competency at work.

## **5.2.3 Academic Point of View**

5.2.3.1 Suggest study and in depth research in every broad aspect and also promote research from both the public and private sectors in order to create improvements and develop human resources to be efficient so that it results in developing the country in total.

5.2.3.2 Suggest promoting and supporting the organization to have a responsible department dedicated to research in order to increase the efficiency and production levels of the organization.

## BIBLIOGRAPHY

- Airports of Thailand Public Company Limited. 2007. **Annual Report**.  
Retrieved November 17, 2009 from <http://aot.listedcompany.com>.
- Airports of Thailand Public Company Limited. 2008. **Annual Report**.  
Retrieved October 9, 2009 from <http://aot.listedcompany.com>.
- Airports of Thailand Public Company Limited. 2009. **Annual Report**.  
Retrieved September 5, 2009 from <http://aot.listedcompany.com>.
- Aranya Somkeaw. 2003. **Employee Competency Assessment for Development Plan**. Nonthaburi: Siam H. R. Cooperation Company.
- Armstrong, Michael. 2006. **A Handbook of Human Resource Management Practice**. 10th ed. London: Kogan Page.
- Association of Asia Pacific Airlines. 2009. **Global Aviation Industry Trend**.  
Retrieved April 17, 2009 from [http://www.zinnov.com/presentation/Global\\_Av](http://www.zinnov.com/presentation/Global_Av).
- Aviation Radio of Thailand Company Limited. 2004. **Numbers and Types of the Aircraft**. Bangkok: Aviation Radio of Thailand Company.
- Bank of Thailand. 2002. **The Trend of the Thai Economic Growth**. Bangkok: Bank of Thailand.
- Bank of Thailand. 2008. **The Trend of the Thai Economic Growth**. Bangkok: Bank of Thailand.
- Becker, G. S. 1975. **Human Capital**. New York: Columbia University Press.
- Bernardin, H John. 2003. **Human Resource Management: an Experiential Approach**. 3rd ed. Boston, Mass.: McGraw-Hill/Irwin.
- Blaug, Mark. 1972. **Introduction to Economics of Education**. London: Penguin Books.
- Boeing Company. 2009. **Current Market Outlook 2009-2028**. Retrieved January 23, 2009 from. <http://en.boeing-me.com/ViewContent.do?id=45402>
- Boonkong Hunjansit. 2001. **Human Resource Economics**. Bangkok: O. S. Printing House. (In Thai)

- Bratton, J. and Gold, Jeffery. 1994. **Human Resource Management Theory and Practice**. Hound Mills, Basingstoke, Hampshire: Macmillan.
- Breaugh, James A. 1992. **Recruitment: Science and Practice**. Boston: PWS-Kent.
- Byars, Lloyd L. and Rue, Leslie W. 1997. **Human Resource Management**. 5th ed. Chicago: Irwin.
- Chaianan Samutvanich. 2009. **Expenses Reduction in Thai Airways Public Company**. Bangkok: International Public Relations Department.  
(In Thai)
- Chen, Feinian. 2003. **The Division of Labor Between Generations of Women in Rural China**. Retrieved January 26, 2005 from <http://www.sciencedirect.com>
- Civil Aviation Training Center. 2009. **Management Construction Development Plan For Increasing Efficiency in Performance of the Civil Aviation Institution**. Bangkok: CATC.
- College of Social Science. 2003. **Master of Education in Human Resource Development**. Retrieved January 26, 2009 from <http://www.xu.edu/hrd/overview.html>
- Cronk, Tom et al. 1994. **Human Resource Management**. South Melbourne: Thomas Nelson Australia.
- De Cenzo, D. and Robbins, S. 1993. **Human Resource Management**. 4th ed. New York: John Wiley & sons.
- Department of Labour Protection and Welfare. 2003. **Thailand Labour Standard**. Bangkok: Department of Labour Protection and Welfare.
- Dessler, Gary. 1997. **Human Resource Management**. 7th ed. Upper Saddle River, N.J.: Prentice Hall.
- Drobnic, Sonja et al. 1999. Dynamics of Women's Employment Pattern Over the Family Life Course: a Comparison of the United State and Germany. **Journal of Marriage and Family**. 61 (1): 133-146.
- Ellickson, Mark C. 2002. Determinants of Job Satisfaction of Municipal Government Employees. **Public Personal Management**. 31, 3 (Fall): 343-358.
- Ferris, Gerald R. and Buckley, M. R. 1996. **Human Resource Management: Perspectives, Context, Functions and Outcomes**. 3rd ed. Englewood Cliffs: Prentice Hall.

- Fisher, Cynthia D. and et al. 1993. **Human Resource Management**. 2nd ed. Boston: Houghton Mifflin.
- Gilley, Jerry W; Steven, A. E. and Maycunich, Ann. 2002. **Principles of Human Resource Development**. 2nd ed. Cambridge, MA: Peruses.
- Gomez -Mejia L. R.; Balkin, D. B. 1995. The Determinants of Managerial Satisfaction with the Expatriation and Repatriation Process. **Journal of Management Development**. 6 (1987): 7 -18.
- International Air Transport Association. 2002. **Labour in Air Cargo**. Retrieved December 15, 2004 from <http://www.iata.org/membership/pages/travelcargo.aspx>.
- Ivancevich, John M. 1998. **Human Resource Management**. 7th ed. Boston: Irwin McGraw-Hill.
- Kamolman Oupapan. 2008. **Stress Management of Check-in Staff for Thai Airways Passengers**. Thesis Chiang Mai University. (In Thai)
- Kim, Meesok and Cho, Kyung-HO. 2003. Quality of Life Among Government Employees. **Social Indicators Research**. 62/63 , 1(April): 387-396.
- Liang, Wen-Miin et al. 2005. **Factor Construct of Health Related Quality of Life in Taiwanese Workers**. Retrieved January 26, 2005 from [http://www.jniosh.go.jp/en/indu\\_hel/pdf/437\\_Nordin.pdf](http://www.jniosh.go.jp/en/indu_hel/pdf/437_Nordin.pdf)
- Milkovich, George T. and Boudreau, John W. 1991. **Human Resource Development**. 6th ed. Homewood, Illinois: Irwin.
- Ministry of Education Department of Education. 2000. **Guideline of Providing Education on Issue of Life and Family Study Scope of Material by Step**. Bangkok: Ministry of Education.
- Ministry of Information and Technology and Communication. 2003. **The Unemployment of the Middle Level and High Level Labour 1996-2002**. Bangkok: National Statistics Institution.
- Ministry of Information and Technology and Communication. 2009. **Thai Labour Statistics**. Bangkok: National Statistics Institution.
- Ministry of Interior Affairs Department of the Interior. 2005. **Population Sorted by Age in Bangkok**. Retrieved February 10, 2005 from <http://www.dopa.go.th/xstat>.

- Ministry of Labour. 2009. **Government Labour Development Policy**. Bangkok: Ministry of Labour.
- Ministry of Labour and Social Benefit. 2003. **Wages and Average Income of the Private Sector Employees Sorted by Industry and Type of Employment 2002**. Bangkok: Department of Benefit and Labour Protection.
- Ministry of Transportation. 2003. **Air Transportation Statistics Sorted by Airport 1997-2002**. Bangkok: Department of Air Transportation.
- Ministry of Transportation. 2004. **40 Years of Department of Air Transportation**. Bangkok: Department of Air Transportation.
- Ministry of Transportation. 2007. **Annual Report**. Bangkok: Ministry of Transportation.
- Ministry of Transportation. 2008. **Annual Report**. Bangkok: Ministry of Transportation.
- Mondy, R.Wayne; Noe, Robert M. and Premeaux, Shane R. 1999. **Human Resource Management**. 7th ed. Upper Saddle River, N.J.: Prentice Hall.
- Nataphan Keajonan. 2005. **Human Resource Management**. Bangkok: Se-ed. (In Thai)
- National Institute of Development Administration. 1997. **Social Theory**. Bangkok: Roongsang Pub. (In Thai)
- Nongnuch Wongsuwan. 2001. **Human Resource Management: Project of Text Development**. Bangkok: Ratchapat Rumpaipunnee. (In Thai)
- Panlop Piriyasurawong. 2003. **Trend in Information and Technology for Education and Training**. Accompanying Paper in the Speech. (In Thai)
- Peterson, N. G. et al. 2001. **Understanding Work Using the Occupational Information Network: Implications for Practice and Research**. Retrieved November 23, 2009 from <http://www.highbeam.com/doc/1P3-74812197.html>

- Phatsari Tuchinda. 1996. **Human Resource Spiritual Development: a Case Study of Conscientious, Moral and Ethical Development of Human Resource in Betagro Northern Agro-Industry Co.,Ltd.** Term paper, National Institution of Development Administration. (In Thai)
- Phayom Wongsansri. 1995. **Human Resource Management.** thesis, Rajabhat Suan Dusit University. (In Thai)
- Phiyawadee Tangsuwan. 1994. **Labour Forecast in Thailand.** Bangkok: Ramkhamheang University Publisher. (In Thai)
- Ratchanok Moonked and et al. 2008. **Job Satisfaction of the Staff of Thai Airways International Public Company Limited.** Valaya Alongkorn Rajabhat University under the Royal Patronage. (In Thai)
- Ratchapan Choiejit. 2002. **The Relationships Between Population Density and Commuting Patterns in Bangkok.** Doctoral dissertation, Mahidol University. (In Thai)
- Sherman, A. Bohlander, G. and Snell, S. 1996. **Human Resource Management.** Cincinnati: South Western College .
- Sirisopak Buraphadeja. 1991. Work and Evaluation Analysis. In **Psychology Business.** Bangkok: Department of Mental Health Ministry of Public Health. (In Thai)
- Stahl, O. Glann. 2003. **Public Personnel Administration.** 6th ed. New York: Harper & Row. Pp. 205 -206.
- Supachai Yawaprapat. 2005. **Thai Public Sector Management: New Trend and Challenges.** Bangkok: Chudthong Company. (In Thai)
- Syoum Gebegziabher. 2000. **A Primer of Public Personnel Administration: Human Resource Development.** Africa: World Press.
- Thai Airfreight Forwarders Association. 2002. **Labour Information in Air Logistics in the Industry.** December 1, 2004 from <http://www.tafathai.org/index.php?name=aboutus>
- Thai Airfreight Forwarders Association. 2004. **Labour Force in Air Cargo.** Retrieved December 1, 2004 from <http://www.tafathai.org/index.php?name=aboutus>
- Thailand Productivity Institute. 2007. **Job Assessment.** Bangkok: Thailand Productivity Institute

- Thongchai Somboon. 2006. **Human Resource Management**. Bangkok: Se-Ed Public Company Limited. (In Thai)
- Todsaporn Hongsanun. 1995. **A Study of Factors that Have the Influence the Career Decision Making Process in Aviation Industry to Commercial Pilot Student, Civil Aviation Training Center Thailand**. Master thesis, National Institute of Development Administration. (In Thai)
- Toffler, A. 1970. **Future Shock**. London: Pan Books.
- Tompkins, J. 1995. **Human Resource Management in Government**. New York: Harper Collins College.
- Tompkins, J. 1997. **Human Resource Management in Government**. New York: Harper Collins College.
- United Nations. 1990. **United Nations Project Methods Human Resource Management in Government**. Retrieved November 23, 2009 from <http://webapps01.un.org/dsd/partnerships/public/partnerships/117.html>
- Villi, Nurmi. 2003. **HRD Innovations: a Case Study from the Finnish Paper Industry**. Retrieved November 23, 2009 from <http://www.leeds.ac.uk/educol/documents/000001156.htm>
- World Bank. 1995. **World Development Report**. New York: Oxford University Press.

## **APPENDIX**

### **Questionnaire for Research Topic Management and Development of Labour in Thai Aviation Industry**



## Questionnaire for Research Topic Management and Development of Labour in Thai Aviation Industry

- Explanation :**
1. This questionnaire is used for the survey of the management and development of labour , by using on the employees of the companies in the aviation industry and for this study only. All of the answers will be kept confidentially and presented into the over view.
  2. The questionnaire is divided in 4 parts. Please answer all the questions.

### Part 1 Personal Characteristic Data

**Explanation** Mark / in ( ) in front of the item that is true relating to you

1. Gender
 

<input type="checkbox"/> Male	<input type="checkbox"/> Female
-------------------------------	---------------------------------
2. Now your age is
 

<input type="checkbox"/> 1. Less than 20 years old	<input type="checkbox"/> 2. 21 - 30 years old
<input type="checkbox"/> 3. 31 - 40 years old	<input type="checkbox"/> 4. 41 - 50 years old
<input type="checkbox"/> 5. More than 50 years old	
3. Level of education
 

<input type="checkbox"/> 1. Below Bachelor Degree	<input type="checkbox"/> 2. Bachelor Degree
<input type="checkbox"/> 3. Master Degree	<input type="checkbox"/> 4. Others
(Indicate.....)	
4. Income
 

<input type="checkbox"/> 1. Below or 10,000 Baht	<input type="checkbox"/> 2. 10,001 - 30,000 Baht
<input type="checkbox"/> 3. 30,001 - 60,000 Baht	<input type="checkbox"/> 4. More than 60,000 Baht
5. Marital Status
 

<input type="checkbox"/> 1. Single	<input type="checkbox"/> 2. Married
<input type="checkbox"/> 3. Widow/Divorce	<input type="checkbox"/> 4. Separate
6. Which type of job do you work for in the aviation industry?
 

<input type="checkbox"/> 1. Airline	<input type="checkbox"/> 2. Airport
<input type="checkbox"/> 3. Air Cargo	<input type="checkbox"/> 4. Others
(Indicate.....)	

7. Your present position  
 1. Staff  2. Primary Executive Level  
 3. Middle Executive Level  4. Others  
 (Indicate.....)
8. Work Period  
 1. Less than 3 years  2. 3 - 5 years  
 3. 6 - 10 years  4. More than 10 years
9. In year, 2008 you were in training/ seminar/ business field trip or increase knowledge development from outside agency or received training in the organization.  
 1. Yes  2. No

## Part 2 Organization Management Data

**Explanation Mark / in ( ) in front of the item that is true the most**

10. Do you think that your company has an appropriate labour plan?  
 1. Yes  2. No
11. Recruitment and labour selection have standard and fairness  
 1. Yes  2. No
12. Hiring employee due to ability and experience  
 1. Yes  2. No
13. The organization has a new labour orientation provided by high level Department, Direct Line of Duty  
 1. Yes  2. No
14. Promotion, raise due to knowledge, ability, and experience  
 1. Yes  2. No
15. Performance appraisal on labour has standard and use the data to accompany employee's competency  
 1. Yes  2. No
16. Transferred or the labour's resignation due to the procedure that is set and fairness  
 1. Yes  2. No

17. The company has a compensation system such as salary, wages, and other bonuses appropriately and fairly  
 1. Yes  2. No
18. The organization has organized the appropriate structure and the efficiency for the management  
 1. Yes  2. No
19. Do you think whether the organization management in general should be in what way?  
 1. Autocracy  2. Democracy  
 3. Freely

**Part 3 Labour Development Data in Thai Aviation Industry**

**Explanation** Please mark / in the space showing the level of suggestion that matches the fact the most

Labour Development Factor	Opinion Level					
	High est	High	Mode rate	Low	Lowest	Never
	5	4	3	2	1	0
<b>Training</b>						
1. Training gives the labour knowledge skill and experience						
2. Training helps the labour to perform with efficiency and effectiveness						
3. Training makes change in personnel's behavior						
4. Training creates skill and development in job management						
5. The material in the course is useful to apply for the real job						
6. Documentation of Training has full and clear material						
7. Period of time used in training is appropriate						

Labour Development Factor	Opinion Level					
	High est	High	Mode rate	Low	Lowest	Never
	5	4	3	2	1	0
8. People who received training have satisfaction in training and conveniences						
9. After training, the knowledge was acquired to be expanded in order to follow on the same guideline						
10. The labour received training from the specialist in many aspects continuously						
11. The labour received training in various technology relating to the task of the organization appropriately						
12. The labour received the training on the performance in order to present and develop information technology of the organization regularly						
13. Follow up and performance appraisal on people who received training in each course seriously and continuously						
14. Labour received training, seminar, business field trip, or increasing knowledge from the internal agency and from outside the organization						
<b>Education</b>						
15. The labour are supported to have continuing education in their vocational line in order to bring back to perform the duty						
16. Let the labour to have education in the institution that arranges the education in the vocational subject relating to the task of the organization						

Labour Development Factor	Opinion Level					
	High est	High	Mode rate	Low	Low est	Never
	5	4	3	2	1	0
<b>Education</b>						
17. Labour received consultation from the specialist in performing the job in order to develop the work quality						
18. Labour have the opportunity to study for basic, medium and advance management programme						
19. Labour have the opportunity to have field trips abroad relating to the business and bring back to use in the organization						
20. Labour have the opportunity to have business field trips at many companies that have modern innovation especially the advance in technology						
21. The organization has the budget for scholarship to give to the labour enough and appropriately						
22. The organization used the level of education, training, and experience to be the qualification to determine the level of compensation for the labour						
23. There is a scholarship plan for the labour clearly and appropriately						
24. Providing education for labour is the main policy for the organization						
<b>Organization Development</b>						
25. All labour received promotion and support to be able to operate the basic computer programme and higher level						
26. The labour used mixed media for personnel development						

Labour Development Factor	Opinion Level					
	High est	High	Mode rate	Low	Lowest	Never
	5	4	3	2	1	0
<b>Organization Development</b>						
27. Promote the labour to organize the social activity in many occasions such as do merit , offer food and stuff to the monk, donations for disabled children, senior citizen homes						
28. The organization promotes and supports religion activities and respect of the labour						
29. Labour receive promotion and support on giving suggestions and determination on the direction of the organization development						
30. Labour have special knowledge and ability in the aviation industry						
31. Labour Union has the importance and is useful for development and progression of the organization						
32. Labour got the support to do organization analysis and bring the result to perform in order to increase the efficiency and effectiveness of the organization						
33. Human Resource Development Plan in the organization has flexibility and suitability to the present situation						
34. Mentor System is brought to transfer the knowledge and skill in performing the job from one generation to the new members						
35. Labour that have knowledge, ability, and experience received the opportunity at work and receive progression						

Labour Development Factor	Opinion Level					
	High est	High	Mode rate	Low	Lowest	Never
	5	4	3	2	1	0
36. There is the arrangement to give benefit to labour appropriately and enough						
37. Labour were cultivated and having campaigns for good health and safety at work						
38. Labour Union has a part to stimulate in company culture						
39. Labour have responsibility for the society in the organization						
<b>Organization Development</b>						
40. There is a support of security for the employees that have to be out of the job in order to be able to survive in the society such as the back-up money, pension, and compensation						
41. Labour have a chance to swap duties or positions due to the learning organization aspect						
42. There is a plan for organization development to be learning organization						
43. Labour are equal between male and female for being considered in career path						
44. Performance appraisal on labour regularly at least one a year						
45. Labour received promotion and support to have good morale in performing the job						





## **BIOGRAPHY**

**NAME** Squadron Leader Watana Manon

**BACKGROUND ACADEMY** Bachelor of Art (Political Science)  
Ramkhamhaeng University.1982  
Master of Science (Environmental Science)  
Kasetsart University. 1996

**POSITION & OFFICE** Vice President (Administrative Affairs)  
Civil Aviation Training Center (CATC), Thailand  
State Enterprise Under Ministry of Transport  
(2006 – Present)

**EXPERIENCES** Director of Aviation Management Division  
Civil Aviation Training Center (2004 – 2005)  
Acting Chief of Air Cargo Management Program  
Civil Aviation Training Center (2002-2003)  
Ground School Instructor  
Civil Aviation Training Center (2000-2001)  
Chief of Weather Observer Section  
Weather Division , Directorate of Air Operation  
Control, Royal Thai Air Force (1996-1999)