CHAPTER 1 INTRODUCTION

Low-cost carriers (LCC) or discount airlines have been a successful business in North America since 1973 and were pioneered by Southwest Airline. This company's business model has been copied many times around the world including by the leading low-cost carriers, Ryanair, in Europe and AirAsia, in Southeast Asia. Currently there are no airlines planning to adopt this model in Taiwan.

This raises the questions- is it a good time and opportunity to copy the same model in Taiwan? And how early should a carrier adopt this model in doer to effect early market penetration?

This study will introduce the background of low-cost carriers and explore its global implementation. In concluding, this study will offer suggestions to the hypothesis "is Taiwan ready to implement the business model of low-cost carriers?"

This study uses a case study of AirAsia, the leading low-cost carrier in Southeast Asia, to support its assertions.

1.1 Backgrounds and Motivation

On December 7, 2004, JetStar Asia, a budget air carrier based in Singapore, announced regular flight services between Taipei and Singapore beginning December 16, 2004. The initial ticket retailed at NT\$1,760 for a single trip and this was considerably lower than the industry average of approximately NT\$10,000 (US\$312) [Newspaper: The Taipei Times, Dec 07, 2004, p.12].

The opening of the route made JetStar Asia the first low-cost carrier to edge into the Taiwan air travel market. Jetstar Asia is the third low-cost airline to be launched from Singapore after Valuair and Tiger Airways in 2004.

AirAsia, the pioneer low-cost airline in Southeast Asia began service in December 2001 and achieved a net profit by June 30, 2003 [The wall street Journal Europe, 3 July 2003].

Since that time low-cost carriers have become a very popular means of travel within Southeast Asia.

So, what is the status of low-cost airlines in Taiwan?

We are surprised that no domestic airline has a launched low-cost service in Taiwan to date as the low-cost carrier business model has been copied many times around the world and proven to be profitable. Southwest Airlines, the first discount airline in the world, remained one of the few profitable major American airlines post-911 and during the time of SARS.

The purpose of this dissertation is to assess the feasibility of implementing a low-cost carrier model in Taiwan.

This study will use airlines which have adopted a low-cost model with success and bear some similarity to the airline industry in Taiwan. The most available airlines to study are airlines in Southeast Asia.

1.2 Objective

The leading low-cost airline in South East Asia is AirAsia.

AirAsia implemented a low-cost carrier business model in Southeast Asia when it was re-launched as a low-cost carrier following the acquisition of the company by Tune Air in December 2001. AirAsia can now be seen as very successful case to study low-cost carrier business model adoption in Asia as they achieved a net profit in only one and half years.

This study will compare the capability and environment of low-cost carrier business between Taiwan and Southeast Asian countries. The operational strategy of AirAsia will be used as a benchmark for comparison.

The objectives of this study include the following:

- 1. How and what can Taiwanese airlines learn from AirAsia Airline.
- 2. Is the demography and geography of Taiwan suitable for a low-cost carrier model?
- 3. Can the economy of Taiwan support a low-cost carrier?

- 4. What aviation regulations will potentially effect low-cost carriers in Taiwan?
- 5. Is Taiwan ready for low-cost carriers?

1.3 Scope

Globally a number of airlines are adopting a low-cost business model and competitive advantage can be attributed to success in increasing efficiency while lowering costs. Southwest Airline and Ryanair are the most famous low-cost airlines in the world; they both offer low fares, efficiency and are profitable. While their commercial success provides a good study of effective lowcost carrier service. This study will focus primarily on AirAsia based in Malaysia, as a suitably comparable Asian-based airline.

This paper will study the history of AirAsia and their strategies concerning implementing and operating a low-cost business model. No details of financial data and future business strategies of AirAsia will be reported in this paper. Alongside company profile, this study will also compare the development of social, economic, business, industry, government, and regulatory conditions between Taiwan and Southeast Asia.

To summarise, this dissertation will attempt to compare all possible issues between airlines in Taiwan and AirAsia.

It must be noted some statements are based on assumptions and predictions regarding future economic and market conditions and as such are difficult or impossible to predict with absolute accuracy.

1.4 Organization of the Dissertation

The following sections are organized as follows:

Chapter two will review literature studying low-cost carrier models about the world.

While Southwest Airline and Ryanair are studied the focus will remain in Southeast Asia.

Chapter three will detail the design of the empirical study, including the research

procedure, research method and the framework for this research.

Chapter four will use a SWOT analysis to study AirAsia. This chapter will also detail the economic and business conditions and development, government regulations, demography and geography of Malaysia.

Chapter five will offer a detailed analysis of all factors between Taiwanese airlines and AirAsia. This chapter will also outline economic and business development and conditions, government regulations, and demography and geography in Taiwan.

Chapter six will conclude this study by summarizing findings, managerial implications, limitations, and suggesting possible directions for future study.



CHAPTER 2 LITERATURE REVIEW

2.1 History of Low-Cost Carriers

The first successful low-cost carrier is generally acknowledged to be Southwest Airlines in the United States, which was founded in 1971 and has been profitable every year since 1973 [www.southwest.com 2004]. With the advent of aviation deregulation the model spread to Europe as well, the most notable successes being Ireland's Ryanair, which began low-fares operations in 1991, and easyJet, formed in 1995 [Answers.com, 2005]. As of 2004, low cost carriers are now edging into Australasia, led by operators such as Malaysia's Air Asia, and Australia's Virgin Blue.

Low-cost carriers pose a serious threat to traditional "full-service" airlines, since the high cost structure of full-service carriers prevents them from competing effectively on price-the most important factor among most consumers when selecting a carrier. From 2001 to 2003, When the aviation industry was rocked by terrorism, war and SARS, the majority of traditional airlines suffered heavy losses while low-cost carriers generally stayed profitable.

According to the market analysis by Boeing Commercial Airplanes in year 2004 (see figure 2-1), low-cost carriers have different stage of market penetration in globally.

North American was a much maturity market with lower growth rate in less than 8%, while the Southeast Asia was very high growth rate up to 60% with only 2% market penetration [Drew Magill, 2004]; Southeast Asia has numerous opportunities in low-cost carriers because of new deregulation.

Europe's low-cost carriers market was in between North American and Southeast Asia, it was up to 30% growth rate with more than 16% market penetration [Drew Magill, 2004].

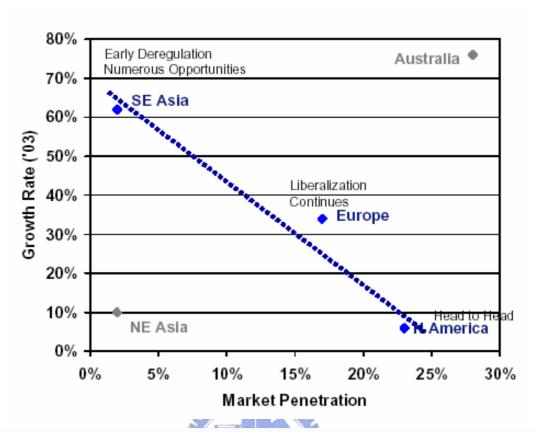


Figure 2-1: LCC are at Different Stages of Maturity in the world Source: LCC's market, Analysis by Boeing Commercial Airplanes, 2004

1896

Many carriers have opted to launch their own no-frills airlines, such as KLM's Buzz, British Airways' Go Fly, and United's Ted, but have found it difficult to avoid cannibalizing their core business. One exception to this has been British Midland's bmibaby, which successfully operates alongside its full-service counterpart.

In Canada, Air Canada has found it difficult to compete with new low-cost rivals such as Westjet and Canjet despite its previously dominant position in the market: Air Canada declared bankruptcy in 2003 [Pittsburgh Post-Gazette, 2005]. In Finland the competition went in a different direction, as the national carrier Finnair lowered prices so that the low-cost competitor Flying Finn was forced to cease its operations.

Australia's Qantas airline has launched two low cost carriers: JetStar services the Australian domestic market in competition with Virgin Blue, while Australian Airlines

operates internationally to Asian destinations.

A new batch of low cost airlines is swooping into Asia to see if the formula can work there. A number of low-cost carriers either flying or about to launch has doubled to about fifteen. Most are spin-offs from traditional airlines such as Thai Airways' Nok and Tiger Airways. Tiger Airways is joint venture by Singapore Airline and Ryanair.

In Malaysia, AirAsia was incorporated on December 2nd, 2001. It was turned to profit in 2002 [AirAsia's prospectus, 2004] and launched new routes from its hub in Kuala Lumpur International Airport at breakneck speed, undercutting former monopoly operator Malaysia Airlines with promotional fares as low as RM10 (US \$2.50) [www.airasia.com, 2005], which is cheaper than a normal bus tikets. AirAsia claims its operating costs are less than half those of other successful Asian carriers, and it has made air travel an affordable option for more Malaysians. AirAsia become the pioneer of low-cost carriers in Asia.

A number of low-cost carriers also launched in Southeast Asia; Jetstar Asia is a Singapore-based partnership between Qantas (49% shareholding), local businessmen Tony Chew (22% shareholding) and FF Wong (10% shareholding) and Temasek Holdings (19% shareholding) [www.jetstar.com, 2005]. It is regional extension of the Jetstar brand, which was launched by Qantas as a low cost airline in the Australian domestic market. Valuair is the region's only value-for-money budget airline operating out of Singapore. Privately owned, Valuair begun operations in May 2004 and in 2005 flies daily to Perth, Bangkok, Jakarta and Hong Kong on its Airbus A320's. Valuair claims its 32 inch seat pitch [www.valuair.com.sg, 2005], the distance between your seat and the seat in front of you, is more comfortable than other major airlines with 29 inch seat pitch. Established in December 2003, Tiger Airways [www.tigerairways.com, 2005] addresses the needs of travelers looking for a reliable low fare carrier to serve the Asia Pacific and has responded well to the tremendous growth of air travel and the rise of budget travel in the region.

In Thailand With Nok Air, air travel will no longer be expensive. Nok Air will help

enhance the quality of life for Thais to be comparable of those in other developed countries. It target the customer in both Local and international tourists seeking to explore the beauty of the different parts of Thailand.

Table 2-1 show the top three of leading low-cost carriers in the region around the world in term of scheduled available seats per week. Southwest is no doubt be the world's top one of low-cost carriers; Ryanair is the leader in the region of Europe.

Table 2-1: The regional top three LCC in term of Scheduled Available Seats per Week

Region	1st rank	2nd rank	3rd rank
North American	SOUTHWEST.COM	air Tran	GO EXCH GO ATA.
Europe	RYANAIR.COM	easyJet.com	Air one
Australia	wirginblue.com.au	Jet≭	
Southeast	Cebu Pacific Air	Air Asia	AIR DO Holdadido International Artines Air Do

Source: This summary & Boeing Commercial Airplane ranking

2.2 Literature of Low-Cost Carrier Model

A low-cost carriers, also known as a no-frills or discount carriers or budget airlines, are an airline that offers low fares but eliminates most traditional passenger services. Low costs equal low fares. They use one type of aircraft. They keep it in the air as much as they can.

They don't use large planes; a large 747 plane can't be turned around (unload and load) in 20 minutes. For instance, AirAsia have only one type of aircraft, Boeing 737s, to save on training overheads. They don't give free meals; they don't show movies. They use young, eager, hard orking and relatively cheap crew! And the crews help to clean the aircraft to shorten turnaround times. They don't have old union agreements to fret over. They negotiate

everything with their suppliers. They don't use travel agents. You book online or through a call centre. They don't transfer your bags and they don't do interlining.

According to the market analysis from Boeing Commercial Airplanes, they estimates that low-cost airlines earn around 45% less revenue per mile than full-service airlines and so need 50% lower costs [Economist print edition, 2004], a full-service airlines can charge more for long-haul flights. Typical low-cost carrier business practices including following model;

- 1. A single passenger class; the seating configuration can maximizes seating capacity by single class. For instance, A Boeing 737-300 aircraft can fit 148 passenger seats in single seating configuration while the typical passenger seat is 132 in a two-class configuration of Boeing 737-300 aircraft. In Europe, Ryan air use the seats that do not recline, no window shades, and no seatback pockets, the seatback pockets are hard to keep clean. The safety instructions are printed on the back of the fold down table.
- 2. A single type of aircraft is a purpose of reducing training and servicing costs. Normally they use Boeing 737 aircrafts; they do not use large planes. You cannot turnaround (unload and load) a 747 aircraft in 20 minutes. A typical turnaround time is around 45 to 120 minutes in full-service airlines.
- Short flights and fast turnaround times, shorter-range flights cut out the unnecessary frills.
 They keep it in the air as much as they can. This strategy allows maximum utilization of planes.
- 4. Point-to-point transit, short flights also simplify the routes, they emphasize point-to-point transit instead of transfers at hubs, and the purpose is to enhance aircraft utilization. For example, Ryanair, Southwest, and EasyJet often add a new destination and connect it to a number of existing points. Low-cost carriers fill in connections in their network. According to an analysis from Aviation week & Space Technology, the low-cost carriers are benefiting from two significant and related trends; one is the quest for timesavings and another one is desired for point-to-point service. Passengers look to avoid connecting

- flights, and the resultant time delays, that are too often unavoidable when flying on a major carrier.
- 5. "Free" in-flight catering and other "complimentary" services are eliminated, and replaced by optional paid-for in-flight food and drink. They don't show movies. They definitely no moisturizer in the toilets.
- 6. A simple fare scheme: Typically fares increase as the plane fills up, which rewards early reservations, known as "yield management" [Mintel International Group, 2005]. Yield management, also known as revenue management, is the process of understanding, anticipating and reacting to consumer behaviour in order to maximize revenue. Traditional airlines profited on those who booked early, reducing prices as the date of travel approached. Low-cost carriers' pricing model effectively turned this on its head, rewarding those who bought early and raising prices as the date of travel approached. That all depends on when you book and when you want to fly. If you want to fly at a weekend or holiday expect to pay more. If you want to fly tomorrow expect to pay more. For example. Bangkok to Singapore on Air Asia can be from Baht 499 to Baht 2,799 [Rascott.com, 2004]. About 30% of fares are sold at the lowest price. Price creates the market as the masses' wealth is rising pretty fast in Asia's booming economies. One of the surprise things about low-cost carriers in Asia has been the huge elasticity of demand when you drop the price.
- 7. Unreserved seating would encourage passengers to board early and quickly.
- 8. Flying to cheaper, less congested secondary airports to avoiding air traffic delays and taking advantage of lower landing fees. Southwest is the first successful low-cost carrier in the world, they fly into the secondary airports of major cities. In Asia, alternative airports may not necessary because of limited airport in the region.
- 9. Emphasis on direct sales of tickets, flights book is only though the web-site to sidestep overheads and bring costs down for the punter, especially over the Internet to avoiding

fees and commissions paid to travel agents and corporate booking systems. They negotiate everything with their suppliers. In Thailand, Nok has teamed up with banks to allow passengers to pay for tickets via ATMs (automated teller machines) and 7-Eleven convenience stores for counter payments. In Europe, 99% of low-cost booking is made through the Internet, compared with 75% in America [Weecheng, 2004].

10. Employees working in multiple roles, for instance, flight attendants also cleaning the aircraft or working as gate agents to limiting personnel costs. Normally, they use young, eager, hard working and relatively cheap crew! In USA, Southwest need only 80 workers to fly and support each aircraft, comparing with 115 or more at a traditional full-service carrier. The cabin staff of low-cost carriers needs to clean their aircraft before and after each landing, while the task is assigned to an expensive, standby cleaning crew in full-service carriers.

One of the important researches of Taiwan's low-cost carriers is based on a dissertation from Chun-Yuen Wu [6], he was a post-graduate in National Cheng Kung University. His studied subject is "The operation strategies study of low-cost airline model in Taiwan"; He based on an approach of fuzzy analytic hierarchy process (FAHP) method and acquire expert's opinions and summarizes the outcome through the questionnaires, he concluded that the priority of operation with low-cost carrier should follow bellows instruction in Taiwan.

- 1. A strategy with dynamic price.
- 2. Direct sale of ticket, most importance is sale the ticket through the Internet.
- 3. Combination with E-commerce, a lot of businessman may like to try a low-cost carrier.
- 4. High discount rate in un-busy season or period.
- 5. High turnaround rate to enhance the utilization of the flights
- 6. Focus the core competence and outsourcing the non-core business.

- 7. Employees work in multiple roles to reduce the operation cost.
- 8. Better control in financial performance

2.3 Low-Cost Carriers in USA

You probably wonder how discount airlines can sell tickets at one-third to one-half the price of traditional airlines, especially given their financial success relative to the rest of the red-ink-spilling industry. The basic answer is simple; their overhead is much lower. Expenses for low-cost carriers average just 7.3cents a mile compared with 11.7cents for traditional airlines, according to the Department of Transportation (see table 2-2). In USA, airlines have responded by introducing variations to the model. America West Airlines offers a first class product, for example, while JetBlue Airways advertises satellite television.

Table 2-2: The expenses comparison between LCC and conventional carriers in U.S.

AIRLINE	UNIT COST PER MILE (cents)	MAINTENANC E OUTSOURCE	AGE OF PLANES (years)	LABOR COSTS[1] (cents)
AIRTRAN	8.1	33%	3	2.1
ALASKA AIRLINES	8.3	60	8.8	3.4
AMERICA WEST	7.6	69	10	2.1
ATA	6.8	16	3	1.6
FRONTIER	8.5	22	4.1	1.9
JETBLUE	6.1	35	1.9	1.8
SONG	N.A.	25[2]	5	N.A.
SOUTHWEST	7.5	54	8	2.9
SPIRIT	7.6	0	15	1.9
TED	N.A.	18[3]	2.6	N.A.
CONVENTIONAL CARRIER	11.5	25	10.5	3.5

NOTES:

[1]Per average seat mile.

[2]For Delta and Song.

[3]For United and Ted.

N.A.: Not available.

Sources: Department of Transportation, Eclat Consulting, the airlines

More than 32 years ago, Rollin King and Herb Kelleher got together and decided to start

a different kind of airline. Southwest began with one simple notion: If you get your passengers to their destinations when they want to get there, on time, at the lowest possible fares, and make darn sure they have a good time doing it, people will fly your airline. Southwest began as a small Texas airline has grown to become one of the largest airlines in America. Today, Southwest Airlines flies more than 65 million passengers a year to 59 great cities (60 airports) all across the country, and the flights are more than 2,800 times a day. Southwest have nearly 400 of the newest jets in the nation, with an average age of 9.6 years [http://www.southwest.com/about_swa/airborne.html, 2004].

Southwest Airlines is the first low-cost carrier in the world, and its business model has been copied many times around the world. Southwest is an airline in the United States, founded in Dallas, Texas on June 18, 1971 [http://www.airga-va.com/southwest.htm, 2004]. It is currently the one of largest U.S. airline in terms of domestic customers carried. It is known as a low-cost airline and it has been profitable every year since 1973. The experience of flying on Southwest is quite different from that of most other U.S. airlines. Tickets must be bought from the airline itself, and can't be purchased through a travel agent or through common online venues like Orbitz or Travelocity. The airline's tickets can be bought over the phone, the airline offers discounts but and extra Rapid Rewards points [http://www.southwest.com/rapid_rewards, 2004] to customers who use its website. Customers are not assigned seats; they are assigned to a "boarding group" depending on their check-in time, naturally, earlier check-ins get to board earlier, and are left to find their own seats on the plane. Meal service is less than on historically full service airlines, with shorter flights receiving just a single small snack and soft drink, and longer flights meriting a prepackaged goods. In the post-911 era, these meals in a bag typically exceed the food served on full-service airlines like United or American. Although there is no video entertainment, Southwest is known for colorful boarding announcements and crews that burst out in song.

Southwest built its successful business on flying multiple short, quick trips into the

secondary airports of major cities. For example, Southwest flies into Love Field in Dallas, Midway Airport in Chicago, BWI Airport near Baltimore, Maryland and Washington, DC, and Oakland International Airport in the Bay Area, rather than the more expensive DFW International, O'Hare International, Dulles International, and San Francisco International airports. Southwest also has large operations at Orlando International Airport and Tampa International Airport, where it handles a large amount of tourist traffic to various cities throughout the eastern United States.

For all the leanness in comforts, which helped it pass through the post-911 travel slump as one of the few profitable major American airlines, Southwest manages to maintain excellent customer satisfaction ratings. Its employees are generally well-known for their friendliness, which is often attributed to a unique company culture that made chairman and founder Herb Kelleher a celebrity in the business world.

Southwest has also been a major inspiration to other low-cost airlines, and its business model has been copied many times around the world. Europe's easyJet and Ryanair are two of the best known Southwest clones on the other side of the Atlantic, while Canada's WestJet is Southwest's cousin in the north. And recently the AirAsia is the leading of low-cost carriers in Southeast Asia.



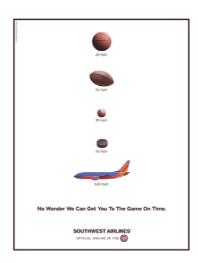


Figure 2-2: Interesting advertisement by Southwest (left: 1997, right: 2001) Source: (http://www.swamedia.com/swamedia/sidebar/pr_team.html)

How is the potential of low-cost carrier in US? According to industry analysis, low-cost carriers already fly a quarter of all domestic airline passengers and will carry up to 40% of American fliers by 2006. But today the American low-cost carriers sectors have somewhat diverged. Also considering the status in Europe, the differences go wider in gap; America's low-cost carriers are starting to move upmarket in service quality, whereas Europe's give every impression of moving relentlessly downmarket. They emphasize dirt-cheap tickets, yet they are also expanding as they try to fend off start-up competitors. At the same time, both of Europe's leading low-cost airlines have blurred the simplicity of the original business model they adopted from their American predecessors.

Low-cost airlines may now be mature as a concept in America, but the market remains in flux. Some the largest full-service airlines have slashed costs and reduced capacity by one-fifth as they have struggled to stay financially solvent. Moreover, leading low-cost carriers have altered their image. Southwest and JetBlue have developed strong brands, offering a well-defined service rather than just low prices. They are attracting business passengers, and sometimes they even offer a separate business cabin. The emphasis at JetBlue is on slick and stylish service and an enviable punctuality record. On the other hand, the bigger the low-cost carriers grow, and the more they offer more services, the less distinguishable they become from full-service airlines. For example, Southwest's coverage of the nation is now so complete that 20% of its passengers actually make transfers between its own flight.

2.4 Low-Cost Carriers in Europe

Southwest's business model has been copied into other countries after it get profit in a decade. In Europe, Ryanair is the largest low-cost carrier since 1985. EasyJet is another pioneer low-cost carriers after Ryanair in Europe. The biggest difference between low-cost carriers in America and Europe is that they have existed in Europe for less than ten years.

Europe is in the shake-out phase. Loads of new carriers have sprung up. But most of these will disappear rapidly, just as their American equivalents did. Intense competition is taking its toll not just among the doomed newcomers, but on the industry leaders as well.

When low-cost airlines were first launched in Europe after the liberalization of Europe's domestic airline market was completed in 1997, Ryanair and EasyJet, the pioneers, explicitly and expertly mimicked American low-cost carriers such as Southwest. Low-cost carriers have captured almost one-fifth of the UK air travel market, they generated 23 millions passengers a year and generated £1 billion ticket sales a year. If they go on growing at the current rate, they will overtake the established airlines in the short-haul market by 2020

In this chapter, Ryanair is the major low-cost airlines to be introduced, not only because of its leading low-cost business in Europe but also its rapid expansion in the market.

Ryanair was Europe's original low fares airline and is still Europe's largest low fares carrier. In year 2004, Ryanair carried over 34 millions passengers on 220 low fare routes across 19 European countries. It have 12 European bases and a fleet of over 100 brand new Boeing 737-800 aircraft, with firm orders for a further 125 new aircraft, which will be delivered over the next seven years. These additional aircraft will allow Ryanair to double in size to over 70 millions passengers by 2012. Ryanair currently employs a team of 2,600 people, comprising over 25 different nationalities. Over the years, it has evolved into the world's most profitable airline, running at remarkable margins by relentlessly driving costs down. Ryanair has been characterised by rapid and continuing expansion, enabled by the deregulation of the air industry in Europe in 1997.

Ryanair was founded in 1985 by Irish businessman Dr.Tony Ryan. The airline began with a 15 seater, turbo propeller-engine plane flying between Waterford and London Gatwick with the aim of breaking the duopoly on London-Ireland flights at that time held by British Airways and Aer Lingus. In 1986 the company added a second route - flying Dublin-London Luton in competition to the BA/Aer Lingus duopoly for the first time. With two routes and

two planes, they carried 82,000 passengers that year [Airsider network, 2003].

Passenger numbers continued to increase, but the airline generally ran at a loss, and by 1991 was in need of restructuring. Michael O'Leary was charged with the task of making the airline profitable. Dr Ryan encouraged him to visit the USA to study the 'low fares and no frills' model being used by Southwest Airlines. O'Leary quickly learnt that the key to low fares was a quick turn-around time, no frills and no business class. O'Leary returned convinced that a no-frills airline could make huge inroads into the national carrier-dominated European air market. In 1995, Ryanair celebrated its 10th birthday by carrying 2.25 millions passengers. It had become the largest carrier on all its routes.

After EU deregulation of the air industry in Europe in 1997, Ryanair was ready to take on the continent. After a highly successful flotation of Ryanair on the Dublin Stock Exchange and the NASDAQ Stock exchanges, the airline launched services to Stockholm, Oslo, Paris and Brussels. The airline was voted Airline of the Year by the Irish Transport Users Committee and voted Best Managed National Airline by International Aviation Week magazine. In year 2002, Ryanair becomes No.1 in Europe of customer service beating all other European airlines for punctuality, fewer cancellations and least lost bags. (see table 2-3)

Table 2-3: Ryanair's record in customer service

	Airline		% On Time*	Bags missing per 1,000 passengers	% completions
	Ryanair		90.2	0.39	99.1
Ī	Easyjet		86.5	RTP	RTP
	Air France		75.7	16.5	96.2
	Alitalia		81.6	13.9	98.9
	Iberia		82.0	13.4	98.5
	British Airv	/ays	73.8	20.5	98.5
	Lufthansa		79.2	17.7	98.7
	SAS		82.4	9.9	98.7
	Aer Lingus		RTP	RTP	RTP

Source: (http://www.ryanair.com/site/EN/about.php)

Ryanair is one of Europe's most controversial companies, praised and criticised in equal measure. Its supporters praise its commitment to exceptionally low fares, its radical management, its populism, and its willingness to challenge what Ryanair calls the 'establishment' within the airline industry. Critics have attacked its labor union policies, and have charged that it practises deceptive advertising.

Ryanair has grown massively since its creation in 1985, from a small airline flying the short hop to London from Ireland. The driver of the growth has been Ryanair's flamboyant CEO, Michael O'Leary. After taking the rapidly growing airline public in 1997 he used the money raised to expand the airline into a pan-European carrier. Revenues have risen from €231 millions in 1998 to some €343 millions in 2003, and net profits have increased from €48 millions to €239 millions over the same period. In an industry where the survival rate is 1 in 10 and where even the giants such as American Airlines and Delta struggle to keep in the black, Ryanair's success has confounded many industry analysts.



Figure 2-3: Interesting advertisement by Ryanair

Source: (http://www.ryanair.com/site/EN/about.php, 2004)

Ever keen to drive costs down, the airline launched its website in 2000, with the aim of cutting flight prices by selling direct to passengers and excluding the costs imposed by travel

agents. Within a year the website was handling three quarters of all bookings, and now accounts for 95% of the total.

During 2004, a modest loss of 3.3 millions Euros in the second quarter was the airline's first recorded loss for 15 years, indicating turbulent times in the low fares market. However, the enlargement of the European Union in 2004 is expected to lead to more new routes as Ryanair and other low-cost carriers tap the markets of the EU accession countries. Since the accession countries joined the EU on 1 May 2004, Ryanair has opened new routes to three of the ten new EU member states.

Ryanair's passenger numbers have grown by up to 25% every year for the best part of the last decade. Carrying under 0.7 millions annually in its early years, passenger grew to 19.5 millions in 2003, the passengers grew to 24.6 millions in 2004 (see Figure 2-4). The rapid addition of new routes and new hubs has enabled this growth in passenger numbers, and Ryanair is now among the largest carriers on European routes.

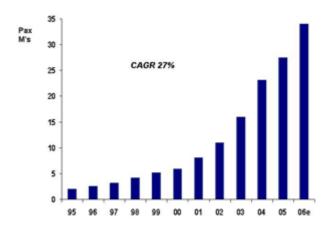


Figure 2-4: Growth and expansion of Ryanair

Source: (http://www.ryanair.com/press/2004/jan/gen-en-280104.html, 2005)

Ryanair has been heavily criticised for many of its practices in the past. In a number of incidents it has responded stubbornly to relatively trivial matters, usually to make a point about the constant need to avoid adding 'frills' to its service. This attitude came to a head in

2004 when the airline received much backlash for charging a passenger for the use of a wheelchair he needed to travel from the check-in desk to the aircraft. Ryanair described wheelchairs as an optional extra, and claimed that the airport should provide them. Critics have consistently accused Ryanair of poor treatment of customers whose flights have been cancelled. The airline has frequently left passengers to spend the night in the airport without any compensation, such as accommodation or meal vouchers.

Among Ryanair's main low-cost competitors are easyJet, Air Berlin, Germanwings, Volare and BasiqAir. In 2004 approximately 60 new low-cost airlines were formed. In the summer of 2004, O'Leary predicted that the following winter would be a 'bloodbath' in which most of these new airlines would go bust. Despite traditionally being a full-service airline, Aer Lingus began to adopt a low-fares strategy in 2002, leading to much more intense competition with Ryanair on Irish routes which is Ryanair's most profitable.

The low-cost-carrier sector faces serious challenges in Europe. At present an all-out war rages between airlines in general. Europe has around 50 low-cost carriers, although that total changes from week to week as new ones are launched and others go bust. Low interest rates, a glut of second-hand airplanes, off-the-shelf software and the example of the successful market leaders has lured others into the market.

2.5 Low-Cost Carrier in Southeast Asia

Low-cost airlines have been a success in the United States and Europe, and a new batch is swooping into Asia to see if the formula can work there. Some of the new carriers are independents, while others are owned by larger airlines.

When Tony Fernandes, the CEO of AirAsia, launched Asia's first no-frills airline Air Asia in Malaysia in January 2002, few people imagined that in the space of 36 months, over twenty-five new low fare airlines would be spreading their wings in Thailand, Singapore, the Philippines, Indonesia, India and Japan. While sub-Saharan Africa, Latin America and the

Middle East are home to only a handful of low-cost carriers, the region spanning South Asia, Southeast Asia and East Asia has fast developed into the third major low cost airline battleground after Europe and North America. There are now nearly thirty no-frills airlines (see Table 2-4) flying domestic and international routes across Asia from Pakistan in the west to Japan in the east.

Table 2-4: Major Airlines List of low cost carriers in Asia

1	1			
Country	Airlines	Airlines	Airlines	
Indonesia AWAIR		Citilink Gernala Best events	Lion Air	
	Awair Airlines	CitiLink	Lion Air	
	Adamain Adam Air	India	spiceJet	
	Adam Air		spiceJet	
India	MAIR DECCAN	express	KINGFISHER	
	Air Deccan	Air India Express	Kingfisher	
Japan	AIR DO Hokkaido International Altinos	AIR NEXT ANA	IBEX Airlines	
J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Air Do	Air Next	Ibex Airways	
	JAL EXPRESS	SKY X	SNA Skynet Asia	
	JAL Express	Skymark Airlines	SkyNet Asia Airways	
Malaysia	Air Asia			
	Air Asia			
Pakistan	AERO ASIA	airblue		
Pakistan	Aero Asia	Air Blue		
Dhilinning	Air Philippines	CEBU PACIFIC		
Philippines	Air Philippines	Cebu Pacific Air		
a.	Jet ≭Asia	tiger, airways	Valuair	
Singapore	JetStar Asia	Tiger Airways	ValuAir	
Thailand	Bangkok Airways	One-Two-GO ny Crisin The	nokair	
Hananu	Bangkok Airways	One Two Go	Nok Air	

Source: http://www.attitudetravel.com/ and this thesis

Is low-cost carriers work well in Asia? The big question is can this model operate on a

wider scale in Asia. Asia is quite different from the United States and Europe, which have huge, open aviation markets, and that could stop some low-cost carriers from enjoying the same success. Asian regulators typically have been reluctant to open up routes to more competition because of policy, national concern, and a lot of reason. Moreover, many low-cost airlines keep expenses down by flying out of secondary airports, avoiding major hubs where takeoff and landing fees are much higher while still getting passengers close enough to their destinations. That works fine in Dallas, Chicago, or in London with its multiple airports, but there are few similar places in Asia. And many routes take longer flights in this region, the travelers might not fine with the no amenities on flights.

Is low-cost carriers work well in Asia? The big answer is yes. The demand is certainly Asia. According to David Fullbrook's analysis in Asian Aviation, air travel volume in Asia Pacific is forecast to triple by the year 2020. He also pointed out a requirement condition to succeed low-cost carriers in the region area (see Table 2-5). As benchmark to Easyjet, Ryanair and others succeed in Europe; all airlines from European Union member states have the fifth freedom rights within the European Union. They can fly between any two points, neither of which need be in their home country. Ryanair is an Irish airline, its main base of operation is Stansted, NE of London. And also benchmark to Southwest, JetBlue, and Airtran in North American, they don't fly internationally. In Asia Pacific, the situation is most likely to Europe, Low-cost carriers have to breakthrough the country boundaries.

Table 2-5: The requirement of success low-cost carriers in Asia

Number	Airline requirements	The status in Asia
1	Market liberalisation - open skies.	Asia remains heavily regulated, protecting "national" carriers. The flag carrier model is still strong and airlines such as Cathay, Singapore and Thai are profitable.
2	Domestic demand for point to point travel	In the USA Southwest's competition was less the airlines but more the bus and rail networks. Asia does not have the road or ferry or rail infrastructure. Affordable flying is the most efficient option.
3	International Demand for point to point travel	Held back by established bi-lateral agreements; the lack of affordable secondary airports, and the focus of the new airports on their role as international gateways. The demand is there.
4	Low operating costs	Cathay Pacific will argue that they are waging a constant war on costs. The US and European airlines continue to battle with entrenched unions in every part of their companies.
5	Access to airport slots	Airport landing fees at major centers remain very high. There are few secondary airports in major centers.
6	Selling tickets online to customers	Air Asia sells 25% of its tickets online. That number will need to increase to eliminate call centre costs.
7	Access to planes	A buyers market for both new and second hand equipment.
8	Access to qualified pilots and technical support. Supportive unions.	Competition from the continued growth of the national carriers. Unions have a very limited role in most Asian economies.

Source: David FullBrook, Asian Aviation, 2002

According to Simon Calder in his excellent read "No Frills" [Simon Calder, 2002] identifies the five main cost elements of running an airline as the 5 Ps; People, Planes, Petrol (jet kerosene), places (airports) and promotion. In Asia there is a 6th P; Including "Permission". On a country-by-country basis a small-scale airline can make it, but across borders is not so easy because of "Permission". In Asia, every country needs a national anthem and an airline, and the airlines are often allowed to lose money. To get permission across country by country will be a limitation of aviation in Asia.

Beside, Innovation, diversity and competition will define Southeast Asia's low-cost airlines in 2005, likely influencing new carriers taking off in China and India as well. Branding, ever-longer routes and airports are now all entering the equation as carriers in crowded skies seek an edge over competitors. In Singapore's Changi airport, where low-cost carriers account for 7% of traffic from almost nothing at the beginning of 2004, is building a terminal just for these no-frills airlines. Bangkok's Don Muang may well soldier on as a low-cost carrier and charter flight hub.

Table 2-6: Major low cost carriers in Southeast Asia

Country	Airlines	Incorporated	Status
Malayeia	AirAsia	2001	domestic flights to Malaysia, Bangkok,
Malaysia			Phuket and Indonesia
	Valu Air	2004	flying to BKK, HKG, Perth and Jakarta
			and now to China
Singapore	Tiger Airways	2003	flying to Thailand, Indonesia, Vietnam
Singapore		2003	and the Philippines
	Jetstar Asia	2004	Flying to Thailand, Hong Kong, Taiwan
			and the Philippines Domestic Thanana plus KL, renang,
	Thai AirAsia	2003	Macau, Singapore, Xiamen and Johor
			Dalan
Thailand	Nok air	2004	Thai Air domestic flights rebranded
			<u> </u>
	1-2 Go	2003	Domestic in Thailand and planning HKG,
			KUL and SIN
	Lion Air	1999	Domestic Indonesia plus Singapore, KL,
Indonesia			Penang and Ho Chi Minh City
	AWAir	2004	associated with Air Asia (in Indonesia)
	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
Phillippines	Air Phillippines	1995	It primarily focuses on the domestic low-
			cost market.
	Cebu Pacific Air		the second largest airline in Philippines,
		1994	domestic flights and international flights
			to and from Hong Kong and Seoul.

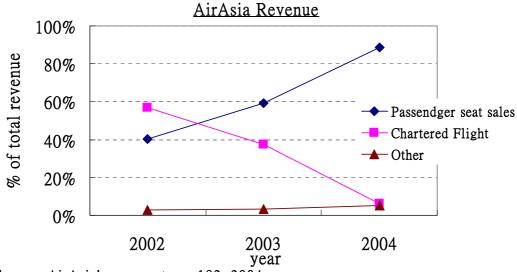
Source: http://www.rascott.com/Aviation%20Pages/Low%20Cost%20Flying.htm Wikipedia encyclopedia, 2005

Most air travel observers believe that there is a place for the new airlines, particularly in secondary or short-haul routes. The success of these no-frills carriers is based on pent-up demand for cheap domestic fares. Low cost point-to-point airlines have lured millions in the West, particularly business executives, and it is thought the potential in Asia is even greater. There are over 130 cities with a population above 1 million people, a rising middle class population and these factors seem favorable for the rise of budget carriers.

The development of the no-frills revolution in Asia has been slow and some suggest that's because the regional airlines are already operating with low operating costs. In addition bilateral agreements between many airlines make it hard for newcomers to get a piece of the action. Governments in the region still control many of the major players and regulate airline consolidation and foreign investment.

2.5.1 Low-cost carriers in Malaysia

AirAsia is low cost airline based in Malaysia. Originally founded by government-owned conglomerate DRB-Hicom [http://www.airasia.com, 2005], the heavily indebted airline was purchased by former Time Warner executive Tony Fernandes's company Tune Air Sdn Bhd for the symbolic sum of one ringgit on December 2nd, 2001. Fernandes proceeded to engineer a remarkable turnaround, turning a profit in 2002 and launching new routes from its hub in Kuala Lumpur International Airport at breakneck speed, undercutting former monopoly operator Malaysia Airlines with promotional fares as low as RM10 (US \$2.50) [Answer.com 2005].



Source: AirAsia's prospectus, p182, 2004

Figure 2-5: AirAsia's revenue

In 2003, AirAsia opened a second hub at Senai Airport in Johor Bahru near Singapore and launched its first international flights to Thailand. AirAsia has since started a Thai subsidiary, added Singapore itself to the destination list, and started flights to Indonesia. As of December 2004, AirAsia and its associated companies operated twenty-six Boeing 737-300.

In December 2004, AirAsia's Indonesian associated company AWAIR was relaunched with Jakarta as its hub. AirAsia also ordered 40 Airbus A320 to replace their ageing Boeing 737-300 fleet; the first Airbus A320 is expected to arrive in January 2006.

2.5.2 Low-cost carriers in Singapore

Incorporated in December 2003, Tiger Airways is Singapore's first true low-cost carrier. Based at Singapore Changi Airport, it launched sales on August 31, 2004 and caters to cost-conscious travelers. Destinations will encompass airports within a four-hour flying radius of Singapore.

Tiger currently operates few Airbus A320 aircrafts. Tiger Airways plans to add four more planes in both 2005 and in 2006. Its new aircraft will seat 180 passengers in an all-economy configuration. It aims to have one of the newest fleets among the low cost carriers. Tiger Airways is staffed by a team of engineers, operations personnel, pilots and cabin crew and

expects to increase staff numbers in line with the airline's growth.

On 5 May 2004, Singapore's low-cost carrier, Valuair was launched, prompting dominant carrier Singapore Airlines to invest in a new low-cost startup, Tiger Airways, to beat the competition. Not to be outdone, Singapore Changi Airport's second most dominant carrier, Qantas Airways, also started its Asian offshoot, Jetstar Asia Airways based in Singapore and commencing operations on 13 December 2004.

Jetstar Asia Airways Private Limited is the Asian offshoot of Qantas Airways, and the third Low-cost carrier to be launched in Singapore. Qantas owns 49.9% of the airline, with the other stakes held by the Singapore government's Temasek Holdings (Private) Limited (19%) and two prominent Singaporean businessmen, Tony Chew (22%) and FF Wong (10%). It received its air operator's certificate from the Singapore government on 19 November 2004

Like its Singapore competitors Valuair and Tiger Airways, the airline flies brand new Airbus A320s with charcoal-grey leather seating. While food and beverage need to be paid on board, there is assigned seating and a 20kg baggage allowance for all passengers, matching the perks offered by Valuair.

Due to its belated entry into the market, the airline intends to differentiate itself from its competitors by flying further anywhere within a 5-hour radius from Singapore. On 25 November 2004, the airline announced seven routes to Shanghai, Hong Kong, Taipei, Pattaya, Jakarta, Surabaya and Manila, the most ambitious startup plan compared to any of its Asian rivals, and will already give it the widest international coverage.

2.5.3 Low-cost carriers in Thailand

The major low-cost carriers are Thai AirAsia, Nok Air and One-to-Go in Thailand. In November 2003, AirAsia entered into a joint venture with Shin Corporation to invest in and operate a low-cost carrier in Thailand. AirAsia has a 49% interest in Thai AirAsia, Shin Corporation holds 50% and Thai AirAsia's chief executive officer, Tassapon Bijleveld,

together with six other individuals holds the remaining 1%. That AirAsia is a no-frills passenger airline modeled after the AirAsia business model. It operates its airline operations under the AirAsia brand and runs its airline operations in accordance with AirAsia's business model, possessing the same strengths and strategies as AirAsia.

Nok Air is a new low cost airline registered under Sky Asia Co., a joint venture between public and private investors. Nok Air aim to touch all the passengers with its friendly Nok Culture, they pay much efforts to understand the needs and demands of its passengers, they hope to give the passengers the level of service that is beyond their expectations. Nok Air also offers the freedom for everyone to have flying as an option for a mean of transport. Nok Air also holds safety at the heart off the operation. Nok Air aircraft operations comply fully with the same safety standard as Thai Airways International. Its current aircraft are all newly leased from Thai Airways with highly experienced cockpit crews. With this strategy flying to all parts of Thailand, Nok Air hopes to be able to give those that have never flown before a convenient and desirable means of transportation, while offering the chance to those that already are enthusiastic travelers the opportunity to travel even more often.

2.5.4 Low-cost carriers in Indonesia

In Indonesia, where at least 22 airlines, most falling in the low-cost bracket by default because of intense competition, Lion Airlines, the largest private carrier with around 25 aircraft, took control of Jakarta's old international airport Halim Perdanakusuma in December 2004. Lion hopes to lure foreign airlines now flying into Jakarta's Soekarno-Hatta airport. Lion's president-director, Rusdi Kirana, believe that can attract passengers because the airport is in the downtown.

Lion Air will buy 60 aircraft from Boeing in a US\$3.9 billion deal that will help this young airline expand routes across Asia. First deliveries would occur in early 2006 and be completed within five to six years. The deal covers Boeing's 737-800 and 737-900 narrow-

body airliners. Airlines can also take options for later purchases of planes [Harry Suhartono and Paul Eckert, 2005].

PT AWAIR International was incorporated in September 1999 as a privately owned domestic company in Indonesia. AirAsia entered a separate Sale and Purchase Agreement to acquire a total of 49% stake equity interest in AWAIR in December 2004 [http://www.awairlines.com/awair/profile.php, 2005], AWAIR re-launched its operations in Indonesia with a new management team, and remodeled itself as a low-cost carrier to serve domestic flights in Indonesia. AWAIR association with AirAsia will serve to add towards AWAIR's dynamics. Moreover it will strengthen AWAIR's operations through the transfer of knowledge and skills, enabling higher standards of operations and allowing AWAIR to offer a quality product to the people in Indonesia.

2.5.5 Low-cost carriers in Philippines

Cebu Pacific is one of the newest airline companies operating in the Philippines following the deregulation of the airline industry in 1994 and is the country's second largest airline after Philippine Airlines.

Cebu Pacific's first flight occurred on March 8, 1996. It initially started with 24 flights daily among Manila, Cebu, and Davao. By the 2000s, Cebu Pacific was able to operate international flights to the neighboring countries of Malaysia, Indonesia, Singapore, Thailand, and the dependency of Guam.

The airline currently has a total fleet of 12 DC-9 aircraft and prides itself on maintaining 95% flight time reliability and uses it as its main marketing tool. It has up to 30% market share in flight routes it services [http://www.cebupacificair.com/aircraftinfo.asp, 2005].

On February 2, 1998, Cebu Pacific Flight 387 DC-9-32 traveling from Manila to Cagayan de Oro crashed on the slopes of Mount Sumagaya in Misamis Oriental killing all 104 people on board. The crash was one of the country's worst air tragedies. Aviation

investigators deemed the incident to be caused by pilot error when the plane made a non-regular stopover to Tacloban. Flight 387 was supposed to be a direct flight but due to the stopover, the pilots were not familiar with the route [http://www.cebupacificair.com/aircraftinfo.asp, 2005].



CHAPTER 3 METHODOLOGY

3.1 Research Procedure

The research procedure used in shown below (see Figure 3-1). The research framework shown in section 3.3. According to research methodology, some statement had be listed and sent to relevant staff of AirAsia to confirm important concepts. The proposition will be concluded after analyzing the case study and regional factor verification.

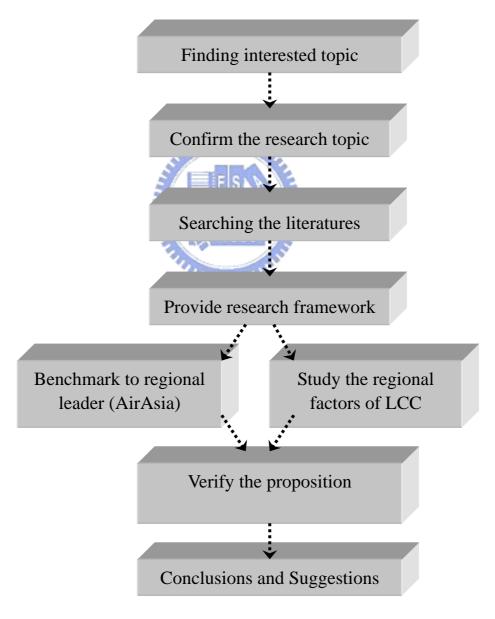


Figure 3-1: Research procedure

3.2 Research Method

This study uses a case study and interview of the leading regional low cost carrier, AirAsia. Some questions were sent to staff at AirAsia prior to the interview. Although AirAsia is the focus of the case study, some other low cost carriers were also reviewed in this thesis. Alongside the case study and interview, the focus of this thesis is to explore the demography, geography, economic variable and aviation regulations between Taiwan and Malaysia. A proposition will conclude after the verification in above case interview and regional factors study this. The purpose of this study is to evaluate whether Taiwan's market is suitable for low-cost carriers.

Primary sources of data are interviews with AirAsia who also provided comprehensive information in their prospectus, detailed operations, company profile, and financial reports.

Another primary source of data was government websites which profiled passenger numbers.

Secondary sources of information were found in journal articles, newspapers, and bibliographies. Journal used were *Journal of Air Transport Management*, *Air Transport World*, *Business Travel News* and *Aviation Week & Space Technology*.

3.3 Research Framework

The research framework refer to "論文寫作研究" from 張世賢, 1986: 162 [2], and also "撰寫博碩士論文實戰手冊" from 朱浤源, 1999:142 [3]. Establishing an frame of reference; in this case- low cost carriers in Taiwan' was the first step in establishing a research framework. Following this it was necessary to determine areas to be considered. It was decided to undertake a case study of AirAsia, and determine what factors would potentially affect the implementation of low cost carrier service in Taiwan.

This research evaluated low cost carrier history in North American, Europe, and Southeast Asia region. AirAsia, a low cost carrier leader in the region of Southeast Asia was

chosen as an index for this study and research was extended to include AirAsia's strategies, operations and low cost carrier implementation as a means to extrapolating the likelihood of low cost carrier implementation in Taiwan.

Similarly, this extended research to factors that potentially impact low cost carrier implementation in Taiwan and these included demography, geography, economic conditions and aviation regulations. The research framework is shown in figure 3-2.

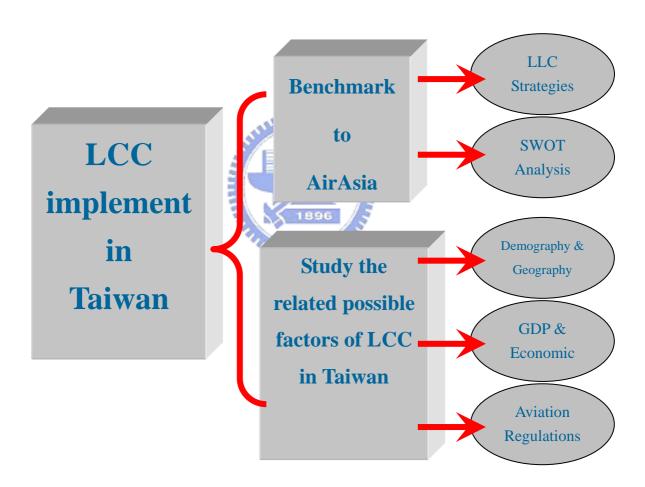
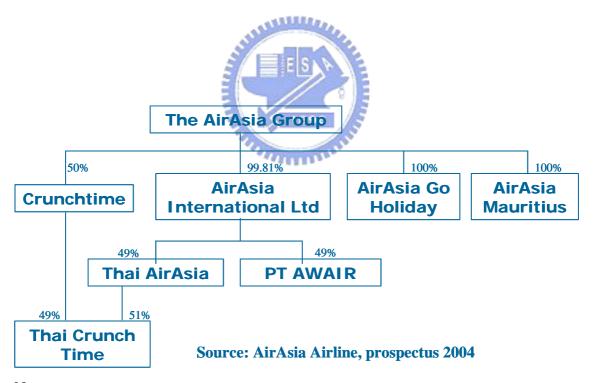


Figure 3-2: Research framework

CHAPTER 4 OPERATION STRATEGIES OF AIRASIA AIRLINE

The background of AirAsia had been introduced in Chapter two. This chapter will focus on the operation strategy of AirAsia in low-cost carriers market. Before introducing the operation strategy, a corporate structure is shown in below figure 4-1 [AirAsia's prospectus, p15, 2004], it will help you to understand the principal operating within the group. The percentage listing in below corporate structure is the shareholding owned by AirAsia group. The company is principally engaged in the business of providing air transportation services and related activities.



Notes:

- 1. The company acquired a 99.8% interest in AirAsia International Ltd (AAIL).
- 2. The company acquired a 50% interest in Crunchtime.
- 3. The company acquired a 100% interest in both AirAsia Go Holiday and AirAsia Mauritius.
- 4. Deemed effective equity interest via AAIL's 49% equity interest in both Thai AirAsia and PT AWAIR.
- 5. Thai Crunch Time is effectively 49.4% owned by the company.

Figure 4-1; AirAsia corporate structure and principal operating companies of the group.

Crunchtime's principal place of business is in Malaysia. Crunchtime is primarily involved in providing in-flight meals. On September 10, 2004, the Ministry of Tourism Malaysia approved the grant of a license to AirAsia Go Holiday to undertake tour operations and travel agency businesses at KLIA [AirAsia's prospectus, p153, 2004]. The principal activity of AirAsia Mauritius is to provide aircraft leasing facilities. The principal activity of AirAsia International Ltd (AAIL) is investment holding. Thai AirAsia's principal place of business is in Bangkok. The principal activity of Thai AirAsia aims to provide aerial transport for people, things and mail. Thai Crunch Time mainly gets involved in providing in-flight meals and trading of merchandise in Bangkok.

4.1 Strategy

AirAsia's goal is to establish itself as a leading low-cost carrier in Asia by offering guests a safe, reliable and enjoyable flying experience at an affordable price. The strategies that AirAsia's e adopts are as follows.

4.1.1 Stimulate demand by offering low fares

AirAsia's goal is to tap into Southeast Asia's growing population and geographic conditions and attract a broad range of guests. AirAsia believes that the group's success in attracting guests and building customer loyalty will be primarily determined by its ability to consistently offer low fares. Consequently, AirAsia intends to continue to offer fares that are on average substantially lower than the published fares of its full-service competitors.

4.1.2 Expand within Asia

AirAsia focuses on routes that are under-served or not served by other airlines. AirAsia intends to launch flights to new destinations within Malaysia, Thailand, Indonesia and other countries in Southeast Asia and China by June 2005. The group also intends to apply its

existing low-cost carrier model employed in Malaysia and Thailand to offer domestic and international air travel services in other Asian markets such as Indonesia by identifying suitable local partners and forming joint ventures.

4.1.3 Increase flight frequencies

The group attempts to increase flight frequencies in markets where have been established as markets with higher potential. AirAsia believes that increasing flight frequencies is important to guests who choose airlines based on low fares and schedule convenience.

4.1.4 Minimize operating costs

AirAsia encourages guests to make flight reservations through the Internet. Sales growth through Internet bookings can be more easily accommodated without incurring significant additional costs.

Aircraft maintenance services, ground handling and ground support services at airports in Indonesia, Macau and Singapore are provided by third parties through contracts procured through a competitive bidding process or on a negotiated basis.

AirAsia intends to strictly adhere to its low-cost carrier model by not offering any frills such as complimentary in-flight meals, in-flight entertainment, loyalty programs, lounges or multiple classes of service. The group plans to leverage its economics of scale to reduce it's per unit cost and to negotiate better terms with its suppliers and the airports at which it operates.

4.1.5 Invest in and enhance AirAsia's Brand

AirAsia believes that its ability to generate publicity as well as marketing and public relations activities have been successful in establishing a high level of brand recognition. AirAsia is trying to continue developing the AirAsia brand in the region of Southeast Asia. It

will also continue to refine its branding strategy to increase customer base while entering new markets.

4.1.6 Continued focus on customer service

AirAsia emphasizes high-quality, friendly and personal service, despite its low fares and low-cost carrier model. All employees are selected, trained and encouraged to provide services consistent with the group's goal.

The group is dedicated to improving the quality of its services through initiatives to speed up reservations and check-in, improve baggage handling services and provide rapid and effective responses to guest feedback. Besides, AirAsia keeps considering appropriate ways to provide its guests an enjoyable and convenient flight.

4.1.7 Optimize revenue and develop new revenue streams

AirAsia uses a revenue management system to optimize revenue from passenger seat sales. This system allows the group to optimize its revenue from passenger seat sales while still offering fares that are on average lower than its competitors on the same routes. AirAsia intends to expand its ancillary revenue base and capitalize on its strong brand by increasing the revenue derived from other sources, particularly freight services and charter services.

4.2 Competitive Strengths

4.2.1 Low cost operations

For the year ended June 30, 2004, AirAsia's cost per ASK (Available Seat Kilometers, which is the total number of seats available on scheduled flights multiplied by the number of kilometers those seats were flown) US\$0.025 was the lowest globally [AirAsia's prospectus, p11, 2004]. The following are the low-cost operations which AirAsia has achieved.

4.2.1.1 Single passenger class

AirAsia operates a single-class service by fitting 148 seats in its Boeing 737-300 aircraft. A typical Boeing 737-300 aircraft has only 132-passenger-seat capacity with a two-class configuration. In 2003, Boeing recognized AirAsia as a leader [AirAsia's prospectus, p67, 2004] in terms of having one of the best utilization rates and dispatch reliability among airlines that fly the Boeing 737-300 aircraft.

4.2.1.2 Single type of aircraft

Operating a fleet of similar aircraft leads to increasing cost savings through simplifying maintenance and reducing the inventoried spare parts; at the same time, the schedule of operation is more efficient and the training costs are also lower.

4.2.1.3 No frills service

There are not any frills services such as in-flight meals, entertainment, royalty programs and airport lounges.

4.2.1.4 Fast turnaround times (unload and load)

AirAsia is able to make more round trips per aircraft per day because it operates point-to-point services and maintains fast turnaround times. Its average turnaround time is approximately 25 minutes, compared to 45~120-minute turnaround times typical of full-service airlines. It targets the region in Southeast Asia within a three-and-a-half hour flight time from AirAsia's hubs at KLIA (Kuala Lumpur International Airport in Kuala Lumpur, Malaysia) and Senai (A domestic airport in south of West Malaysia), and Thai AirAsia's hub at DMA (Don Muang International Airport in Bangkok, Thailand)

4.2.1.5 Low fixed costs

AirAsia successfully have negotiated lower lease charges for aircraft, lower rates for long-term maintenance contracts and lower airport fees.

4.2.1.6 Low distribution costs

AirAsia offers its lowest fares through the Internet as the Internet is the least expensive

distribution channel. AirAsia also reduces distribution costs by not using a global distribution network service. In addition, it employs a fully ticketless system, which saves admnistrative costs and related expenses to a certain degree.

4.2.1.7 Maximizing the benefits of regional media coverage

Due to AirAsia's successful implementation of the low-cost carrier model in Southeast Asia, it receives regular exposure from regional media outlets. AirAsia utilizes such opportunities to promote and increase its brand recognition without incurring additional sales and marketing expenses.

4.2.2 Proven business model and profitable operations

AirAsia adopted the low-cost carrier model in January 2002, and achieved a net profit by the year ended June 30, 2003. AirAsia has used its experience and expertise in Malaysia to expand into Thailand through Thai AirAsia's operations. By strictly adhering to a proven business model, AirAsia maintained profitability through 2003 and the first half of 2004, a difficult period for the airline industry due to global economic recession exacerbated by SARS, high oil prices led from the war in Iraq, and terrorism fears.

AirAsia's management believes that the established business model employed in Malaysia and Thailand can be replicated in other countries. Because of its Asian management, strong performance and brand recognition, AirAsia believes that it is better positioned to form joint ventures in other locations within Southeast Asia compared to other established low-cost carriers based outside Asia.

4.2.3 Ability to penetrate and stimulate a large potential market

AirAsia targets the region in Southeast Asia within a three-and-a-half hour flight time from its hubs, this market encompasses a population of approximately 500 millions people, only a small percentage of this market regularly travels by air. AirAsia believes that certain

segments of this market have been under-served historically and that the group's low fares stimulate travel within these market segments.

According to S-A-P (An independent aviation consultant engaged by AirAsia), AirAsia's share of domestic departing passenger movements from airports in Malaysia increased from 10.1% for the year ended December 31, 2002, to 23.1% for ended June 30, 2004, throughout 18 months.

4.2.4 High maintenance and safety standards

AirAsia's commitment to safety is a priority for the company and its management system. The group's fleet is maintained in accordance with a program prescribed by Boeing, the manufacturer of AirAsia's aircraft.

4.2.5 Dynamic brand

AirAsia is confident with its dynamic and popular brand that has been established. The brand is positioned to project the image of a safe, reliable, low-cost airline that places a high emphasis on customer service while providing an enjoyable flying experience.

4.2.6 Proven management team

AirAsia's senior management team and board of Directors have demonstrated their capabilities by turning around a loss-making, full-service airline into a profitable and respected regional low-cost carrier within eighteen months during an extraordinarily difficult period for the airline services industry. Based on the management's success, AirAsia was awarded as the "Asia Pacific Airline of the Year" in 2003 by the Center for Asia Pacific Aviation.

4.2.7 Distinctive corporate culture

AirAsia's employees understand and subscribe to the group's core strategy and actively participate in maintaining low costs and high productivity. The group's management encourages communication, which creates a dynamic working environment.

4.2.8 IPO enhances AirAsia's financial strength

On June 30, 2004, AirAsia cash and cash equivalents stood at RM58.6 millions (~US\$15.4 millions). The Initial Public Offering is intended to further strengthen AirAsia's financial position without compromising on AirAsia's focus on low costs and high productivity.

Table 4-1: LCC Implement status in AirAsia, Southwest Airline and Ryanair (2004)

Item\ Airline	AirAsia	Southwest	Ryanair
Founded	2002	1971	1985
Flight Class	Single Class	Single Class	Single Class
Fleet types	Boeing 737-300	Boeing 737-200~700	Boeing 737-800
seating capacity	148	137 (737-300)	
unreserved seating	Yes	Yes	Yes
Turnaround time		7 flights/day	
E-ticket	50%	Yes	95%
secondary airport	KLIA	Love Field Airport	London Stansted airport
Point to Point transit	Yes	Yes	Yes

4.3 Operation Weaknesses

The operation weakness is something out of AirAsia's control. The maintenance cost, facility cost, fuel and passenger seasonality are major weaknesses of AirAsia.

4.3.1 Increasing in maintenance cost

AirAsia's maintenance costs will be increased as its fleet ages, the average age of its aircraft is approximately 16 years by June 30, 2004. Any significant increase in maintenance and overhaul expenses could have a material adverse effect on AirAsia. In order to manage

the maintenance costs of its fleet, AirAsia has put in place several maintenance and spare parts policies, as well as has participated in Boeing's aging aircraft program which involves an inspection and maintenance program to identify potential problems with aging systems in aircraft in order to ensure the reliability of the aircraft structure.

4.3.2 High cost component in fuel

Fuel is a major cost for airlines. AirAsia's fuel cost was 29.2%, 29.3% and 30.6% of its total cost of sales and operating expenses in year 2002, 2003 and 2004, respectively. AirAsia forecasts that its fuel costs will go up to approximately 43% of its total cost of sales and operating expenses for the year ending June 30, 2005.

AirAsia implements various fuel management strategies to manage the risk of fuel prices rise. The strategies are as follows.

- 1. Fuel hedging contracts: Since December 2001, AirAsia has participated in contracts to minimize the impact of fuel price volatility. For the year ended June 30, 2004, AirAsia hedged approximately 83% of its fuel purchases.
- 2. Fuel policy: AirAsia controls its fuel supply by uplifting as much fuel as possible to facilitate the use of the least expensive fuel stock.
- 3. Payment upfront: Upfront payment for all purchases gives AirAsia negotiating power to obtain better pricing.
- 4. Fuel consumption policy: AirAsia attempts to minimize fuel consumption by establishing clear guidelines covering all areas of flight operations so that aircraft fuel burn rates can be maintained at a functional minimum. This includes allowing the aircraft to reach its optimum height within the shortest amount of time, as less fuel is consumed at optimum hight, and taking straight-line paths as much as possible.

4.3.3 Relies on third parties' facilities

The availability and cost of terminal space, slots and aircraft parking are critical to AirAsia's operation. Ground and maintenance facilities, including gates and hangars, and support equipment will be required to operate additional aircraft in line with the group's expansion plans. For example, there are discussions involving increasing parking and landing fees at DMA (Don Muang International Airport in Bangkok, Thailand) by 20% by the end of 2004 and a further increase of an additional 15% in 2005.

4.3.4 Limited operating history as a low-cost carrier

AirAsia finds it difficult to evaluate the group's future prospects because of its limited operating history as a low-cost carrier. The group's prospects are uncertain and must be considered in the light of risks, uncertainties and difficulties frequently encountered by companies during the early stages of operations.

4.3.5 Passenger load factors are subject to seasonality

AirAsia generally records higher revenue from November to January as festivals and school holidays in Malaysia. Accordingly, its revenue, operating profit and cash flow is relatively lower between February and May and between July and September due to decreasing travel needs during those months.

AirAsia offers special promotional fares during the non-peak periods to stimulate air travel. AirAsia also provides services to countries other than Malaysia with different seasonal trends from Malaysia and thus reducing the effect of the seasonality on its passenger seat sales.

4.4 AirAsia's Opportunities

To build AirAsia's successful implementation of the low-cost model in Malaysia, AirAsia focused its expansion plans in Southeast Asia, especially in Thailand, Indonesian and China.

4.4.1 Thai AirAsia in Thailand

In November 2003, AAIL (AirAsia International Ltd, an investment holding company which is 99.8% interest by AirAsia) entered joint venture with Shin Corporation to invest and operate a low-cost carrier in Thailand. AAIL has a 49% interest in Thai AirAsia. Through this joint venture, AirAsia has been able to expand with the additional routes covered by Thai AirAsia.

Thailand has a population of approximately 62 millions people and a strong tourism industry. Thailand also enjoys "open-skies" arrangements with India and China which allows Thai AirAsia to reach Asia's two most populous countries. "Open-skies" arrangements reduce regulations, improve access for airlines to cross-border financing and generally free up air travel in the countries which are parties of this agreement. Thai-registered airlines are permitted to fly to other countries after landing in India and China.

Thai AirAsia operates its airline operations under the AirAsia brand and runs its airline operations in accordance with AirAsia's business model, possessing the same strengths and strategies as AirAsia.

4.4.2 PT AWAir in Indonesia

On August 30, 2004, AAIL (AirAsia International Ltd) conducted agreements to acquire a 49% aggregate shareholding interest in PT AWAir. PT AWAir is an Indonesian company that has an Indonesian Air Operator's Certificate and operated as a full service carrier before suspending operations in March 2002. AirAsia intends to adopt a low-cost carrier model and operate from a hub at Soekarno-Hatta International Airport in Jakarta after the transaction.

AirAsia can expand its business through AWAIR. AWAIR's association with AirAsia will serve to add AWAIR's dynamics. Moreover, it will strengthen AWAIR's operations through the transfer of knowledge and skills, enabling higher standards of operations and allowing AWAIR to offer a quality product to the people in Indonesia.

4.4.3 Opportunity in Southeast Asia and China

Thai AirAsia has applied for additional "open skies" of various cities in Southeast Asia, including Phnom Penh, Hanoi, Yangoon and Ho Chi Minh City, and destinations in South China, including Hainan and Kunming. This is a very good opportunity to open China's sky by low-cost carriers. China becomes a huge market that most of businessman will fly over, the low-cost carriers not only serves for business passengers but also all kinds of travelers. At the same time, China's economy has become much better than last decade, and people are rich enough to travel oversea to others country, especially in Southeast Asia. They would like to try their first trip to Southeast Asia; this is also a wonderful opportunity of low-cost carriers service there.

4.4.4 Opportunity of passenger growth

The Southeast Asian aviation industry has grown rapidly in recent years, driven in large part by economic growth in the region and the liberalization of the regional aviation industry. From 1985 to 2000, passenger activity within the region grew at an average annual rate of 7.5%, one of the highest rates in the world. [S-A-P 2004, the S-A-P Group LCC is a San Francisco-based consulting firm that provides financial, strategic, and physical planning advisory services for airports worldwide]

The forecast of passenger growth rates contained econometric analysis, historical and estimated future population and visitor arrival level, GDP, and the potential for liberalization of aviation regulatory regimes.

1. Large demographic area: More than 50% of the world's population lives within a six hour flying radius from Kuala Lumpur, highlighting the potential size of the regional aviation market. Meanwhile, the residents of countries with high per Capitia level of gross domestic product (GDP) tend to travel more. Figure 4-2 highlights this relationship for some countries in the Asia-Pacific region. The amounts include domestic and international air travel to and from reporting airports in the countries shown and may include some transfer passengers, the travel movement amounts include travel by local residents and foreign visitors. Roundtrip represents double one-way passenger movements.

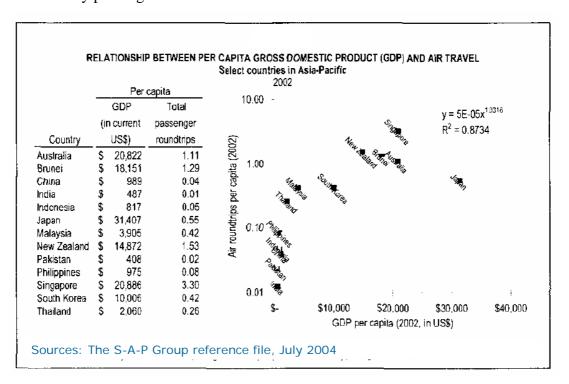


Figure 4-2: The relationship between GDP and air travel in Asia-Pacific countries

- 2. Liberalization of the aviation industry: The rapid air passenger growth that low-cost carriers generate has encouraged some governments and airport operators to liberalize bilateral aviation agreements and to develop new airport capacity to accommodate the increasing demand.
- 3. Geography: The separation of many regions of Southeast Asia by bodies of water and

the lack of competitive sea or land transportation substitutes provide an ideal market for air travel. The introduction of widely available low air fares in Southeast Asia greatly reduces the cost barrier to air travel and creates a competitive transportation substitute for many people.

4. Increasing urbanization: The development of new urban centers is expected to create new destinations for regional travel. Demand for flights that do not serve the region's capital cities will likely come as a result of growth of secondary cities. Table 4-2 highlights the relatively low levels of urbanization throughout Asia.

Table 4-2: The urbanization of select countries in Asia

	Population			Urbanization		Population in cities> 1 million		
Country	2002	2002 to 2015		(2002) ()		2000	2015	
Country	(actual)	Annual growth	ė.	(2002) (a)		(actual) (b)	(forecast) (b)	
Malaysia	24,305,000	1.50%		59%		6%	6%	
Thailand	61,613,000	0.60%	N	20%		12%	15%	
Singapore	4,164,000	1.10%		100%		100%	100%	
Indonesia	211,716,000	1.10%		43%		10%	13%	
Phillippines	79,944,000	1.60%		60%		16%	17%	
India	1,048,641,000	1.20%		28%	1	10%	12%	
China	1,280,400,000	0.60%		38%		14%	17%	
Weighted Average (c) 1.20%								

Notes

- (a) share of total population living in urban areas
- (b) share of total population
- (c) all countries shown, excluding China and India

Source: AirAsia berhad, www.airasia.com, 2004

4.5 AirAsia's Threats

4.5.1 Highly competitive

The airline industry is highly competitive. AirAsia's competition includes full-service airlines, other low-cost carriers in Southeast Asia and other forms of transportation and communication. Regulation of the airline industry has been progressively liberalized since 1988 in Thailand. Thailand also participated in "open-skies" agreements with India in October

2003 and China in January 2004 respectively, which lifts restrictions on airlines, flight and passenger numbers and allows airlines to exercise their Fifth Freedom Rights between Thailand and India, and Thailand and China, respectively [AirAsia's prospectus, p52, 2004]. As a result, Thai AirAsia may face competition in its routes in Thailand, which may threaten to AirAsia's financial performance.

4.5.2 Accident, terrorist attack and disaster

AirAsia is exposed to potential significant losses in the event that any of its aircraft is lost or subject to an accident, terrorist incident or other disaster and significant costs related to passenger claims. There can be no assurance that the amount of AirAsia insurance coverage will be adequate in the event such circumstances arise and any such event could cause a substantial increase in AirAsia's insurance premiums. In addition, any future aircraft accidents or incidents, even if fully insured, may create a public perception that AirAsia is less safe than other airlines, which could have a material adverse effect on AirAsia.

4.5.3 Aviation Regulation and Government policy

AirAsia has no control over the regulations that apply to it. Changes in the interpretation of current regulations or the introduction of new laws or regulations may have a negative effect on AirAsia. Asian regulators typically have been reluctant to open up routes to more competition because of policy or national concern.

4.5.4 Other uncontrolable factors

Generally, revenue for passenger airlines depends on the number of passengers carried and the fare paid by each passenger. During periods of storms or other adverse weather conditions, flights may be cancelled or significantly delayed. In the event that AirAsia reduces the number of its flights for these reasons, its revenues and profits will be reduced.

4.6 Summary of SWOT analysis

Based on above analysis, a table is generated below (see Table 4-3) to summarize the key points of AirAsia's operation strengths, weaknesses, opportunities and threats.

Table 4-3: SWOT summarized table for AirAsia

Strengths	Weaknesses
Low cost operations	Increasing in maintenance cost
1. Single passenger class	High cost component in fuel
2. Single type of aircraft	Relies on third parties's facilities
3. No frills service	Limited operating history
4. Fast turnaround times	Passenger load factors
5. Low fixed costs	
6. Low distribution costs	
7. Maximizing benefits of media	è
coverage	E
Proven business model & profitable operations	E
Penetrate & stimulate to potential market 1896	
High maintenance & safety standards	
Dynamic brand	
Proven management team	
Distinctive corporate culture	
IPO enhances AirAsia's financial strength	

Opportunities	Threats
Expanding revenue by Thai AirAsia	Highly competitive
Expanding revenue by PT AWAir in Indonesia	Accident, terrorist attack and disaster
Good opportunity in Southeast Aisa & China	Aviation Regulation and Government policy
High passenger growth	Other uncontrolable factors

CHAPTER 5 LOW-COST CARRIERS in TAIWAN

Chapter 4 has described in detail the operation of AirAsia in Malaysia. The same factors are to be considered when the low-cost carriers are implementing in Taiwan. This chapter will discuss the socioeconomic and geographical influences, regulations of aviation and the potential constrains for low-cost carriers in Taiwan. A proposition will be proposed after comparing all the necessary factors.

This study is a benchmark to those Southeast Asian countries, which have low-cost carriers implementing, including Malaysia, Singapore, Thailand and Indonesia. Malaysia is the major one for all factors comparison, since AirAsia bases in Malaysia.

5.1 Socioeconomics

The socioeconomic factors include demography, relationship between GDP and passengers roundtrips, per capito income growth, urbanization, substitute form of transport, tourism and etc.

5.1.1 Demography

The below table (see Table 5-1) shows the population and growth rate of population among some Asian countries which have low-cost carriers implementing. Figure 5-1 and 5-2 also point out the same index in population and growth rate of population, respectively. The population of Taiwan is similar to Malaysia and even higher than Malaysia earlier before 2001. Singapore is only with limited population in less than five millions; but there are 3 low-cost carriers, Valuair, Tiger Airways and Jetstar Asia Airways, basing in Singapore.

According to above analysis in population among Taiwan, Malaysia and Singapore, Taiwan is no doubt in a good position of low-cost carriers implementing. The only concern is the population growth rate; Taiwan is not in a fast growth rate compared to other countries

which have low-cost carriers implementing. It indicates that the domestic business of low-cost carriers may not grow as fast as other countries in the next decade.

Table 5-1: The Population and Growth rate comparison among Asia's countries

Population	2000	2001	2002	2003	2004
Taiwan	22,191,087	22,370,460	22,548,000	22,603,000	22,749,838
Malaysia	21,793,293	22,229,040	22,662,365	23,092,940	23,525,482
Singapore	4,151,264	4,300,419	4,452,732	4,608,595	4,353,893
Thailand	61,230,874	61,797,751	62,354,402	64,265,276	64,865,523
Indonesia	205,843,000	208,901,000	212,003,000	215,152,000	
Growth rate %	2000	2001	2002	2003	2004

Growth rate %	2000	2001	2002	2003	2004
Taiwan	0.81	0.8	0.78	0.65	0.64
Malaysia	2.01	1.96	1.91	1.86	1.83
Singapore	3.54	3.5	3.46	3.42	1.71
Thailand	0.93	0.91	0.88	0.95	0.91
Indonesia	1.63	1.64	1.54	1.52	1.49
~ ~					

Source: CIA (Central Intelligence Agency) World Factbook, 1 January 2004 行政院主計處; http://www.dgbas.gov.tw/dgbas03/div4all.htm; 2004

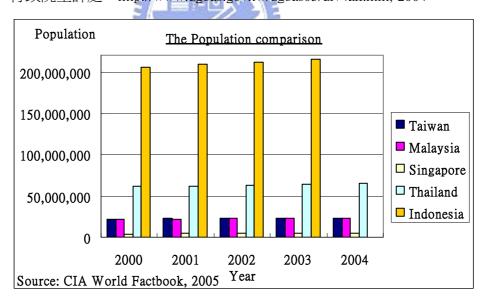


Figure 5-1: The Population Bar Chart in selected Asian countries

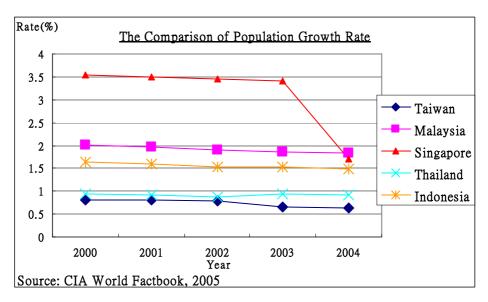


Figure 5-2: The Growth rate of Population among Asian countries

5.1.2 GDP versus Passenger Roundtrip

Beside the population, GDP (Gross Domestic Product) is one of another important indexes for evaluating the low-cost carriers implementing. Table 5-2 and Figure 5-3/5-4 show the GDP and Per Capita GDP among those countries with low-cost carriers. The GDP statistic comes from World Bank Website and the Directorate General of Budget, Accounting and Statistics (DGBAS) of Executive Yuan, R.O.C (台灣行政院主計處).

Table 5-2: The GDP and GDP/Capita in Asia's countries

GDP (Million US	2000	2001	2002	2003
Taiwan		288,080	295,419	298,679
Malaysia		87,540	95,157	103,161
Singapore		92,232	86,969	91,342
Thailand		114,760	126,407	143,163
Indonesia		145,306	172,911	208,311
GDP/Capita (US)	2000	2001	2002	2003
Taiwan		12,878	13,102	13,214
Malaysia		3,938	4,199	4,467
Singapore		21,447	19,532	19,820
Thailand		1,857	2,027	2,228
Indonesia		696	816	968

Source: World Bank, September 2004

行政院主計處; http://www.dgbas.gov.tw/dgbas03/div4all.htm; 2004

The GDP of Taiwan is approximately to 300 billion US dollar in year 2003 (Figure 5-3), which is the highest among those Asian countries which have been implemented low-cost carriers. In Figure 5-4, Taiwan's Per Capita GDP is around 12000~15000 US dollar in past three years. It is much higher than Malaysia, Thailand and Indonesia. Singapore is the only country with higher Per Capita GDP and is also implementing low-cost carriers in the Southeast Asia area.

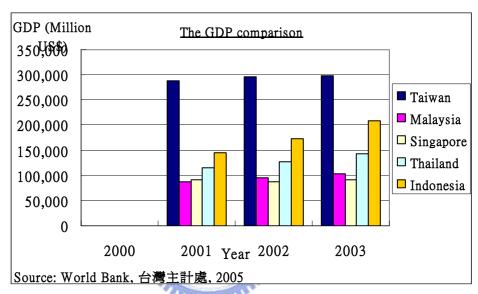


Figure 5-3: The GDP in selected Asian countries

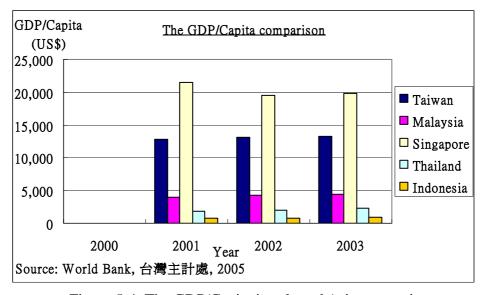


Figure 5-4: The GDP/Capita in selected Asian countries

Beside the Per Capita GDP, another good index is the air passenger roundtrips. Table 5-3 shows the total air passengers in Taiwan, including some in transit passengers. The total air roundtrips passengers are around forty to fifty millions in last decade, and the per Capita roundtrips passenger is around 1.7 to 2.3 from 2000 to 2003.

Table 5-3: The Air Passengers amount of R.O.C

			rs						
Year		Flight		Passengers (1000)					
	total	International	domestic	total	International	domestic	Transit x2		
1951	5 133	-	-	26	-	-	-		
1961	10 898	-	-	211	-	-	-		
1971	74 993	30 012	44 981	3 792	1 143	2 065	585		
1981	121 654	37 252	84 402	11 285	4 063	5 639	1 583		
1991	317 481	68 181	249 300	24 089	10 364	11 210	2 514		
1994	535 627	100 383	435 244	40 434	13 673	23 299	3 462		
1995	632 888	111 356	521 532	47 515	14 954	28 773	3 787		
1996	700 964	123 931	577 033	56 148	16 157	35 902	4 089		
1997	715 845	135 730	580 115	58 138	17 069	37 400	3 670		
1998	638 344	135 023	503 321	53 566	16 440	33 294	3 832		
1999	616 322	132 343	483 979	54 405	17 808	32 534	4 062		
2000	586 560	138 379	448 181	50 383	19 780	26 650	3 953		
2001	561 910	147 212	414 698	48 054	19 501	24 614	3 939		
2002	548 555	156 023	392 532	46 418	20 063	21 890	4 465		
2003	489 171	146 490	342 681	39 793	15 913	20 052	3 828		

Source: http://www.motc.gov.tw/hypage.cgi?HYPAGE=stat.asp; Ministry of Transportation and Communications R.O.C. 2004

An evidence shows the residents of countries with high per Capitia GDP tend to travel more, Figure 5-5 shows the relationship and Taiwan is in the plot. The per capita roundtrips passenger is 2.0 in 2002, which is close to Singapore's and much higher than Malaysia's, Thailand's and Indonesia's. The domestic passengers are slightly higher than international passengers in Taiwan area, the ratio of international passengers to domestic passengers is 0.75:1 (see Table 5-3).

In 2003, low-cost carriers carry quarter of domestic passengers in America [Michael Tretheway, 2003], while the estimated market share of AirAsia is around 25% in Malaysia (see table 5-4). The estimates are provided as of 1 June 2004. If the market share of Taiwan is

similar to America's and Malaysia's, a 25% of domestic passengers will fly in low-cost carriers sometime later when it is implemented in Taiwan.

Table 5-4: Current Low-Cost Carriers Market Share in Southeast Asia (estimated)

Country	domestic activity			Interr	national activity (a)
Country	Share	Carriers included		Share	Carriers included
Philippines	33%	Cebu Pacific Air		NA	NA
Malaysia	25%	AirAsia		5%	AirAsia, Lion Air
Indonesia	21%	Lion Air		8%	AirAsia, Lion Air, Valuair
Thailand	20%	One-Two-Go, Thai AirAsia	l	2%	AirAsia, Thai AirAsia, Valuair
Singapore	NA	NA		2%	Thai AirAsia, Lion Air, Valuaii

Note: (a) within Southeast Asia region

Source: The S-A-P Group, estimates, Departing Seats as of 1 June 2004

In terms of Per Capita GDP, roundtrips passengers and domestic passengers, Taiwan is in good potential to implement low-cost carriers.

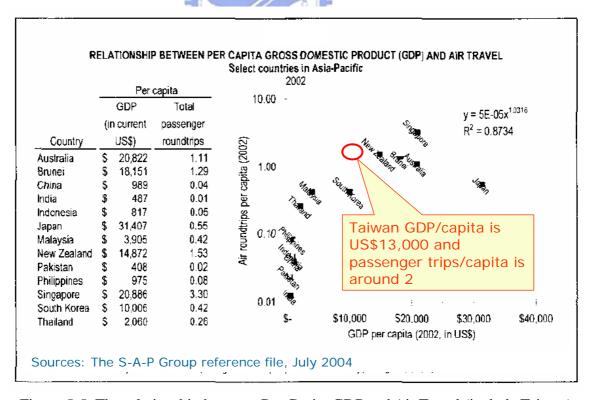


Figure 5-5: The relationship between Per Capita GDP and Air Travel (include Taiwan)

5.1.3 Urbanization

Increasing regional urbanization is expected to lead to the development of new urban centers, creating new destination for regional travel. In addition, airports in secondary cities are usually less congested than national gateway airports and it may offer near-term aeronautical charge incentives to attract new air services. Table 5-5 highlights the urbanization level in Asian countries, including Taiwan. The urbanization of Taiwan is up to 78%, which is higher than most of the Southeast Asian countries except Singapore. Air travel is expected to be popularized with higher urbanization among Taiwan, Table 5-3 also shows that the domestic travelers are the major passengers in aviation activity.

Table 5-5: The urbanization and population growth in selected Asian Countries

Country	2002 Population (Million)	2002 Density (people/km²)	2003 Urbanization (%)	2025 Population forecast (Million)	Population growth 2025/2002 (%)
Taiwan	22.5	622.3	96 78	25.3	1.1
Malaysia	24.4	73.9	64	35.6	1.5
Singapore	4.2	6 127.8	100	8.0	1.9
Thailand	62.6	122.0	32	72.1	1.2
Indonesia (1)	211.7		43		1.1
China	1 280.7	134.1	39	1 454.7	1.1
India	1 049.5	319.3	28	1 363.0	1.3
Japan	127.4	337.1	65	121.1	1.0
Korea	48.4	486.0	80	50.5	1.0
Philippines	80.0	266.7	61	115.5	1.4

Source:美國人口資料局2003年世界人口估計要覽表及聯合國網頁。

5.1.4 Business travelers and tourism

The full service airlines sometimes serve routes only once or twice each day, but a high number of daily flights offers business travelers more flexibility and may increase their use of

⁽¹⁾ Indonesia urbanization is recorded in year 2002

low-cost carriers. A lot of business travelers flew to Mainland China via Hong Kong or Macao, flexible flights can save them a lot of time. Meanwhile, many Taiwan people who have business in the Mainland China are looking forward to having cross-straits charter flights, which will take less time and money, and the low-cost carriers should be able to meet their requirement.

5.2 Geography

An island like Taiwan is an ideal market for air travel. The separation of the whole country by bodies of wafer and lack of competitive sea or land transportation substitutes provides a necessary air transportation for international travel. A good geography is also helpful for major trade routes.

5.2.1 Limited land and sea transport subsittutes

Nearly all of Taiwan's international travel is by air, with limited land or sea substitutes. Within the country, domestic travel is also helped by air between main island and other small islands which is separated by ocean.

5.2.2 Proximity to major population centers

More than 3.5 billion or 50% of the world's population lives within a six hour flying radius from Taipei. Figure 5-6 below shows the population distribution of Asia and points out the potential size of the regional aviation market. In 2002, most of the countries have low Per Capita GDP in this area; for instance, the Per Capita GDP of China is US\$ 989, India US\$487. Due to the low GDP per capita throughout most of the region, a high share of the population has been unable to afford expensive air transportation, and low-cost carriers can be a good potential of air transportation when those countries increase their GDP.

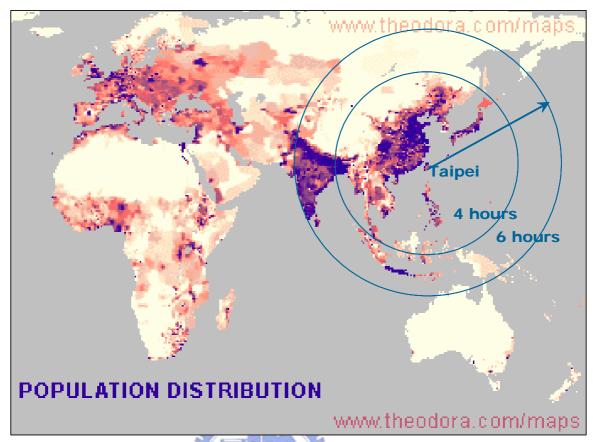


Figure 5-6: The flying radius from Taipei within 4 and 6 hours

China is one of the major possibilities in aviation market for Taiwan. China has strong economic growth and increasingly unconfined regulations on travel to foreign destinations. Travelers from the world's most popular country expect to create significant demand for leisure and business travel to Taiwan.

Singapore's main low-cost carriers, Jetstar Asia, Tiger Airways and Valuair, are flying to Shanghai within seven hours. Those airlines found Bangkok and Hong Kong pretty congested, so they were looking for alternatives when they were establishing their route network. If Singapore's low-cost carriers can do so, Taiwan's airlines can do it easily since the flights are only less than two hours from Taipei to Shanghai.

Table 5-6: World's population lives within a six hour flying radius from Taipei

國	別	人排	口名	2003 年中人口 (人)	占 世 界 人口比率 (%)
中	或	1		1,291,496,022	20.50
即	度	2		1,049,700,118	16.66
即,	尼	4		234,893,453	3.73
巴基斯	坦	6		156,127,453	2.48
俄羅	斯	7		144,586,191	2.30
孟加	拉	8		138,448,210	2.20
日	本	9		127,214,499	2.02
菲律	賓	12		84,619,974	1.34
越	南	14		81,790,803	1.30
泰	或	19		64,265,276	1.02
南	諱	25		48,035,733	0.76
緬	甸	27	MIL	42,510,537	0.67
尼泊	爾	40	ES	26,469,569	0.42
烏茲別	克斯坦	41	/	25,981,647	0.41
馬來西	亞 💈	46	18	23,092,940	0.37
中華民	或	The same		TITLE.	
(臺閩地	2區)	47	4683	22,603,000	0.36
北	韓	48		22,466,481	0.36
總計				3,584,301,906	56.90

資料來源:美國普查局網頁。

5.2.3 Location on major trade routes

Taiwan's geographical location provides a natural hub for air transportation in Asia and Pacific region. Figure 5-6 shows the population distribution around Asia, it also indicates that Taiwan is locatedds on major trade routes around the Asia Pacific. The low-cost carriers can transfer the regional visitor onto another flights via a high number of daily flights. According to the Department of Statistics from Ministry of Transportation and Communications in Taiwan (see Table 5-3, the passengers amount in Taiwan), the transfer passengers are around

3.8 millions in 2003, which is ten percent of total passengers in the whole year.

5.2.4 The Airport and facility

Figure 5-7 indicates that both Taiwan and Malaysia has 39 airports with paved runways in 2003; the more airports the better for low-cost carriers development.

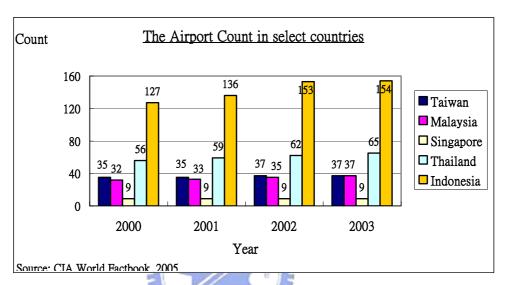


Figure 5-7: Total airport count in selected countries

The major airports are listed in Table 5-7 for whole Taiwan; three of them are the international airport, including CKS International Airport (中正國際機場), Kaohsiung International Airport (高雄國際機場) and Taipei Airport (台北國際機場). Some other secondary airports can help avoid air traffic delays as well as take advantage of lower landing fees for low-cost carrier's development.

Table 5-7: The major airports and facility around Taiwan

Table :	Table 5-7: The major airports and facility around Taiwan										
			客	了運 航江	占	平均每	天運量				
No	Airport	Classify	Area	尖峰小時	客 運	旅客	起降				
			(m^2)	客運容量	年容量	人次	架次				
				(人次/小時)	(人次/年)						
	中正國際機場										
1	CKS international	民航機場	392,491	9,320	32,000,000	42,504	344				
	Airport		Internation	Internation	Internation						
2	高雄國際機場	民航機場	al: 70,985		al:	18,205	224				
			Domestic	al Domestic	Domestic:						
	Kaohsiung Airport		: 17,500	1,350	5,707,000	18,205	224				
	台北國際機場	軍民合用機				22.216	226				
3	Taipei Song Shan	場	46,000	3,450	15,000,000	22,216	326				
4	台中水湳機場	軍民合用機	8,027	580	2,615,000	2,589	77				
4	Taichung Airport	場	0,027	300	2,013,000	2,367	7.7				
5	嘉義機場	軍民合用機	1,464	110	477,000	980	28				
	Chiayi Airport	場	, -	-	,						
6	台南機場	軍民合用機	14,035	1020	4,576,000	3,582	44				
7	Tainan Airport 併果機場	場 車氏百用機	540	40	176,000	200	8				
7	DingTung Airport 花蓮機場	4旦	340	40	170,000	288	8				
8		軍民合用機	3,240	220	1,057,000	2,903	56				
	Hualien Airport 台東豐年機場	<u>場</u> 軍民合用機	Marie.								
9	Taitung Airport	場場	3,942	240	1,285,000	1,997	39				
1.0	馬公機場	軍民合用機	5 27 006	2.700	12 260 000	4.461	105				
10	Magong Airport	場	37,906	2,700	12,360,000	4,461	105				
11	金門機場	民用機場	5,534	400	1,803,000	3,211	51				
11	Khinmen Airport	八川恢物	3,337	700	1,005,000	3,211	31				
12	綠島機場	民航機場	1,206	90	393,000	100	7				
	Orchid Island 蘭嶼機場	777	William .								
13	LanYu Airport	民航機場	1,245	90	406,000	122	8				
1.4	望安機場	日 394-4-0 日	432	30	141,000	7	1				
14	WangAn Airport	民航機場	432	30	141,000	/	1				
15	七美機場	民航機場	567	40	185,000	58	5				
	Chimei Airport	**************************************									
16	馬祖北竿機場	民航機場	538	40	175,000	164	6				
<u> </u>	Beigan Airport 馬祖南竿機場										
17	Nangan Airport	民航機場	2,872	210	936,000	394	12				
10	恆春機場	軍民合用機	5,224	380	1,702,000						
18	HengChun Airport	場	3,224	380	1,702,000	-	-				

Source: Air Navigation Facilities Division, Civil Aeronautics Administration (CAA), Ministry of Transportation and Communications, R.O.C. (2004)

5.3 Aviation Development and Regulation

The Southeast Asian aviation industry has grown rapidly in recent years, driven in large part by economic growth in the region and the liberalization of the regional aviation industry. From 1985 to 2000, passenger activity within the region grew at an average annual rate of

7.5%, one of the highest rates in the world [S-A-P group 2004]. Low-cost carrier activity is only beginning to grow in Southeast Asia, its growth will depend on large part on the continued liberalization of the aviation industry in the region and available airport capacity.

5.3.1 The Airlines and Airways

According to Taiwan's Civil Aeronautics Administration, Ministry of Transportation and Communications, there are thirteen reserved service number of airlines basing in Taiwan. Table 5-8 lists all those thirteen airlines, and six of them serve both international and domestic air transportation, including China Airlines, Eva Airways, Uni Air, Trans Asia Airway, Mandarin Airlines and Far Eastern Air Transport.

Table 5-8: A list of Taiwan's airlines and its function

N0	公司名稱	Airlines	Business	remark				
1	中華航空公司	China Airlines	國際與國內航線定期及不定期 客、貨、郵件運輸業務。	以固定翼機營運				
2	長榮航空公司	Eva Airways	國際與國內航線定期及不定期 客、貨、郵件運輸業務。	以固定翼機營運				
3	立榮航空公司	Uni Air	國際與國內航線定期及不定期 客、貨、郵件運輸業務。	以固定翼機營運				
4	復興航空公司	Trans Asia Airway	國際與國內航線定期及不定期 客、貨、郵件運輸業務。	以固定翼機營運				
5	華信航空公司	Mandarin Airlines	國際與國內航線定期及不定期 客、貨、郵件運輸業務。	以固定翼機營運				
6	遠東航空公司	Far Easterm Air transport(FAT)	國際與國內航線定期及不定期 客、貨、郵件運輸業務。	以固定翼機營運				
7	中興航空公司	Sunrise Airlines	經營普通航空業務及國內航線不 定期客、貨、郵件運輸業務。	一、以直升機營運 二、兼營普通航空業				
8	德安航空公司		經營普通航空業務及國內航線定 期及不定期客、貨、郵件運輸業	一、以直升機營運 二、兼營普通航空業				
9	凌天航空公司		經營普通航空業務。	以直升機營運				
10	大鵬航空公司		經營普通航空業務。	以固定翼機營運				
11	華毅航空公司		經營普通航空業務。	以固定翼機營運				
12	漢翔航空公司		經營普通航空業務。	以固定翼機營運				
13	亞太航空公司		經營普通航空業務。	以直升機營運				

Source: Flight Standards Division, Civil Aeronautics Administration (CAA), Ministry of Transportation and Communications, R.O.C. (2004)

The average age of all Taiwan's fleets was 7.4 years in 2003 (see Table 5-9). A total number of 170 aircrafts below rank top six airways. According to AirAsia's experiences and strategies, some leased aircrafts with old age can help to minimize the operation cost. In Table 5-9, the low ranking airways, especially the airways ranked after number seven, can implement low- cost carrier model and minimize operation cost by using old aircrafts.

Table 5-9: A list of Taiwan's airlines with its amount of aircraft

					5~10	10~15		Average
		Aircraft Age	Total	< 5 years	years	years	>15 years	age
	所屬機關或公	A irlines	(架)	(架)	(架)	(架)	(架)	(Years)
NO	總計	Total	187	45	93	45	4	7.4
1	中華航空公司	China Airlines	57	26	18	13	-	5.9
2	長榮航空公司	Eva Airways	37	8	21	8	-	7.3
3	立榮航空公司	Uni Air	26	2	24	-	-	7.2
4	復興航空公司	Airway	18	1	14	3	-	7.1
5	華信航空公司	Airlines	16	3	10	3	-	7.6
		Far Easterm Air	The same of the sa					
6	遠東航空公司	transport(FAT)	16	3	5	8	-	8.4
7	中興航空公司	Sunrise Airlines	5 4	=	ı	3	1	14.1
8	民航局航空隊	CAA	4	G -	1	2	2	15.7
9	德安航空公司		3 8	E -	ı	3	-	13.1
10	凌天航空公司	E	2	\$ 1	1	ı	-	5.6
11	大鵬航空公司	3	1	-	-	1	-	11.5
12	華毅航空公司	1	100	-	-	-	1	16.9
13	漢翔航空公司	-411	gg u T	1	-	-	-	4.1
14	民航局		1	-	-	1	-	12.2

Source: Flight Standards Division, Civil Aeronautics Administration (CAA), Ministry of Transportation and Communications, R.O.C. (2004)

5.3.2 Cross-strait flight

A direct cross-strait flight service can help save travel time and costs between Taiwan and Mainland China. Taiwan Chamber of Commerce and Industry chairman Ken Hsu (許顯榮) explained that the lack of direct flights to China costs Taiwan about NT\$100 billion in unnecessary transportation costs annually. Referring to indirect passenger flights, each person spends additional NT\$330 due to the mandatory stopover. In total, indirect links incur costs of up to NT\$52 billion for passenger flights and NT\$40 billion for cargo transfers between Taiwan and China each year. [Taipei Times, Saturday, Feb 19, 2005, Page 3]

In recent years, Mainland China's air cargo export volume has been growing very rapidly, particularly in the Eastern China region where airfreight is growing at an annual rate of around 32%. At the same time, conservative estimates indicate that there are currently over 500,000 Taiwanese living and working on the Mainland, Taiwanese companies have invested over US\$90 billion in the Mainland [The Washington State Taiwan Office (WSTO), http://www.washingtonstate.org.tw/English/index.htm]. Once the government approves the direct cross-strait flights, low-cost carriers can take a very good position, a three hours flying radius from Taipei or Kaohsiung can reach most of the major cities in Mainland China.

5.3.3 Forecast of passenger growth

According to SAP group (Strategic Airport Planning, San Francisco); the regional CAAGR (cumulative average annual growth rate) of air passengers will be 8.6% from 2003 to 2008 (see Table 5-10). The Boeing Company also predicts that the worldwide growth rates of air passengers are about 5% annually from now to 2007. At the same time, IATA (International Air Transport Association) also forecasts an annual growth rate of 6% worldwide and 8.3% in Asia Pacific region. The forecast of passenger growth rates will go up to 9.9% if China region is included, which means the low-cost carriers will be higher potential to be a success when direct cross-strait flight services are approved. All the forecasts include international and domestic passengers.

The forecasts are based on varous levels of quantitative and qualitative analyses, including econometric analysis; historic and estimated future population and GDP; historic and estimated future visitor arrival levels; the potential for liberalization of aviation regulatory regimes; current and potential future airfare levels; and forecasts prepared by other industry observers.

Table 5-10: The forecast of air passenger growth rates in selected region (international and domestic)

Course	Forecast	Dagian	Growth
Source	Forecast	Region	Rates
S-A-P Group 2004	2003~2008	Southeast Asia, China, India	9.90%
S-A-P Group 2004	2003~2008	Southeast Asia	8.60%
Boeing Company, 1998	1998~2007	Worldwide	5.00%
IATA, 2004	2004~2008	Asia Pacific	8.30%
IATA, 2004	2004~2008	Worldwide	6.00%

Source: Summary by this research

5.3.4 Regulations of airline industry

No dedicated regulations have been defined in Taiwan's low-cost carrier industry. Most of the concern from Civil Aeronautics Administration, Ministry of Transportation and Communications, is to control the safety and security for whole airline industry [Appendix A]. The low-cost carriers can be available in Taiwan, if the new implementing airlines commit the safety and security control. In AirAsia, its commitment to safety and security is reflected on its system of maintenance of its aircraft, extensive training given to pilots, flight crew, cabin crew and employees and the strict policies and procedures in compliance with the local regulations, international standards and best practices regarding all areas of its business that are involved with the operation of the aircraft.

According to Civil Aeronautics Administration, ROC, no existing regulation will reject the low-cost carriers business in Taiwan [Appendix A]. Once the fare has been approved by one of the committees in Civil Aeronautics Administration, low-cost carriers can fly anyway on the island. Any new setup of budget airlines or those transferring from existing airlines are welcome to join the low-cost carriers market. However, foreign airline's landing is based on a bilateral agreement between the countries, no any definition to separate full-service airlines and budget airlines.

5.4 Potential Constraints when Low-cost Carriers implementing to Taiwan

5.4.1 New markets and regulated

Although Taiwan is liberalizing its air service agreements, access to all markets in the future is uncertain. Besides, access to landing and takeoff slots at some major hub airport in the region may not be available during certain peak periods of the day. Another obstacle that could hold back budget carriers from expanding their reach is that Asia's skies are still highly regulated, which means they need to acquire air rights before they can fly a route.

This is unlike the environment in Europe or the United States. They have issues of air rights which need to be solved. It is important that air rights are in fact trade agreements between governments, and these governments will trade those agreements. While some countries, such as China, Thailand and Brunei have liberalized their aviation markets, most Asian countries are still very protective of their air rights.

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5.4.2 Competition from other carriers

In an effort to attract or maintain market shares, strong airfare competition is expected on high certain routes. Between Bangkok and Singapore/Johor Bahru, for example, AirAsia, Thai AirAsia, and Valuair will likely compete with two newcomers, Tiger Airways and a Qantas Airways affiliated low-cost carrier. Moreover, several full service carriers serve the same market. A predict in Taiwan's market, low-cost carriers will likely compete with most of other carriers in the routes between Taipei and Hongkong or Macao.

Asia's low-cost carriers are facing big challenges despite a tremendous year of growth as their established premium rivals sharply lower their fares in response to the competition. Low-cost carriers will find it increasingly difficult to rely on merely cheap tickets to entice travelers now that full-service carriers have also slashed fares on the same routes without compromising in-flight service. Established carriers have been driving up their cost

efficiencies, improving their performance and the cost differentials between the established carriers and the new entrants are narrowing.

5.4.3 Terrorist attacks have adversely affected the whole airline industry

The terrorist's attack on September 11, 2001 and their aftermath have had a negative impact on the airline industry. The primary effects experienced by the airline industry include increased security and insurance costs, increased concerns about future terrorist attacks, airport shutdowns, flight cancellations and delay due to security breaches and perceived safety threats and significantly reduced passenger traffic and yields due to the subsequent dramatic drop in demand for air travel globally.

5.4.4 High fixed costs

The airline industry is generally characterized by high fixed costs, primarily related to fuel, aircraft operating leases and financing commitments and employee costs. The expenses of each flight do not vary significantly with the number of passengers carried and a relatively small change in the number of passengers or in the pricing or traffic mix which could have a disproportionate effect on an airline's financial performance.

Fuel is the major component of airline's fixed cost, it is typically 30% of all the operated cost. Any fluctuation of the oil price will impact airline industry seriously. Figure 5-8 shows the anual price distribution of Brent crude oil, the price was going to record high from the history.

Oil prices aroused worries about the global economy by pushing through \$50 per barrel on the New York futures market last month, then continually creeping higher into the mid \$50 range. Analysts can only guess when prices will finally hit the highest point. Expensive oil is a particularly sharp blow for airlines, which count fuel bills among their highest operating costs along with labor expenses. If oil damages the broader economy, it could reduce demand

for air travel, though that has not yet been a problem in the Asia-Pacific region. In fact, rising demand is helping carriers offset bigger fuel bills by increasing their revenue.

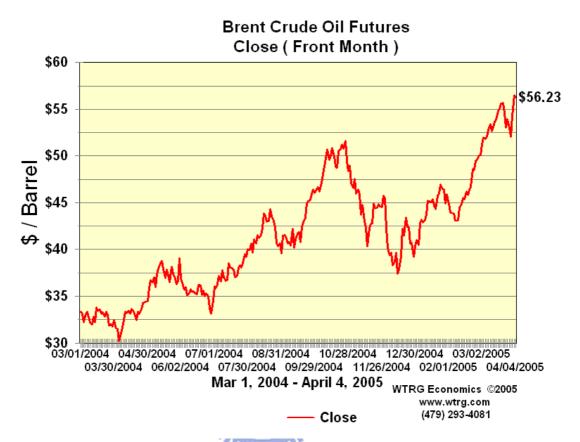


Figure 5-8: The price of Crude Oil (2005 April)

CHAPTER 6 CONCLUSIONS AND SUGGESTIONS

6.1 Conclusions

After a comparative study of AirAsia and consideration of industry conditions in Taiwan the following conclusions have been summarised as follows:

- 1. Industries conditions suggest any of existing airlines in Taiwan should be able implement low fare flights if they are able to minimise costs. It is recommended internet booking is used as a tool for operational efficiency as internet access is widely available in Taiwan. Alongside minimising cost, it is also recommended carriers considering law fare flights adopt a similar model to that employed by AirAsia. This includes increasing flight frequencies, offering a single passenger class, using a single type of aircraft, offering a no frills service' and sow fixed costs. High maintenance and safety standards must be maintained for all airlines- low cost and otherwise. Similarly, all airlines must consider the cost of fuel and seasonality of holiday which will impact to the sale of passenger seat. Joint ventures may be an option to defray expenses and start-up costs
- 2. The aviation industry has grown rapidly in Southeast Asia, driven by economic growth and regulation liberalization. Taiwan's GDP is the highest in Southeast Asia. One study links high Per Capita GDP to increased travel. Increasing urbanization and development is expected to create new destinations for regional travel in Taiwan. Strong economic growth and increasingly relaxed restrictions on travel to foreign destinations in China is expected create significant demand for leisure and business travel to Taiwan and direct flights could potentially capture some of this market.
- 3. Because of geography, Taiwan is well positioned as a potential hub for travelers

from and to Taipei. The population is approximately 3.5 billion living in a six hour flying radius from Taipei.

4. The lower cost of landing fees in secondary airports may help lower operating costs as well as avoid air traffic delays. Aviation regulations do not address fares and should not present a barrier to introducing low cost flights in Taiwan.

After considering a comparative study of AirAsia and reviewing all the major factors concerning implementing low-cost flights, including socioeconomics, geography, and aviation regulations, it suggested a low cost flight service would be well suited to Taiwan.

It is believed approval of direct flights to China will significantly and profitably impact low cost carriers. It is suggested Taiwan is well positioned to penetrate China as both a destination and as a developing market.

6.2 Contributions of the research

Because there are currently no low-cost carrier operating in Taiwan, there are few research papers in this field. Chun-Yuen Wu, a postgraduate in National Cheng Kung University, discusses the priority of operation in low-cost carriers, but this does not relate to Taiwan specifically.

This paper represents one of the few contributions to research concerning low-cost carriers in Taiwan and serves as reference for those who are planning to adopt a low-cost carrier model in Taiwan. It is also hoped that this paper will help facilitate discussion in this field and more related research will follow.

6.3 Limitation of the study

As mentioned earlier, because no low-cost carriers currently operate in Taiwan, most conclusions have been based on a comparative study of AirAsia. It must be recognized then, there may be some significant, and unidentified, differences between Taiwan and Malaysia that potentially could affect implementing a low-cost flight service

6.4 Future Research Direction

It is suggested future research be based on actual experience and organizations in the low-cost carrier industry. It is further suggested future research extend to more than one carrier company in order to gain a more comprehensive understanding of the industry. It is thought research comparing launching a low-cost carrier with changing an existing carrier into a low-cost carrier, alongside research on joint venture low-cost carriers, would also prove useful when considering the industry as a whole.

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APPENDIX A

寄件者: gencaa@mail.caa.gov.tw **日期**: 2005年6月6日 02:16 下午

收件者: 汗油發型

主旨: 請提供台灣低成本票價可行性之相關資料

汪坤發君 先生(小姐)台鑒:

謝謝台端94年6月1日來函建議

案號:094MB00694 案由:請提供台灣低成本票價可行性之相關資料

本局現已處理完成,處理結果如下:

汪先生您好:

有關您詢問廉價航空乙案,為您說明如下:

1.除了捷星亚洲航空外,去年(93)新加坡廉價航空公司Valuair曾詢問申請飛航相關事宜,Air Asia亦表示有經營台灣航點之意願,但迄今均尚未提出申請。

2.廉價航空公司經營內容屬「民用航空法」定義之「民用航空運輸業」,已有完備法 令規範,並無另外訂定法規之必要。

3.觀察歐美情況,廉價航空主要存在於航線價格偏高、服務運能不足、及具成本優勢等市場,但廉價航空在我國之發展,因成本減少有限、缺乏超額利潤市場、航權限制多、我國旅遊型態不同、消費者意識高漲等等,障礙仍多,市場接受度有待觀察。傳統航空公司票價與其差距稍微縮小後,以其優質化之服務,廉價航空威脅有限。至於是否設立廉價航空公司與外籍業者競爭,涉及業者之經營意願與策略,但多元化之航空服務係世界潮流之趨勢,政府對業者之監督與管理均採一視同仁態度。廉價航空在近幾年於亞太地區將發展十分迅速,主要潛在市場係在於大陸、印度及東南亞地區,短期內對我國業者衝擊較小,惟與我業者有關之重要市場(如港、澳、日本),若未來各國政府對航權態度有重大改變,在業者積極降低經營成本同時,仍需密切觀察其發展。

張國政

您的建議對於提昇本局為民服務水準有莫大裨益,為日後處理類似案件有改進依據,請您撥冗以帳號: SP6CX9V4與密碼: 9164 進入本局網站(

http://notesap.caa.gov.tw/caaoa/mb0001.nsf/vw0309?openview)俾登錄本局滿意

時祺

交通部民用航空局 局長 張國政 敬啓 94年6月6日