KLIA LCT COMMERCIAL FACILITIES: BATTLES OF SPACE AND REVENUE IN INTERESTS

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This case was written by Rohafiz Sabar and Nizamuddin Zainuddin, UUM College of Business. It is intended to be used as the basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation.

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Introduction

The planning of air transport infrastructure for airport terminal in Kuala Lumpur International Airport (KLIA) has been largely oriented towards the needs of airline as main customers. Airport as a provider for air transportation has consistently been geared towards meeting the highly demand of airlines such as low cost carries (LCCs), while passengers as end of users of air transport modes has been largely neglected. The pressure of LCCs that aimed for simplifying the terminal infrastructure has led to the decreasing of Level of Service (LOS) of airport facilities, which subsequently, increase the pressure of space and uncomfortable airport experiences towards Low Cost Passengers (LCP). After several years of establishment of LCCs, there is no evidence that the preferences of passengers has been preferred into terminal design as the airport planners to reduce the airport space and size to reduce the associated cost of development.

Kuala Lumpur International Airport (KLIA)

Kuala Lumpur International Airport (KLIA), Malaysia, is situated at Sepang which is 30 miles from the main city, Kuala Lumpur. The construction cost of KLIA was about $3.5 billion. Planning and development of the new airport began in 1990 when it became evident that the then existing airport, Sultan Abdul Aziz Shah International Airport or Subang International Airport, faced capacity constraints and was incapable of meeting long-term increases in passenger traffic and cargo demand. In addition, KLIA was interested in becoming one of Asia’s major aviation hubs along with neighbouring airports, Bangkok Suvarnabhumi Airport and Singapore Changi Airport.

In 2010, the airport ranked as the 13th busiest airport in the world and handled 29 million passengers and 80,447 metric tonnes of cargo. The airport is operated by Malaysia Airport Holding Berhad (MAHB), Sepang Berhad, and serves as the base for Malaysia Airlines, MASkargo, Air Asia and Air Asia X. Malaysia Airlines (MAS) is a traditional airline with comprehensive hub-and-spoke networks comprised of regional, domestic and international services. In contrast, Air Asia and Air Asia X are airlines with point to point services, low fares and lower overall cost structures.

![Figure 1 Percentages of International Passenger Movements by Sectors at KL International Airport](image)
Figure 1 above shows the percentages of passenger traffic from the Asia Pacific, Europe, the Middle East, America and Africa sectors in 2007\(^1\). The traffic from the Asia Pacific region generates most traffic at KLIA, LCT, with 85% of all passengers from the region. The establishment of routes by Air Asia to most Asia Pacific countries has successfully generated additional traffic through KLIA.

Current Transport Issues of KLIA

Rapid Growth of Low Cost Carriers (LCCs)

The worldwide growth of Low Cost Carriers (LCCs) is having a significant influence on traffic forecasts for potential air travellers with increased pressure from passengers for reduced air fares, while at the same time, the airports are faced with the need to increase efficiency levels in their operations to cater for the anticipated traffic growth that LCCs have generated.

![Air Asia Passenger Forecast 2004-2015](image)

Figure 2 shows the actual and forecasted growth drawn up by Air Asia for the period 2004 to 2015. It also shows a steady high growth in both domestic and non-domestic (international) passenger traffic for Air Asia. Except for the traffic forecast in 2007, the passenger traffic forecasts to date was higher from the actual passenger traffic level. For example, 2.8 million (2004), 4.4 million (2005), 5.7 million (2006) and 8.7 million (2007), for international and domestic movements, were recorded. The establishment of new routes by Air Asia contributed about 30% growth of the Malaysian domestic

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\(^1\) Malaysia Airport Holding Berhad Annual Report.

\(^2\) Source: Strategy and Commercial Planning Division, Air Asia Berhad (2004).
aviation market (O’Connell, 2007) and generated in 2007, for Air Asia, a total of 8.7 million international and domestic passengers. This, in turn, increased passenger traffic at KLIA. The major factors contributing to the high level of passenger traffic in the domestic sector have arisen from pre-planned rationalisation, as Malaysia Airline System (MAS), the prominent legacy carrier, separately operates 19 domestic trunk routes while Air Asia operates 99 non-trunk routes.

**Transition of Secondary Airports to Low Cost Airports**

A secondary airport may be defined as an under-utilised and reliever airport that complements the main or primary airport of a city. A secondary airport is may situated far away from a city centre (Langkawi serving Alor Setar) or sometimes it is close. A secondary airport complements the primary airport in a metropolitan multi-airport system. Normally, the secondary airport is situated within an attractive catchment area in terms of traffic generation, has an important feeder function for the large hub airports, offers a reasonable number of direct scheduled connections, and has normally more than 9 network carriers operating at the airport. Secondary airports do not have a hub function and concentrate more on point to point city pair connections.

The development of secondary airports has been highly successful leading to a significant increase in passenger numbers as well as a growth in the number of point to point routes served by the airlines, particularly by Low Cost Carriers (LCCs). The partnership of LCCs and secondary (low cost) airports has been significant, both in terms of gaining market share, and in expanding the size of the overall aviation market (Barrett, 2004).

To attract the LCCs, the ideal attributes of a secondary airport should include competitive airport charges (i.e. lower charges) and a lack of congestion in order to allow the aircraft to have a rapid turnaround time. The secondary airport should also be under-served by network (flag) carriers and therefore currently offer a limited choice of routes for business travellers. The potential advantages of secondary airports include growth opportunities for new markets such as business and leisure travellers (students and the elderly), plus enhanced opportunities for existing markets which may, in turn, contribute to increased economic benefits for the region served by the secondary airport, such as direct and indirect employment, and inbound tourism.

There are a number of reasons why these attributes are important. Firstly, there are no problems with the availability of slots, allowing the LCCs to design schedules to make the best use of their fleet in terms of aircraft utilisation. Secondly, the lack of congestion should allow airline schedules to be maintained and therefore the costs of delays are minimised. Thirdly, the marginal costs of secondary airports are very low, or almost zero, so that aeronautical charges are also often low. Lastly, there is a reduced dependency on complex infrastructure such as air-bridges and complex baggage handling systems, making it possible to design passenger terminals simple enough to meet LCC needs for quick and cost-effective services (Barbot, 2006).

**Burden of Aeronautical Charges**

A drive by LCCs towards a reduction in airport charges was the main factor that led to the establishment of LCTs for Air Asia operations. These have enabled Air Asia to achieve a critical 25-minute turnaround time for narrow-bodied aircraft and led to an improvement in on-time

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3 Most profitable routes
4 Air Transport News: [www.rati.com](http://www.rati.com)
5 Referred to as ‘no-frills’ or ‘low fare’, these airlines introduce the concept of ‘low cost’ into their organisational culture and offer low fares in exchange for cutting out many of the traditional passenger services.
performance. For example, a reduction in Passenger Service Charges (PSC) has been negotiated between Air Asia, the Ministry of Transportation (Malaysia) and Malaysia Airports Holding Berhad (MAHB) at airports served by Air Asia in Malaysia. Interestingly, as stated by Tan Sri Tony Fernandez, the motive for the establishment of LCTs, as seen from the Air Asia perspective, was linked to the following three principles:

1. The terminal should be built with basic facilities with an emphasis on a reduction in capital investment and discounted airport charges (primarily, PSCs).

2. The terminal design should not consider the use of air bridges as a means of passenger access to and from the aircraft, in order to reduce capital investment and eliminate air-bridge charges.

3. The charging structure for aeronautical charges, such as PSCs, landing charges and government taxes, should be revised. Table 1 shows a comparison between PSCs and landing charges at Kuala Lumpur International Airport (KLIA), Malaysia, for the main terminal and the newly constructed LCT at the same airport.

<table>
<thead>
<tr>
<th>Charges</th>
<th>Main Terminal</th>
<th>LCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSCs</td>
<td>RM 45</td>
<td>RM 15</td>
</tr>
<tr>
<td>Domestic flights</td>
<td>RM 30</td>
<td>RM 7</td>
</tr>
</tbody>
</table>

Table 1 shows that the structure of aeronautical charges for the LCT has been reduced to about 25-33% compared with those for the main terminal. International PSCs have been discounted from RM45 to RM15. The PSC for domestic passengers has been discounted from RM30 to only RM7. As mentioned previously, Fernandes stated that the main interest of Air Asia in LCT development was to have a reduction of airport charges in addition to a LCT being specifically designed and available for LCC operations.

Fernandes also stated that the capacity of the KLIA LCT should be able to deal with an increasing number of terminal passengers as a result of the rapid growth in Air Asia’s traffic. Whilst the forecast is for passenger throughput to be increased, there is a need to consider the balance of terminal capacity and airport charges. Thus, Air Asia has sought to negotiate with Malaysia Airports Holding

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7. Malaysia Airport Holding Berhad (MAHB) User Charges.
8. Note: USD 1 = RM3.18 (08/05/08); RM = Ringgit Malaysia.
9. Airport charges exemptions include passengers using an International flight (transiting between flights with less than 12 hours between flights), and infants on international and domestic flights. The charges do not apply to domestic transit passengers.
10. Based on aircraft weight (Maximum Take-off Weight). The landing charges are same for both main terminals and LCT.
Berhad (the airport owner) to reduce the level of airport charges taking into account the additional volume of users through the passenger terminal at KLIA LCT.

**The Need for Basic Terminal Facilities**

The LCT design concept is based on a reduction in costs as well as an emphasis on terminal operational efficiency. The concept also focuses on space reduction and terminal size, the basic provision of terminal services and an appropriate level of service to cater for the requirements of airlines and passengers. The provision of basic terminal facilities depends on the type of airport operations, aircraft mix and the volume of passenger traffic. The terminal design also needs to take into account airside / landside (terminal) links, walking distances, the check-in process, aeronautical and non-aeronautical services, administration space and support services (Kadza and Caves, 2000). As stated by Odoni and De Neufville (1992), the terminal design should include the following facilities:

1. Processing facilities (ticket counters, check-in counters, security controls, passport controls, baggage carousels, customs counters, etc.),
2. Holding areas (lobbies, gate lounges, etc.),
3. Passageways (corridors, escalators, moving sidewalks, etc.)

The basic terminal facilities are currently more adaptable to small airport terminal models which require fewer facilities in the LCT design. Service standards will greatly influence terminal design and capacity, as well as costs. This may lead to efforts to balance economic resources and LCT terminal efficiency.

**Battles of Commercial Space on the LCT Design**

Recent LCT designs (KLIA LCT) have taken into account the need to generate additional income contributing towards total airport revenues as well as the availability, size limitation and dimensions of the terminal building. An increase in dimensions will require more land and additional floors and this will increase the cost of construction (Venegas, 2005). The charging structure for lounges and offices has no direct influence on passenger numbers. It could be argued that the cost of lounges and offices is (partly) subsidised by the passengers or airlines hence a reason for not having them in the LCT. Commercial activities often provide the main part of an airport’s revenues, for examples, by generating up to 80% of all revenues in 50 major world airports (Oum, Yu et al. 2001).

The design of food and beverage (F&B) facilities at LCTs should also take into account passenger lifestyles (business travellers and holiday makers). In order to match market preferences, KLIA LCT is currently offering simple and convenient services in the F&B outlets. Thus, the establishment of fast food and kiosks is advised in order to meet passenger needs. As an example, the footprint of the fast food restaurant is about 375m² which is smaller when compared with that in the main KLIA terminal building. Tables 2 to 4 show the relative proportions of commercial areas in KLIA LCT.
Table 2  Retail outlets KLIA LCT\textsuperscript{11}

<table>
<thead>
<tr>
<th>BUSINESS</th>
<th>LOCATION</th>
<th>FLOOR AREA (m\textsuperscript{2})</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCCT Emporium</td>
<td>Public Concourse</td>
<td>125.0</td>
</tr>
<tr>
<td>Airport Emporium</td>
<td>Domestic Departure</td>
<td>125.0</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Domestic Departure</td>
<td>71.25</td>
</tr>
<tr>
<td>Carlo Rino</td>
<td>Domestic Departure</td>
<td>62.5</td>
</tr>
<tr>
<td>Eraman Duty Free</td>
<td>International Departure</td>
<td>141.3</td>
</tr>
<tr>
<td>Pusrawi Pharmacy</td>
<td>International Departure</td>
<td>67.44</td>
</tr>
<tr>
<td>Eraman Duty Free</td>
<td>International Arrival</td>
<td>108.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>700.69</strong></td>
</tr>
</tbody>
</table>

The restriction of space encourages airport commercial planners to make more efficient use of available free space (i.e. corners of the building and wasted space in the public concourse) by to being converted for commercial use. In the recent development of LCTs, the efforts of KLIA LCT to create additional revenue through exploitation of free spaces seems an interesting idea. Table 4 shows the efforts of the commercial department at KLIA to generate extra income and reduce wasted space in the LCT.

Table 3  F & B operations KLIA LCT\textsuperscript{12}

<table>
<thead>
<tr>
<th>BUSINESS</th>
<th>LOCATION</th>
<th>FLOOR AREA (m\textsuperscript{2})</th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonald’s</td>
<td>Public Concourse</td>
<td>375</td>
</tr>
<tr>
<td>Asian Kitchen</td>
<td>Public Concourse</td>
<td>160</td>
</tr>
<tr>
<td>Coffee Bean &amp; Tea Leaf</td>
<td>Domestic Arrival</td>
<td>120</td>
</tr>
<tr>
<td>Café Espresso</td>
<td>International Departure</td>
<td>40.0</td>
</tr>
<tr>
<td>Buy &amp; Fly</td>
<td>Domestic Departure</td>
<td>71.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>766.25</strong></td>
</tr>
</tbody>
</table>

Table 4  Commercial Initiatives KLIA LCT\textsuperscript{13}

<table>
<thead>
<tr>
<th>Observation</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating in public concourse</td>
<td>Realign seating arrangement and allocate prime retail or promotional space</td>
</tr>
<tr>
<td>Wasted space in public concourse</td>
<td>Open up blocked space to accommodate seats and other activities</td>
</tr>
<tr>
<td>Unused check-in counters in public concourse</td>
<td>Convert counters into commercial space</td>
</tr>
<tr>
<td>Dead areas in public concourse</td>
<td>Convert dead areas into commercial space</td>
</tr>
<tr>
<td>Passageway to toilets too wide</td>
<td>Convert into mini outlet(s)</td>
</tr>
<tr>
<td>Pillar ‘face’ unused in public concourse or domestic/ international departures</td>
<td>Maximise use of pillars for advertising activities</td>
</tr>
</tbody>
</table>

\textsuperscript{11} KLIA Commercial Department Internal Presentation, 2006
\textsuperscript{12} KLIA Commercial Department Internal Presentation, 2006
\textsuperscript{13} KLIA Commercial Department Internal Presentation, 2006
Dedicated space to encourage the airlines or third parties to use for their promotional activities can also increase LCT commercial revenue through renting activities. Counter services could be rented by tourism agencies, and hotel and travel/tours agencies to provide service offers to LCT passengers. Other commercial entities (vending machines for snacks and drinks, postal and photo services) can also be introduced into the terminal design in order to generate extra commercial revenue.

Conclusion

There are continuing pressures on reducing airport usage costs to the airlines. The arguments for this follow the line that reduced airport charges will lead to reduced air fares. This in turn will generate additional passenger growth with consequent benefits in terms of direct or indirect employment, inbound tourism and stimulation of local economies. These arguments should be understood in the overall context of airline and airport charges, costs and revenues.

Airport direct and indirect revenues from air carriers and tenants are received for the right to conduct an activity on the airport or use or occupy airport property (check-in desk and offices) as is the revenue from government activities which is any activity conducted by the government on airport property (immigration and custom offices). It is therefore worth examining the selected cost and revenue structures (airport charges) and their impact on LCT facilities design and development.

References


