



CASE STUDY ON SUSTAINABILITY OF AIR ASIA AS LOW COST AIRLINES AND COMPARISON WITH INTERNATIONAL AIRLINES ON THE BASIS OF CUSTOMER REQUIREMENT AND SATISFACTION USING LEAN SIX SIGMA

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Abstract

This is the case study on the Air Asia's market strategy as world's number one low cost airlines. This project helps to identify how Air Asia has sustained in their market with other competitors as a strong cut throat competitor. We have also compared the strategic requirement for Air Asia from the consumer side aspects on comparing with other international flight flying along with the Air Asia destination hubs in the Asia Pacific region. This study is to show the improvement required for Air Asia to increase their market sustainably on the requirement from consumer aspect. This paper focuses on the improvement to be done in their service to become the top most branded flight service in the world.

Key words: *Business strategy, cut throat competition, market sustainability.*

Introduction

From the very start, Air Asia have boldly gone where no other airline in Asia has been, creating a path that others have subsequently followed. Air Asia has made such strides as Air Asia ventured into unknown territory that last year. In just our 12th year of operation Air Asia celebrated our 300 millionth guest! Our spate of successes is due to a spirit of innovation, which has seen us develop an entirely new way of thinking, stripping away unnecessary costs while offering quality service. Air Asia have been voted the Best Low-Cost Carrier in the World five years in a row thanks to that. As for being cool, Air Asia offer millions of free tickets a year. More than being bold, cool and innovative, the Air Asia brand is also about being truly Malaysian.

Under the leadership of Tony Fernandez, the airline was flying high in 2002 and launched its new route that year. In 2003, a second hub was opened in Sinai International Airport, Johor Bahru, as well as the airline's maiden international flight to Bangkok. After that the only place Air Asia was heading for is up, as the Thai and Indonesian subsidiaries were set up as well as the commencement of flights to Indonesia, Macau, China, Philippines, Vietnam and Cambodia in 2005.

Their vision is to be the largest low cost airline in Asia so they can provide a low cost service that will allow the three billion people to fly to more destinations across the region. They aim to be a truly ASEAN airline corporation as they look out for every country's best interest

Phase: 1

Sustainability of AIR ASIA

The following factors are collected and made under research on Air Asia about the sustainability in the international Market.

Investment

In the case of Air Asia the investment done by the Air Asia holdings is done in a wide range. All Air Asia aircrafts having a simple and unique structure. The production of Aircraft is done in a bulk manner. The Air Asia is



focusing its investment towards the developing countries because of the lowest money value compared with developing countries

Remove Non-Essential Features

The main feature in Air Asia is to cut down the non-essential requirement, In general Aircraft there are 6 restrooms but in Air Asia there are only three Restroom. The front restroom space is eliminated and it is designed for accommodation for business class passenger spacing .There is only a few business class seats in the aircraft. Rests of the seats are allotted for economy class. There is no free welcome drink and free food given for the passengers. There is no TV attached with the seats where the passengers can enjoy hearing music, videos and exact location of the flight and the exact time taken to reach the destination which is excluded as non-essential feature.

Use of Secondary Airports

The main business Strategy of Air Asia is abandon airports which have too high costs And choosing secondary airports because the tax of landing and takeoff is low, time of the Aircraft in the Airport is very low about 20 mins,5 minutes for boarding out the passengers, in time of the passenger about 5 minutes ,Setting time of the plane about 10 minutes.

Standardized Fleet

Comparing with other airlines, the air Asia required a comparatively less maintenance due to its size, structure and facility inside the Aircraft.

Rapid Turnaround

In order to reduce the airport tax the air Asia kept their aircrafts for the very short time in the airport.

Online Ticket Sales

Online ticket sales are provided by air Asia in order to avoid the call centers or agencies for reducing the extra charges for the tickets. The online tickets are one of the best margins of income for Air Asia. They have vivid offers in the ticket aspect where they sale for low value to high value depending on the seat priority. Based on the seat priority the value of the ticket price changes, the seats can be chosen by the passenger himself/herself.

Online Check-In

The check in process in airport is simplified for the better convenience of the passenger. In order to avoid the fewer while check-in, air Asia avoided the check-in desks and implemented the online check-in facility.

Have Staff do Multiple Jobs

Air Asia reduced the number of staffs and a single staff performs multiple job.

Example:

- Cabin crew also check tickets at the gate
- Air hoisters do also cleans aircraft

Fly point to point

Air Asia has no connecting flights; they fly point to point destinations. (Passenger transfers to other flights are not accommodated, no compensation for missed connections)

Baggage Allowance

Impose baggage charges (a manned bag drop disk is needed for bags, and of course people loading and unloading the aircraft. This also allows extra revenue for checked bags, hidden when e.g. a family discusses which airline to

use). Some carriers charge extra for baggage on non-flexible tickets (mostly tourists) but include the baggage charge in the ticket price for flexible tickets (mostly business travelers, who often have no checked baggage).

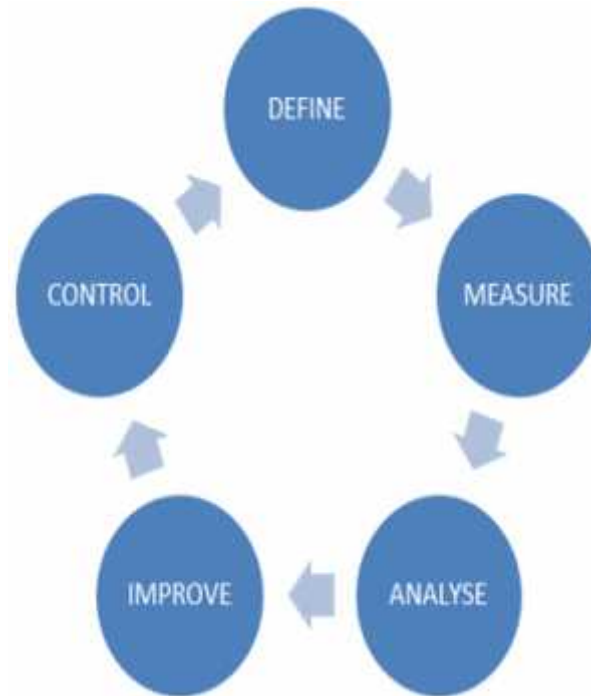
Hedge Fuel Costs

Buying fuel in advance when it is cheaper.

Phase: 2

Comparison with International Airlines on the Basis of Customer Requirement and Satisfaction Using Lean Six Sigma

DMAIC



The figure shows the Lean Six Sigma architecture DMAIC used in this study. The goal of the definition stage waste establishes project goals and ranges. This stage involves using SIPOC to analyze the supplier and customer, and collecting VOC for the customer. The data is ultimately collated into a project charter. During the measurement stage, flowcharts and line graphs are primarily used to collect data within the range defined in the previous stage, organizing the data into problem points. In the analysis stage, brain storming, cause-and-effect diagrams, and Failure Mode and Effects Analysis (FMEA) are conducted to assess possible causes and analyze the priority improvement sequence.

1. Define Phase

The purpose of the define phase is to define the project goals and project charter. During this stage we collect the “voice of the customer” or customer opinions and we used quantitative descriptions. The focus of each project is the customer of the process. The customer is defined as the individuals or groups who receive the goods or services of the process. Customers can be external to the organization or an internal component of the organization. During the Define phase, the team must contact customers to better understand their requirements of the process, or the “Voice of the Customer.” After interviewing or surveying customers, the team must translate that information into measurable requirements that will give the team insight on how to improve the process or solve the problem

Voice of Consumer (VOC)	<ul style="list-style-type: none"> ➤ Low cost performance ➤ Travelling time ➤ Consumer satisfaction ➤ Baggage weightage ➤ No connecting flight
Critical To Satisfaction (CTS)	<ul style="list-style-type: none"> ➤ Low cost and travelling time ➤ No connecting flight
Critical to Quality (CTQ)	<ul style="list-style-type: none"> ➤ Flight fair
VOC to CTQ drill down	“Cost and Time “ is selected as the main parameter
Voice of Design	<ul style="list-style-type: none"> ➤ Cost and time
Defect Opportunities	<ul style="list-style-type: none"> ➤ Passenger comfort ➤ Luggage weightage
Voice of Process (VOP)	<ul style="list-style-type: none"> ➤ Travelling time

Survey Questions Capturing Flight Equity

Flight preferences & perceptions:

	AIR ASIA	SRILANKAN AIRWAYS	ETHHAD	SPICE JET	JET AIRWAY	MALASYIAN AIR	SILK AIRLINES	MALINDO	TIGER	SINGAPORE AIRLINES
What top 5 flights do you recall immediately?										
Which of the flights packages were easily identifiable?										
Flights travelled in the last 1 year										
Distribute your last 5 travels amongst these flights										
Which of the following flights is value for money?										
Which flights do you intend to try in the near future?										
Which of the flights adds do you recall immediately & rate them (1-5)										
Rate the flights on their attribute of comfort (1-5)										
Rate the flights on their attribute of Services (1-5)										

Rate the flights on their attribute of time travel (1-5)										
Rate the flights on their priority of selection(1-5)										
COST (1-5)										
OVERALL QUALITY (1-5)										

Priority Chart

Based on the Survey inputs given by the Passenger at Trichy International Airport, Cochin International Airport, Coimbatore International Airport

Flight Names	Beneficial Cost	Time Travel	Comfort	Services	Luggage's	Priority
Air Asia	5	5	4	3	3	20
Srilankan Airways	4	2	3	3	3	15
Ethihad Airways	2	2	5	5	5	19
Spice Jet	3	3	5	3	3	15
Jet Airways	2	3	5	4	3	17
Silk Airways	2	4	5	3	4	18
Malindo Airways	4	4	2	2	3	15
Malasyain Airlines	3	4	4	3	3	17
Tiger Airlines	3	4	2	2	2	13
Singapore Airlines	3	3	4	4	3	17

Measure Phase

The goal of the measure phase was to collect data and clarify related situations in the work process to facilitate the assessment of the root causes of problems during the next stage. For this case study, on the basis of priority chart we plotted graphs regarding the cost, time, comfort, services, luggage's. Then we measured priority given by the customer for choosing Air Asia. This was to facilitate later analysis. Measurement is critical throughout the life of the project and as the team focuses on data collection initially they have two focuses: determining the start point or baseline of the process and looking for clues to understand the root cause of the process. Since data collection takes time and effort it's good to consider both at the start of the project. Determine how the process currently performs First, your team must establish the current state, or the "baseline" of the process before making any changes. The baseline becomes the standard against which any improvement is measured. This is a key step as the data collected will be used throughout the life of your project.

Input, Process and Output Measures

<i>INPUT</i>	<i>PROCESS</i>	<i>OUTPUT</i>
Company service	Cost and time	Customer satisfaction

Effectiveness Measures

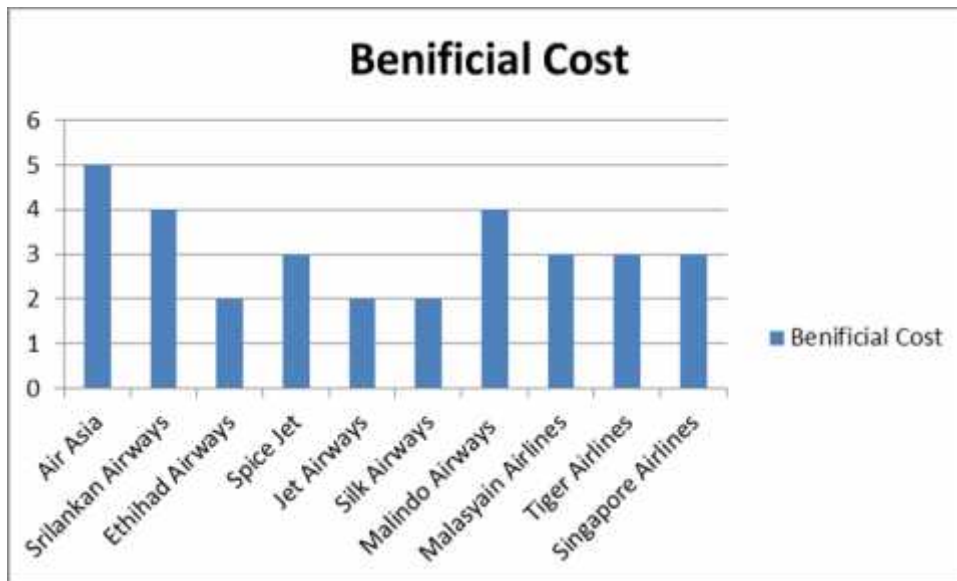
- Beneficial coast
- Response time

Efficiency Measures

- Time taken for travelling
- Passenger service

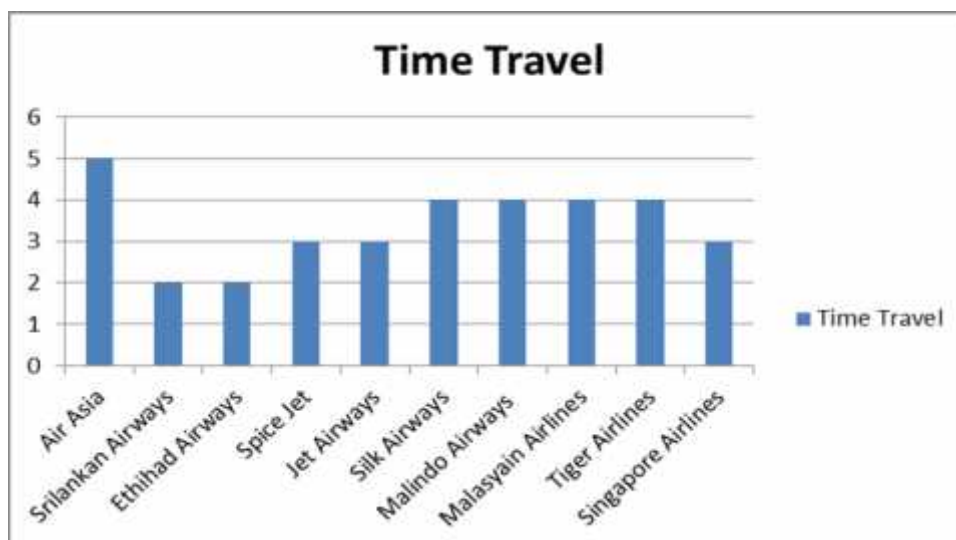
Graphical Representation

Cost of Airlines



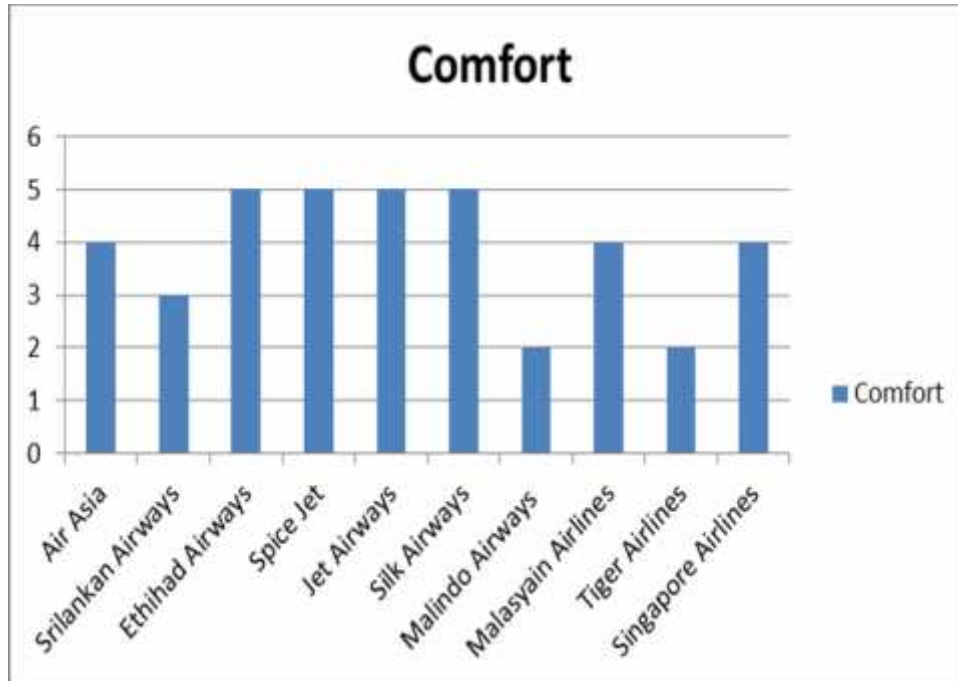
The graph above shows that, Air Asia provides low cost and beneficial air services. In cost of Airlines ,Air Asia gives most economical benefits than other airlines.

Travelling Time



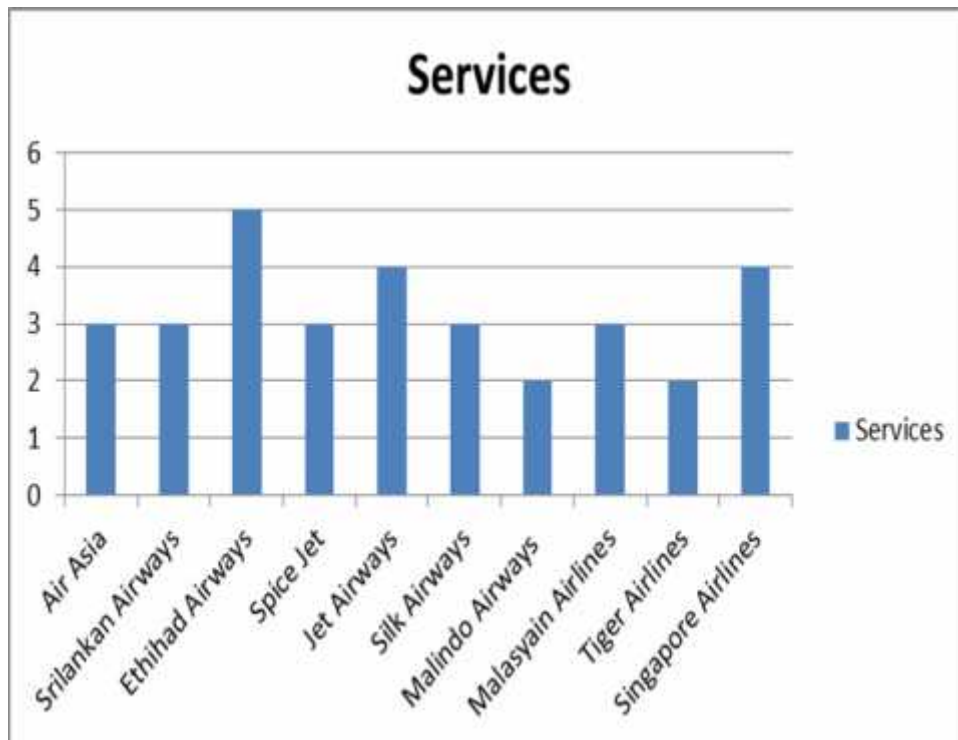
The travelling time of Air Asia is less while comparing with other flights because there is no connecting flight cost for Air Asia.

Passenger Comfort



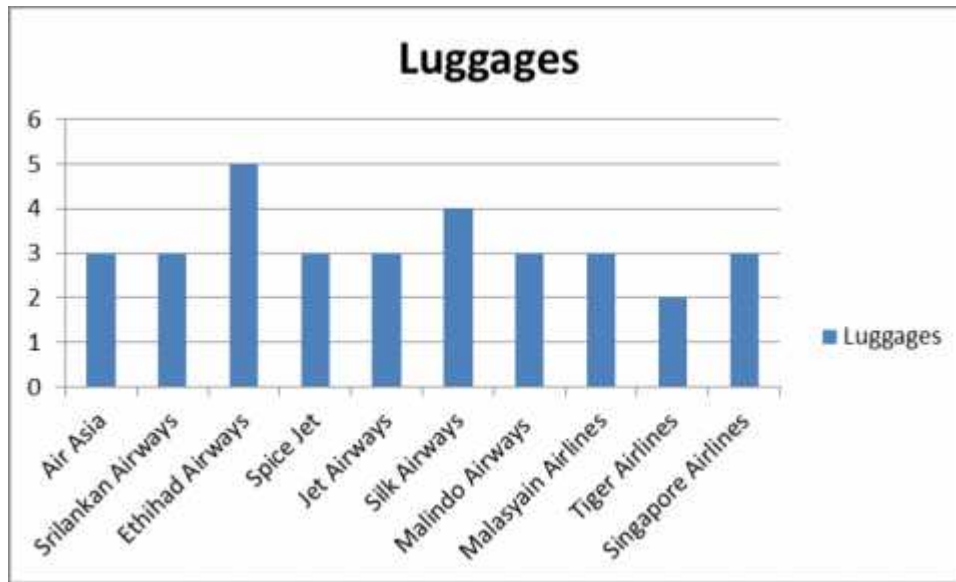
In Air Asia, the passenger comfort is above average than other top most comfortable providing airlines due to its economic flight design.

Passenger Service



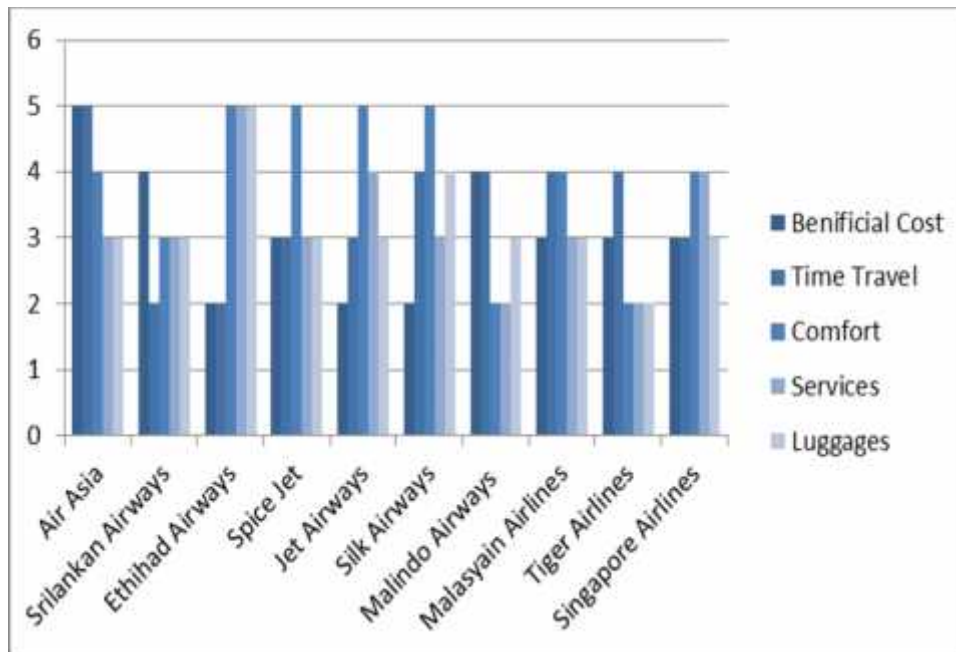
Here Etihad Airways is giving more services than other airlines. Here Air Asia's Services are average due to the reason of no free food and snacks facilities provided for the guests.

Luggage's Facilities



Here also Ethihad Airways is allowing more luggage facilities than other airlines. Here Air Asia's luggage facilities are average.

Priority Chart



Based on the consumer survey report, we have come to show that air Asia is high in its economic cost and flight travel time. we can see from the statistics that air Asia's comfort and service aspects are average.

Analyze Phase

The goal of the analysis phase is to analyze the primary causes of the problems in the packaging process. This case used brain storming as a starting point. After creating, verifying and examining detailed process maps created in the Measure Phase, the team will be able to list concerns or pain points within the process. This allows the team to take advantage of the collective wisdom of process participants.



The graph shows that Air Asia provides low cost air service and provides less time travel. This satisfies the VOC or Customer Requirement.

AS-IS DIAGRAM



This is the general format for travelers in the airport from departure to arrival to their desired locations in Air Asia flight

Learning Outcomes

- Created the priority chart of the of Air Asia's sustainability.
- Created graphical representations of Air Asia in compared with other flight services on Asia Pacific hub.
- Analyze the VOC and Customer requirements and compared with the result out comes.
- We analyze the cause and effect and value stream mapping for concluding

Improve Phase

The cause analysis was used to identify the key factors influencing process output changes. Improvement measures were then implemented for the key factors during the improvement stage .How will you fix the problem? Once the project teams are satisfied with their data and determined that additional analysis will not add to their understanding of the problem, it's time to move on to solution development. The team is most likely collecting improvement ideas throughout the project, but a structured improvement effort can lead to innovative and elegant solutions.

Brainstorm Solutions that Might Fix the Problem

The team's efforts at this stage are to produce as many ideas as possible based on the idea that from Quantity comes Quality. Creative idea generation consists of a host of techniques intended to lead the team to out-of-the-box solutions.

Select the practical solutions

In many cases, a project team can employ a list of improvements to their processes, but when they are forced to choose between conflicting options,

Tools: To-Be Maps

Select the best solution(s)

Implement the solution(s)

Accomplishing successful implementation requires careful planning. The team must consider logistics, training, documentation and communication plans. The more time the team spends on planning, the faster they reach total adaptation to the improvements by their process participants.

Measure improvement

Once the team is able to show that the solution has resulted in measurable improvement, then the team can move on to the Control Phase.

Now Diagram

The Areas in form of burst is the areas to be concentrated for improvement



- Baggage section could be improved
- Entertainment must be kept in the plane that is LCD screen should be placed
- Survey form while travelling to international destinations can be made e-format.

Control Phase

On the requirements from the consumer aspects, the following needs from the consumer must be satisfied for a better consumer satisfaction.

Conclusion

Air Asia is world's best low cost airlines in the world, this study shows how Air Asia became the world's low cost airlines consecutively for 6 years. We have shown in the study about their standards and hardworking Business Strategy to achieve this standards as well, we have taken the consumer side survey to show the further improvements in Air Asia.