

**DEATH TRAP OR ECONOMIC OPPORTUNITY:
THE INTERNATIONAL AIRLINE INDUSTRY
IN THE UNITED STATES**

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Executive Summary

In a span of few years, the International Airline Industry in the US has gone from being called a “death trap for the investors” by Warren Buffett to making a reported \$ 6.8 billion in net profit. While most airline CEOs might have been celebrating the improved financial performance, the industry should catch up with the pace of data technology and make more efficient use of their database and reassess their competitive positions.

I. Introduction

1. What is the scope of the research?

The scope of the research is to study the current trends in the US international airlines industry and investigate how the new data technology can assist airline companies in attracting new customers while retaining loyal customers. The research will focus on how airline companies nowadays are reshaping their business models, making more effective use of the data technology and reassessing their competitive positions in order to increase efficiency and profitability.

2. Identify the industry and provide a brief history.

The U.S international airline industry, by definition, facilitates the transportation of people to and from the U.S and international destinations. Post 2008, the industry has been struggling to achieve breakeven primarily due to the economic slowdown and high crude prices. In the past five years, the industry has been performing well due to decrease in crude prices. According to the most recent data provided by IBISWorld, airlines in the US have performed well financially in 2016, with a reported \$ 6.8 billion in net profit, which is nearly double of those of 2014. Furthermore, airlines received a positive return on invested capital for the third consecutive year. [1]

3. Industry Size and Growth Trends

The International airlines industry in the United States includes 136 business'. Total wages of the industry are \$ 11.8 billion with a revenue of \$ 63.7 billion and a profit of \$ 6.8 billion. The annual growth in the last 5 years was approximately -0.4% and is estimated to be 3.3% till 2022. [1]

The growth trends are listed below:

a. Differentiated Positioning

Low cost carriers (LCCs) are offering optional, pay-as-you-go upgraded services to their customers. By making minute changes to their models, some Full-Service Carriers (FSCs) like United airlines are offering more Ultra low-cost carriers (ULCC) -like basic services to cater to value-based customer segments and some carriers are operating separate but clearly segmented airlines under their corporate umbrella. [2] For instance, the United-Continental merger wherein UAL changed its name to United Continental Holdings, Inc. has resulted in United getting LCC business of Continental.

b. Digitization

Digitization can bring in many opportunities of growth for the airline industry. Passengers are looking for a one stop experience through a seamless digital platform. Airline companies should not just focus on ticket commoditization alone but offer passengers attractive travel programs as well. This can be achieved alone or by being in partnership with companies that offer complimentary services. [2]

c. Decline in Unit Cost

Both RASM (revenue per available seat mile) and CASM (cost per available seat mile) declined by more than 8 percent in 2016, reaching their lowest values in over 10 years. While RASM decline was driven by the decline in yield, CASM decline was primarily driven by a continued decline in the price of crude oil. Ex-CASM unit cost increased by 2% in 2016 and are expected to rise by another 2% in 2017. [3]

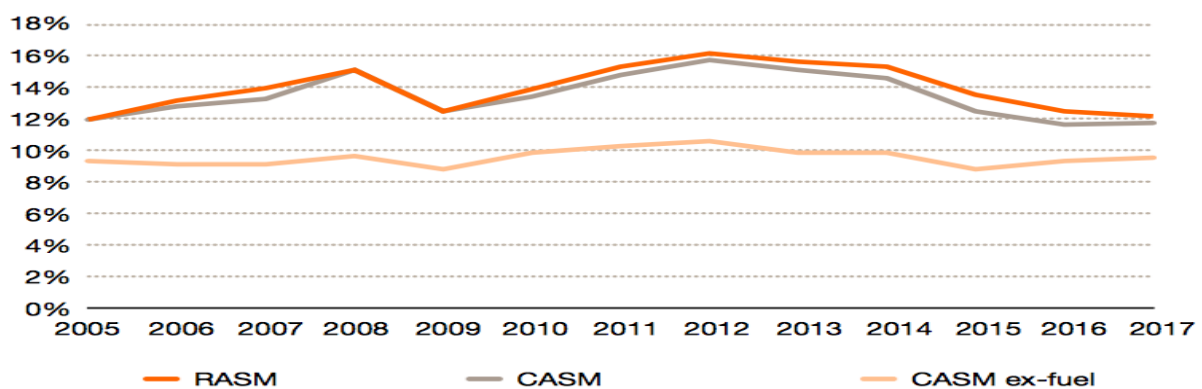


Figure 1.1 – Trends in RASM, CASM and CASM ex-fuel

4. Brief description of key challenging issues

- Organized labour is pushing for higher wages
- the predicted rise in fuel costs will play a big part in deciding profitability
- With the rise of Big Data Analytics, airlines must look to utilize the vast information of customers in their databases to provide a better travel experience.
- Overcapacity needs to be dealt with by streamlining operational procedures
- Cost-control procedures along with research and development in efficient equipment usage will be an important factor in deciding the success of a company.

II. Industry Overview

1. PEST Analysis

Political Factors

The international airlines industry has always been very sensitive to the various political issues. [4] Relations with other countries can get strained due to factors such as current global climate, outbreak of diseases or epidemics, or war. In addition, constraining regulations issued related to international trade, tax policies of new governments and competition involved in the market can act as a deterrent. Government Acts, such as the 1978 Airline Deregulation Act that introduced a free market in the Airline industry, also have a huge impact on the functioning of the international airlines industry.

Economic Factors

Several economic factors play a role in impacting the international airline industry in the U.S. Terrorist attacks and incidents involving planes (9/11 attacks, Malaysia Airlines Flight 325) have resulted in increased safety cost of airlines. Oil prices have always had a huge influence in the operation of the industry. Increasing labour demands, along with operational and maintenance costs affect the international airlines industry on a day to day basis. Global financial crisis' and recessions also have a direct correlation with the international airlines industry [5].

Socio-cultural factors

The emergence of millennials into consumer class has had a huge socio-cultural impact in the working of the international industry. A change in the generation of travellers leads to change in their demands, flying preferences and variety of services offered in terms of both quality and price. Trying to meet these changing trends can often be challenging as well as an opportunity for the international airlines industry.

Technological Factors

Technological advancements have made it easier to estimate consumption of fuel, smooth airline operations and a reduction in turn-around time in general and determining the latest methodologies that can be used to adopt effective process'. Big Data is one of the most trending technologies used by each of the major players in the industry to improve their strategies for pin-pointing services to passengers and reducing cost.

2. Elaborate on the key challenges faced by the industry

The international aviation industry in the US has been shown in favourable light the past few years mainly due to low oil prices. But as they say, the future is always uncertain. PWC states in its report that oil prices are predicted to rise. [2] The consumer usually bears the cost of the rising prices as “fuel surcharges”. This along with labour unions asking for pay hikes does not bode well for the companies. Increasing ticket prices in a cut-throat competitive environment is not a viable option when the consumer is extremely price sensitive. The use of proper cost-control strategies will be of paramount importance to keep prices competitive. Airlines need to realize that the current market environment demands strategic decisions that can sustain the profits being shown on their balance sheets. [2]

The usage of technology and analytics will be a major deciding factor about the company's success. Carriers have often been criticized of sitting idle on the wealth of customer data they possess. Testing times lie ahead for companies to use technology as a tool to extract useful information from all the unstructured data. Frequent-flier programs and mapping customer needs to provide relevant information nearer to date of travel can help airlines capitalize on revenue opportunities. Carriers are currently

offering very competitive ticket rates and that seems like a good situation for the consumer. But this will reduce revenue significantly which could spell doom for the smaller companies. Since reports suggest a rise in per capita disposable income, the way a carrier differentiates itself from its competitors will be key to their success. The challenge arises as to how airlines can offer end-to-end services that can complement a customer's travel plans and offer a holistic experience while using technology to optimize their operations and provide prompt service.

Most airline companies have invested heavily in new fleets looking at increased demand trends and now face the issue of overcapacity which is further driving ticket prices lower. Airlines will have to push for efficient use of resources and optimizing operations and routes to maximize capacity utilization.

3. Factors that affect trends in demand and supply growth

The International Airlines industry in the US is subject to various factors that affect its growth trends. Strained political relations between the US and other countries can potentially meddle with customer's travel plans. Favourable seasons when tourism is encouraged can increase demand for air travel. The price of tickets can affect demand such that high prices can discourage leisure travel. Business travellers rely on the economic condition of their company to make travel decisions. Expansion and Globalization in the corporate world usually translates to increased demand for international air travel whereas weak economic conditions leave companies to seek cheaper alternatives.

[1] Although air travel is considered very safe, the industry is not immune to the odd safety issue that crops up which inevitably discourages the consumer to travel by air.

Lower profits will prevent management from investing in a new and probably more efficient fleet, thus negatively affecting supply. Price fluctuations in crude oil can also affect supply of gasoline and petroleum which can directly affect ticket prices as well as company revenue. [1]

III. Industry Analysis (Porter's Five Forces Model)

The structure of international airline industry in the US suggests it is currently moving towards oligopoly post the economic slowdown around 2008. [6] The recession pushed lots of airlines into bankruptcy which initiated a trend of consolidation in the industry. The consolidations in the industry resulted in the four major players which now own almost 70% of the market share, as opposed to only 40% before recession. [8] And thus, barriers to entry in the international airline industry have been high ever since.

Industry Rivalry

The international airline industry in US faces strong force of competitive rivalry. In 1978, the Airline Deregulation Act was introduced which consequently increased competition within the industry with decreased fare prices. [9] At the same time, extensive consolidations took place in the industry which resulted due to failure of many smaller airlines. Afterwards, the market has become more competitive.

Power of customers

The bargaining power of customers is high in the international airline industry due to the implementation of technology, especially in terms of online ticket distribution. With advanced technology, booking tickets through travel agencies is no longer the only option. Instead, online ticketing and distribution systems have given potential customers an increased transparency and accessibility in pricing and flight information when choosing between airlines. Low-cost-carriers have also gained a larger market share with the increased demand in economical flights, subsequently benefiting the customers with the price wars between airlines.

Power of suppliers

The bargaining power of suppliers is high in the international airline industry in the United States. The three main elements in the airline industry: fuel, aircraft and labour, all cannot be controlled by the airline companies themselves. For instance, the price of aviation fuel strongly relies on the price and supply of crude oil, which is expected to rise. [10] Since fuel accounts for about 40% to 50% of

air operating costs of one single flight, fuel efficiency is directly related to the airline company's profitability. As for the manufacturing of aircrafts, airlines must depend on the only two major suppliers which are Airbus and Boeing. On the other hand, labour is typically unionized in the airline industry. [11] The union is powerful in the industry in the sense that if an airline is to hire a replacement pilot from another airline, the union has the right to reject and prevent the airline from hiring a pilot.

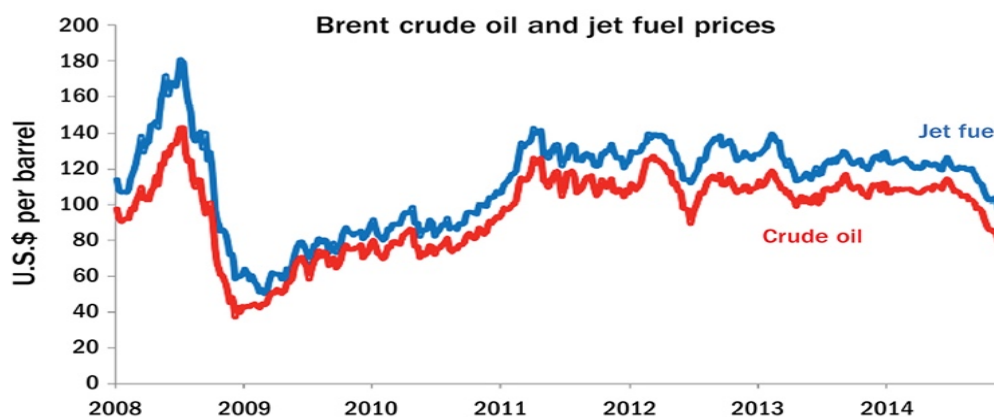


Figure 3.1 – Dependence of Jet fuel prices on crude oil prices

Threat of new entrants

New entrants are not much of a threat to the existing companies in this industry due to the high barriers of entry in the international airline industry in the United States. High barriers are formed due to the needs of huge capital investment to enter the industry and because price is driving business, it is difficult to make profits in the first few years. Low switching costs facilitate the trend that customers choose carriers based on who has the lowest fares. New entrants thus find it difficult to operate competitively for longer durations. Moreover, it will take about a year for companies to get licensed to enter this industry. Afterwards, there will be a sequence of examinations and tests by the Federal Aviation Administration and the Department of Transportation to approve operation. [12] The time and money spend with almost no return and the pressure from the major players are enough to drive new entrants away from entering the airline industry. In short, the gestation period is too long.

Threat of substitutes

Substitutes impose a low threat in this industry. Apparently, traveling by ship is the only one way left to travel abroad other than by plane. This alternative is not suitable and relevant to the segment targeted by the airline industry. [13] Thus, it is unlikely for substitutes to be a significant threat to the

industry. On the other hand, as an alternative to travelling, more and more corporations are using technology that facilitates audio and video conferencing to cut down on cost of operation. Although travelling at times is inevitable given certain situations, such technology is quickly becoming a cheaper substitute when limiting expenses is a priority.

Based on the analysis above, with high entry barriers and the intense competition between major players, the international airline industry in the US is leaning towards the structure of oligopoly. [14] Further, since the competition between the major airlines is elevating, it is now the time for airlines to digitize and redefine competitive positions.

IV. Positioning

One of the challenges that United Airlines faces is the issue of over-capacity. For airline companies, the opportunity costs really do add up. The key is maximizing revenue through optimal fleet utilization. [15] Like its counterpart Southwest airlines, which employs the use of data analytics to offer better customer services, United also plans to implement big data for better customer experience. [16] It also plans to establish a customer solutions team to provide agents with creative solutions such as using nearby airports, other airlines or ground transportation alternatives to get customers to their destination. [17] Airline companies often use hedging strategies as a profit protection tool to cope with the rising fuel prices. United Continental also uses hedging strategies to manage increasing fuel prices. Hedging losses of about \$200 million were declared in the second quarter, 22% of its fuel was hedged for the second half of 2015 and only 5% for 2016. Southwest airlines on the other hand, is the classic example of fuel hedging done right. During the 2008-2009 financial crisis all major airlines in the U.S. were bleeding except for Southwest which posted record setting quarters with a net income of \$321 million in the second quarter of 2008. This was due to Southwest's efficient fuel hedging operation. This allowed Southwest to survive the financial crisis relatively unscathed.

SWOT for United Airlines

Strengths <ul style="list-style-type: none"> • Strong Operational Network • Member of Star Alliance Network • Largest airline in the US 	Weaknesses <ul style="list-style-type: none"> • Financial Issues • Heavy dependence on third party providers • Weak management • Tarnished reputation
Opportunities <ul style="list-style-type: none"> • Technological Expansion (Big Data) • Global travel and tourism 	Threats <ul style="list-style-type: none"> • Increase in aviation fuel • Government regulation • Emission regulations • Strong union of employees

United has a strong operational network with 4500 flights per day to 337 airports across the globe. [1] Since it is the founding member of the Star Alliance Network, customers enjoy added perks. United Continental has a market share of 23.5% which is the largest in the US airline industry. On the other hand, United had filed for bankruptcy in 2002. Since it outsources most of its operations, it relies heavily on third party providers. United airlines have been part of many scandals (Chairman's scandal, videos of passengers being involuntarily pulled out of an overbooked flight) which has tarnished its reputation. Currently, United is using big data strategies to reduce the problem of over booking and to offer better customer service. Technological advancement can prove to be a major opportunity for United which they have not explored yet to their full potential. Tourism industry is another key area of opportunity wherein airline companies can act alone or get into partnerships with tourism companies to offer a one stop shop experience for customers. The major challenges that United faces is the increasing fuel prices, stringent government regulations and a strong union of employees.

SWOT for Southwest

Strengths <ul style="list-style-type: none"> • Price leadership • Strong fleet base • Effective use of big data 	Weaknesses <ul style="list-style-type: none"> • Few international flights • Over dependency on Boeing
Opportunities <ul style="list-style-type: none"> • Global expansion • Partnerships 	Threats <ul style="list-style-type: none"> • Increase in fuel price • Stringent government regulations • Increasing Competition

Southwest has one of the largest fleet base - Boeing in the world. The company's business model allows it to have low fares which makes it one of the most popular flights amongst customers. Southwest uses big data to deliver excellent customer experience and to reduce fuel price. [18][19] Boeing is its sole supplier of aircraft parts which means Boeing has a bargaining power over Southwest and any disagreement with Boeing would cause problems for Southwest. Southwest started flying internationally just over three years ago in 2014 to few places like Jamaica, Aruba and the Bahamas. It has yet to achieve a lot in the International airlines arena as compared to its counterparts. Several opportunities lay ahead for Southwest; one of the many being expanding globally. The company can also plan partnership strategies with other companies to offer better customer services and in turn generate revenue. One of the major threats that Southwest faces is increasing competition since it is a new player in the international flights domain. The ever-increasing fuel prices and government regulations are other major concerns and Southwest needs to come up with effective strategies to tackle such issues.

V. Conclusion

Despite the many challenges and problems faced by the International Airlines Industry in the U.S., it has bright growth prospects in the future. The U.S. economy has seen a steady rise in the recent past which is expected to reflect in the progress of the airlines industry. Some of the latest technologies in Big Data and analytics have helped the major players in the market in devising new strategies for customer retention as well as expansion. The Airline which can achieve costs appropriate to standard of service in the most efficient manner is going to come out on top.

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