Package Delivery Essay, Research Paper

Package Delivery:

Changes in the industry due to technology

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Introduction

The air transport industry encompasses flights of common carriers, certified cargo and passenger services offered to the public, and general aviation, which caters to private aircraft used for recreation or business. The industry supports a wide range of businesses and borne from it were package delivery services.

Origin and Development

In 1910, the air transport industry was established in Germany when regular air service in dirigibles provided service between European cities. Passenger services grew faster in Europe than in the United States primarily because of World War I (1914-1918).

While the ground transport services in the States were based on the railroad, many of the roads and railroad capabilities in Europe were devastated from bombings. That result and the advent of the war airplane made the industrialized European nations take note. The war also proved the military value of airplanes and sparked a dramatic acceleration in its production. By the wars end, small, miniscule commercial air carriers took advantage of the ruined European ground transportation system and the large surplus of aircraft and pilots.

Air service within Europe flourished and by 1930, government-sponsored airlines operated well beyond Europe to numerous European colonies in the Middle East, Africa, Asia and Latin America.

Since the United States suffered none of the devastation that afflicted Europe, trains were the fast, reliable and comfortable ground service that Americans enjoyed. Air travel was still uncomfortable and hadn t flourished in the States as in Europe. In 1914, the first scheduled air flight for businessmen took place but as the winter tour season ended, so did the commercial venture in Florida.

The government decision to transport U.S. mail by aircraft kept the air travel industry alive here. Originally, the government used its own pilots and aircraft. The 1925 Kelly Act, a contract that solicits bids from the private sector for airmail, and the 1926 Air Commerce Act, which allows the government to regulate commercial aviation, were key to changing the development of U.S. commercial aviation in the private sector.

Numerous technological advances were made between World War I and eventually World War II (1939-1945). Navigation and radio communications were greatly improved. These improvements by the 1930s significantly contributed to advances for aviation. Now radio signals from fixed locations guided pilots to their destinations in darkness or poor visibility conditions. Flight lines and routes for air travel were marked. Engineers made numerous advances in design producing air-cooled engines and better cockpit indicators.

WWII had an enormous impact on aviation and aircraft production increased dramatically during the war. Airlines for the first time had more business than it could handle. Design in aircraft increased size, speed, distance and also amenities for passenger travel.

The transition

U.S. mail contracts were the primary source of revenue for airlines in the 1920s and 1930s. Freight also moved by plane during this time, in the Great Lakes region where Ford automotive plants flew parts between assembly plants.

With engineering feats and the infancy of larger aircraft, larger freight items where capable of being flown because of large aircraft lifting capabilities. Airfreight then becomes a major business after WWII with the spread of international air service. Today, as in the late 1930s, a major share of high-value shipments such as jewelry, small parts and valued items are still carried by cargo aircraft. While expense to companies is at a higher cost, the offset to companies is the savings in inventory costs, damage, theft and speed at which they meet supply and demands of the marketplace.

Two Giants UPS and FEDEX

United Parcel Service, UPS, is by all standards the largest package-delivery company in the world. While it has owned a considerable portion of this market since 1919 through merger and innovation, it maintains its edge in the marketplace by continually adapting its resources to new technologies to make it more efficient.

Federal Express, FEDEX, on the other hand, a giant in its own right, emerged in 1973 from the ideas of a Yale University student, who noted the need for a private airfreight system to concentrate solely on delivering shipments.

Originally, UPS dominated the market, delivering small items and clothing to a major department store network. It expanded eventually and extended its operations through a New York City headquarters. By 1950, UPS served stores in 16 metropolitan areas. But as people started to migrate towards the suburbs in the late 1940s, UPS began losing business. As a result, its owner Jim Casey, who started the company, decided to concentrate on door-to-door pickup and delivery of small parcels (less than 50 pounds) from any customer, residential or commercial. This placed it in direct competition with the U.S. Postal Service. Its revenue, from 1964 to 1969, more than doubled and by 1975, it serviced the entire continental United States.

In the late 1970s and early 1980s, FEDEX now matured from being just another company with a fleet of 16 aircraft began to slice into UPS wealth by specializing in overnight deliveries. FEDEX in its fist 26 months of operation lost $29 million dollars but rebounded in 1979, to earn profits in excess of $21.4 million.

UPS didn t wait long to counter FEDEX and began offering a similar air-delivery service in the early 1980s. UPS also took a move-forward approach and invested heavily in technology and aircraft gradually increasing its share of the express-delivery market.

FEDEX became synonymous with express delivery in the early 1980s but while enjoying its market lead found competitors investing heavily in its niche. FEDEX suffered setbacks, as did others in the business of buying into technology. Perhaps this is most evident when FEDEX took losses of $300 million in its ZapMail venture, a satellite-based system for electronic delivery of documents that was thwarted by the facsimile machine, in 1986. While there are technological gains in the aviation delivery community, companies are really at the mercy of continually evolving innovations of upcoming tech giants. In essence, how much bang in technology will I get for my bucks? Looking at air-delivery technology, how long will that technology last and provide me with revenue before becoming outdated.

The end of the 1980s is more or the less the balancing of the two giants in air cargo delivery. The only other significant carrier DHL, which operates primarily in Southeast Asia and Europe, has been slowed since 1996 with technical integration problems. So, while the potential strategic disadvantage of the followers is clear, the value of the competitive advantage for the leader is also time-limited.

Recent Developments

In the 1990s, both air-delivery giants have moved toward e-commerce, business-to-business and the World Wide Web sites to automate its package-processing system.

In 1996, FEDEX introduced its World Wide Web site allowing customers to enter shipment information and access details on their shipment status. Six months later, UPS introduced tracking software that provides customers with an image of the package receiver’s signature. FEDEX learning from previous encounters with UPS immediately prepped itself with a new strategy. This called for taking another small piece out of UPS by announcing FEDEX now also offered three-day delivery service within the United States. Its move was aimed at increasing its competitiveness with UPS in lower-cost, ground service services.

UPS, in kind, heavily pushed its workforce to be part-time employees, which allowed for lower wages therefore more profit. In August 1997, UPS workers went on strike. It took UPS 15 days to agree to most of the labor demands after considering that its old rivals FEDEX and the U.S. Postal Service stood ready to take strategic advantage of its disadvantage.

If not for a myriad of single investments in technology, UPS would have lost footing long ago. Instead to face a new era, UPS, as early as 1985, began improving its data networking applications to enhance communications with their customers and increased its efficiency. It had put itself in a unique position of being able to address e-tailing (retailing) and B2B demands better than its competition. UPS had, in essence, created a bridge between both the physical and electronic world. It had a well tested, reliable network.

Looking at UPS current position, it has a system that includes an IT network and a significant database which tracks over 200 data elements. Its core business now encompasses call center operations, funds, online tracking, address validation and virtual logistics departments and business communications services as additional offerings. While UPS holds the lead in many delivery service areas today, FEDEX has similar services. But for both, their primary core service is package delivery.

The stalemate in the industry currently is technology obsolescence to newer innovations. Many of the recent technological advances become shared commodities in this industry within weeks. It s like Coke and Pepsi…people are satisfied with what they know and that it is delivered to their convenience stores. In this case, its on the market shelves and its a taste people are comfortable with when they want it.

The use of the Web and market jockeying by package delivery services makes it almost impossible to hide your new innovative tracking, web site, aircraft fleet or sorting automation. The two giants hold such a grip on these small advantages, its hard to challenge them with their available resources and especially, because of their flow of established revenues.

Footnotes:

Origin and Development

- Air Transport Industry, 1993-2000 Microsoft Corporation.

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Two Giants

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