

The express mail industry structure



The express mail industry has expanded exponentially in recent years. Despite domestic and international competition from 6 other competitors, three top competitors have held 85% of the market. In 1996 alone, individuals and organizations consumed \$16-\$17 billion dollars worth of services for expedited shipments within the United States alone. The apex of service was the ability to fulfill the promise of overnight shipping accompanied with next-morning delivery. However, for a substantially lower price, there were companies emerging that began to offer next-afternoon delivery, second-day service, third-day delivery (10%-20% less and 40%-50% less, respectively). There too were companies that offered same-day shipping and early-morning-next day delivery that, of course, exponentially cost more.

The evolution of the express mail industry has made it so that the material delivery of the package was only a fraction of the services offered.

Customers can now track the route of their package in detail, expect to receive outstanding customer service, and are supplied with guarantees of prompt and punctual services. Additionally, the volume of shipping has increased up to 20% in the past 10 years; unfortunately for the express mail industry, due to falling prices attributed to increased competition and streamlined efficiency of deliverables, industry revenues have totaled to increases of only 10%-15% per year. An emphasis of time-to-market strategies was implemented in their package delivery logistics system. This was, in part, due to the “ perishable” or “ time-sensitive” nature of the parcels. It was stated that express mail items usually had a high ratio of value to weight. There was a higher acceleration of business cycles and an

expanding customer base; the sheer volume of demand for express mail naturally increased. This demand was guided by a set of basic buying motivations on the part of the consumer. The criterion of selecting an express mail carrier included, but was not limited to price, reliability, services offered, readily available parcel tracking information and/or route updates, and “convenience and customer service.” High-volume discounts were allowed for large companies in order to encourage service loyalty, however, it was often the case that after contracts had expired companies would switch to another carrier with similar services over the issue of price.

Despite the business operations of nine competitors (one of which was permitted to exercise a legal monopoly – USPS) Federal Express, UPS, and Airborne Express controlled 85% of the domestic and international express mail market. The “Big Three” – as they are referred to, delivered more than 5 million packages daily of which 98% arrived on time. They accomplished this feat through massive global investment in depreciable assets and human resources. The details surrounding each of the top three companies’ strategies vary with each individual entity, however, the basic activities and infrastructures remained the same. The comparable facets that spanned each company was the use of a large fleet of vehicles and drivers employing handheld computers to enhance efficiency and to monitor package progression, the use of multiple transfer points that led to the company’s airport, and the utilization of cargo containers containing the parcels that were then loaded onto planes that were flown to massive hub facilities. Furthermore, the retention of an extensive network of customer service representatives that assisted clients schedule pick-up times/locations, track

packages, and acquire information on pricing and scheduling was necessary for any company operating on a global level.

Competition was fierce and the competitive advantages of each of the companies were easily mimicked; the matching of prices, services, and customer support was merely the minimum necessities for remaining competitive in the industry. The fierce rivalry in the express mail industry and the high level of alternative products (such as ordinary mail delivery, facsimile, and the advent of e-mail as a costless tool for secure transmissions of time-sensitive documents) led to an eventual price war between the two largest firms – Fed Ex and UPS. The price war eventually diminished as the economy rebounded from recession and the industry became more consolidated. Proprietary technologies such as package tracking and the use of electronic solutions for parcel management became so widely expected and appreciated by consumers that they were transformed into infrastructure technologies of the industry.

The smaller companies (also referred to as Second-Tier firms) included BAX Global, DHL Worldwide Express, Emery Worldwide, Roadway Package System (RPS), TNT Express, and the United States Postal Service. Each firm took a varied approach to which market they exercised their transport capabilities in. For example, TNT and DHL concentrated on the international market. Of all of DHL's packages, 80% crossed international borders and controlled more than 40% of the trans-border express shipments. Because of the immensity of the big three firms' operations, DHL tended to specialize in hard-to-reach areas of the world and utilized Bahrain in the Middle East and Nairobi, Kenya which both carried hubs in their cities. They also made

extensive efforts to familiarize themselves with customs procedures and officials to hasten the delivery of cross-border packages. The only reason that TNT and DHL operated in the United States was to lower operating costs and increase the dependability of their international services. TNT mainly focused its efforts in Europe. Firms such as BAX and Emery competed with the first tier carriers by focusing on heavy cargo rather than overnight letters. An attempt to provide services in the small package market was “disastrous” for Emery when they utilized acquired subsidiary Purolator Courier. RPS did not offer overnight delivery. Its firm was owned by Caliber Systems and focused on two-day ground shipments. To combat the competitive market share that the top firms possessed, it heavily invested in information systems and efficiency of ground transport.

How has Airborne survived, and recently prospered, in its industry?

Airborne was stated in the case to have only controlled only 16% of the domestic mail market. It is evident that the ownership of its own airport has presented multiple advantages. It no longer had to pay for landing fees and was able to modify the facility to accommodate its changing needs. It additionally offered a warehouse on the grounds as the airport facility that was available for lease by other companies. Early in its business life, it targeted the customers that needed transport for large-volume, high priority shipments. They were careful as to which customers with whom they chose to work; they only selected the customers who had needs that they could best accommodate. They knew they couldn't be an all-encompassing organization, so they deliberately picked the appropriate customers that would benefit from the company's specialized strengths. Airborne also

maximized property tax reductions due to their airport's eligibility for Community Reinvestment Act zoning status.

They relied heavily on humans for sorting and less on automation, kept a low populace of unionized labor (compared to competitor UPS), and maintained a fleet of primarily used aircraft. A major competitive advantage for Airborne Express was their patented cargo containers that fit through a passenger door and allowed the company to utilize up to 80% of the aircraft's usable space (compared to competitors' ability to only use 65%-70% of their aircraft cargo area.) The strategy of buying used aircraft (1960s-1970s models) and refurbishing/modifying them for Airborne's purposes totaled only approximately \$24 million each, where as purchasing a new Boeing 767 cargo plane came to a total cost of \$90 million. Their aversion to improvident spending was not only seen in the acquisition of their depreciable assets, but in their decisions regarding technology investing as well. Airborne was very austere in their expenditure on the spartan systems that comprised their technology. They refused to establish new systems to enhance their operations unless they could distinguish a clear benefit of doing so.

Airborne's corporate culture was very cost-conscious – executives answered their own telephones and headquarters were designed to be functional first. They positioned themselves so that in case an unforeseeable stimulus in the industry was to come about (such as UPS' union strike) they would be able and ready to respond in a sufficient manner. Airborne also made strategic alliances with other shippers, such as RPS, since the combination of the two separate companies was logical based on their individual strengths. This was especially prevalent when looking at the lack of international shipping on

Airborne's part. They allowed commercial airlines and local partners to complete their shipments. It wasn't fiscally sound to expand operations to include substantial international air service. Airborne's use of independent contractors allowed them to save up to 10% on pick-up and delivery as well.

Attempt to quantify Airborne's sources of advantages:

Airborne has many numerical advantages over its competition; this list includes the fact that a greater amount of their volume consisted of afternoon and second-day deliveries which results in an increased opportunity for use of the ground fleet for long-haul capabilities. 30% of the shipments handled by Airborne were ground-based throughout the entirety of their shipping journey (vs Fed Ex at 15 %) – this allowed for increased cost savings over aircraft usage. Another quantifiable advantage was Airborne's ability to use more of the aircraft than a competitor and the statistic that 80% of the costs of a flight did not vary with the amount of the cargo carried.

Furthermore, 80-85% of Airborne's volume was sent to the 50 largest metropolitan areas vs 60% for Fed Ex and even less for UPS. This careful selection of customers allowed consolidation of packages shipping and subcontractors that operated locally for Airborne. Contractors presented a cost-advantage as well. It was stated that contractors handled 60-65% of volume and was 10% less expensive than company-owned package handling. If one takes the combined total of pickup and delivery of one overnight letter by Fed Ex and calculate the cost that could be saved by utilizing contractors: Pick up subtotal – \$1. 37, Delivery subtotal – \$2. 05. Total = \$3. 42 for pickup/delivery cost one overnight letter. To save 10% of

\$3.42 per letter at an average of 700,000 letters per day would calculate into \$239,400 of savings per day, approximately \$15,561,000 per year advantage over Fed Ex's cost structure. To be equitable you would also need to calculate into this the cost of advertising that Airborne does not invest in and the cost of information technology that is not applicable as well.

Additionally, you must consider that the payroll for part-time employees is \$1.00/hour less than Fed Ex for 8,000 employees at Airborne.

The cost of the aircraft operated by Airborne express numbered approximately 175 (98 owned) at anywhere from \$20-\$24 million per aircraft compared to the industry average of \$90 million per aircraft. Take this figure compared to Fed Ex's fleet of 489 owned planes: $98 * \$24 \text{ million} = \$2,352,000,000$ vs average cost between new and used aircraft of \$57 million: $489 \text{ planes} * \$57 \text{ million} = \$27,873,000,000$. Assuming that the revenue generated from the plane was utilized by using 100% of the cargo area efficiently, 80% of the total aircraft for Airborne's \$2,352,000,000 investment was \$1,881,600,000 vs Fed Ex's capability to only utilize 65-70% (67% average) of its cargo area: $\$27,873,000,000 * 67\% = \$18,674,910,000$. Both of these figures were affected by the 80% of carrier cost unaffected by cargo load. The remaining 20% was in fact affected by weight and distribution of cargo. The 20% advantage of Airborne vs Fed Ex was where the additional 13% of cargo utilization was more profitable for the company. 20% of usable flight costs equaled $\$1,881,600,000 * .20 = \$376,320,000$ vs $\$18,674,910,000 * .20 = \$3,734,982,000$. Airborne = \$3,840,000 per aircraft additional revenue vs Fed Ex's \$7,638,000. It appears that Fed ex is more profitable per aircraft until you calculate the total

expenditure of fleet. By a factor of $\$3.84\text{m}/\$2,352\text{m}$ vs $\$7.638\text{m}/\$27,873\text{m}$ of revenue of more usable cargo vs total fleet expenditure. Airborne = .002 vs Fed Ex = 0.0002. Fed Ex spends exponentially more to make less revenue by the usable cargo area of their more expensive, larger fleet.

What must Robert Brazier, Airborne's President and COO, do in order to strengthen the company's position?

Robert Brazier would need to expand on several main weaknesses of the company's structure to strengthen its position. In order to remain sustainable, he must expand the Information Technology investment and automate certain disposable positions so as to follow their cost-averse strategy. He needs to increase advertising and release restrictions on what customers Airborne chooses to serve. It seemed beneficial when RPS joined with Airborne to complement each others' strengths to take advantage of industry opportunities, although Airborne should have fully embraced the possibilities this cooperation could have presented. I would suggest the expansion of potential mergers and acquisitions with other tier 2 firms. They should expand beyond their comfort of the metropolitan areas to acquire a more broad penetration of the global market. Additionally, they did not hold comparably high reliability and punctuality statistics as their major competitors Fed Ex and UPS. Automation of some tasks may decrease errors in processing, etc. Ultimately, Airborne needs to increase its market share by encroaching into UPS reliability issues and Fed Ex's higher pricing.