Delta Airlines Case Study
(Exemplar of Big Data and CRM)

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Delta airlines are a major American airline headquartered in Atlanta, Georgia in the United States. Delta started as an aerial crop dusting operation in 1924 but has now grown into one of the world’s largest airlines transporting about 160 million passengers yearly. Delta also operates in about 64 countries worldwide.

Delta has ten domestic hubs and three international hubs including Amsterdam Schiphol Airport and the Charles de Gaulle Airport in Paris. (Delta, 2016)

Delta has had a consistent annual revenue increase over the years and this has mainly been due to the loyalty and expansion of customers. Loyalty of customers has been massively aided by Delta’s customer relationship management (CRM) which has heavily relied on big data. The figure below shows Delta’s revenue generation over the last couple of years:
Delta Customer Service

Delta Airlines’ Business Model is heavily based on their customer relationships. The figure below summarises just what this entails:

(Reese, 2015)
CRM for Delta Airlines is important for basically the following reasons:

- Focusing on retaining high-value customers
- Maximizing customer knowledge in terms of customer value and customer needs
- Developing personalized services and improving customer service efficiency
- Increase marketing efficiency

CRM is significant because global passengers is expected to continue rising in the coming years and it is important for Delta to retain their loyal customers. Most travelers say that a personalized service is important for the airline decision and are less likely to switch if they have this satisfaction.

Delta’s CRM is controlled through the following avenues from on their mobile phone application or website from Pre flight through to Post flight:

![Diagram showing CRM control avenues from Pre-flight to Post-flight](image)

This leads to creating a financial, social, structural and personalized bond with the company.

(Ghanekar, 2012)
SWOT Analysis of Delta Company

**STRENGTHS**
- 3rd Largest Airline Carrier
- Innovative and Strategic Business Moves
- Guaranteed Safety and Reliable
- Sensitivity and Understanding to Passengers
- Wide Choice of Destination Cities
- Convenient Flight Schedules

**WEAKNESSES**
- Not Popularly Known for International Routes
- Reducing Stock Prices
- Very High Labor Expense
- Reducing Market Share
- Low On-Time Ratings

**OPPORTUNITIES**
- Investment into New & Improved Technologies
- Reduce Operational Costs
- Acquire or Merge more Alliances
- Enhance Customer Experience
- Cheaper Fuel Alternatives

**THREATS**
- Reducing Number of Business Flyers
- Highly Competitive Market
- Cheaper Alternatives to Business Travel
  Offered by Competitors
- Terrorism
- High Fuel Costs
- Increased Regulation
Delta Airlines CRM and Big Data

The airline industry is today very interested in Big Data but how exactly does Big Data help a company like Delta make money? Or how exactly does Big Data help Delta airlines in anyway at all?

Big Data, as understood and accepted by most today, is high-volume, high-velocity and high-variety information assets which can create substantial economic value and help with operations, decision-making, risk management and customer service. IBM believe big data is essential for evolution of data and information management.

Data analytics has been used efficiently to increase sales in the retail industry examples are companies such as Amazon and eBay. Therefore how can an airline emulate the successes of these online e-commerce retail companies’ use of big data. They can do this by:

1. Greater Value Creation for customers
2. Increased Personalization

Increasing value for customers to use their services and increasing personalization is obviously going to increase demand for the airline and therefore generate more revenue.

(Abhishek Singh, 2013)
OPPORTUNITIES AND THREATS FROM BIG DATA

Delta has been able to use big data to provide the following opportunities:

1. Create value propositions based on increasingly real-time information about customer preferences and needs and using that information for targeted services.
2. Delta has invested over $100 million in airport baggage systems to track and improve its baggage handling. With more advanced tools for baggage data collection and analysis, Delta’s operations teams at airports and headquarters have been able to better identify key causes and trends in mishandled bags and implement effective solutions. By integrating real-time flight data into its baggage systems, Delta now automatically alerts baggage handlers when connecting bags need to be transferred directly to another plane instead of sent through the airport’s luggage sorting system.
3. Delta has made use of more advanced data in its efforts to better engage customers and generate loyalty. The airline combines customer data from flight purchases, routes flown, and credit card spending to piece together customers’ demographic profile, travel habits, spending ability, and even what company they work for. The company uses that data to carefully tailor promotions and target customers with whom the airline senses there is more opportunity. If you have recently joined a travel-heavy professional services firm

However some threats from using big data exist. These are:

1. Customers may feel their privacy is being invaded on a bit too much and may decide to use another airline

(Sean L. 2013)
In conclusion CRM for delta is obviously one of the important business factors for the company. Big Data has been aiding the company enhance their CRM over the years and this has helped in customer loyalty and customer expansion

References & Bibliography


