Northeastern University
College of Professional Studies

Module 4 - Assignment

Airline Case Study

ALY6060 Decision Support & Business Intelligence

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Submitted by: -

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Part 1:-

Consider the following questions. Pick **ONE** for your assignment:

- How do you see the future of analytics brought about by Industry 4.0, affecting the company in the case study? Identify the characteristics of Industry 4.0 that will affect the company and industry the most? Why do you think so?
- What is the company doing now to prepare for the future? Explain how Industry 4.0 should impact their approach to data analytics? How should it impact their decision-making as a result?
- What recommendations do you have that will improve their implementation of new BI tools that will support the future of data analytics-based decision-making?

Answer 1: -

The purpose of Industry 4.0 is to transform manufacturing through AI, flexible automation, and cloud technology. Despite the fact that artificial intelligence-driven sensors and other advanced technology enable connectivity and data capture, the cloud serves as a scalable platform for all industries to use and store vast amounts of data, apply business intelligence and advanced analytics, and then use those insights in real-time to improve their operations. (Genpact, 2022). In business planning, business intelligence (BI) and analytics have superseded strategy as the most crucial factor (Trubskyy, 2022). I have taken in consideration the case study of airline industry.

Case in brief: Bob and his crew were notified of a new event that required passenger re-accommodation. Because the flight from Bangkok, Thailand (BKK) to Hong Kong (HKG) was expected to be delayed, 7 of the passengers who had a connectingeflight4 from Hong-Kong topChicago, United States (ORD) were likely to miss their flight. Bob and his crew attempted to rebook the customers on-the next-available aircraft from HKG to ORD, however that flight was completely booked and could only take two passengers owing to restricted seat availability. As a result, Bob and his crew were left with the difficult decision of determining which two people should be placed on the next available flight and which others would have to spend the night in Bangkok in order to catch the following flight to ORD. Bob decided to enlist the expertise of Peter, a seniorobusiness intelligence expert at Thai-ABC Airline, in order to come up with the best potential solution for the situation. Bob and Peter used the required information, including customer data, financial reporting and bookings, lifelong income details, and other factors like customers ' loyalty, profit scores, historical miles travelled, social networking sites, cost of service, and so on, to determine which people ordinarily should be put on the next available

flight to Chicago, USA, and which should not. With this issue, Bob and his team intended to establish a baseline for future accommodation-related challenges and determine the best solutions to implement using the present Business Intelligence platform. As a result, it became critical to determine how the combination of current Biotechnology, passenger data, and new accommodation strategies would enable Thai ABC Airline to respond to issues lies with the short and long term, as well as how it would help address the important problem of passenger satisfaction. If I had to choose two people to seat and five to bump based on the information above, I would choose Jennie and Danny to sit and Michael, Jane, Ben, Joe, and Tom to bump.

First and foremost, I would seat Jennie. Since, she has already spent several hours waiting at the airport and it would be unfair to force her to stay move night and mis her connecting flight. Then there's the fact that she's-been the airline's most loyal customer for the past 920 years, making her the lone million miler among all the other customers. Jennie has provided $200,000 to the airline's earnings, and it may no to be ethically or bmp such a devoted customer given the forementioned criteria. Given her elite rank and value, the compensation the airline might have to provide her would be very substantial (between $400 and $1600). As a result, I'd want to offer
Jennie one of the seats. I'd have to choose between Tom and Danny for the second seat. Tom has proven to be one of our most devoted customers, logging over 100,000 miles in the last year. Tom has contributed to the Airline with a lifetime revenue of $130,000, roughly three time that of Danny. However, the cost of serving Tom has shown to be very expensive because he frequently changes or cancels his travel, causing the airline to pay a very high cost of serving him. Tom also takes advantage of many promotional offers and redeems his miles using flights, credit cards, and shopping portals, according to the data. Tom is also rarely active on social media and has a small following. In addition, Tom paid no money for the ticket because he purchased it with a "award ticket." As a result, I believe Tom should be compensated between $400 and $1600 for a ticket that cost him nothing. As a result, h might be willing to accept the offer.

I'd prefer Danny to Tom for the following reasons: To begin with, Danny's-final destination is Las0Vegas, and he may face considerable adjustments to his itinerary, for which the airline may be required to reimburse him significantly.Second, Danny has been a long-term customer of the airline for the past seven years.

Third, and most crucially, Danny is the group's most socially involved member. He is the owner and operator of the well-known travel site "Travel More with Less," as well as the energetic person on social networking site, with a significant following. The Blog includes a straight link to the Thai ABC Airline website, and any articles or postings about Thai ABC Airline's customer care or promotional offers usually get a lot of attention from Danny. This encounter with the airline may prompt him to write exceedingly nasty evaluations about Thai ABC on his blog and on his social media channel, Twitter, perhaps discouraging many current and potential consumers from flying with Thai ABC. As a result, the repercussions might be enormous for the airline, whose major goal is to improve customer service while also retaining and attracting new customers.

PART 2:-

The data including customer demographic data, in-flight experiences, and flight information, to determine passenger satisfaction. The analysis giving recommendation based on various factor for customer satisfaction. Airlines class based on satisfaction shows that eco class have the highest rate of dissatisfaction. The eco class flyer needs to be given a better experience. The travel dissatisfaction is more in the male than that of females. So, more factors need to be considered for male flyers. Analysis shows few customer retention parameters such as the loyal customer are those who do both business and personal travel by the same airlines and the most satisfied loyal customer are prepared in advance with baggage, online boarding and checkinG services. However, all these factors are missing from disloyal customers.

Airline Industry Analysis

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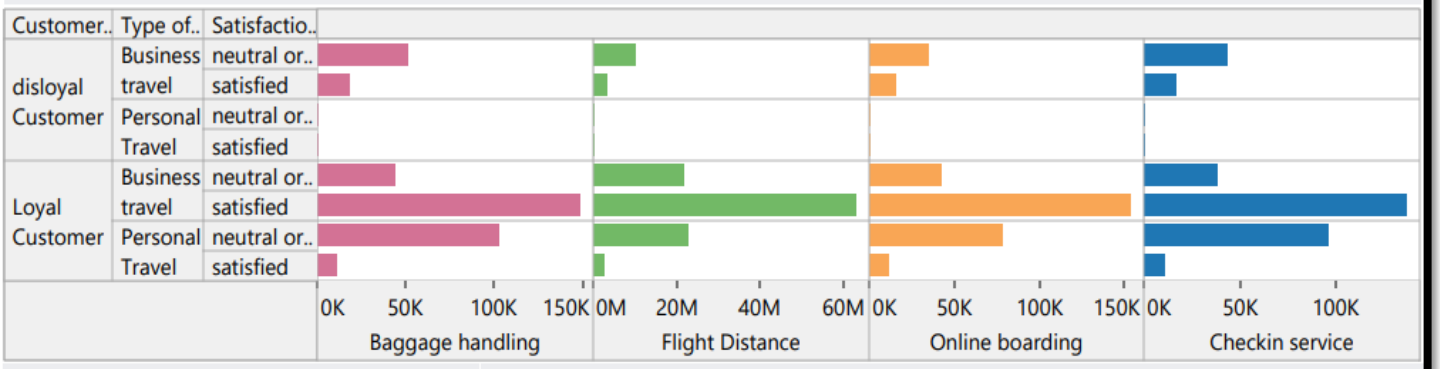
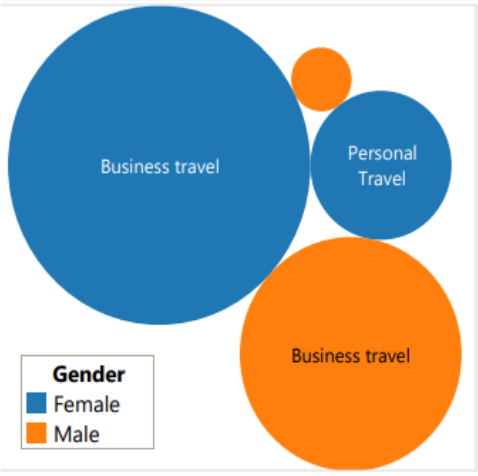
Airlines class based satisfaction

Satisfaction	Class		
	Business	Eco	Eco Plus
neutral or dissat..	15,185	38,044	5,650
satisfied	34,480	8,701	1,844

Customer Retention Parameter



Satisfaction based on airline class



Travel satisfaction based on Gender

Reference:

Anon

(2022) Retrieved 12 May 2022, from https://journals-sagepub-com.ezproxy.neu.edu/doi/pdf/10.1057/jit

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