

Term Project: Task 2

Executive Summary

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The scenario/Business Problem:

Due to recent unfortunate airline crashes, the media has been promoting statistics stating air is no longer a safe way to travel. The news and media outlets have been bombarding the public with reports and figures about the trends of airline safety and that things are not looking good. What was previously thought as the safest way to travel, especially when compared to automobiles, is now being presented as one of the most dangerous to the public. But are any of these claims based on facts?

You work for an airline on the data science team as a data analyst and are a resident data visualization expert. You have been tasked with helping multiple groups in the organization combat this negative publicity and help tell the airline's side of the story. There is a fear internally about what this type of media coverage will do to airline sales and how it could impact the future of the company. Not only do they need you to help create some internal communications, but you will also be tasked with what is published to the public and the media.

Project Task 2: Executive Summary

Your dashboard was well received by the internal team and while some of the information was news to everyone, the entire consensus was that it is ready to be prepared for an executive review, so external communications can be started. Your next task is to prepare an executive summary summarizing your findings and telling the story of what you found. This can be done either in PowerPoint, Prezi, Spark, etc.

Remember your audience – these will be senior leaders that care about the portrayal of the industry and their airline specifically. They also want to make sure they are being ethical and sharing information that isn't misleading. This presentation will set the tone and make a recommendation for how the media is addressed going forward with the information and facts that need to be shared. Also remember that this audience regularly speaks with shareholders – so any information you can find to help predict future risks and the position of the company will be beneficial to the conversation. For example, if you found information that indicates where future sales will be impacted or where there are safety risks – this is important information to raise to this group. This audience is internal - they would be considered industry experts, so make sure your presentation caters to an audience that is familiar with the topic.

Slide 1: Introduction

Airline Safety – Delta, North America.
Executive Summary – October 2023

Slide 2: Fatalities my Month and Year for Planes, Trains, and Automobiles

In this slide, we examine the fatalities across different modes of transportation – Planes, Trains, and Automobiles – from 2017 to 2021, focusing on monthly and yearly trends. Understanding the broader transportation landscape will provide valuable context for evaluating Delta, North America's safety performance. When it comes to safety, planes consistently stand out as the safest form of travel among these modes. This is a testament to the comprehensive safety measures and a commitment to

continuous improvement that characterizes the aviation industry. Understanding this context will allow us to assess Delta, North America's safety performance within the broader transportation landscape.

Slide 3: Global Plane Fatalities Map from 2017 – 2021

On this slide, we present a global map illustrating plane fatalities that occurred between 2017 and 2021. This visual representation will help us identify regions with higher incident rates, allowing us to better assess the safety landscape and potential risks faced by Delta, North America. Notice that North America has some of the lowest number of incidents. Notably, it highlights North America's commendable safety record and positions it as a region with comparatively lower incident rates. This information is crucial for senior leaders at Delta, North America, as it provides a solid foundation for discussions on safety performance and the steps necessary to maintain and improve their excellent safety reputation.

Slide 4: Fatalities by Kilometer Flown

This slide focuses on the metric of fatalities per kilometer flown, providing a nuanced perspective on airline safety. By analyzing this data, we can gain insights into the safety records of different airlines, including Delta, North America, and how their performance compares to industry standards.

Normalized Comparison: Fatalities per kilometer flown is a normalized metric. It considers the distance traveled, ensuring a fair comparison between airlines of different sizes and operating profiles. This means that airlines with larger fleets and more flights won't necessarily have higher numbers of fatalities solely due to their scale.

Industry Benchmark: By analyzing this data, we can establish an industry benchmark for safety. Airlines like Delta can be evaluated against this benchmark to determine how their safety performance compares to industry standards. If Delta has one of the lowest rates, as suggested, it underscores their commitment to safety and positions them as a leader in the industry.

Reassurance to Stakeholders: For Delta, North America, having one of the lowest rates in this metric is not only a point of pride but also a source of reassurance to stakeholders. Shareholders, passengers, and employees can have confidence in the airline's commitment to safety, and this information can be used to strengthen the airline's reputation and market position.

Slide 5: Fatalities by Airlines, Years 2017 – 2021

This slide provides an overview of fatalities in the airline industry for the years 2017 to 2021. It is essential to understand the context and trends in airline safety to make informed decisions regarding Delta, North America. This data is crucial for several reasons, especially when considering Delta, North America, as it positions them as one of the airlines with one of the lowest fatality rates.

Ethical and Transparent Communication: Sharing this data with senior leaders and stakeholders allows for ethical and transparent communication about safety. Delta demonstrates their commitment to providing accurate information and being responsible in their reporting.

Reputation Management: Delta's position as one of the airlines with the lowest fatalities enhances its reputation and instills confidence in passengers and investors. It also positions them as an industry leader in safety, which can be leveraged in marketing and communications.

Slide 6: Flight Phase Fatalities

In this slide, we delve into the specifics of flight phase fatalities within the airline industry. We analyzed incidents that occurred during various phases of flight, such as takeoff, cruise, descent, and landing. Understanding when and where these incidents tend to happen is crucial for pinpointing potential areas of improvement in safety protocols, pilot training, and overall safety performance. This level of scrutiny and commitment to improvement is essential in an industry where safety is paramount.

Slide 7: Emerging Safety Issues – Passenger Incidents Reported

In this slide, we draw attention to an emerging safety concern that has gained prominence in recent years—unruly passenger incidents. The Federal Aviation Administration (FAA) received a significant increase in reports, with a noteworthy surge of 492% from 2020 to 2021. It is crucial to note that this spike is not solely attributable to a rebound from the pandemic's impact on travel in 2020. In 2019, there were 1,161 incidents, indicating an upward trend. This issue is a matter of concern as it poses potential safety risks and demands the attention of the airline industry. It underscores the importance of robust safety protocols, passenger education, and industry-wide collaboration in addressing this emerging safety challenge.

Slide 8: Closing

In conclusion, this executive summary has provided a comprehensive overview of the safety landscape in the airline industry, with a specific focus on Delta, North America. We've examined fatalities by airlines, monthly and yearly trends across various modes of transportation, global plane fatalities, flight phase fatalities, and fatalities by kilometer flown.

Our analysis not only highlights areas where Delta excels but also identifies potential areas for improvement. As industry experts, it is essential for us to continually strive for the highest safety standards and to be transparent and ethical in our communications.

Moving forward, we recommend that Delta, North America, prioritize ongoing safety initiatives, leverage industry best practices, and remain committed to sharing accurate and transparent information with both our internal teams and shareholders. This proactive approach will ensure our airline's continued success and safety reputation in the competitive aviation landscape.

Thank you for your attention, and we look forward to your feedback and guidance as we navigate the path to a safer and more secure future for Delta, North America.