



ANALYSIS OF AIRLINE REVIEWS

FOR BRITISH AIRWAYS



- The purpose of this analysis is to understand customer sentiment and identify key topics in British Airways reviews.



- METHODOLOGY :
- SCRAPPING - Collected data from British Airways reviews on AirlineQuality.com
- CLEANING -Removed non-alphanumeric characters, tokenized, and filtered stopwords from reviews
- ANALYSIS - Applied sentiment analysis using TextBlob and topic modeling using Latent Dirichlet Allocation (LDA).

Data Collection

- Data was collected from the British Airways reviews page on AirlineQuality.com. A total of 20 pages were scraped, with reviews extracted from each page. The dataset includes a collection of customer feedback on the airline's services, including details on flights, staff, and overall experience.

Review

""a huge disappointment""Danilo Queiroz Palermo(United States)14th December 2024✔Trip Verified| This subpar. But not only that, Heathrow airport, their hub, is by far the worst large airport I've seen in Eu suitcase. It came to Washington the following day, Thursday. Ever since, it's been sitting in the airport you have in inquiry about luggage it sends you a link via SMS and hangs up. No option to talk to a human. that the AirTag shows the suitcase in IAD and offering to go pick it up so they don't need to deliver it. 777 / A350Type Of TravellerBusinessSeat TypeBusiness ClassRouteWashington to LondonDate FlownDecember 2024Money12345Recommendedno"

""we had to bus to the aircraft""8 reviewsJ Meares(United Kingdom)13th December 2024✔Trip Verified| F Disappointingly they had not secured a gate so we had to bus to the aircraft and it was all a hot scrum. cabin crew forgot about those on the last bus so I had to ask for a welcome drink. It came and the champa seat were lovely as always (I greatly prefer to the Emirates white/gold bling). Drinks service was prompt disturbed through the night so got a good sleep on a comfy bed. Cabin was a bit too warm though for my pe could warm the ceramic coffee cups so coffee retains its heat a bit longer? Pouring not quite hot coffee belt. Excellent work by the ground staff. Overall 8/10. Improvement points: gate not bus to the plane; do 777Type Of TravellerSolo LeisureSeat TypeBusiness ClassRouteCape Town to LondonDate FlownDecember 2024Sea ""victims of their new supper service""P Gough(United Kingdom)12th December 2024✔Trip Verified| Check ir the American Airlines admirals club, which is abysmal. There is a free bar, serving cheap alcohol – an aw consistency in the quality of their first class crew. The drink selection was fine. The food was appallin the starters or the mains. First choice of Main unavailable as only two had been loaded. The fillet steak cheeseboard. luggage off swiftly the other end – so good to see priority tagging working.AircraftBoeing 7 & Beverages12345Inflight Entertainment12345Ground Service12345Wifi & Connectivity12345Value For Money1234

""flight was cancelled last minute""L Harper(United Kingdom)6th December 2024✔Trip Verified| British Airv kept us at the gate saying the plane couldn't land while literally every plane from that airport was taki flight to Amsterdam later the evening also took off without any problems. It's just the one operated by B from theirs. I had to rebook myself on the Eurostar the next day and would still miss the important appoi AmsterdamDate FlownDecember 2024Seat Comfort12345Cabin Staff Service12345Ground Service12345Value For Mon

""Nobody wants to take responsibility""P Shaw(United Kingdom)2nd December 2024✔Trip Verified| The flight delay, nor was any help forthcoming from the phoneline. Nobody in the airline wants to take responsibilit TravellerSolo LeisureSeat TypeEconomy ClassRouteMarrakesh to LondonDate FlownAugust 2024Seat Comfort12345

Data Cleaning

Steps taken for data cleaning:

- **Removal of Non-Alphanumeric Characters:** Stripped text of special characters and numbers.
- **Tokenization:** Split the text into individual words for further analysis.
- **Stopwords Removal:** Removed common words like "the," "is," etc., that do not add value to sentiment analysis.

AFTER

Cleaned_Review

huge disappointmentdanilo queiroz palermounited statesth december trip verified first time flew british airways huge disappointment seat quite good food simple service subpar heathrow airport hub far worst large airport iv
bus aircraft reviewsj mearesunited kingdomth december trip verified pretty good flight still small things improved check quick lounge good tasty food well chosen wines disappointingly secured gate bus aircraft hot scrum gc
victims new supper servicep goughunited kingdomth december trip verified check fine priorityfast track lines security boarding one lounge option first class customers mexico city american airlines admirals club abysmal fre
flight cancelled last minutel harperunited kingdomth december trip verified british airways absolute rubbish fly amsterdam urgent appointment flight cancelled last minute presumably due bad weather theyve kept us gate sa
nobody wants take responsibilityp shawunited kingdomnd december trip verified flight time changed last minute without warning assistance provided ground staff rd party agents regarding impact delay help forthcoming ph
terrible customer services wardenunited kingdomth november trip verified im fraustrated flight cancelled last minute wasnt end world even though earliest could get rebooked three days later insane saga events proceeded c
british airways really cheapjay jordanunited kingdomrd november trip verified sat plane hour forty five minutes awaiting takeoff due bad weather london understandable safety fortunately long layover delay affect however me
never fly ba againscott annettunited statesth november verified british airways stranding wife heathrow airport days access baggage told airline employees purchase necessities toiletries refreshments etc wed reimbursed ck
pleasantly surprised reviewsr laneunited kingdomth november trip verified although like many days avoid ba long haul london heathrow due perception poor service lack customer services things go wrong pleasantly surpris
flight attendants outstandingn christieunited kingdomth november trip verified flight british airways best flight attendants outstanding processional attentive helpful food good seatlie flat bed comfortable love smart design ch
food service worstl teeaustraliath november verified worst airline ever flown cancelled flight hours departure didnt even contact didnt put new flight rebook next day also left find accommodation nightmare refused compensa
flying ba disappointinglylynur jnssonicecelandth november trip verified disappointing service plane interior terribly incompetent customer service booked flight directly bas website soon started get emails saying selected seats

Review

"a huge disappointment"Danilo Queiroz Palermo(United States)14th December 2024✔ Trip Verified| This was the first time I flew British Airways, and it was a huge disappointment. While the seat is
"we had to bus to the aircraft"8 reviewsJ Meares(United Kingdom)13th December 2024✔ Trip Verified| Pretty good flight but still some small things that can be improved. Check in was quick. Loung
"victims of their new supper service"P Gough(United Kingdom)12th December 2024✔ Trip Verified| Check in was fine, but no priority/fast track lines for security or boarding. There is only one lounge
"flight was cancelled last minute"L Harper(United Kingdom)6th December 2024✔ Trip Verified| British Airways is absolute rubbish. I had to fly to Amsterdam for an urgent appointment. The flight was
"Nobody wants to take responsibility"P Shaw(United Kingdom)2nd December 2024✔ Trip Verified| The flight time was changed at the last minute without warning and no assistance was provided by
"Terrible customer service"S Warden(United Kingdom)29th November 2024✔ Trip Verified| I'm so fraustrated. My flight was cancelled last minute, which wasn't the end of the world, even though th
"Is British Airways really this cheap"Jay Jordan(United Kingdom)23rd November 2024✔ Trip Verified| We have sat on this plane for an hour and forty five minutes awaiting takeoff due to bad weather
"I will never fly BA again"Scott Annett(United States)18th November 2024Not Verified| British Airways stranding my wife and I at Heathrow Airport for 2.5 days, with no access to our baggage. We we
"I was pleasantly surprised"32 reviewsR Lane(United Kingdom)17th November 2024✔ Trip Verified| Although like many these days, I avoid BA on long haul from London Heathrow due to my percep
"flight attendants were outstanding"N Christie(United Kingdom)15th November 2024✔ Trip Verified| This flight was British Airways at its very best. The flight attendants were outstanding - processio

Sentiment Analysis

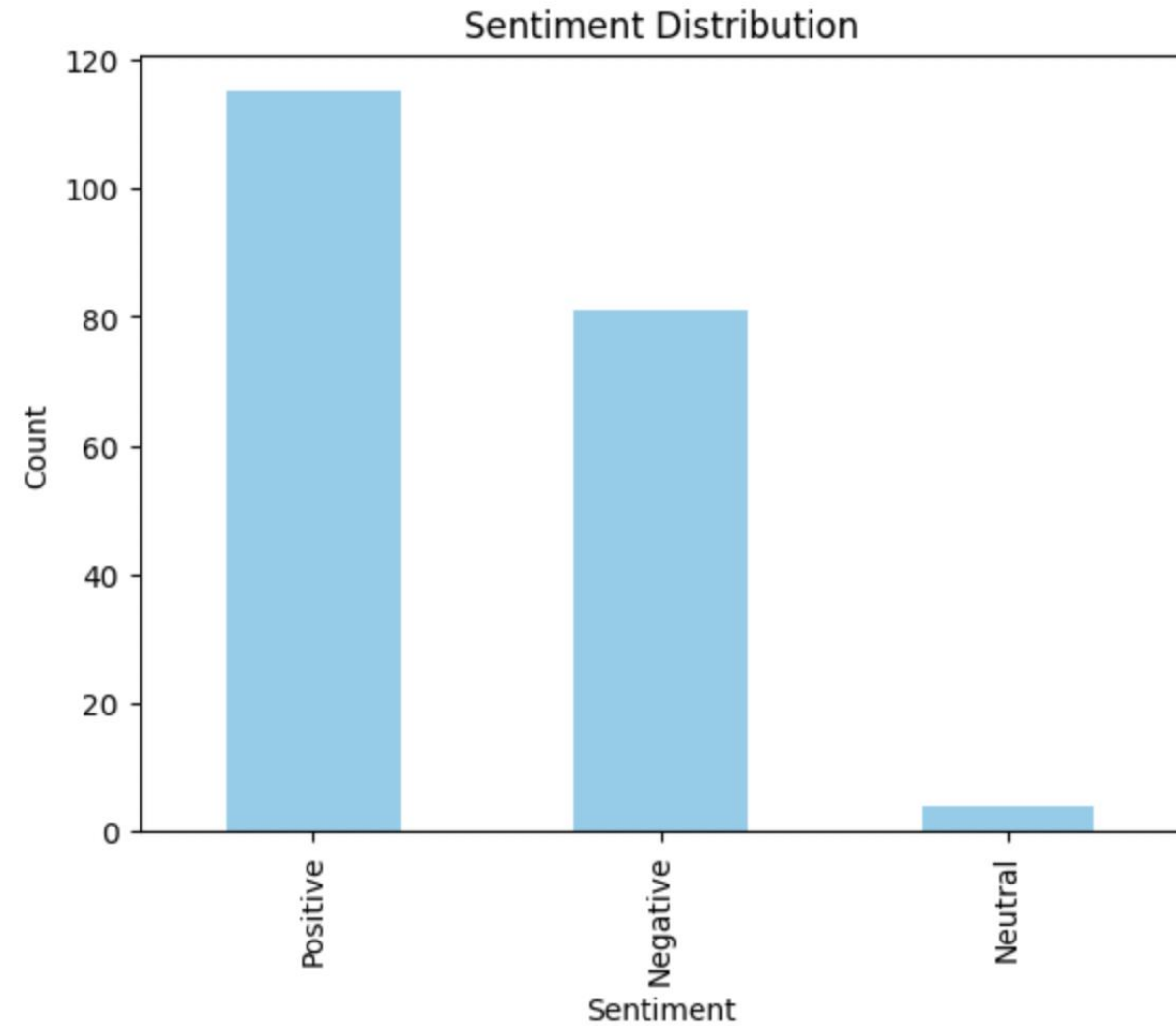
Sentiment	Sentiment_Label
0.03526785714285720	Positive
0.17927927927927900	Positive
0.17200263504611300	Positive
0.01029411764705890	Positive
0.11666666666666700	Positive
-0.1431818181818180	Negative
0.019270833333333300	Positive
-0.22000000000000000	Negative
0.015000000000000000	Positive
0.4689285714285710	Positive
-0.07373737373737370	Negative
-0.06387878787878790	Negative

- Sentiment analysis was performed using TextBlob, which assigns a polarity score to each review.

Sentiment Labels:

- Positive: Reviews with a positive polarity.
- Negative: Reviews with a negative polarity.
- Neutral: Reviews with a neutral polarity.

**Sentiment
Distribution:**
The sentiment
distribution is
visualized in a
bar chart below.

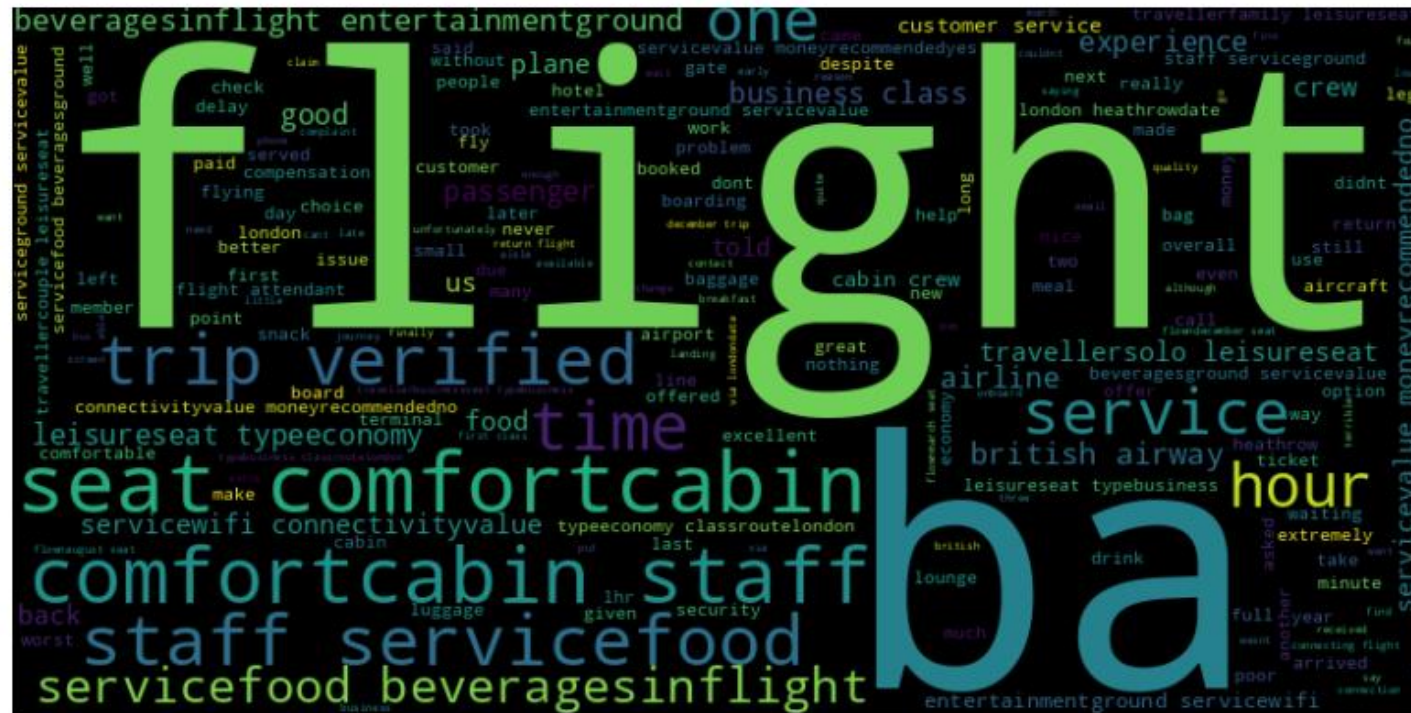


- The sentiment analysis of the reviews reveals the following distribution:

- **Positive Sentiment:** A significant number of reviews (around 120) expressed positive sentiments toward the airline, reflecting satisfaction with various aspects such as comfort, service, and overall flight experience.
- **Negative Sentiment:** Around 80 reviews showed negative sentiments, indicating dissatisfaction with factors such as delays, cancellations, or customer service issues.
- **Neutral Sentiment:** A small portion of the reviews (approximately 10) were neutral, where customers neither expressed strong positive nor negative feelings.

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- The predominant sentiment is **positive**, which suggests that British Airways has a generally favorable reputation among its passengers.
 - A notable amount of **negative feedback** indicates areas for improvement, especially in flight-related services like cancellations and customer service.

Word Cloud of Frequent Words



- Flight-related terms: "Flight," "Seat," and "Service" are some of the most prominent words, reflecting their importance in customer experience.
- Staff and Comfort: Words like "Staff," "Comfort," and "Cabin" emphasize the role of onboard service and comfort in shaping passengers' opinions.
- Issues and Complaints: Terms such as "Delay," "Cancelled," and "Compensation" indicate recurring issues that some passengers encountered.

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- The most frequently used words reflect a mix of **positive experiences** related to flight comfort and **negative experiences** tied to delays and poor customer service.
 - There is a strong emphasis on **staff interactions**, suggesting that this is a critical area for passenger satisfaction.

Topic Modeling (LDA)

- Topic 0:** Focused on general flight-related feedback, including seat comfort, staff, and service quality.
- Topic 1:** Related to **business class experiences**, with an emphasis on staff service, seat quality, and in-flight comfort.
- Topic 2:** Highlighted issues around **flight cancellations**, time management, and customer service, with a notable focus on service-related terms.
- Topic 3:** Centered on **staff interactions**, with keywords like "crew," "service," and "staff" dominating.
- Topic 4:** Dealt with a combination of **flight experience**, service, and comfort-related aspects, including service food, comfort cabin, and leisure seat.

The topics confirm that **flight and seat comfort** are primary concerns for many customers, but **service-related issues** such as cancellations, delays, and staff behavior also play a significant role in shaping reviews.

Understanding these topics can help British Airways improve its service in areas that are frequently mentioned in reviews, particularly in **staff interaction** and **flight punctuality**.

Recommendations:



Staff Training & Service Improvement:

- Invest in customer service training for staff to handle complaints and issues more effectively.
- Ensure that communication during delays and cancellations is timely, transparent, and empathetic.

Flight & Seat Comfort:

- Continue to enhance seating comfort, particularly for long-haul flights, to maintain the positive sentiment around cabin comfort.

In-flight Experience:

- Consider upgrading in-flight services, including entertainment and food options, to further elevate passenger satisfaction.

Proactive Customer Support:

- Provide better proactive support to passengers, especially when flights are delayed or cancelled, to reduce the frustration caused by these incidents.

THE END