

AIRLINE REPUTATION MANAGEMENT BASED ON TRAVELLER INSIGHTS: THE IMPACT OF SERVICE FACTORS ON PASSENGERS' WILLINGNESS TO RECOMMEND

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Abstract. This study aims to determine how factors relating to airline services influence damage to airline reputation, as measured by passengers' willingness to recommend the airline. The study focuses on the relationship between passenger evaluations of airline service attributes and reputation outcomes in the airline sector. The study focuses on six service factors: seat comfort, cabin staff service, ground service, food and beverages, in-flight entertainment and value for money.

This research uses a quantitative analysis based on passenger evaluations of the quality of airline services. A binary logistic regression model is used to examine the effect of selected service attributes on the probability of a passenger recommending the airline. This method enables the relative importance of each service factor to be compared and assesses whether damage to an airline's reputation depends equally on all aspects of the passenger experience, or whether some factors have a stronger managerial impact.

The results show that different factors of airline service contribute differently to passengers' willingness to recommend an airline. The findings confirm that airlines should not rely solely on a general reputation management strategy, because different service dimensions create different levels of reputational risk and value. This study's practical value lies in helping airline managers to identify priority areas for service improvement, allocate resources more effectively and design reputation management strategies based on traveller insights rather than broad assumptions about service quality.

Keywords: Reputational Damage Index, risk factor analysis, airline service quality, reputation management, airline development.

JEL Classification: M31, L93, L15, D12

1. Introduction

Corporate reputation is widely recognised as a vital strategic asset that directly impacts organisational performance, stakeholder relationships and long-term competitiveness. It functions as a managerial resource affecting customer acquisition, employee retention, investor confidence and organisational resilience during periods of uncertainty and crisis (Fombrun & van Riel, 2004; Moskvichenko et al., 2024). As service industries become more customer-centric and transparent in their digital operations, management's responsibility for monitoring, protecting and improving organisational reputation has grown in importance (Chan, 2017).

Reputation is generally defined as the collective assessment of an organisation based on its historical actions and the expectations stakeholders hold regarding its future behaviour (Lange, Lee & Dai, 2011). Reputation is formed through the accumulated experiences and evaluations of stakeholders over time (Pires & Trez, 2018; Oklander, Oklander & Shcherbyna, 2025). It is widely regarded as a significant indicator of organisational effectiveness and managerial performance.

The growing importance of reputation management is particularly evident in service industries, where customers tend to evaluate intangible experiences rather than physical products (IATA, 2025). In

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such environments, a good reputation can reduce uncertainty and information asymmetry by signalling service quality, reliability and trustworthiness (Pires & Trez, 2018). Effective reputation management can help organisations strengthen customer loyalty, reduce customer acquisition costs, maintain a competitive advantage and mitigate the negative consequences of operational failures (Curtis, Ambrose & Manuela Jr, 2024).

According to Stakeholder Theory, organisational reputation is multidimensional because different stakeholder groups evaluate organisations according to different criteria (Setälä et al., 2025). For example, investors focus on financial performance and sustainability, employees on organisational culture and working conditions, regulators on compliance and safety standards, and customers on service quality and value. In the airline industry, customer perceptions are particularly influential as passenger experiences are often shared on online review platforms and social media. This shapes the opinions of potential travellers and directly affects their purchasing decisions (Li & Liu, 2019; Antón Maraña, Baruque Zanón, Porras Alfonso & Arranz Val, 2023). Due to the high level of competition, operational complexity and public visibility of service failures, the airline industry is a particularly relevant context for studying reputation management (Baruah & Panda, 2020). Service disruptions such as delays, cancellations, poor customer service and inadequate communication can rapidly spread through online platforms, causing significant reputational damage. Traditional customer satisfaction measures often have limited managerial value as they combine various service issues into an overall score, which makes it difficult to prioritise improvement initiatives and allocate resources effectively (Barbot & Boubaker, 2020; Bunchongchit & Wattanacharoensil, 2021).

The research examines key dimensions of airline service, including cabin crew service, ground service, seat comfort, food and drink, in-flight entertainment, value for money and Wi-Fi connectivity. The proposed index combines complaint frequency, customer sentiment and expert-based risk weighting to enable managers to identify, prioritise and address the service deficiencies that contribute most significantly to reputational deterioration (Czerny & Lang, 2021; Forsyth, 2021).

2. Literature Review

A company's reputation is always dynamic as there are numerous internal and external factors that influence it. In the case of airlines, these factors are comparable to their main service and how the company behaves (Bischoff, López Manuel & Vázquez Vicente, 2025). These elements are central to the customer

experience and form the absolute baseline for a positive reputation. Safety and security are the most important issues, forming the basis of trust between airlines and passengers (Otwane & Waithaka, 2025). Even minor security lapses or a lack of transparent maintenance data can have enormous repercussions for an airline's reputation. Passengers rely on airlines to keep them safe, so a loss of trust in this regard has an instant negative effect (Al-Sahali & Al-Adeem, 2024). Operational reliability is crucial to maintaining the airline's core promise to deliver passengers on time (Tam, Suki & Liew, 2022).

The main reasons for customer complaints and dissatisfaction are flight delays, cancellations and missed connections. These issues undermine people's perception of the airline's reliability, and people have become more concerned with punctuality and adherence to schedules. Service quality encompasses all aspects of a passenger's experience (Belton & Stewart, 2002). This includes the behaviour of staff and how they are trained, including both ground and cabin crew. Passengers are satisfied if the seats are comfortable, the plane is clean, the food is good and there is a good selection of entertainment. It is also important to handle baggage safely and solve problems quickly and empathetically (Lippitt et al., 2023).

The value proposition and pricing refers to passengers' overall judgement of whether the travel experience was worth the price they paid (Chan, 2017). Unlike individual service attributes, it considers both tangible and intangible factors, such as ticket cost, comfort, punctuality, staff behaviour, baggage policies, food quality, entertainment, flexibility and disruption management. In airline reputation management, value for money is particularly influential as it links customer experience to perceptions of fairness. Research based on airline review data indicates a strong association between value for money and satisfaction, intention to recommend, and customer loyalty. It is also often influenced by a combination of service attributes, such as seat comfort, staff service, food and entertainment (Atalık, Bakır & Akan, 2019; Nghiêm-Phú, 2019).

Seat comfort is one of the most important aspects of the quality of airline service because it directly affects passengers' physical experience during the flight. As travellers must remain seated for extended periods in a confined space, aspects such as legroom, seat width, recline, cushioning, cabin ergonomics and personal space are key indicators of service quality. From a corporate reputation perspective, seat comfort is a visible indicator of whether an airline prioritises passenger well-being or merely provides transportation. Research based on passenger reviews shows that, particularly in economy class where space restrictions are more noticeable, seat comfort is often assessed alongside value for money and overall satisfaction (Nghiêm-Phú, 2019; Park et al., 2020).

The service provided by cabin staff represents the human side of the airline experience, playing a major role in shaping passengers' perceptions of professionalism, safety, empathy and responsiveness. Unlike physical service features, the performance of cabin crew is judged through direct interaction with passengers, including greetings, communication, attentiveness, problem solving, conflict management and attitude throughout the flight. This factor is particularly important in terms of reputation management because passengers often see staff behaviour as a reflection of an airline's values and organisational culture. Studies on airline service quality have shown that dimensions of service related to staff are strongly linked to customer satisfaction, trust and loyalty. Conversely, poor staff behaviour can generate negative online reviews and word-of-mouth publicity (Song et al., 2019; Park et al., 2020).

Ground services encompass all activities that occur before and after the flight, including check-in, baggage handling, boarding, transfer assistance, gate communication, disruption management and arrival procedures. While the flight itself is the core product, passengers often form strong impressions even before they board the aircraft, so ground services are an important part of the overall travel experience. Dissatisfaction often begins on the ground due to long queues, unclear instructions, poor communication, lost baggage or inefficient boarding processes. Research suggests that poor performance in areas such as check-in, boarding and customer service can lead to strongly negative evaluations (Park et al., 2020). Ground service is closely linked to corporate reputation because it reflects reliability and organisational competence. While passengers may tolerate limited meal options or basic entertainment, they are generally less forgiving of missed connections, baggage issues or inadequate communication during delays. Ground services also influence perceptions of value for money, as travellers consider whether their entire journey was smooth, predictable and fairly managed (Nghiem-Phú, 2019).

The quality of food and beverages served on a flight can influence passengers' perceptions of hospitality, care and service. Although meals are rarely the main reason for choosing an airline, they can leave a lasting impression as passengers have limited alternatives during the flight. The perceived quality of food and drink depends on factors such as taste, freshness, presentation, cultural suitability, dietary options, portion size and whether the service matches what was promised. In research on the quality of airline services, food and beverages are commonly considered to be a product attribute on board that affects passenger satisfaction and perceived value, particularly on medium- and long-haul flights (Atalık, Bakır & Akan, 2019; Park et al., 2020).

In-flight entertainment plays a crucial role in the passenger experience, helping travellers to manage

boredom and stress and to perceive the passage of time more positively during a flight. This is particularly evident on long-haul routes, family trips and journeys where passengers expect a more comprehensive in-flight experience. It may include seatback screens, streaming services, films, music, games, information about the destination, content for children, and charging facilities for personal devices. Research based on passenger reviews has identified in-flight entertainment as a service attribute that can positively influence satisfaction when delivered effectively. This is mainly because it adds enjoyment to the basic transportation function (Park et al., 2020). It also contributes to perceptions of value for money, as passengers often evaluate whether the overall on-board experience justifies the ticket price. High-quality entertainment can enhance a company's reputation by making travel more enjoyable and engaging (Srivastava & Shainesh, 2018).

The research examines the differences between traditional expert ratings and modern methods. While traditional average ratings are useful, they do not always distinguish between minor service issues and factors that cause more significant reputational damage. For example, poor food quality and poor cancellation handling may both reduce satisfaction, but the reputational consequences are not equal. Issues such as cancellation handling, baggage failure or poor ground service can result in public complaints, social media attention and long-term distrust. Therefore, this study employs two complementary approaches. First, a Reputational Damage Index (RDI) based on expert opinion is calculated to estimate the severity and contribution of each service factor to total reputational damage (Seo & Park, 2017). The second approach involves applying logistic regression to test which service factors statistically influence the probability of a positive airline recommendation. Together, these two methods enable a managerial and statistical evaluation of reputational risk.

The study is based on the assumption that not all service failures damage airline reputation equally. Some service factors may only create limited dissatisfaction, while others directly impact trust, reliability, perceived fairness and passengers' willingness to recommend the airline. The research hypotheses were developed to test whether different service dimensions have different levels of impact on airline reputation.

The main dependent variable in this study is airline reputation, which can be evaluated using client recommendations. Recommendation is used as the key reputational outcome because it reflects whether passengers are willing to express positive support for the airline following their travel experience. If passengers do not recommend the airline, this indicates dissatisfaction and reputational damage. Additionally, the Reputational Damage Index is employed to assess

the relative contribution of each service factor to total reputational risk.

Based on this logic, the general research hypotheses are formulated as follows:

H1. Airline service factors differ in terms of their level of impact on the damage to an airline's reputation.

H2. Value for money has a positive effect on whether passengers recommend the airline.

H3. Ground service has a positive effect on whether passengers recommend the airline.

H4. The service provided by cabin staff has a positive effect on whether passengers recommend the airline.

H5. The food and beverages offered by the airline have a positive effect on whether passengers recommend the airline to others.

H6. Passengers are more likely to recommend the airline if they find the seats comfortable.

H7. In-flight entertainment has a positive effect on whether passengers recommend the airline.

3. Methodology

This study's methodology was designed to evaluate the contribution of different airline service factors to reputational damage. The analysis was based on customer review and rating data for British Airways. The dataset contained 3,290 passenger reviews, including both numerical service ratings and a binary recommendation variable. The recommendation variable was used as the main reputational outcome because it directly reflects whether passengers would support the airline following their experience. In this context, a positive recommendation indicates approval, while a negative recommendation suggests damage to the airline's reputation (Pires & Trez, 2018).

The study focused on six core service factors: seat comfort, cabin staff service, ground service, food and beverages, in-flight entertainment, and value for money. These factors were selected as they represent the main dimensions of the passenger experience and are consistently present in the review data (Liu et al., 2025). Although seat comfort was reported in the descriptive analysis, it was not included in the final comparative modelling due to the substantially smaller number of observations compared with the other factors. This decision was made to ensure consistency between the Reputational Damage Index, which is based on expert opinion, and the logistic regression model.

The empirical procedure consisted of five main stages. Firstly, descriptive statistics were calculated to provide an initial overview of the service ratings. Secondly, a correlation analysis was performed to examine the associations between service factors and airline recommendation. Thirdly, a Reputational Damage Index based on expert opinion was constructed to estimate the relative reputational damage caused by each

service factor. Fourthly, logistic regression was applied to evaluate the statistical effect of each service factor on the probability of a positive recommendation. Fifthly, the RDI and logistic regression results were compared to identify the most important reputational risk factors.

The first stage of the analysis included the number of observations, the mean and median ratings, and the standard deviation.

In the second stage, a correlation analysis was performed to examine the relationship between service factors and the recommendation variable.

The correlation coefficient (r) indicates the strength and direction of the relationship between two variables. The p -value is used to assess statistical significance (Field, 2018; Hair, Black, Babin & Anderson, 2019).

The third stage of the methodology involved constructing an expert-based Reputational Damage Index (RDI). The purpose of the RDI was to measure the contribution of each service factor to total reputational damage on a relative basis. This method was employed because not all service failures have the same reputational consequences. Some failures are relatively easy to recover from, while others directly impact trust, reliability, public image and customer willingness to recommend the airline (Belton & Stewart, 2002).

The RDI is calculated by combining three components: Severity Weight, Complaint Volume and Polarity Score. The scale ranged from 1.0 to 5.0, with higher values indicating stronger reputational severity (Parasuraman et al., 1988; Zeithaml, Bitner & Gremler, 2018). The formula is as follows:

$$RDS_i = WS_i \times VC_i \times PS_i$$

where:

RDS_i is the reputational damage score for service factor (i),

WS_i is the expert-derived severity weight,

VC_i is the complaint volume coefficient, and

PS_i is the polarity score.

The total Reputational Damage Index was calculated as the sum of all reputational damage scores:

$$RDI = \sum_{i=1}^n RDS_i$$

Ranking the service factors according to their share of total reputational damage made it possible to determine the percentage contribution of each factor to total RDI.

The fourth stage of the methodology involved applying logistic regression. This method was used to evaluate the statistical effect of each service factor on the probability of a positive airline recommendation (Pang & Lee, 2008). Logistic regression was appropriate because the dependent variable was binary, with two possible outcomes: 'yes' and 'no'. The 'no' category was used as the reference category, while the 'yes' category was the target (Menard, 2002).

The model can be expressed as follows:

$$\begin{aligned} & \text{logit}(P(Y_i = 1)) \\ &= \beta_0 + \beta_1 \text{Seat Comfort}_i + \beta_2 \text{Cabin Staff Service}_i \\ &+ \beta_3 \text{Ground Service}_i + \beta_4 \text{Food and Beverages}_i \\ &+ \beta_5 \text{In-flight Entertainment}_i + \beta_6 \text{Value for Money}_i + \varepsilon_i \end{aligned}$$

where:

$Y_i = 1$ if passenger (i) recommends the airline, and
 $Y_i = 0$ if passenger (i) does not recommend the airline.

The coefficient β shows the change in the log-odds of positive recommendation associated with a one-point increase in the corresponding service rating (Hosmer, Lemeshow & Sturdivant, 2013). Since log-odds coefficients are not always intuitive, odds ratios were calculated by exponentiating each coefficient:

$$\text{Odds Ratio}_i = e^{\beta_i^2}$$

According to Liu (2012), an odds ratio greater than 1 indicates that higher ratings in a service factor increase the odds of recommendation. An odds ratio close to 1 indicates a very limited effect. Statistical significance was evaluated using p-values, with $p < 0.05$ used as the significance threshold (Belton & Stewart, 2002).

The logistic regression model was not used to calculate the RDI directly.

The expert-based RDI measures reputational damage based on severity, volume of complaints, and polarity. Logistic regression quantifies the statistical impact of service ratings on recommendations.

The final methodological step involved comparing the results of the expert-based RDI and logistic regression. This comparison was used to determine whether factors causing the greatest reputational damage also had the strongest statistical impact on recommendations. This enabled the study to distinguish between strategic reputational severity and individual recommendation behaviour.

If a factor had a high RDI contribution and a significant logistic regression effect, it was considered a primary reputational risk factor. If a factor had a high RDI contribution but no significant regression effect, it was considered a reputationally relevant factor that could cause damage, but which does not independently predict recommendations when other factors are taken into account. Similarly, if a factor had a low RDI contribution but a significant regression effect, it was considered to have lower strategic severity,

yet still have a measurable influence on passenger recommendations.

This combined approach strengthens the analysis by avoiding reliance on a single method. Expert evaluation provides managerial and reputational insights, while logistic regression offers statistical validation. Consequently, the methodology provides a more comprehensive evaluation of the impact of airline service factors on reputation and customer recommendations.

4. Results

An empirical analysis was conducted to evaluate the contribution of different airline service factors to reputational damage. The case of British Airways clearly illustrates this issue, as the overall recommendation rate in the analysed dataset is relatively low. Of the 3,290 customer reviews analysed, only 38.72% of passengers said they would recommend the airline. This suggests that more than six out of ten passengers would not recommend British Airways to others. From a reputation management perspective, such a result cannot be dismissed as mere dissatisfaction. It indicates a broader reputational concern because recommendations reflect not only personal satisfaction after one flight, but also customers' willingness to publicly associate themselves with the airline in a positive way.

The descriptive results show that cabin staff service has the highest mean rating, at 3.23. This suggests that direct interaction with cabin crew remains British Airways' strongest service area. It also indicates that the airline has a positive reputation for human service interaction, even when other service areas perform more weakly. However, all other factors with a high number of reviews are below the neutral midpoint of 3.0. This is important because the rating scale ranges from 1 to 5, and values below 3.0 indicate significant dissatisfaction (see Table 1).

While some passengers provide positive evaluations, many others give very low scores.

The relationships between service ratings and recommendations were examined before calculating the Reputational Damage Index. Table 2 shows the correlation between the main service factors and the recommendation variable.

Table 1
Descriptive Statistics for Core Service Factors (Traveller Ratings)

Service factor	Review count (N)	Mean rating	Median rating	Standard deviation
Seat Comfort	3,176	2.83	3.0	1.36
Cabin Staff Service	3,165	3.23	3.0	1.49
Ground Service	2,812	2.80	3.0	1.46
Food and Beverages	2,911	2.68	3.0	1.44
In-flight Entertainment	2,171	2.65	3.0	1.39
Value for Money	3,290	2.64	3.0	1.46

Table 2

Cross-Factor Correlation Matrix and Association with Recommendation

First variable	Second variable	Correlation value	p-value
Seat Comfort	Cabin Staff Service	0.635	0.0
Seat Comfort	Ground Service	0.383	0.0
Seat Comfort	Food & Beverages	0.604	0.0
Seat Comfort	In-flight Entertainment	0.345	0.0
Seat Comfort	Value For Money	0.694	0.0
Seat Comfort	Recommended	0.652	0.0
Cabin Staff Service	Ground Service	0.379	0.0
Cabin Staff Service	Food & Beverages	0.699	0.0
Cabin Staff Service	In-flight Entertainment	0.308	0.0
Cabin Staff Service	Value For Money	0.664	0.0
Cabin Staff Service	Recommended	0.656	0.0
Ground Service	Food & Beverages	0.322	0.0
Ground Service	In-flight Entertainment	0.101	0.0
Ground Service	Value For Money	0.413	0.0
Ground Service	Recommended	0.389	0.0
Food & Beverages	In-flight Entertainment	0.456	0.0
Food & Beverages	Value For Money	0.678	0.0
Food & Beverages	Recommended	0.659	0.0
In-flight Entertainment	Value For Money	0.334	0.0
In-flight Entertainment	Recommended	0.282	0.0
Value For Money	Recommended	0.789	0.0

The correlation results show that value for money has the strongest link with recommendations (coefficient 0.789), followed by food and beverages, cabin staff service and seat comfort. Ground service has a moderate association, while in-flight entertainment has the weakest association. Airline reputation emerges from connected service experiences, particularly those relating to perceived value and comfort.

The next step involved using the expert-based RDI method. Table 3 shows the severity weights derived by the experts and applied in the RDI calculation.

Ground services receive the highest severity weighting of 5.0 because failures in this area directly impact the fundamental promise of air travel: reliable transportation from one destination to another. Ground

services include check-in, boarding, baggage handling, handling flight cancellations, and providing customer support before and after the flight. These services are closely connected with operational reliability and crisis response. Consequently, negative experiences in this area can damage a company's reputation more severely than dissatisfaction with ancillary services.

'Value for money' receives a severity weighting of 4.5 because it reflects the customer's perception of fairness. If passengers feel that they are not getting their money's worth from the airline, it becomes more than just a service issue. It becomes a question of trust. Cabin staff service receives a weighting of 4.0 because staff behaviour is highly visible and evokes strong emotions. A single rude or careless interaction

Table 3

Expert-Derived Reputational Severity Weights (SW)

Service Factor	Rationale	SW
Ground Service	It encompasses operational failures such as delays, baggage issues, handling cancellations, and airport services. It has a direct link to reliability and crisis management. There is a high level of regulatory and media risk.	5.0
Value for Money	It is linked to perceived corporate exploitation, unfair pricing or dishonesty. Such failures can damage long-term trust and lead to negative publicity.	4.5
Cabin Staff Service	It represents human interaction, empathy and service recovery. Failure can result in emotional complaints and viral incidents. It is high in the assurance and empathy dimensions.	4.0
Seat Comfort	It reflects the core promise of product quality. Although systemic failure can affect many passengers, reputational damage is usually less emotional than operational failures.	3.0
In-flight Entertainment	Failure of an ancillary service. This has low emotional impact and is usually recoverable.	2.0
Food and Beverages	This is a subjective service area with lower strategic severity. It is often easier to improve and can be partly substituted by customers.	1.0

can greatly impact how passengers perceive the airline. Seat comfort receives a weight of 3.0 because, although it is part of the core physical product, it is less directly connected with crisis management. In-flight entertainment/food and beverages receive lower weights because they are ancillary and more easily recoverable service elements.

Expert-based RDI results show that value for money is the largest contributor to reputational damage, accounting for 28.6% of the total. This is an important finding because although 'value for money' does not have the highest severity weight, it combines a high complaint volume with a strong polarity score. In other words, passengers evaluate this factor not only negatively, but frequently and with high intensity. This confirms that perceived value is one of the most sensitive areas of airline reputation.

Ground service is the second-largest contributor to reputational damage, accounting for 25.6% of the total RDI. This is primarily due to its high severity weight of 5.0 and complaints relating to operational failures. Together, value for money and ground service account for 54.2% of total reputational damage, demonstrating that reputational risk is concentrated in two key areas: perceived value and operational service reliability.

Seat comfort accounts for 14.5% of the total RDI, indicating that physical comfort is still important for an airline's reputation, although it is not the most important factor. Cabin staff service accounts for 13.1%. Despite its high severity weighting, its lower complaint volume and polarity score reduce its overall contribution, which is consistent with its relatively high mean rating. In-flight entertainment contributes 12.0%, a relatively high proportion for an ancillary service, mainly due to complaint volume and polarity. Food and beverages

contribute only 6.1%, as the lower severity weight assigned by experts suggests that catering problems are easier to recover from and are less directly linked to corporate reputation crises.

The rating distribution confirms these findings. 'Value for money' shows a strong concentration of negative ratings, with nearly half of passengers giving scores of 1 or 2. Substantial dissatisfaction is also evident in 'ground service', with 42.8% of passengers giving ratings of 1 or 2. Cabin staff service presents a less negative pattern, with only 18.2% giving a rating of 1 and 37.3% giving a rating of 4 or 5.

The correlation results suggest spillover effects between service factors. There is a moderate association between 'ground service' and 'value for money' and recommendations, meaning that operational failures can undermine broader perceptions of price fairness. A temporal comparison also shows a deterioration in major risk areas. Ground service declined from 2.95 to 2.68, and value for money fell from 2.71 to 2.58. Furthermore, segmentation analysis shows that dissatisfaction is structural, as all traveller groups report low recommendation rates, although their main complaints differ.

After the expert-based RDI assessment, logistic regression was used as a second method.

The results of the logistic regression analysis show that value for money has the strongest statistically significant effect on airline recommendations. Its coefficient is 1.484 ($p < 0.001$) and the odds ratio is 4.41. This means that a one-point increase in value for money increases the odds of recommending the airline by approximately 4.41. It is the most critical factor. If passengers feel that the service does not justify the price, the probability of a negative recommendation increases sharply.

Table 4

Reputational Damage Index Factor Calculation and Contribution Based on Expert Evaluation

Factor	SW (Severity)	VC (Volume)	PS (Polarity)	RDS (Damage Score)	% of Total RDI
Value for Money	4.5	0.497	2.364	5.277	28.6%
Ground Service	5.0	0.428	2.204	4.717	25.6%
Seat Comfort	3.0	0.411	2.167	2.671	14.5%
Cabin Staff Service	4.0	0.342	1.771	2.423	13.1%
In-flight Entertainment	2.0	0.472	2.345	2.219	12.0%
Food and Beverages	1.0	0.486	2.322	1.128	6.1%

Table 5

Logistic Regression Results for the Effect of Service Factors on Airline Recommendation

Factor	Coefficient	p-value	Std. error	z-score
Seat Comfort	0.025	0.327	0.255	0.980
Cabin Staff Service	0.587	0.012	0.234	2.507
Ground Service	0.724	0.001	0.210	3.430
Food & Beverages	0.527	0.017	0.224	2.214
In-flight Entertainment	0.020	0.931	0.212	-0.122
Value For Money	1.484	0.000	0.270	5.265
Constant	-11.359	0.000	1.379	-8.236

Ground service is the second strongest significant predictor. Its coefficient is 0.724 ($p = 0.001$) and the odds ratio is 2.06. This means that a one-point increase in Ground Service increases the odds of recommendation by around 2.06 times. This finding aligns with the expert-based RDI, in which 'ground service' is also one of the two primary sources of reputational damage.

The cabin staff's service also has a statistically significant positive effect on recommendations. Poor service from cabin staff damages the airline's reputation because passengers directly associate staff behaviour with professionalism, empathy and reliability. Even when operational problems occur, positive staff interaction can mitigate negative perceptions, whereas negative staff interaction can exacerbate dissatisfaction.

The food and beverage sector also has a significant effect. Interestingly, the expert-based RDI gives food and beverages the lowest severity weight. The difference between the methods does not constitute a contradiction. This suggests that food and beverages may not be a high-severity strategic reputational crisis factor, but they still influence passengers' individual decision-making.

Although 'seat comfort' has a positive coefficient, it is not statistically significant in the logistic regression model. The model does not provide reliable evidence that seat comfort significantly influences recommendations when other service factors are taken into account. In the expert-based RDI, however, Seat Comfort still accounts for 14.5% of total damage due to its high complaint volume and reputational severity. However, in the regression model, it does not independently predict recommendations when other factors are taken into account.

In-flight entertainment is also not statistically significant. Its coefficient is 0.020 ($p = 0.931$) and the odds ratio is 1.02. This suggests that in-flight entertainment has no measurable independent effect on recommendations in this model. While it may still be important to some passengers, particularly on long-haul routes, the general dataset does not show it to be a significant predictor of recommendations.

Table 6 compares the results of the two methods. This comparison does not treat expert-based RDI

contribution and odds ratios as the same measurement. They represent different analytical perspectives. RDI contribution shows the proportion of total reputational damage based on severity, volume and polarity. The odds ratio shows the statistical influence of a factor on the probability of recommendation.

The expert-based RDI revealed that the majority of reputational damage was concentrated in the 'value for money' and 'ground service' categories. 'Value for money' accounted for 28.6% of the total RDI score, while 'ground service' accounted for 25.6%. This indicates that reputational risk is not evenly distributed across all service factors.

The results of the logistic regression analysis also support this conclusion. The model showed that not all service factors had a statistically significant effect on passengers' willingness to recommend the airline. 'Value for money', 'ground service', 'cabin staff service' and 'food and beverages' had significant positive effects on recommendations. Seat comfort and in-flight entertainment did not have a statistically significant effect in the regression model. Any damage to the airline's reputation is factor-specific and should not be evaluated based on general satisfaction averages alone.

In the logistic regression model, value for money had the strongest statistically significant effect. This factor is the most critical. It was also the largest contributor to total reputational damage.

'Ground service' was found to have a statistically significant positive effect, with a coefficient of 0.724 and an odds ratio of 2.06. It was also the second-largest contributor to the expert-based RDI. Poor ground service can damage the perception of airline reliability and reduce trust in the airline as a whole.

Cabin staff service had a statistically significant coefficient of 0.587 and an odds ratio of 1.80. Although Cabin Staff Service was not the largest contributor to the RDI, it remained an important reputational factor.

The food and beverages sector had a statistically significant coefficient of 0.527 and an odds ratio of 1.69. However, the expert-based RDI showed that food and beverages contributed only 6.1% to total reputational damage. This difference between the two methods is significant. It suggests that food and beverages have

Table 6

Comparison of Expert-Based RDI Results and Logistic Regression Results

Factor	Expert-Based RDI Contribution	Logistic Regression Odds Ratio	Interpretation
Value for Money	28.6%	4.41	The strongest factor in both methods.
Ground Service	25.6%	2.06	The second strongest factor in both methods.
Seat Comfort	14.5%	1.03	This is relevant in expert RDI but not significant in regression.
Cabin Staff Service	13.1%	1.80	Moderate RDI contribution and a significant regression effect.
In-flight Entertainment	12.0%	1.02	Moderate expert RDI contribution with no significant regression effect.
Food and Beverages	6.1%	1.69	Although the severity is low, there is a significant individual effect on the recommendation.

a measurable effect on individual recommendation behaviour, but are not one of the most severe strategic reputational risk factors.

Neither 'seat comfort' nor 'in-flight entertainment' affect passengers' willingness to recommend the airline. The logistic regression coefficient is close to zero and is not statistically significant. However, the expert-based RDI showed that in-flight entertainment contributed 12.0% of total reputational damage, meaning that passengers may still complain about this factor.

The comparison shows a high degree of convergence between the two methods for the two most important factors. 'Value for money' is the largest contributor to RDI and the strongest predictor in logistic regression. 'Ground service' is the second-largest contributor to RDI and the second-strongest significant predictor in logistic regression. This convergence strengthens the conclusion that perceived value and ground-level operational service are the main reputational risk priorities for British Airways.

The two methods provide more differentiated results for the other factors. Cabin staff service is significant in logistic regression and has a moderate RDI contribution. This means that it is important both statistically and in terms of management, even though it is not the main source of damage. 'Food and beverages' is significant in logistic regression, but has a low RDI contribution. This suggests that it influences recommendation behaviour, but its strategic reputational severity is lower. 'Seat comfort' and 'in-flight entertainment' contribute to RDI, but are not statistically significant in logistic regression. This suggests that they may cause dissatisfaction and reputational damage, but they do not independently predict recommendations when other variables are considered.

5. Conclusions

This study evaluates the influence of various airline service factors on reputational damage. Reputation was primarily measured through passengers' willingness to recommend the airline. An additional managerial tool, the expert-based Reputational Damage Index, was used to estimate the relative severity of each service factor (Song, Ruan & Park, 2019). The results demonstrate that not all service dimensions affect airline reputation equally (Agarwal & Gowda, 2021).

The results support the research hypothesis that different service factors do not affect airline reputation equally. Reputation damage is mainly concentrated in the 'value for money' and 'ground service' categories. These factors exhibit high complaint intensity, managerial severity and a strong statistical influence on recommendations. This finding is important for airline managers because it suggests that reputational recovery should not focus on improving all service factors equally. Instead, priority should be given to service areas where

failures have the greatest impact on trust, perceptions of fairness, and willingness to recommend.

The results also show that airline reputation is built through operational and emotional factors. Ground services represent operational reliability, with passengers expecting flights, baggage handling, check-in, boarding and disruption management to function smoothly. 'Value for money' represents fairness and trust: passengers expect the airline to justify its prices with an acceptable level of service. Cabin staff service represents human interaction: passengers evaluate whether the airline treats them with respect and empathy. The effects of 'food and beverages', 'seat comfort' and 'in-flight entertainment' are more limited or conditional, but they still form part of the total passenger experience.

From a managerial perspective, reputational damage management should be organised according to severity and statistical impact. British Airways should first address value for money and ground service, as these factors cause the most reputational damage using both methods. Improvements in pricing transparency, compensation communication, handling disruptions, baggage reliability, organising boarding and providing airport-level customer support may have the strongest positive impact on the company's reputation. Cabin staff service should be maintained as a reputational asset, while food and beverages can be improved to support passenger satisfaction. Seat comfort and in-flight entertainment should not be ignored, but should be treated as secondary priorities unless specific route or segment analysis shows a greater impact.

The results show that the hypotheses were only partially supported. H1, H2, H3, H4 and H5 were supported. However, H6 and H7 were not supported by logistic regression, despite these factors still contributing to the expert-based RDI. It is important to note that the two methods measure different aspects of reputational damage. The RDI captures reputational severity, complaint volume and negative polarity, whereas logistic regression captures the statistical effect of service ratings on recommendations. Therefore, combining both methods provides a more balanced understanding of airline reputation.

The findings suggest that airlines should prioritise service areas where improvements would have the greatest impact on their reputation. Improving 'value for money' does not necessarily mean reducing prices. It may also involve clearer communication, greater consistency in service delivery, more transparent compensation policies and better alignment between customer expectations and the actual service provided. Improving 'ground service' requires better coordination of airport operations, more reliable baggage handling, a stronger response to disruptions, and more effective communication during delays or cancellations. These changes can reduce reputational damage because they address the factors with which passengers most strongly

associate trust and recommendation (Adelina Tay, 2023).

The main limitation of the study is that it is based on customer review data, which may be more extreme than the average passenger's opinion. Passengers who leave

online reviews may be more dissatisfied or emotionally invested than those who do not. Future studies could also employ text mining methods to identify specific themes relating to disruptions, such as delays, cancellations, baggage issues, refund problems, and staff behaviour.

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