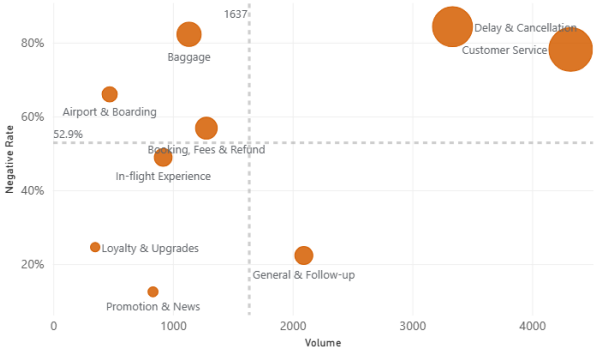
US airline customers on Twitter: what to fix first

Executive brief · 14,375 customer tweets to 6 airlines · 16–24 Feb 2015 · Patch.B

What we found

1. **Service and delays drive the complaints:** Customer Service and Delay & Cancellation make up two thirds of negative tweets (36.5% and 30.3%), and they are the only two topics that are both frequent and mostly negative (78.2% and 84.3%).
2. **Every airline draws more negative than positive tweets:** Net Sentiment Score is below zero for all six, from −68.2 (US Airways) to −4.6 (Virgin America). Among airlines with data on all 7 days, US Airways gets the most negative tweets per passenger (2,165.9 per 1M).
3. **Negative tweets spike when flights go wrong:** Sunday 22 Feb had 2,316 negative tweets (73.4%). Customers say no one responds, delays come without updates, and they doubt weather explanations.



Top right = frequent and mostly negative, fix first · bubble size = negative tweets

What to do (in priority order)

1. Answer customers faster when flights are delayed or cancelled (every airline).
2. Send delay and cancellation updates before customers ask, with the cause and the time of the next update.
3. Fix each airline's own weak spot: United baggage tracking (13.3% of its negative tweets) · Virgin America booking and refunds (18.1%) · US Airways airport process (86.3% negative).
4. Protect In-flight Experience, the topic with the highest share of positive tweets (37.3%).

Key numbers

14,375	62.9%	−46.6	1,158.8	91.7%
Customer tweets	Negative tweets	Net Sentiment Score	Negative tweets per 1M passengers	AI topics matching people

Limits of the data

- 9 days of February 2015 (16 and 24 Feb partial), collected by an unknown method: read it as a pattern, not a full-year picture.
- Tweets to American exist almost only on 22–24 Feb, so American cannot be compared directly.
- About 52% of topics come from AI, matching people on 91.7% (κ 0.90), and some human labels are wrong too: under testing the top two problems hold, while third place can change.
- Passenger numbers are BTS-based estimates and exclude regional partners.

Source: Twitter US Airline Sentiment (Kaggle, CC BY-NC-SA 4.0) · BTS T-100 Market and On-Time Performance, February 2015