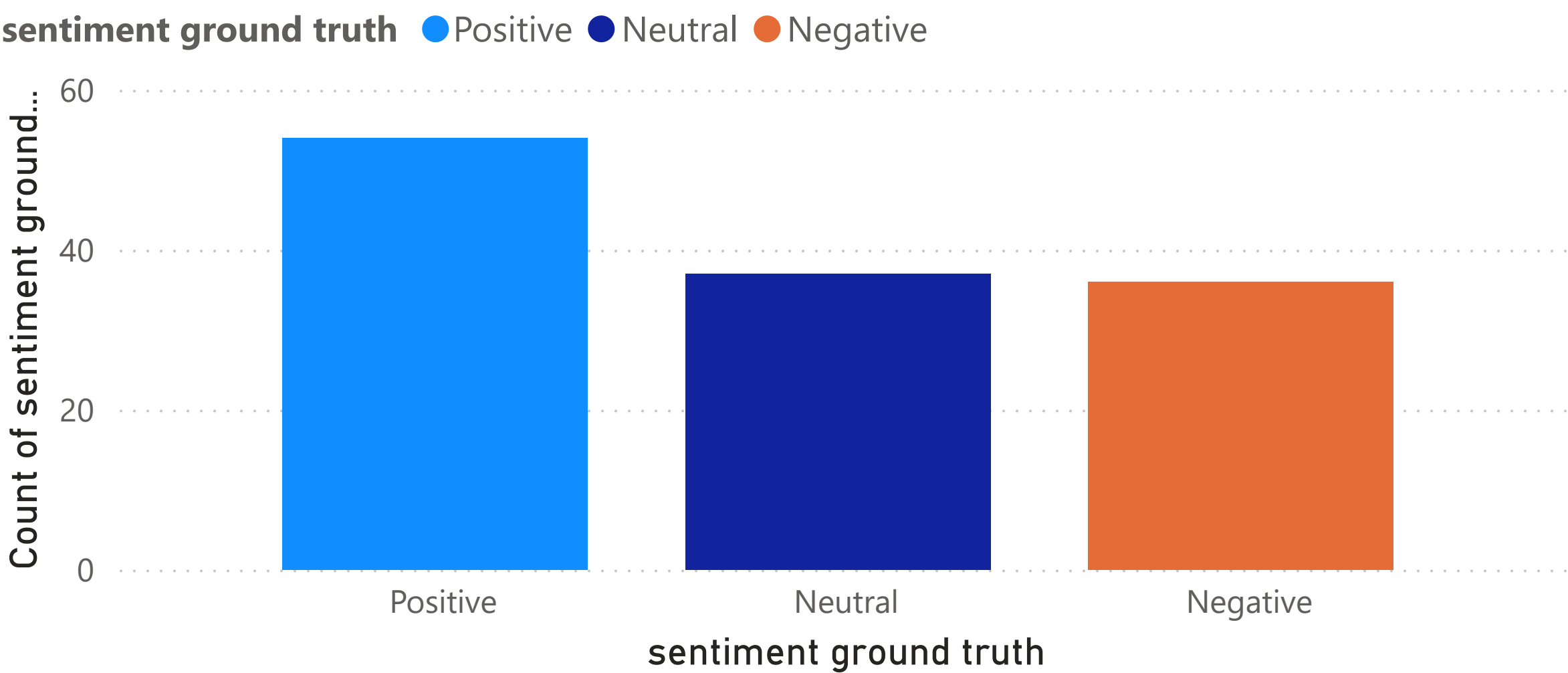
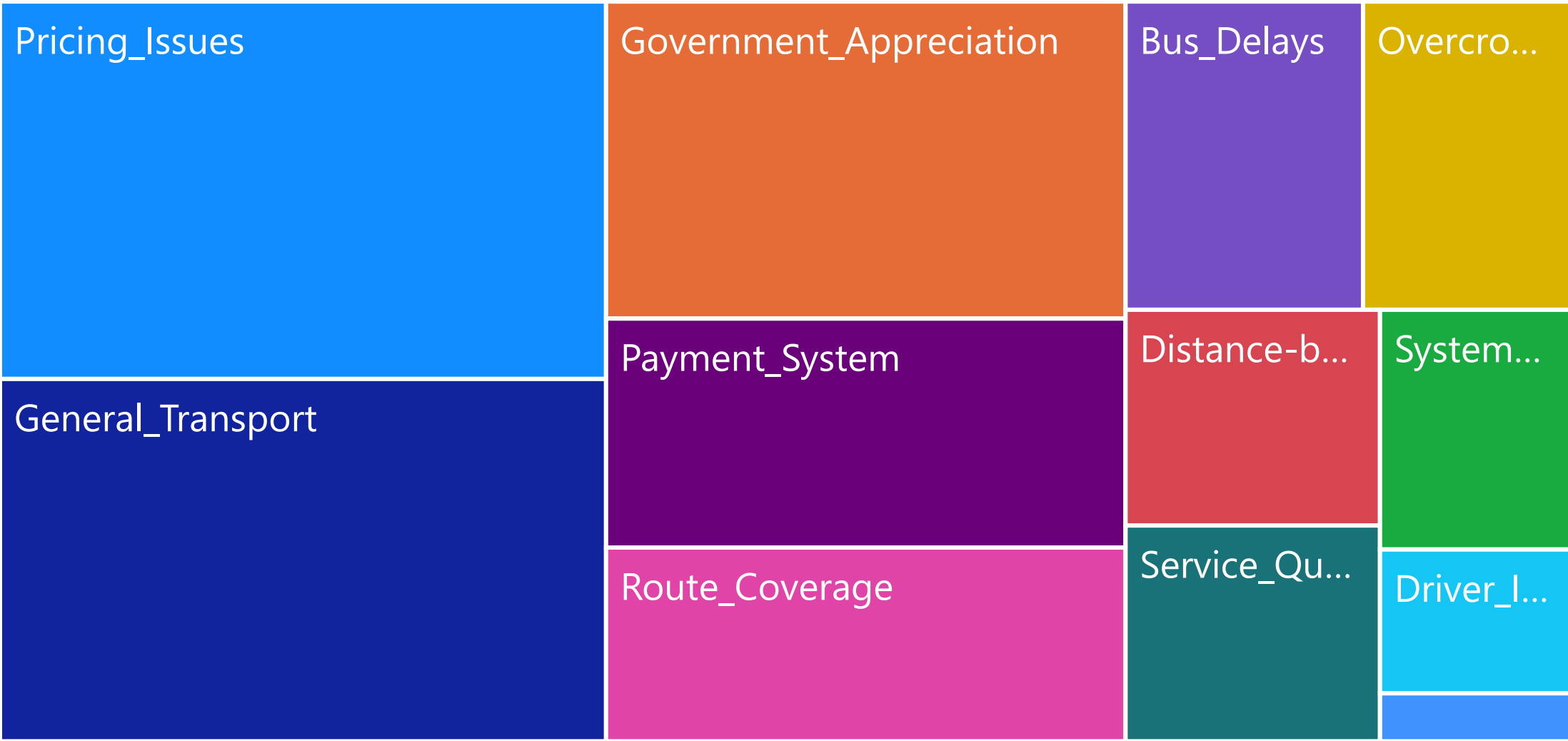


Public Sentiment Analysis of Rwanda's Distance-Based Fare Pricing Model, Source: X

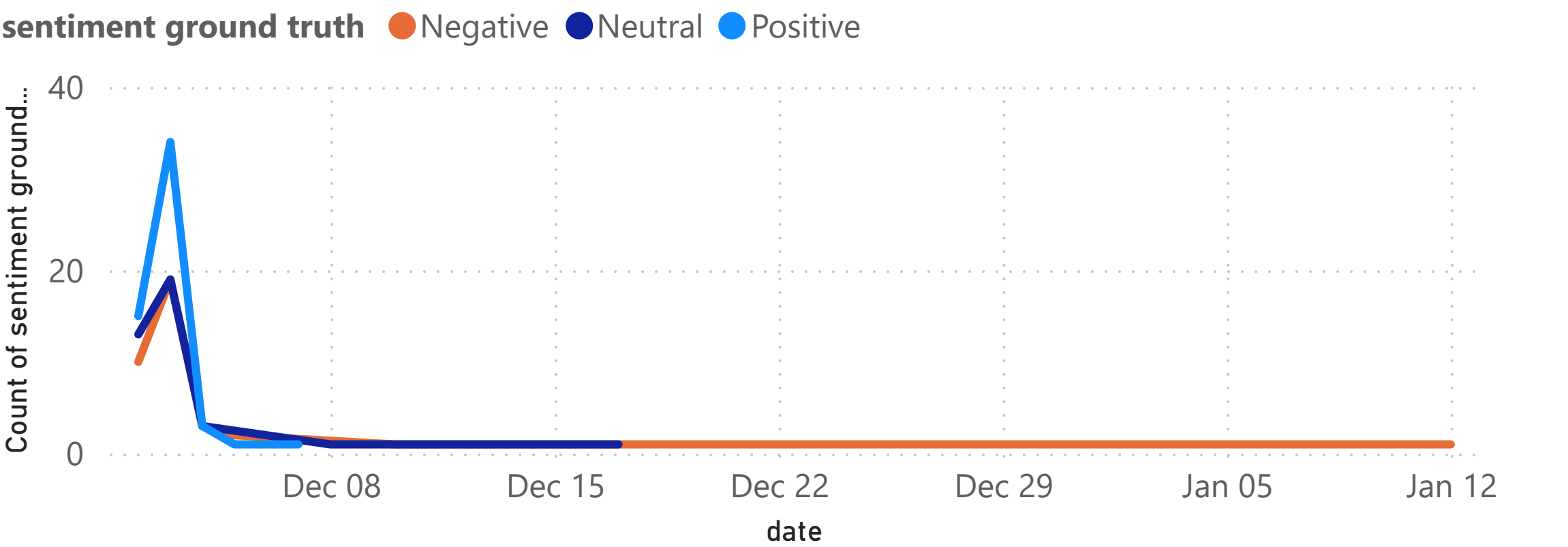
44% percent of the people reacted to RURA's new pricing post are happy with the change.



Mixed Reactions to Distance-Based Pricing: Savings for Some, Concerns for Others



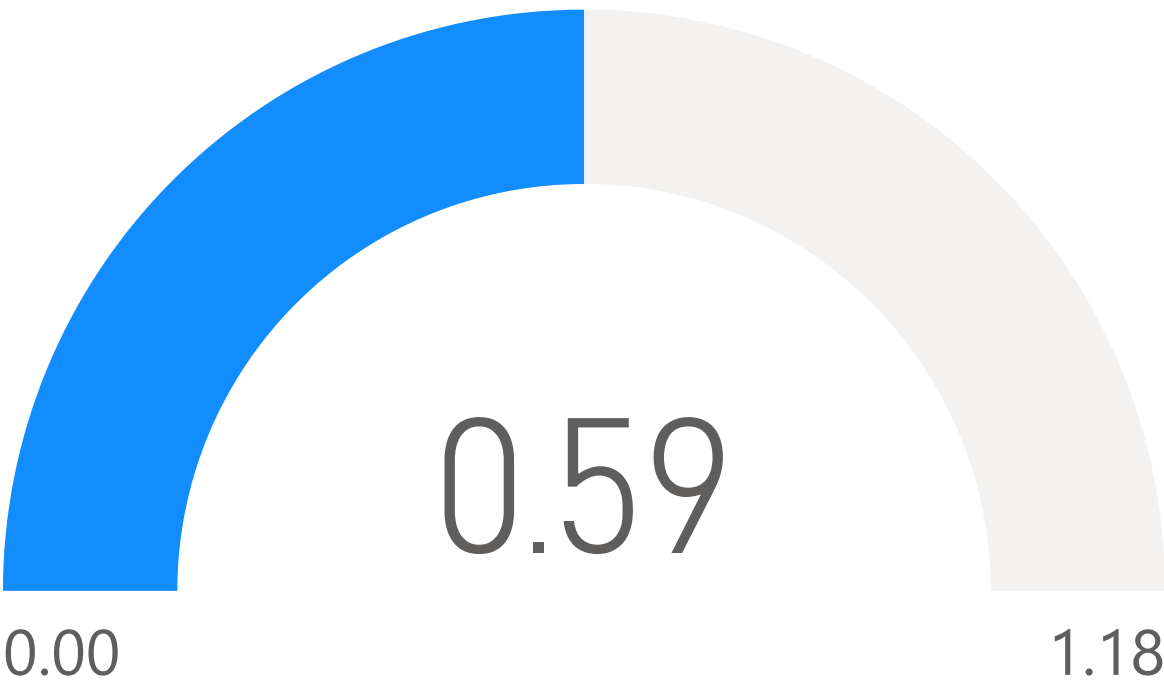
Public Reactions to New Fare Pricing: Initial Concerns Fade Over Time



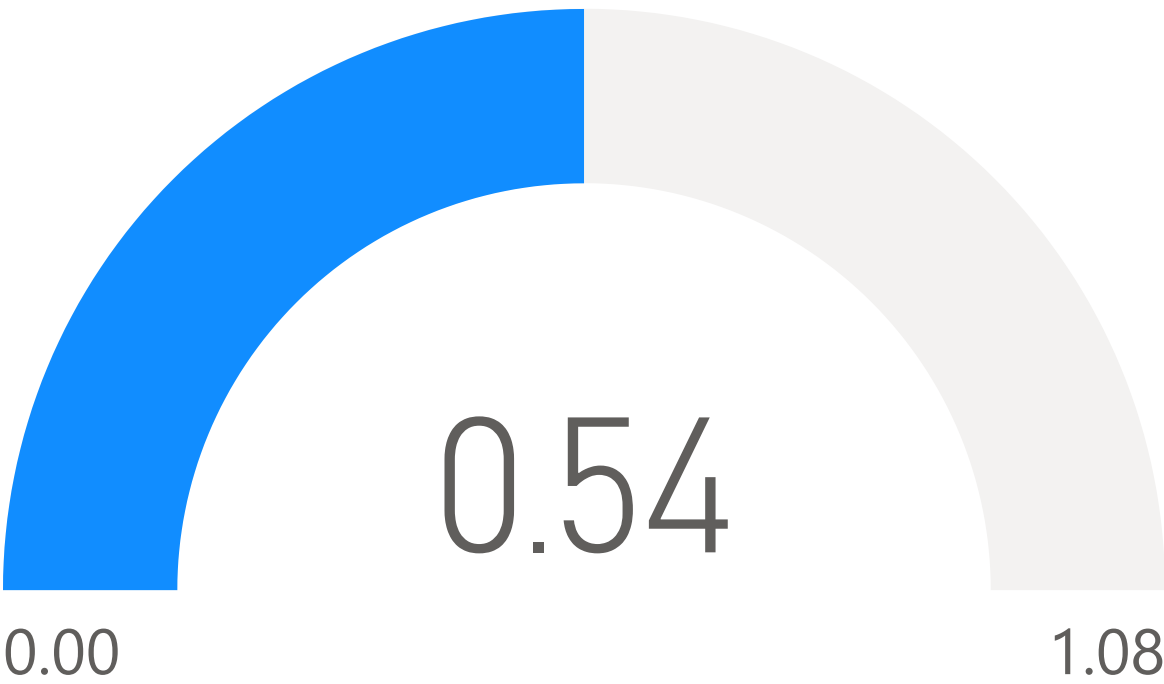
- **Positive vs. Negative Reactions:** About **40% of tweets were positive**, while **60% were negative or neutral**, showing mixed public opinions.
- By understanding public sentiment accurately, policymakers can quickly address concerns, improve communication, and ensure the fare system meets citizen expectations.
- Within the first **five days** of announcing the new distance-based fare pricing model, public reactions were at their peak (Day 3), with **a majority expressing positive sentiment**. However, engagement steadily declined as days passed, suggesting that early concerns may have been driven by a lack of clear information

Sentiment Classification Models: Performance Comparison and Insights

VADER F1 Score



TextBlob F1 Score



textblob_label	vader_label	sentiment ground truth	TextBlob Accuracy	VADER Accuracy
negative	negative	Negative	1.00	1.00
negative	neutral	Neutral		1.00
negative	positive	Negative	1.00	
negative	positive	Positive		1.00
neutral	negative	Negative		1.00
neutral	negative	Neutral	1.00	
neutral	neutral	Neutral	1.00	1.00
neutral	positive	Neutral	1.00	
neutral	positive	Positive		1.00
positive	negative	Negative		1.00
positive	negative	Positive	1.00	
positive	neutral	Neutral		1.00
positive	neutral	Positive	1.00	
Total			0.43	0.53

The analysis used two models (VADER and TextBlob) to classify sentiment. VADER outperformed TextBlob with an **F1 score of 0.59**, making it the better tool for this type of analysis.