

MySQL Database:

```
1 • create database sentiment_analysis_database;
2
3 • CREATE TABLE sentiment_analysis (
4     id INT AUTO_INCREMENT PRIMARY KEY,
5     wav_filename VARCHAR(255),
6     sentence_number INT,
7     sentence_text TEXT,
8     sentiment FLOAT,
9     magnitude FLOAT,
10    transcription_date DATE,
11    transcription_confidence FLOAT,
12    speech_duration_seconds FLOAT
13 );
14
15 • select * from sentiment_analysis;
16
```

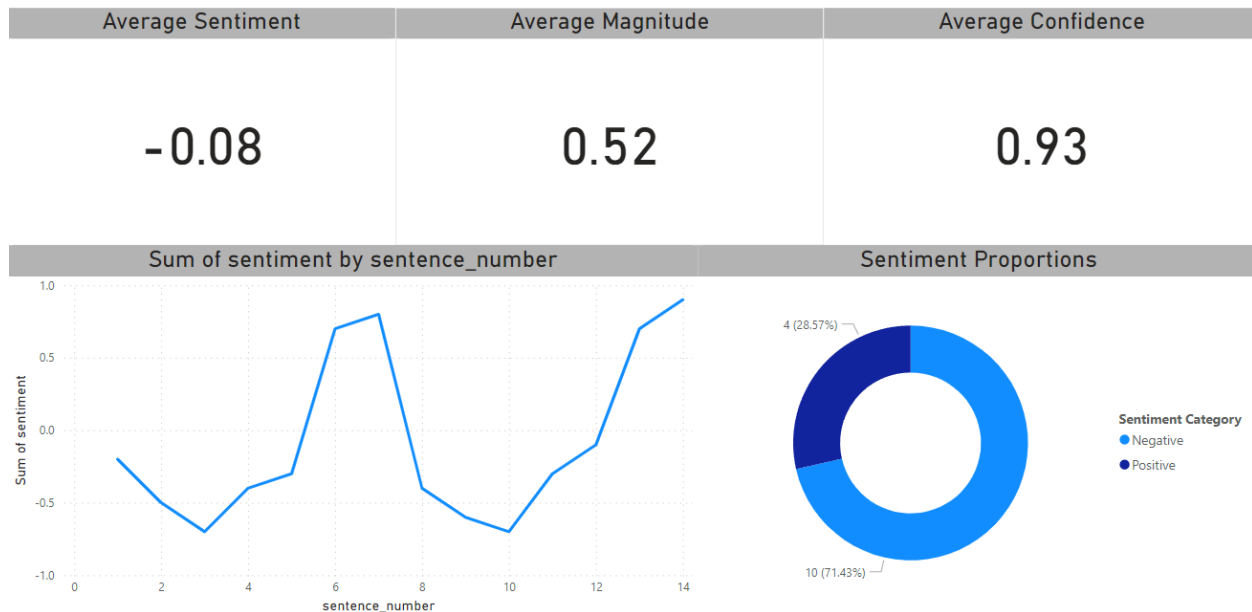
100% 1:15

Result Grid Filter Rows: Search Edit: Export/Import:

	id	wav_filename	sentence_num...	sentence_text	sentiment	magnitude	transcription_d...	transcription_confide...
	1	French Audio	1	telephone consultation with customer service w...	-0.2	0.2	2024-03-04	0.937995
	2	French Audio	2	I would like to speak to a customer service repr...	-0.5	0.5	2024-03-04	0.931844
	3	French Audio	3	check your account I do see additional charges...	-0.7	0.7	2024-03-04	0.934747
	4	French Audio	4	I see and what is the cost of these international...	-0.4	0.4	2024-03-04	0.93382
	5	French Audio	5	would you like to upgrade to this package woul...	-0.3	0.3	2024-03-04	0.933702
	6	French Audio	6	from next month your new package including in...	0.7	0.7	2024-03-04	0.931356
	7	French Audio	7	thus staying in contact with your family abroad...	0.8	0.8	2024-03-04	0.932467
	8	French Audio	8	today I am going to make a video in French ab...	-0.4	0.4	2024-03-04	0.934109
	9	French Audio	9	I'm calling you because I received my tele...	-0.6	0.6	2024-03-04	0.933717
	10	French Audio	10	nationals have you made calls abroad recently...	-0.7	0.7	2024-03-04	0.931428
	11	French Audio	11	where you call it depends on the country where...	-0.3	0.3	2024-03-04	0.93288
	12	French Audio	12	you will have two hours of international calls pe...	-0.1	0.1	2024-03-04	0.932192
	13	French Audio	13	how can I check if I benefit from other services...	0.7	0.7	2024-03-04	0.933728
	14	French Audio	14	I wish you a good day thank you Pascal have a...	0.9	0.9	2024-03-04	0.938556
	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

PowerBI Visualisations:

Sentiment Analysis Visualizations



Interpretations from Visuals:

- Starting with the **Average Sentiment** of -0.08, this hints at a slight skew towards negative feedback overall. But considering it's quite close to zero, the overall sentiment seems to be mixed, with neither positive nor negative feedback overwhelmingly dominating.
- The **Average Magnitude** score sits at 0.52, reflecting a moderate level of emotional expression in the feedback. This tells me that while there's a certain degree of emotion present in the responses, it doesn't reach levels of extreme sentiment, which is quite common in customer feedback scenarios.
- The **Average Confidence** score is pretty high at 0.93, which gives me a lot of faith in the sentiment analysis process. This score suggests that the underlying data, likely the transcriptions from audio or text inputs, has been interpreted by the AI with a high degree of certainty, making the resulting sentiment analysis quite trustworthy.
- The line chart depicting the **Sum of Sentiment by Sentence Number** reveals a fluctuating pattern, indicating a mix of positive and negative sentiments throughout the text. This fluctuation is valuable as it points to the complexity of the feedback, suggesting that certain aspects or moments are received more positively or negatively than others.
- The Sentiment Proportions Donut Chart in our dashboard clearly indicates that 71.43% of the feedback is negative, with only 28.57% positive. This substantial lean towards negative feedback aligns with the average sentiment score and suggests that negative customer experiences are prevalent and need to be addressed. Despite the minority of positive feedback, it's crucial to understand the drivers behind the overwhelming negative sentiment to inform any necessary improvements.