Financial Sentiment Analysis Task

Annotation Guidelines (Version 1.0)

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1. Introduction

This document provides detailed instructions for annotating financial sentiment in short Hindi factual statements. The objective is to assess whether the assigned sentiment label (positive, negative, neutral) accurately reflects the financial implication of each fact.

Your task is to evaluate whether the sentiment assigned to each fact is correct based on its financial and economic meaning.

You should read this document carefully before beginning the annotation.

2. Onboarding

You will be given access to the Notion workplace during this annotation period. Click on the Sentiment Analysis page. Here you will find the link to the platform and guidelines.

There will also be a table where you will find your name. When you hover over your name, you will find the 'open' option. That will lead you to your page (image below)

You will find a checklist to complete your tasks.
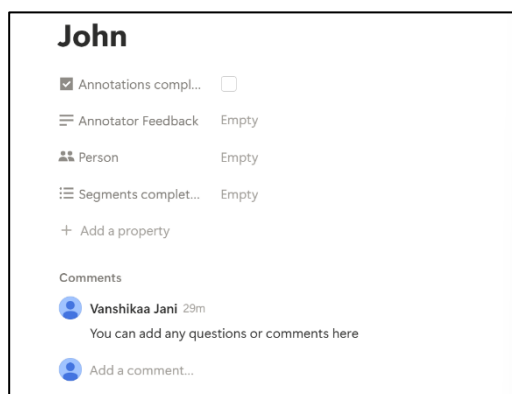
For communication you have two options. You can always email me at **Vanshikaa.Jani@mbzuai.ac.ae** to send me the annotated data or ask any questions. Another option is to add comments in Notion.

In the image to the left, you can find an example of where to comment. I will reply to you there.

2. Annotation Workflow

You will complete the task using a dedicated online interface. The workflow is as follows:

1. **Login**

   o Enter your name and password on the login screen.

2. **Review Guidelines**

   o Read this document within the interface.

   o Confirm understanding to proceed.

3. **Segment Selection**

   o Data are divided into predefined segments.

   o Start with the pilot segments (1-3). Finish these first and send them to me.

   o *Only start the remaining segments (after pilot) after I confirm with you.*

4. **Fact Evaluation**
   For each fact:

   o Read the Hindi fact.

   o Review the assigned sentiment for accuracy.

   o If it is correct, then choose "Yes".

   o If the assigned sentiment is incorrect, select the correct sentiment label.

   o If you are unsure, select "I don't know"

5. **Navigation**

   o "Previous" allows revisiting earlier items. You can modify your answers but make sure you download the latest answers.

   o "Save & Next" records the annotation and advances.

   o A "Jump to Fact" option in the sidebar enables direct navigation.

6. **Translation Option (Optional)**

- o A machine translation tool is available to view an English rendering of the Hindi fact.

- o Use translation only for clarification. Your decisions should be strictly on the meaning of the fact, not on translation phrasing.

7. **Download**

- o Upon completion of a segment, download the corresponding CSV output and send it to the designated email.

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3. Definition of Financial Sentiment

Financial sentiment refers to the **direction of economic or financial impact** implied by a factual statement.
The sentiment reflects the **overall financial consequence**, not emotional tone or linguistic style.

Sentiment must be assigned purely on the informational content of the fact, without assumptions, inference beyond what is stated, or use of external sources.

There are three possible sentiment classes:

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4. Sentiment Categories and Decision Criteria

4.1 Positive Sentiment

A fact is labeled **positive** when it indicates an **improvement** in financial, economic, or operational conditions. Typical indicators include:

- Increase in profitability, revenue, output, or growth metrics

- Expansion of credit availability or financial support

- Reduction in financial stress indicators (e.g., NPAs decreasing)

- Decline in costs such as inflation or borrowing burden

- Signals of strengthened economic activity (e.g., PMI increasing)

Examples:

- "बैंक क्रेडिट ग्रोथ 14% तक बढ़ी।"
  Bank credit growth increased to 14%.
  → Positive

- "विनिर्माण पीएमआई बढ़कर 59.2 हो गया।"
  Manufacturing PMI rose to 59.2.
  → Positive

- "महँगाई घटकर 4.2% रह गई।"
  Inflation decreased to 4.2%.
  → Positive

4.2 Negative Sentiment

A fact is labeled **negative** when it indicates **deterioration**, increased **risk**, or heightened **financial burden**. These include:

- Increase in NPAs, defaults, delinquencies, fraud, or losses

- Decline in revenue, output, profit, or market performance

- Increase in inflation, borrowing costs, or other burden indicators

- Regulatory or enforcement actions signaling misconduct

- Adverse macroeconomic indicators

Examples:

- "एनपीए अनुपात बढ़कर 7% हो गया।"
  NPA ratio increased to 7%.
  → Negative

- "औद्योगिक उत्पादन 5% घटा।"
  Industrial output declined by 5%.
  → Negative

- "चिट फंड धोखाधड़ी में 300 करोड़ की संपत्ति कुर्क।"
  ₹300 crore seized in a chit fund fraud case.
  → Negative

4.3 Neutral Sentiment

A fact is labeled **neutral** when it conveys information **without a directional financial impact**. These include:

- Administrative or procedural announcements

- Statements of rules, schedules, or non-directional facts

- Events where financial impact is unclear or not inherent

- Statements providing context rather than outcomes

Examples:

- "आरबीआई ने नई KYC गाइडलाइन जारी की।"
  The RBI issued new KYC guidelines.
  → Neutral

- "कंपनी ने तिमाही नतीजों की घोषणा की तारीख तय की।"
  The company set the date for announcing quarterly results.
  → Neutral

4.4 "I Don't Know"

You should choose **I don't know** when:

- The statement does not provide enough information to infer direction.

- The impact depends on unspecified conditions.

- The fact is ambiguous despite contextual reasoning.

This label should be used conservatively but is preferable to guessing.

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5. Principles for Annotation

1. **Base decisions strictly on the sentence provided.**
   Do not incorporate background knowledge or external research.

2. **Interpret sentiment in terms of financial/economic consequence.**
   Not linguistic tone or connotation.

3. **Avoid stakeholder-specific interpretations.**
   Annotators should evaluate overall economic effect, not impact on a single group unless explicitly stated.

4. **Do not infer unstated causal relationships.**

5. **Use translation only as a comprehension aid**, not as the primary source of meaning.

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6. Examples of Boundary Cases

Case A: Mixed Implications

"कंपनी ने लागत कटौती के लिए 500 कर्मचारियों को निकाला।"
The company laid off 500 employees to reduce costs.

What the sentence *explicitly* states

- **Action:** layoffs

- **Purpose:** cost reduction

There is a **clear financial intent** stated: reducing costs.

Default: Negative

Why:

- Layoffs are a **signal of financial stress or deterioration**

- In financial reporting and benchmarks, layoffs are overwhelmingly treated as negative events

- The sentence does **not** report an achieved improvement (e.g., profits increased)

But it would be positive if it was something like:

- कंपनी ने छंटनी के जरिए खर्च में कटौती के बाद अपना मुनाफा बढ़ाया
  The company increased its profit after cost-cutting through layoffs

Case B: Multi-Indicator Statements

If a fact contains both positive and negative indicators but no net direction:
→ Use **I don't know**.

Case C: Ambiguous Administrative Actions

"आरबीआई ने पूँजी प्रावधान नियमों की समीक्षा की।"
RBI reviewed capital provisioning rules.
→ No impact specified → **Neutral**

SENTENCE TYPE	CORRECT LABEL
NO CHANGE / ANNOUNCEMENT	Neutral
CLEAR IMPROVEMENT	Positive
CLEAR DETERIORATION	Negative
OPPOSING INDICATORS, NO NET RESULT	I don't know
OPPOSING INDICATORS, NET RESULT STATED	Positive / Negative

7. Use of the Translation Tool

A machine translation button is included to reduce cognitive load for complex Hindi terms.
Translation usage will be logged for analysis.

Guidelines:

- First interpret the sentence in Hindi.

- Use translation only when meaning is unclear.

- Final sentiment decision must reflect the financial interpretation, not stylistic variation introduced during translation.

8. Interface Reference Guide

8.1 Fact View

📄 **Fact**

अक्टूबर में जीएसटी राजस्व **4.6%** बढ़कर ₹**1.96** लाख करोड़ तक पहुंच गया।

🎯 **Assigned Sentiment**

🟢 **positive**

🔄 Translate to English

English Translation (for assistance only):
GST revenue rose 4.6% to ₹1.96 lakh crore in October.

The central pane displays:

- Fact sentence (Hindi)

- Assigned sentiment

- Translation button

8.2 Annotation Controls

- Yes / No / I don't know

- Correction dropdown (if applicable)

- Save & Next / Previous

8.3 Sidebar Tools

- Jump to Fact

- Segment progress indicator

8.4 Segment Completion

- Download CSV

All changes are saved locally in the session until explicitly downloaded.

A manageable size of 20 per segment is chosen but if you have to stop early then you may download the current progress. When you return, use the jump option to skip to the last annotated fact in the segment. In such cases you can upload multiple CSVs.

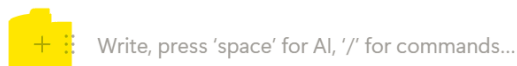Either upload it in Notion:

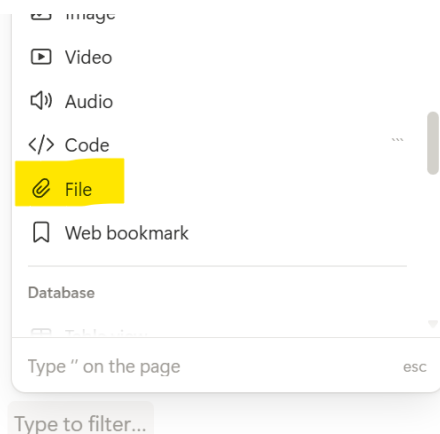## Upload the datasets here

Example:

⬆ pilot_segment_1_Vana.csv 6.8 KiB

Or email it.

To upload it on Notion:

1. Click on + option

+ ⦙ Write, press 'space' for AI, '/' for commands...

2. Then scroll down till you find "file"

Image
▶ Video
🔊 Audio
</> Code
📎 File
🔖 Web bookmark

Database

Type '' on the page   esc

Type to filter...

9. Quality Expectations

You are expected to:

- Apply sentiment criteria consistently

- Avoid guesswork in ambiguous items

- Use "I don't know" where information is insufficient

- Complete all assigned segments

- Ensure correctness before submission

11. Contact and Support

For questions regarding task structure or annotation challenges, contact:
Vanshikaa.Jani@mbzuai.ac.ae

Or use the comment section in Notion.