

# Sentiment Assignment



Finch for Text is powerful Natural Language Processing (NLP) software that helps you turn your text into valuable, actionable insights. Among its many capabilities is Sentiment Assignment, which involves identifying a piece of content as positive, negative or neutral and returning a numeric score that indicates *how* positive, negative or neutral the item is. Read on to learn why you need it and why you'll love it:

## ✓ Perform Sentiment Assignment at the Document, Sentence & Entity Level

We go beyond just keywords to understand sentiment in text. Our Deep Learning models were trained on a large and diverse corpus of news, conversational and narrative datasets to capture nuances in language that other products cannot. Going a level deeper, our sentiment models can also understand sentiment at the entity level – rather than just at the sentence or document level. This context-based approach can be applied on large documents, rich with entities.

## ✓ Sentiment Topic Classification Drives Sentiment Scoring Accuracy

When assigning sentiment to individual entities, we first classify sentences into one of 28 topics. This allows our Deep Learning sentiment model to understand the specific nuances of each topic area and accurately assign entity sentiment scores.

## ✓ Company "Baseball Cards" Provide Instant Access to a Wealth of Information

Finch for Text excels at assigning sentiment to companies. Together, our massive knowledge base of more than 2.1M organizations, our topic-based approach to assigning sentiment and our entity disambiguation and enrichment capabilities mean you'll have at-your-fingertips access to information about every entity mentioned in a given document. You'll also see an overall sentiment score for the entity in question, a sentiment score per-mention, and rich metadata about companies of interest to you.

## ✓ Out-Performed Sentiment Tool in Place at Major Content Aggregator

Finch for Text's sentiment capabilities recently out-performed the sentiment tool in place at a major, international news content aggregator. Many companies were incorrectly tagged as positive when they were actually negative, and vice versa. Additionally, this competitor's tool failed to capture the contextual topic of the sentiment. As an example, something that is "negative" in terms of growth can mean something very different than "negative" sentiment related to a lawsuit.

# Financial Use Cases

## Risk-Scoring

Sentiment scores calculated at various levels: article, company, industry, market, and portfolio.

Sentiment assigned to a taxonomy of business topics.

Aggregated Finch sentiment scores for companies and industries to provide risk scoring, trending, and traceability

## Adverse Media Monitoring

Article, company, and sentence level sentiment used to identify negative information about organizations and people.

Screen sanctions, watch lists and Politically Exposed Persons (PEPs)

## Due Diligence

The granular nature of Finch sentiment scores at the company and sentence level, make it easier to vet agents, partners, suppliers, investments, and other third parties

### In Practice:

From the news article at right, Finch for Text was able to determine that while this is a negative news story for the company, Nio, it was positive for Xpeng Motors.

The below passage in particular contains words that are both positive and negative within the same sentence. Finch for Text understands context at the entity level and was able to assign the correct sentiment to the correct company.

*“GUANGZHOU, China -- Chinese electric car company **Nio saw deliveries slide** in May as the global chip shortage hit its business, while rival **Xpeng Motors saw vehicle delivery growth** in May as it managed to weather the same semiconductor shortage.”*

As shown in the entity baseball cards below, Finch for Text assigned a sentiment class, a sentiment score and a sentiment confidence score to each entity. Finch for Text also identified a topic related to each company that informed its sentiment assignment.

**NIO Inc (car marque)**  
(Shanghai-China)

NIO is a Chinese automobile manufacturer headquartered in Shanghai, specializing in designing and developing electric vehicles. The company is also involved in the FIA Formula E Championship, although NIO has ended funding the team after selling to Lisheng Racing.

Coordinates: 31.17,121.47  
(NIO) XNYS

Sentiment Class: negative  
Sentiment Score: -0.9970  
Sentiment Confidence: 0.9980  
Topic: Growth

**Xpeng Inc (automobile manufacturer)**  
(Guangdong-China)

Xpeng or Xiaopeng Motors, also known as XMotors.ai, is a Chinese electric vehicle manufacturer. The company is headquartered in Guangzhou, with offices in Mountain View, California in the US and is publicly traded on the New York Stock Exchange.

Coordinates: 23.128795, 113.258976  
(XPEV) XNYS

Sentiment Class: positive  
Sentiment Score: 0.9120  
Sentiment Confidence: 0.9280  
Topic: Growth

### Sentiment Topics:

**When assessing sentiment, Finch for Text uses these topics and associated vocabularies to inform our models:** Bankruptcy, Buy-Rating, Demand, Dividend, Earnings-Estimate, Economic-Recession, Economic-Recovery, Growth, IPO, Job-Cuts, Joint-Venture, Lawsuit, Mergers-Acquisitions, Price-Margin, Profit-Loss, Quarter-Earnings, Sales-Revenue, Sales-Volume, Share-Price, Stock-Market, Unemployment, Venture-Capital, Other-Business, Entertainment, Politics, Sports, and Technology.

