
InMoment
Understanding to Improve:
GETTING THE MOST OUT OF CUSTOMER & EMPLOYEE
DATA WITH WORLD-CLASS TEXT ANALYTICS

Introduction

Text analytics are vital to your brand's ability to understand your customer and employee experiences. You can have listening posts across every channel and at every point in the customer journey, but if you don't have the best possible text analytics solution in place, your ability to derive actionable intelligence from that data is essentially moot. And your ability to create transformational change across the organization and drive business growth? That'd be a non-starter without effective text analytics. Without them, all you have is a score, not any context or information on what actually went well or needs improvement.

It's obvious that text analytics are vital, but in an industry full of jargon, claims about accuracy, and a huge amount of conflicting data, how can you tell what solution attributes will be the best for your company?

Without text analytics, all you have is a score, not any context or information on what actually went well or needs improvement.

Well, in this eBook, we're cutting through the fancy lingo and salesy claims to get to the heart of what makes a text analytics solution truly successful. Keep reading to learn more about top terms, accuracy, solution necessities, and more!

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TEXT ANALYTICS 101

A Quick Glossary

There's no way around it: conversations around text analytics are chock-full of jargon. Below, you'll find straightforward definitions for the terms we'll be using to describe the ins and outs of text analytics solutions. Feel free to check back in with these definitions as you read:

Accuracy: The combination of precision and recall for a given tag or text analytics model.

Emotion: Measure of positive/negative feelings strong and clear-cut enough to be categorized as a specific emotion.

Human Translation: The method of having each comment translated individually by a human translator as it is submitted by the customer.

Intent: Intent identifies what the customer is trying to achieve based on their response.

Keyword: A word or term that occurs in unstructured customer feedback data.

Machine Translation: Translation done by a machine that has been trained by humans.

Native Language Model: A Text Analytics model that is purposely built for a specific spoken language.

Natural Language Processing: A field of computer science & artificial intelligence that draws intelligence from unstructured data.

Precision: Correctness; represents how often a given concept is correctly captured by a specific tag.

Recall: Coverage; refers to how thoroughly the topics or ideas within a given tag are captured.

Sentiment: The expressed feeling or attitude behind a customer's feedback, categorized as positive, negative, or neutral.

Sentiment Phrase: Also referred to as a Sentiment Bearing Phrase or SBP. A phrase or sentence identified with positive, negative, or neutral sentiment.

Sentiment Score: A measure for both the polarity and intensity of the sentiment within a given comment.

Tag: A label generated from text analytics that groups together similar customer comments around a specific concept or topic.

Text Analytics: The methods & processes used for obtaining insights from unstructured data.

Text Analytics Model: A natural language processing engine that uses tags to label and organize unstructured data.

Theme: A dynamically extracted concept from a collection of comments, generated by an unsupervised machine learning algorithm.

Unstructured Data: Qualitative data or information that is not organized according to an easily recognizable structure; includes comments, social data, images, or audio recordings.

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LET’S TALK ABOUT ACCURACY

What It Is and What It Isn’t

Now that we’ve gone over the top terms, it’s time to recognize a truism vital to understanding text analytics as a whole:

The First Step to Unraveling the Mystery of Text Analytics Is to Understand That It Is Both an Art and a Science

When we talk about analyzing unstructured data, what we're really asking computers to do is understand and analyze a very human concept—and then to do it in multiple languages.

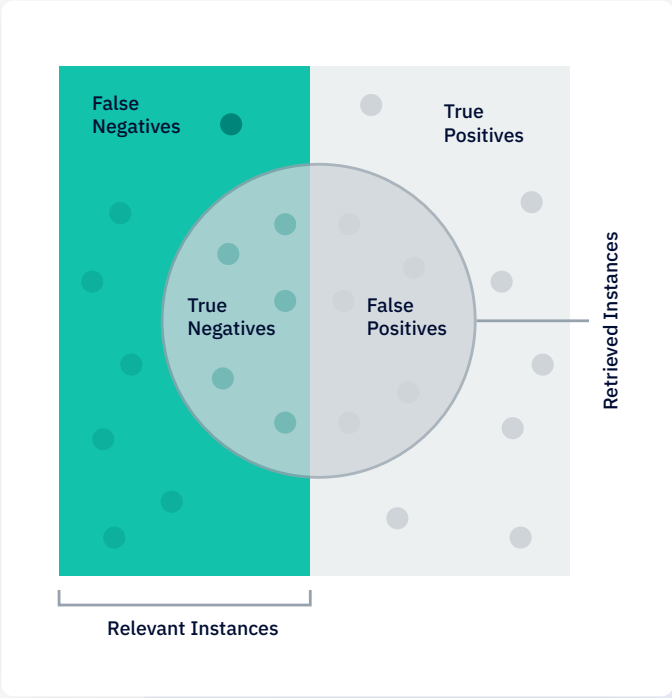
The truth is, computers will never be able to understand 100 percent of the nuances of human language (especially when you consider that even humans often have trouble distinguishing and understanding emotion, sarcasm, slang, and all the other complexities inherent in everyday speech). That is why it is so important to dispel common misconceptions about accuracy. We've laid out a few fictions below and replaced them with fact:

Fiction #1:

ACCURACY HAS A SINGULAR MEANING

The term “accuracy” gets thrown around in text analytics discussions a lot. But what does it actually mean? When referring to the accuracy of the text analytics as a whole, accuracy is based on two factors: recall and precision. Often CX vendors will tout 80-90 percent accuracy, when what they are really talking about is precision. However, what they do not account for is recall—the extent to which the model retrieves all key terms or topics. For example, if the recall rate is only 60%, you are missing 40% of actionable intelligence without even realizing it.

In addition, when speaking to translation, accuracy is often confused with literalness, or the degree of similarity between exact words and grammar. Accuracy is actually the degree of similarity in meaning. A comment does not need to be translated literally to be accurate.



PRECISION: Fraction of retrieved instanced that are relevant (how useful the results are).

RECALL: Fraction of relevant instanced that are retrieved (how complete the results are).

Fiction #2:

PERCENTAGES ARE A TRUE REPRESENTATION OF ACCURACY

You've heard accuracy rates thrown around: "Our text analytics are 85% accurate!" But have you ever thought about what that actually means, especially when you're digging through your data? When you come across a mis-tagged or miscategorized comment, you might be tempted to think, "Well, these text analytics don't work." If you stop and think about it, however, if the text analytics are 85% accurate, that still means that 15% won't be. And that's when percentages don't always feel like a true representation of accuracy. Your brain might know that 15% of one thousand comments might mean 150 comments are tagged incorrectly, but when you see it in your data, it can feel like a lot more.

Fiction #3:

ACCURACY IS THE GOAL

This may be the biggest misconception alive in text analytics today. Accuracy is not the goal of text analytics; it's a happy byproduct. The goal of text analytics in an experience program is the ability to transform customer data into business improvement. It's important to never lose sight of that end goal when designing your program and the text analytics solution that helps to power it!

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TOP OBJECTIVES FOR A MODERN TEXT ANALYTICS SOLUTION

Scalability, Quality, Actionability, and Speed

So if 100% accuracy is neither achievable nor the end-all-be-all of text analytics solutions, what should experience programs strive for? Here are four key areas to consider when measuring the effectiveness of a text analytics solution:

Scalability

Any and every growing business (especially those with a global reach) needs a solution that supports all of the countries and languages your customers work and buy in—at an acceptable level of quality and at a price that makes sense. No one has unlimited resources, so the first criteria must be that the text analytics solution you choose is scalable.

Quality

The goal of text analytics is not to allow you to read every single comment that your customers submit. For most businesses, this is simply not feasible unless you have a team of analysts dedicated to it full time. Your text analytics solution must be able to understand and surface important trends and patterns based on individual comments and the sentiments behind them.

Actionability

Another key objective of text analytics is to be able to take action on the customer issues that most affect your business. This means you need a layer of sophisticated analytics that can add tags and themes on a granular level, uncover sentiment, assign categories, identify intent, spot legal issues and possible customer churn, and more!

Speed

Business today moves quickly, so you need a text analytics solution that can keep pace—which often means real-time analysis and reporting. This is specifically relevant when considering translations for global companies. The need for speed means that brands don't have time to wait for a perfect translation of each and every comment because perfect translations are only possible if a team manually translates every word, which takes a significant and unrealistic amount of time & money.

TIFFANY & CO.

Tiffany & Co. Leverages Global Text Analytics for Market-Specific and Company-Wide Understanding of Experiences

For a global company, the ability to collect and analyze customer feedback across multiple regions and languages—within a single platform—is essential. Tiffany & Co., one of the world's most recognizable and respected luxury brands, leverages InMoment in 18 languages across 300 company-owned stores, multiple authorized retailers, its e-commerce platform, and in its customer care center for a real-time understanding of market-specific and company-wide feedback trends.

After translation to English, comments are analyzed using approximately 150 custom tags, and customer sentiment is displayed in a multitude of reports and dashboards in both English and the original comment language. This way, both local and corporate program owners can view results in the language that is most comfortable for them. Further, InMoment's highly accurate translation means Tiffany & Co. may use any and every platform feature—on feedback collected in all languages—to sift through comments and research topics most important to the brand.

With more than 1.5 million pieces of customer feedback collected each year, comments are used to recognize exceptional locations and employees, identify areas of opportunity, and understand the specific drivers of customer satisfaction. The ability to analyze feedback across 18 different languages helps Tiffany & Co. understand nuances in the experiences and expectations of its customers across each region, market, and location.

GETTING GLOBAL WITH TRANSLATION

Human, Machine, and More

As we mentioned in the last section, the translation method you choose can affect the goals you set for the scalability, quality, actionability, and speed of your text analytics solution.

LET'S GO OVER THE DIFFERENT OPTIONS
AND THEIR PROS AND CONS:

Human Translation

Human translation is the method of having each comment translated individually as it is submitted by the customer. This type of manual translation requires a long, expensive process.

Instead of real-time results, there is usually a wait of 24 to 48 hours (or more) to get the translated results. And because human translation is limited to languages that a specific translator can work with, outsourcing more complex languages to other translators will also add additional costs—and more time.

Native Language Libraries

A native language library is a text analytics model created entirely in a language of choice, so the system analyzes and tags comments in that native language instead of translating them to English, tagging them, and exporting them back to the original language. Creating a native language library involves a native speaker building out the initial text analytics model and then constantly refining it to ensure that it remains up to date.

Creating language libraries is a slow and expensive process, usually costing hundreds of thousands of dollars and taking months or years to build. Large amounts of data must be collected, collated, and categorized in the language of choice before the libraries can be built. In addition, each of these libraries must be built and tuned to individual industries to ensure their accuracy. The main problem with these native language libraries, therefore, is the lack of scalability.

Machine Translated, Human Led

Machine translation is exactly what it sounds like. It uses machines—trained and monitored by humans—to translate text. When translating, machine translation services look for patterns and trends in millions of documents to provide the best translation.

Additionally, many machine translation services are now using a neural machine translation engine. This means that rather than translating individual words, it uses a neural network capable of deep learning to look at whole sentences and understand the greater context. These translation services are highly accurate, actionable, cost efficient, and scalable, which makes them the best option for an international VoC program.

A “MODEL” TEXT ANALYTICS SOLUTION

Tailoring Intelligence for Your Business

The next element of a text analytics solution to explore is the models you can employ to label and organize your unstructured data. These models have truly come a long way when it comes to their ability to deliver intelligence that is specifically tailored to your business so you can identify areas that require action and deliver direct value to your bottom line.

Traditionally, brands were faced with the choice between two specific types of text analytics models: industry models and custom models. The definition of these two historical approaches is self explanatory, but let’s take a deeper dive.

Industry Models

An industry model is developed by experts to reflect the characteristics of a specific industry. These models are often designed by a vendor to be employed for every client that fits that particular industry, and therefore it often misses brand-specific insights. Additionally, because the same model is used for multiple brands, the model can't be adapted for one brand without being adapted for all. However, these models are a much more time-and-cost effective solution when compared to custom models.

Custom Models

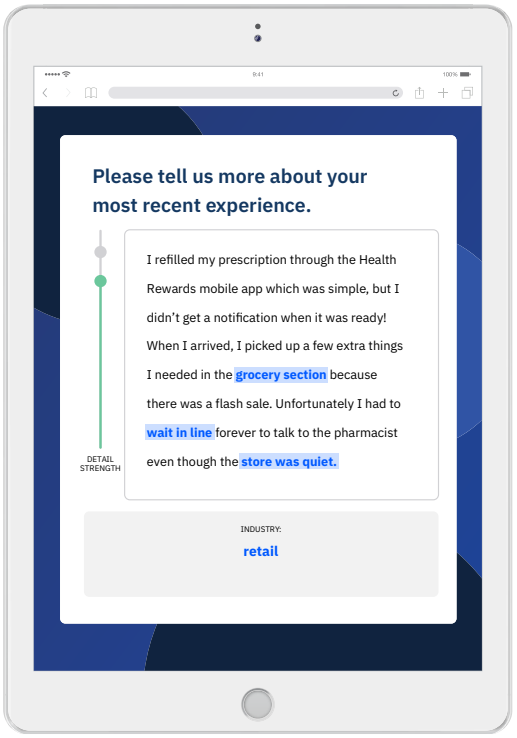
A custom model is built specifically for a certain company, gaining individualized context on the moments that set a brand apart from its competitors. While they are highly accurate, these models are more expensive to create and maintain, so they aren't updated regularly. Additionally, they require a high number of comments to test.

Custom Layered Models

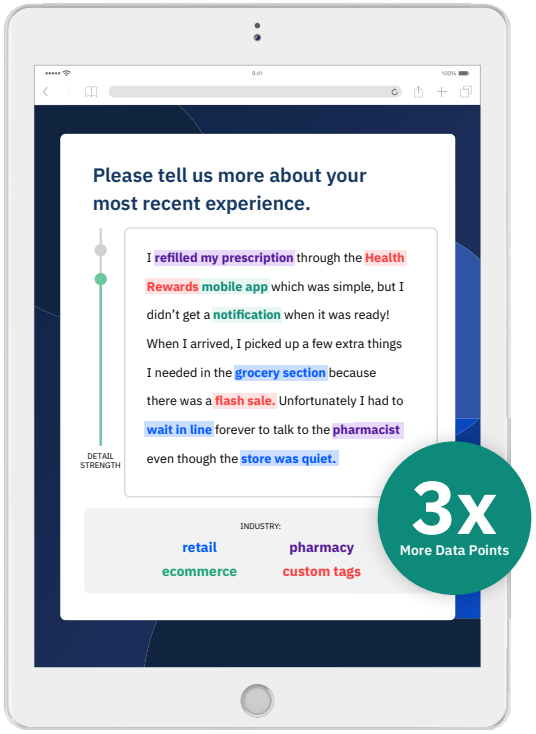
There are pros and cons to both of these historical approaches, but there is a new, more effective approach on the scene that gives experience programs the best of both worlds: custom layered models. Custom layered models take the accuracy of custom models and the efficiency of industry models to provide tailored, accurate, and effective results at a fraction of the cost.

How? InMoment's Custom Layered Models leverage over 50 industry models to craft a personalized, tailored solution for each brand. And when your text analytics are built to suit your specific needs, the intelligence you gain from them is multiplied. Take a look at the difference:

SINGLE INDUSTRY MODEL



CUSTOM LAYERED MODEL



Comparing and Contrasting Models

Want a straightforward look at how historical industry and custom models compare to custom layed models?

We've laid out the features and benefits of each in this chart!

	INDUSTRY MODELS	CUSTOM MODELS	CUSTOM LAYERED MODELS
Covers All Industries	✗	✓	✓
Reflects Unique Business	✗	✓	✓
Delivers Insights for a Combination of Offerings, Channels, & Services	✗	✓	✓
Can Be Adapted for an Individual Business without Changing the Model for All Clients Using That Model	✗	✓	✓
Highly Accurate	✗	✗	✓
Cost Effective	✓	✗	✓
Time Efficient	✓	✗	✓
Updated Regularly	✓	✗	✓
Can Be Tested with Limited Data	✗	✗	✓

FACTORING IN SENTIMENT

Getting to the Why

When humans look to tell effective stories—whether in film or in conversation—sentiment is absolutely essential. It's no different when your customer or employee is trying to tell you a story about their experience via unstructured feedback. It's your text analytics solution's job to detect the emotion in their story, identify it, and help you understand what is causing that specific sentiment so you can improve experiences. But the specific method you use to help your solution detect sentiment can affect the results you get and, therefore, your ability to act and transform.

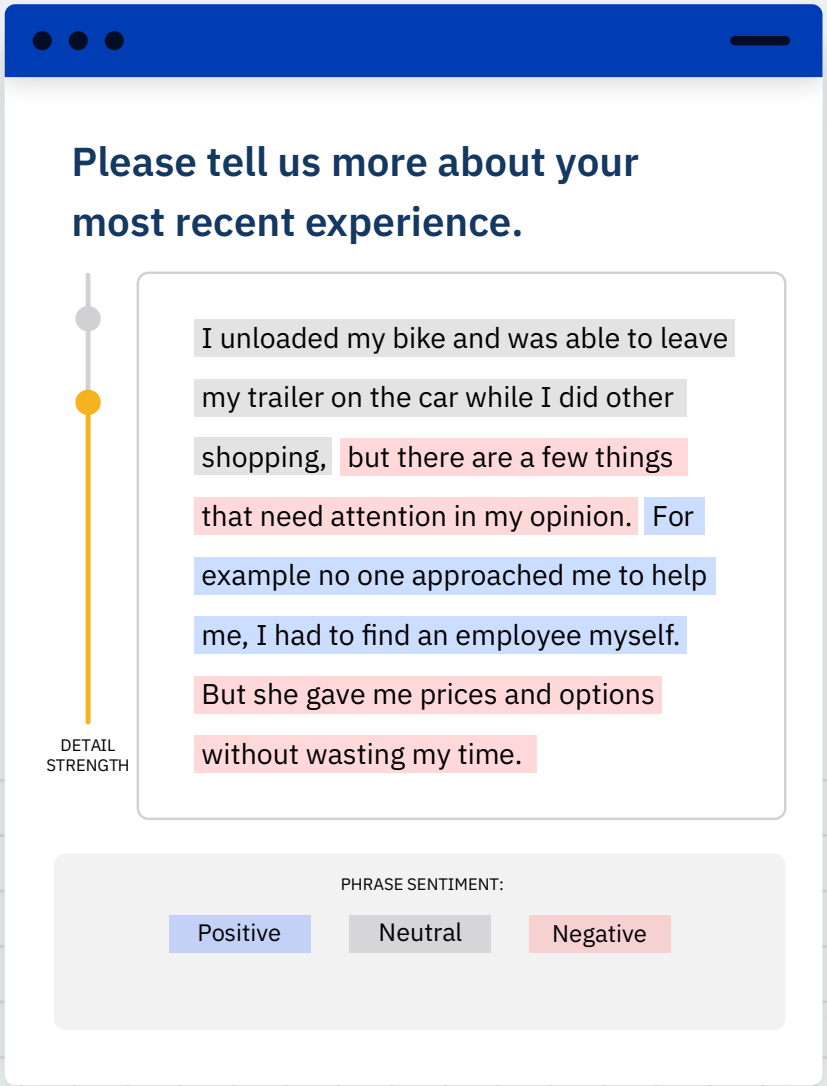
Rules-Based Sentiment

Traditionally, the way text analytics identified sentiment was through a rules-based approach. As the name suggests, this method applied rigid rules to understand unstructured feedback. Additionally, changing these rules or updating them required manual intervention. And even with those manual updates, accuracy never really improves.

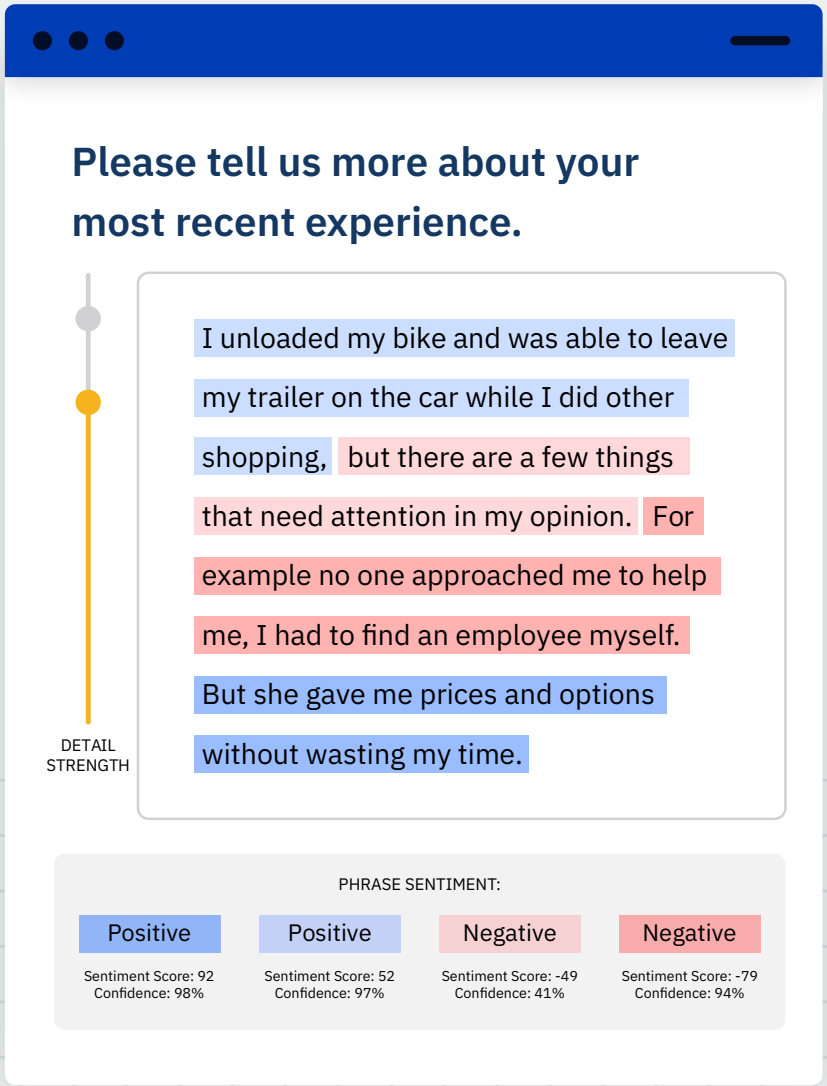
Adaptive Sentiment Engine

The idea that inspired the adaptive sentiment engine approach is that rigid rules do not lend themselves to best understand human emotions. Instead, adaptive sentiment is AI driven, meaning that it learns and improves over time, giving you more accurate results. This engine continually recognizes new terms and phrases as well, meaning that it grows and adapts in lockstep with your brand. Check out the difference below!

RULES-BASED



MACHINE LEARNING



DRIVING IMPROVEMENT

Now that you know what it takes to make your text analytics solution truly world-class, what next? Well, it's time to make sure that your greater experience program is set up to actually drive improvement for your organization.

Text analytics are just one piece of the puzzle when it comes to using your VoC, VoE, or other experience initiatives to power business growth. When you look at the bigger picture, it becomes clear that you need a solid strategy for success. At InMoment, we leverage the Continuous Improvement Framework, a method that helps us guide our clients through designing, listening, understanding, transforming, and realizing their goals for their experience initiative.

If you want to learn more about this framework and how text analytics fit into it, you can read more here!

Like what you've seen so far?

There's more where that came from on www.inmoment.com/resources!

Here are a few other pieces you may like:

- How You Listen Matters: Modernizing Your Methods & Approach to Customer Feedback
- How to Prove the Business Value of Your CX Program
- Building a Business Case for Your CFO (or Anyone Else!)
- Measuring Doesn't Make You Taller

About InMoment

Improving experiences is why InMoment™ exists. Our mission is to help our clients improve experiences at the intersection of value—where customer, employee, and business needs come together. The heart of what we do is connect our clients with what matters most through a unique combination of data, technology, and human expertise. With our hyper-modern technology platform, decades of domain authority, and global teams of experts, we uniquely deliver a focus on Experience Improvement (XI) to help our clients own the moments that matter. Take a moment and learn more at **inmoment.com**

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