

The Fundamentals of Social Media Analytics



Introduction

Understanding consumers and their preferences has always been essential for brands and agencies. In the past, the only way to accomplish this was to run a survey or a focus group or hire an outside market research firm.

Today, things are different. There are now trillions of unsolicited consumer posts on social media that brands can track in real-time to better understand their target audience, industry landscape, brand perception and so much more.

In light of all this social data on consumer opinion, we come to a natural question: How can marketers, strategists, executives and analysts extract meaningful consumer insights from this data? Social media analytics provides the solution to uncovering consumer insights from online data.

This guide aims to provide a framework for getting starting with social media analysis. Whether you're a CMO, an analyst, or a marketing manager, this guide will help you learn the fundamentals of social media analytics and how you can apply it to help your organization make smarter decisions backed by consumer insights.

Table of Contents

Introduction	
Part 1: What is social media analytics?	
Social media analytics vs social media monitoring vs social media intelligence	
Understanding unsolicited conversations	
Social media engagement	
Part 2: Dealing with unstructured data	
Defining unstructured data	
Machine-automated NLP and machine-learning	10
Part 3: Uncovering consumer insights with social media analytics	12
Quantitative analysis: The what.	13
Qualitative analysis: The why	13
Conclusion	1!

Part One:

What is social media analytics?

Social media platforms—such as Facebook, Twitter, Instagram, and Reddit—are a public 'worldwide forum for expression', where billions of people connect and share their experiences, personal views, and opinions about everything from vacations to live events.

But social media isn't just a place for individuals to connect with each other. It's also a place where consumers talk about brands, products, and their preferences. The growth of these platforms has provided companies a new source of insights on which to base their strategies: social conversations. Through social media analytics, businesses have the opportunity to listen, monitor, and look in depth at these conversations and understand what people are saying online to make better-informed decisions.



Social Media Analytics vs. Social Media Monitoring vs. Social Media Intelligence

Whether you are knowledgeable of these terms or not, you've probably heard the term 'social media analytics' used interchangeably with 'social media listening' and 'social media intelligence', but they aren't exactly the same. First, we'll begin by approaching the term 'Social Media Analytics'.

The Definition of 'Social Media Analytics'

Of all the definitions for 'Social Media Analytics', Gohfar F. Khan's hit the nail on the head. In his *Seven Layers of Social Media* book, he defined social media analytics as "the art and science of extracting valuable hidden insights from vast amounts of semistructured and unstructured social media data to enable informed and insightful decision making".

Within organizations, different people and departments have unique research questions, therefore their reasons for analyzing social media platforms and leveraging social insights differ. Some of the use cases include:

Brand positioning assessment: What are people saying about my brand?

Competitive research: How is my competitor doing? What are people saying about their product?

Campaign planning and measurement: Was the new campaign effective? What was the conversation around the campaign?

Audience interest and demographic understanding: Who is interested in my product? What are their interests?

Industry and product trend discovery: What are popular trends at the moment?

Performance benchmarking: How is my product positioned compared to my competitor's?

Early warning – crisis management: What issues can be identified? How can it be fixed?

Many organizations don't listen to social conversations because of the overwhelming amount of available data; however, there are certain tools that specialize in capturing and interpreting this conversation online, making it easier to separate valuable signals from social media noise. These tools can crawl most social media channels, including anything from the main social networks to forums, news sites, and blogs.



Social Media Monitoring (SMM)

Often referred as 'social media listening', social media monitoring is the ongoing process of **tracking and gathering** what the audience is saying on social media—a hashtag, a keyword, or other terms—about a brand or its competitors.

As stated in The Future Place, monitoring can be **active**, such as searching for specific brand mentions, or **passive**, like tuning into an audience to learn about their interests.

Think of McDonald's new campaign introducing their preservative-free chicken nuggets. Both McDonald's and the agency responsible for their ad "A Better Chicken McNugget" would rely on SMM to track surface-level metrics to measure their new campaign. These vanity metrics, such as number of likes, shares, or retweets would be used to assess basic engagement and campaign performance, without looking for deep understanding of the social conversation around McNuggets and its context.

As a summary, SMM consists of identifying and collecting useful data, with no means of categorizing or understanding it. The data gathered through SMM could be useful, but no actionable insights can be derived at this listening stage.

Social Media Intelligence (SMI)

Social media intelligence encompasses monitoring social media, collecting and analyzing the content, and using the resulting consumer insights to inform strategy. Basically, SMI uses both social media monitoring and analytics to derive strategic solutions.



Understanding unsolicited conversations

Social media analytics is an exercise in omniscience, not omnipotence. Before we begin drilling into why this is so important, here are the definitions for both:

Omniscience: knowing everything; having unlimited understanding or knowledge

Omnipotence: having complete or unlimited power

Social media is a place where users can talk freely without having to filter themselves. This is why social media analytics is omniscient and not omnipotent: it knows everything about a certain topic, but doesn't need to participate or control these social conversations. What we mean when we say "omniscient SMA", we refer to the analysis of unsolicited conversations on social media, without the intent of interfering or asking them to be part of a two-way conversation. Social media analytics is used to observe and inform, not to engage.

Think of it this way: Batman is omniscient and Superman is omnipotent. Although most organizations want to assimilate themselves to a God-like character with unlimited power like Superman, Batman is more intelligent, relatable and versatile in his job.

Organizations can't control the social conversation because social conversations around brands on social media are largely unsolicited.

Unlike traditional focus groups, social media analysis extracts consumer insights from unsolicited conversations without the added bias of direct contact. By listening and understanding from an outside perspective without trying to be part of the conversation, you get a more objective perspective.



"Superman is too busy saving the world, so Batman needs to focus on street level crime."

The Artifice

Photo Credit: Warner Bros

Social media analytics vs. social media engagement

Social media engagement involves a two-way conversation; with engagement, there's a 'personal' interaction between brands and their fans. Examples of social media engagement include interactions with customers, prospects, and influencers on social networks. When engaging with customers, brands can reach out to customers to remediate any issues they might have found through social monitoring.

Therefore, social media analysis and social media engagement are **not** the same. Ultimately, social media analysis is about listening, whereas social media engagement is joining the conversation.

Even if brands know how social media analysis works, where should they start? Next, we'll explain how brands can use social media analytics to make sense of the vast amount of unstructured data on social networks, and eventually use it to their advantage.



Photo Credit: UXDesign

Part Two:

Dealing with unstructured data

With the <u>explosion of big data</u>, there has been a reciprocal explosion of companies trying to mine value from the overwhelming amount of data out there. When looking at the data that needs to be analyzed, we can find two distinct types: structured and unstructured data.

We are all aware of structured data: purchases, transactions and electronic sign-ups, but...what is unstructured data? How is it different from structured data?



What's the difference between structured and unstructured data?

Structured data refers to the kind of data that is organized and displayed in a database with rows and columns, making it straightforward to work with. Examples of this include sales figures, names, phone numbers, etc.

Unstructured data lacks organization. Due to its variability and unidentifiable internal structure, unstructured data cannot be analyzed by the conventional technologies.

A few examples of 'unstructured data' are:

- Social media posts
- Emails
- Images
- Product Reviews

When looking at social media posts, we see that most of the information can't be segmented into fixed categories due to the complexity and variability of the content. Social media users write about different subjects, in varying forms, making it hard to categorize them in a strict manner. Due to the increase in popularity of social media channels, new analytics tools and processes were developed to understand and extract value from this boom of unstructured data.

Structured Data (Enterprise)

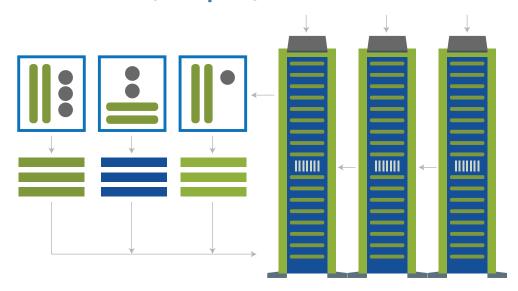
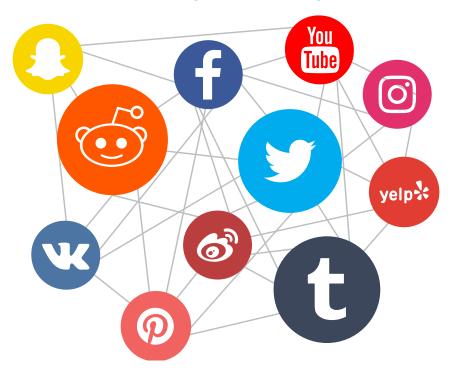


Photo Credit: The Executive's Guide to Big Data & Apache Hadoop

Unstructured Data (Social Media)



But why bother to analyze this unstructured data?

It can yield deeper insights.

Organizations in several industries are researching and investing intools to extract meaning from this data and drive strategic business decisions, something hard to get from limited structured data. The value of unstructured data comes from the patterns and the meanings that can be derived from it. Examples include identifying issues, market trends, or overall customer sentiment towards a brand.

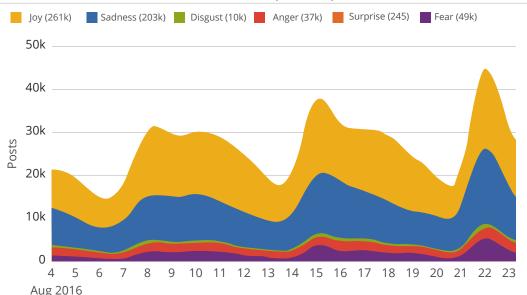
Two available solutions for the analysis of unstructured data are **machine-automated NLP** (natural language processing) and **machine-learning**.

Machine-Automated Natural Language Processing (NLP) and Machine-Learning

Natural Language Processing is a branch of artificial intelligence that allows a machine to understand the human 'natural' language. Therefore, the machine-automated solution tries to make sense of the data by processing statements and categorizing them in a systematic way.

Applications of NLP on social data can identify general sentiment about a topic—either positive, neutral or negative—or it can even go as far as analyzing the universal emotions through emotion analysis.





Machine-automated solutions aren't enough

Most analytics companies offer machine-automated features, but the problem is that the results can be inaccurate and not pertinent to the subject matter. Although machine automation requires less setup time, it risks providing irrelevant information to the user when analyzing conversations in different industries with particular dialects and slangs.

An example where a dialect or slang could be a problem is when a word such as 'wicked' is used in different contexts. Meaning "evil or morally wrong", 'wicked' is widely identified as a word with a negative connotation, thus machine-automated processes would negatively categorize phrases with this word. However, 'wicked' has a different meaning in the state of Massachusetts; used as a positive word, it can mean "very" or "occasionally cool", making the outcome of the analysis very inaccurate and irrelevant to the search.



On the other hand, for more comprehensive text analytics, there's **the** machine-learning approach.

To better understand this concept, think of the online recommendations from Amazon; depending on your purchases, search history, your ratings, Wish List, the interests of other similar customers, and more examples of what you're interested in, it will try to find items more relevant to your search.

Or even better, think of machine-learning as a Gmail filter. Fundamentally, filtering in Gmail is adding a label or tag to emails, so that it can count and group emails of the same kind together. If properly trained, Gmail's Inbox classifies emails into Topics like Social/Promotions/Updates etc. This model looks for patterns in the content of every email—such as keywords, phrases, authors—and assigns it to the most pertinent category; it doesn't follow predefined parameters.

Machine-learning allows tools to analyze multiple variables simultaneously, and reveal how they interconnect to form patterns.

This option differs from machine-automated solutions in many ways; since the outcome will be more related to the question the user is trying to solve, machine-learning requires external knowledge and deep understanding of the conversation's subject matter to train the tools appropriately. Although training some posts to define each custom category may take some time, it will help the analysis tools to identify robust patterns and provide more relevant consumer insights.



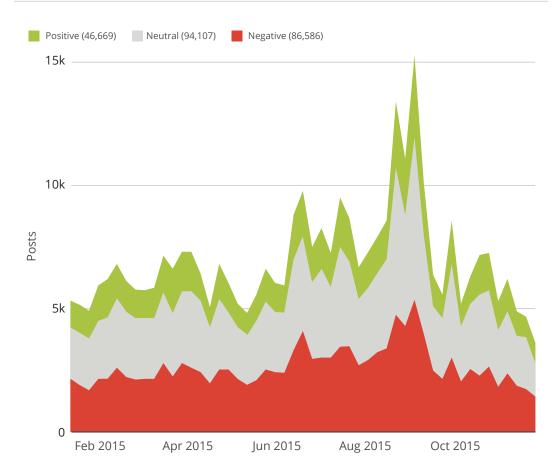
Photo Credit: Madmimi

Machine-automated approach: T-Mobile example

In the following example, we can see the analysis of T-Mobile's customer service on Twitter in 2015. Through machine-learning NLP, social posts can be categorized into general positive, neutral, and negative sentiment by identifying the keywords.

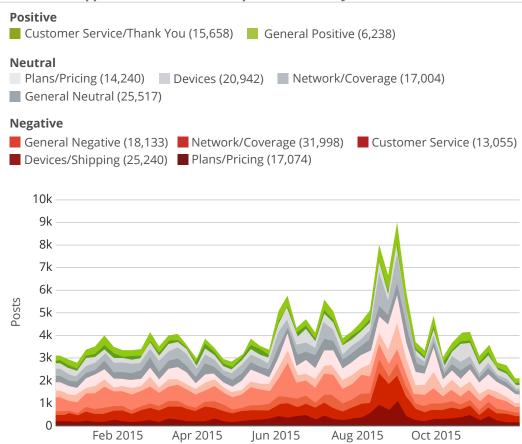
It's useful to know whether customer service was overall positive or negative, but how can you extract more valuable, relevant insights from this data? How can you know why big part of the conversation is negative? This is where machine-learning comes in.





The following visual contains the same data and timeframe used to analyze T-Mobile's basic sentiment around its customer service. The main difference is that through machine-learning, you can create custom categories that will explain the reason behind the positive, neutral and negative sentiment, providing actionable solutions you can apply. Whether it is expensive plans, bad coverage, or insufficient customer service, organizations like T-Mobile can use machine-learning to understand the 'why' behind the negative sentiment towards their brand and make better informed decisions in the future.





Custom categories in machine-learning processes allow the analysis to be more accurate and precise; some advantages include deeper nuance and meaning dependent on the user's subject matter expertise and business context. With this solution, brands can uncover highly specific consumer insights to help them make more strategic decisions.

Part Three:

Uncovering consumer insights with social media analytics

In marketing, strategy, and tech, we hear a lot of jargon around 'measurement' and the 'software landscape'. 'Insights' have become ubiquitous, with many organizations and individuals using this term in many different ways.

In previous publications, we've described how insights come in many different forms. What are customers saying about your products and company? How about your competition? Who is your target market, what do they care about, and how do you reach them effectively? What trends are affecting your industry and how should you respond? These are relevant questions to the decision-making of businesses, and they can be answered through social media analytics. First, we will go over the difference between quantitative and qualitative analysis to better understand how you can derive actionable insights from social data.

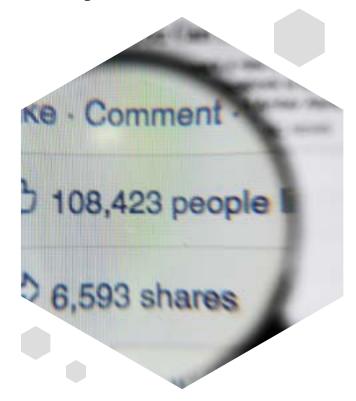


Quantitative analysis: the what

Similar to the infamous McNamara Fallacy, this analysis supports the theory that "If you can't measure it, it doesn't exist" because it can't be proven. Therefore, in quantitative analysis, the only data taken into account for strategic decision-making is the data you can count.

This type of analysis is efficient and easy to gather and analyze because of its simplicity and concrete nature. Since it doesn't deal with complex data, it is more easily comprehended, and therefore, more 'credible' than insights gained from qualitative research, as it provides numerical proof.

Consequently, quantitative analysis disregards data that isn't in the form of easily digestible numbers; therefore, if you can only understand a fraction of the available information, it isn't comprehensive or insightful enough. In social media, if your Facebook campaign post has 1,000 likes, you get to know its "weight". However, the 1000 likes don't necessarily mean that the campaign was successful. From the perspective of social listening, it is important to understand the context and nuance; it is critical to understand the underlying 'why' of the 1,000 likes to see if it's something that the company wants to do again in the future.



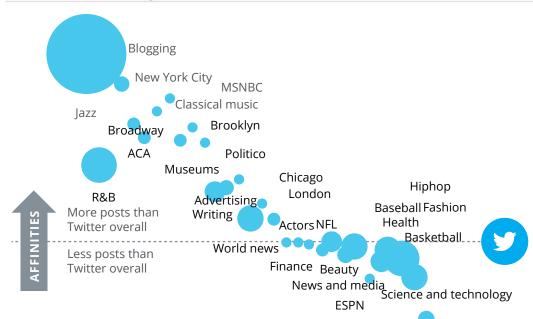
Qualitative analysis: the why

Qualitative analysis is less related to hard numbers, and more to the meaning behind those numbers. So why did your company get 1,000 likes? Did they like the product? Or was it the message? What about the athlete that was sponsored? These intangibles provide knowledge and insights that can help drive more effective and strategic solutions because they get to the heart of consumer preferences and behavior..



In a presentation about The Power of Social Data with Schireson consultancy, Jazz at Lincoln Center (JALC) was able to gain valuable insights about their audience. In the following visual, we see how JALC was able to understand the main interests of their audience and compare this to those of their competitors. Knowing this information about their audience allowed JALC to carry on more informed campaigns and promote customer intimacy.

JALC Affinities Findings vs Twitter



Adapted from Slide by INBOUND

For the most comprehensive insights, a combination of both quantitative and qualitative analysis is ideal



Although it is harder to work with qualitative data, it is necessary to make sense of it since it provides deeper insights, as well as nuance and perspective that would be impossible to get from mere volumetrics. The results can give an understanding of the story behind the results of the analysis of quantitative data. For example, with qualitative data, you can find popular trends or even emotional sentiment around brands.

Volumetrics only touch the surface of understanding; they are a numerical indication of user reaction, but if complemented with insights, businesses can discern what's happening in social and **why**. Although all these insights can be derived from metrics, not all metrics can be insights.

Understanding the basics of social media analytics is the first step to obtaining social media insights of strategic importance to organizations. As the data analytics industry grows throughout time, possessing basic knowledge about this topic will help you find the optimal solutions to social data analysis.

Conclusion

The scope and volume of data from social media may seem too large and too unactionable. But, with the right tools, social media data can provide key insights and inform big decisions.

This guide was created to help you understand what social media analytics entails. We started by outlining the different elements in social media analytics and clearing up general misconceptions. We then identified and described the types of data available. And, most importantly, we looked at effective data analytics solutions to gather powerful consumer insights.

We live and work in a world that is hyper connected. We have the ability to communicate, engage, and collaborate with people, organizations and brands by a few simple clicks. Companies and organizations have the opportunity to tune into the conversation, learn about consumers, and enter the market better-informed.

Start uncovering consumer insights from social media data today with a customized demo of Crimson Hexagon.