
Practice papers

Unlocking the full potential of social listening platforms through prescriptive-based intelligence

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Abstract Today's business leaders are demanding access to information that will help them make more informed decisions. The widespread shift to customer-centric business practices, which require a much deeper understanding of consumer needs, emotions, and behaviours, is a primary driver of this heightened thirst for more data. This data obsession has triggered an unprecedented level of innovation in marketing technology. Particularly, innovation in platforms that can ingest and analyse new sources of consumer data. Social listening platforms are an important contributor to this new data collection and analytics ecosystem. This paper explores the adoption of social listening platforms and social analytics practices and details the distinct and highly valuable benefits these solutions can provide marketers and customer experience management executives.

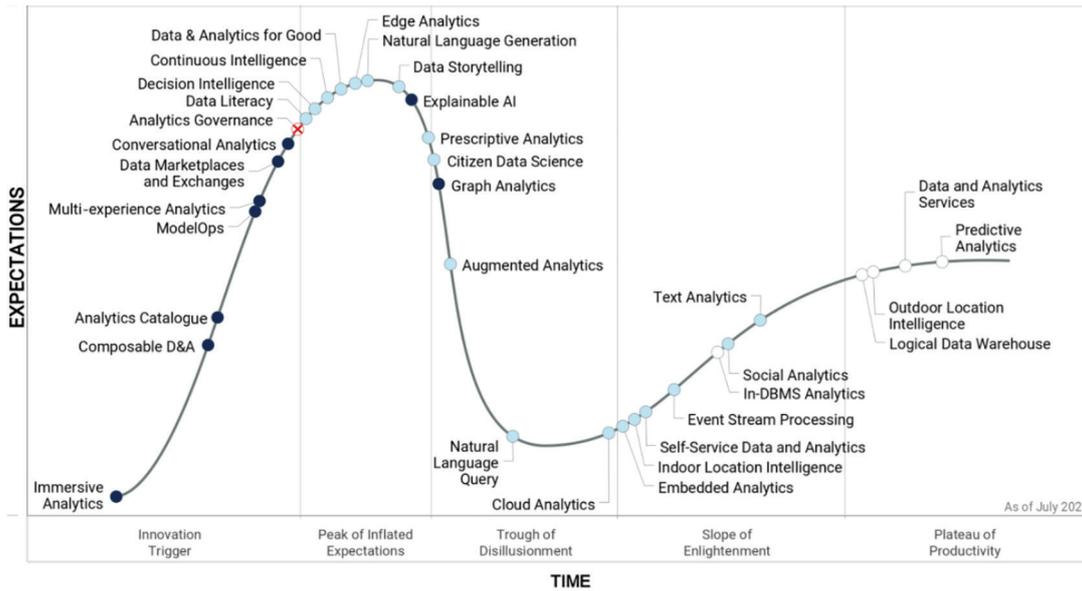
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INTRODUCTION TO SOCIAL LISTENING AND SOCIAL ANALYTICS

So, what do social listening platforms do? According to Gartner®, 'Social monitoring and listening refer to "the near-real-time identification of relevant social posts through keywords, brand or product names, and topics including changes, trends, or anomalies".'¹ The social listening platforms enable businesses to track, analyse, and measure social conversations and mentions (online posts

and content) across a variety of digital media data sources such as social networks, forums, reviews, videos, blogs, news, images, and more. These platforms directly support the growing business need to have instantaneous access to consumer behaviours, attitudes, sentiment and emotions.

There is a movement afoot to reclassify social listening platforms as consumer intelligence platforms to account for the emerging need to have these platforms



Plateau will be reached: ○ < 2 yrs, ● 2-5 yrs, ● 5-10 yrs, ▲ >10 yrs, ⊗ Obsolete before plateau

Figure 1: Hype Cycle for Analytics and Business Intelligence, 2021
Source: Gartner.

collect and manage not only social data sources but also other forms of business intelligence data (eg, corporate sales data, new customer acquisition and engagement data, customer loyalty data, etc.). The goal is to ultimately integrate these data sources so the platforms can support more contextualised data analysis and a better understanding of the impact of digital marketing and customer experience enhancements on business performance. For simplicity, I will continue to refer to these solutions as social listening platforms. Currently *Brandwatch*, *Clarabridge*, *NetBase Quid*, *Sprinklr*, *Synthesio*, and *Talkwalker* are some of the leading providers of social listening and social analytics services on the market.

Social analytics methods, enabled by social listening platforms, are well on the way to widespread adoption in the digital marketing and customer experience analytics business communities. Figure 1 illustrates the latest Gartner *Hype Cycle for Analytics and Business Intelligence* which estimates mainstream adoption of social analytics in two-to-five years.²

THE DIGITAL ANALYTICS TOOLKIT

It is important to point out that a social listening and social analytics platform is just one of many different types of analytics tools within the very fragmented and broader category of digital analytics technologies. It is very common for companies to also invest in other digital analytics tools that provide analytic capabilities that don't exist within most social listening and social analytics platforms. This often includes the use of mobile app analytics and web analytics platforms (eg, *Google Analytics*, *Adobe Analytics*, etc.), tools that perform consumer search research, content marketing topic research, and SEO (eg, *Semrush*, *Moz*, *Hubspot*, etc.), or multichannel marketing hubs to perform digital marketing performance measurement (eg, *Salesforce*, *Oracle*, etc.). The digital analytics and IT professionals within a business need to understand the full scope of business intelligence and analytics requirements so they can thoughtfully select the specific digital analytics tools that best meet their collective needs. This multi-tool approach has put enormous pressure on digital and marketing

analysts to become well-versed on a variety of analytic platforms. Please note that the focus of this paper is to describe the key capabilities and unique benefits provided by social listening and social analytics platforms.

Evolution of social analytics adoption

When a new source of data and insight is introduced to the market, such as social data, it is normal for the initial reporting and analysis of the data to be very descriptive in nature. That is, the data is used to describe the frequency of events, establish benchmarks and then track changes to those benchmarks over time. Examples of those metrics in social analytics are share of voice (% of your brands' or products' social mentions in that product category) and customer sentiment (frequency of social mentions about your brand that are classified as negative, neutral, or positive). For instance, the introduction of web analytics platforms in the early 2000s followed a similar implementation pattern with a heavy initial emphasis on descriptive insights.

The development of descriptive metrics, dashboards and reports is a crucial step in the implementation and adoption of new social data streams. However, that is not enough. For a new data source and new analytic/intelligence platform to reach its full potential, the data source needs to be thoughtfully integrated into the broader business and consumer intelligence ecosystem. Social listening platforms' recent movement to ingest social data as well as other business intelligence data sources is a significant step in the right direction.

The next step in the evolution of social analytics adoption is to use the platform to identify opportunities to improve the business. That is, to move from generating only descriptive analytics insights that track the frequency or occurrence of certain events to the application of prescriptive analytics that illustrate the best way to move forward with a new business opportunity or respond to a competitive threat.

Social data has an extremely unique and compelling property that is lacking in many other analytical data sources, it can explain *why* people feel and behave the way they do towards a brand at a speed and scale that is difficult to match with more traditional research methods. This allows the analyst to identify the root cause of consumer behaviours which can then be used to prescribe and test new business strategies and operational approaches aimed at optimising KPIs such as sales, customer satisfaction, and customer lifetime value.

The unique property of social data and analytics

For years the analytics community has had access to rich CRM transactional data sources that track what people buy, what purchase channels they utilise, what customer support services they use, and for some products/services, how customers use their products. Analysts have also had access to information that describes who their customers are by collecting data directly from customers or through third-party data aggregators. This data includes demographics, geographic data and self-reported interests. Gathering data to understand why customers buy your products, why some customers are satisfied and others are not, and why some customers are loyal to your brand is generally sourced through quantitative and qualitative research. If research is not available, then analysts attempt to *infer* the answers to these 'why' questions based on the demographic and behavioural profile of the consumers. However, decisions based on inaccurate inferences can lead to missed business opportunities and consumer discontent.

The potential to use social-sourced data to fill this knowledge gap is tremendous. Having access to a steady stream of data that answers the 'why' questions can support many strategic business functions (see Figure 2).



Figure 2: Business functions that benefit from social analytics insights
 Source: Author.

Social analytic descriptive analytics can help companies monitor the volume and sentiment of mentions across each of these important business functions, however, the ability to prescribe targeted and highly relevant business actions relies on isolating and accurately interpreting the relevant social conversations. This is a more complex analytical objective and it necessitates the development of thoughtful data queries and data management structures to produce timely and transformative insights.

A good example of a reactionary use of a social listening platform is when Georgia Aquarium received alerts of rapidly growing negative conversations, particularly from anti-captivity activists, resulting from a press release about the unexpected passing of their beloved Beluga whale. The aquarium was able to use the social insights and the specific discussion topics and themes to provide a timely and well-informed follow-up press release that addressed the public's specific concerns.³ Interestingly,

the fear of not being prepared to identify or respond to emergencies like the aquarium's incident has been a primary motivator for many companies to initially invest in social listening platforms.

Social insights can also support more opportunistic responses by companies. An example of this is when Walmart used a social listening and consumer intelligence platform to uncover growing consumer interest in buying previously owned clothing. This helped to inform Walmart's decision to embrace and test a new 'recommerce' business model and partner with thredUP to offer consumers over 750,000 preowned items.⁴

REALISING THE FULL POTENTIAL OF SOCIAL DATA

To realise the full potential of social analytics you need to first understand some of the primary challenges social data presents to the social listening platform providers and the analyst community.

Challenge 1: Unpredictable nature of the source data

Social data is largely unstructured. It is not generated in pre-defined formats and this makes it extremely challenging to extract meaning from large volumes of social data. It is open-ended text that can be written in a formal style within blogs and news articles or written with no regard for grammatical rules and spelling accuracy, including slang, ambiguity, and unusual abbreviations within social network comments or online chats. The solution to this issue is to convert the unstructured data into structured formats using natural language processing (NLP). 'NLP is a branch of artificial intelligence (AI) used to identify patterns by reading and understanding meaning in human language.'⁵ Social listening platforms have integrated NLP techniques that help analysts transform this diverse and multilingual unstructured text into structured data that can then be used in a variety of different data analysis techniques. Many social listening platforms even provide the ability to perform image analysis, using deep learning models to help assess the impact of specific images on social media programs.⁶ In general, social listening platforms have made great progress embedding features that allow analysts to classify unstructured social mentions into very useful structured topic categories and themes.

Challenge 2: Accuracy of sentiment scoring models

One of the core data analysis techniques needed in social listening platforms is sentiment analysis. 'Sentiment analysis is the process of determining whether a piece of writing is positive, negative, or neutral. A sentiment analysis system for text analysis combines natural language processing and machine learning techniques to assign weighted sentiment scores to the entities, topics, themes, and categories within a

sentence or phrase.'⁷ The accuracy of these sentiment analysis systems has been an obstacle in realising the full potential of social data. Although the process of measuring sentiment analysis accuracy is somewhat subjective because different readers will have different interpretations of the text, overall accuracy collected from multiple sources is expected to be in the 60%–85% range depending on the difficulty of the source data.^{8,9} Although tremendous strides have been made in improving the accuracy of sentiment scoring systems, providers need to continue to make enhancements in this area so that analysts and business executives trust the integrity of the insights.

Challenge 3: Customising metrics and data dimensions to meet specific business use cases

Most social listening platforms will provide starting templates that help the analyst structure the data for analysis across different use cases (eg, brand tracking, campaign measurement, etc.). However, analysts should consider these templates as simply starting points, and by no means are they the end product. Each use case has elements that are unique to a specific business. As mentioned earlier, some companies may even want to integrate data into their social analytics that is sourced from other internal business intelligence systems. Therefore, the development of social analytics metrics and data dimensions that are customised to meet the specific needs of each business is a time-consuming process that requires collaboration with business and IT stakeholders and careful planning and implementation. Social listening platform providers that identify opportunities to make the initial setup process more streamlined and efficient will help address a major challenge and business need facing many companies looking to implement social analytics.

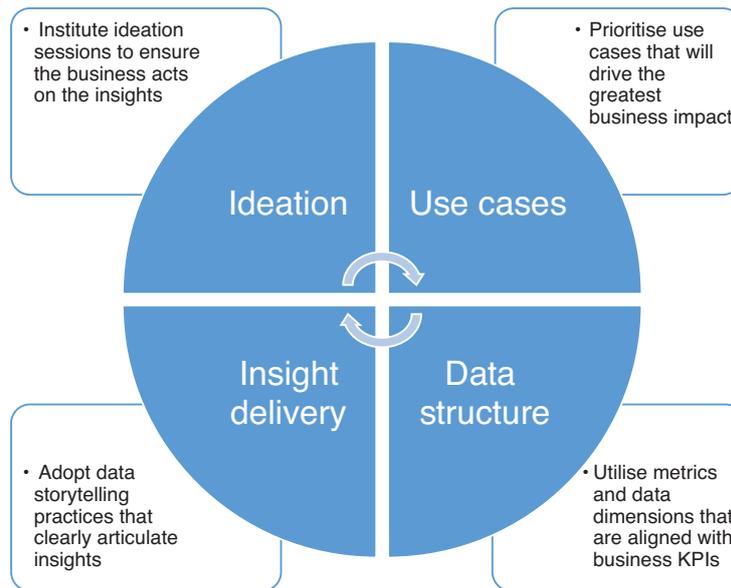


Figure 3: Key social listening and social analytics implementation elements and considerations
Source: Author.

Challenge 4: Growing concerns surrounding consumer privacy

The consumer privacy challenge does not pertain strictly to social-sourced data, but to any data that is collected on consumers, particularly when it is not done in a transparent manner. According to the *Experience 2030: The Future of Customer Experience is Now* study that was sponsored by SAS and conducted by Futurum Research, ‘73% of consumers are concerned with how brands are using their personal data.’¹⁰ This concern and growing level of consumer mistrust with businesses’ handling of personal data have manifested in the adoption of stricter data regulation practices in regions such as the European Union and in the state of California.

Therefore, in the context of this paper, the selection of your social listening partner should be performed with this consumer concern at the front of your mind. It is critical to understand the data collection practices used by the provider to ensure it is 100% compliant with federal and state data regulations. Furthermore, the data collection

practices should pass your own business ethics set of standards to avoid putting your own company at risk for utilising data that doesn’t adhere to those standards. Social listening providers are aware of these rapidly changing regulations. In fact, some social listening platforms see this as an opportunity to establish a leadership position by promoting their transparent data collection methods and firmly committing to remain compliant with ongoing regulatory changes.

A PATH FORWARD: HARNESSING THE FULL POTENTIAL OF SOCIAL DATA

So how can analysts realise the full potential of social listening platforms and analysis? Figure 3 highlights four key elements of a social listening and social analytics implementation that require thoughtful consideration and planning. Each of the elements should not be thought of as a one-time endeavour. Instead, each element will evolve over time and resources need to be assigned to the active ongoing management of these important tasks.

Use cases

The success of a social listening and analytics implementation is undeniably connected to the selection of the right use cases. That is, use cases that are aligned with top business imperatives and support critical growth or risk mitigation objectives should be prioritised. For example, an airline company may weave elements of a competitive intelligence use case and a customer experience management use case together. This combined social analytics solution use case could monitor and quickly assess customers' satisfaction with each of the core airline services (eg, booking tickets, flight check-in, passenger boarding, inflight food and entertainment, baggage claim, etc.). Furthermore, the solution could also be configured to compare a company's own customer experience performance to the performance of its top competitors. This use case would provide invaluable insights that could be used to pinpoint customer pain points that could lead to targeted business initiatives to improve the customer experience.

Data structure

The second critical step during the implementation process is the development of data management structures and data dimensions that align with business needs and KPIs. The first step is to ensure that your queries ingest value-added social information and filter out the noise. Most social listening providers integrate user-friendly tools to help analysts write highly targeted query logic, test the logic on sample data, and review the results to determine if the query is ingesting data that will support value-added analyses. Implementing data management structures also includes the development of metrics and data dimensions that support social analytics as well as broader business intelligence needs. The metrics used to report social analytics insights need to seamlessly align with metrics used

in other parts of the business. For example, the social metrics should include consumer sentiment and share-of-voice metrics that complement and help validate broader customer satisfaction and brand awareness metrics that the company tracks. Also, the best way to unearth specific insights that can lead to targeted business opportunities and improvements is to incorporate thoughtful data dimensions, often called categories, in the social analytics vernacular. To return to the airline industry example, it is not sufficient to evaluate consumer sentiment at only the overall level. Instead, the analyst needs to build and integrate airline service categories that enable a significantly more detailed analysis of sentiment across each customer interaction point with the brand. This allows airlines to assess their own strengths and weaknesses across the entire customer experience journey and pinpoint services that need immediate attention.

Insight delivery

Identifying the right use cases and structuring the data properly is not enough to guarantee social analytics success. Delivery of the insights in a way that tells a clear, easy-to-understand story is crucial for success. The analyst needs to understand their audience and create reports that meet their specific knowledge consumption needs. Automated dashboards alone will not provide the level of data discovery and interpretation that is necessary to bring the key insights to life. Social analytics reports need to be thoughtfully crafted, incorporating data visualisations, storytelling, and clear summaries of key insights and business recommendations. Kevin Hartman, in his book 'Digital Marketing Analytics' defines the role of an analyst as having three important components: 'the data strategist', 'the techie', and 'the data designer'.¹¹ Ideally, these diverse roles/skills exist in a single analyst but can be spread

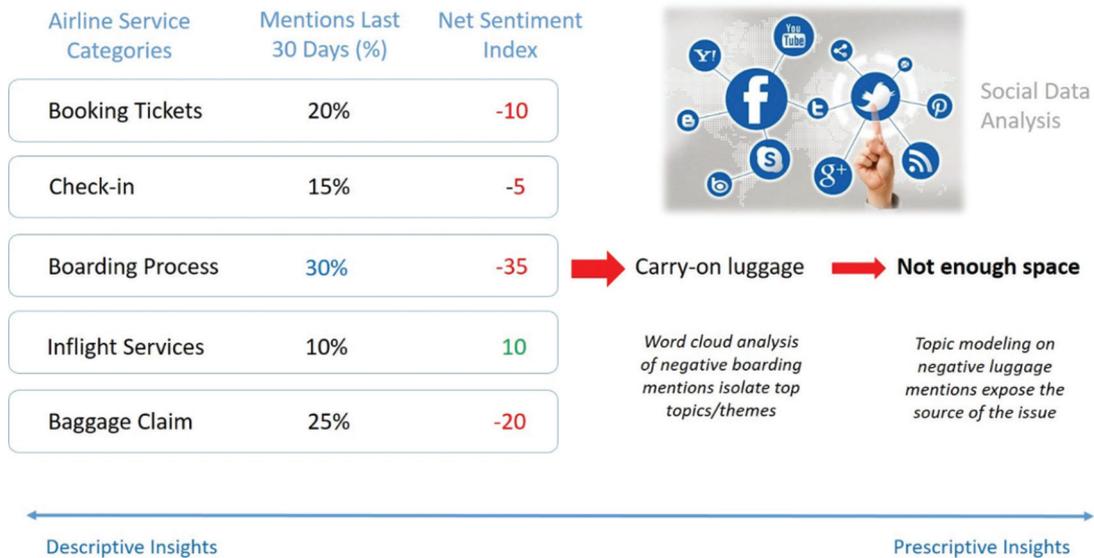


Figure 4: Moving from descriptive to prescriptive-based social analytics
 Source: Author.

across multiple analysts if needed. The data strategist role requires an understanding of the inner workings of the business and ensures the analytics agenda is aligned with the most pressing business needs. The techie role requires data management and analytical expertise to perform a variety of different social analytics techniques. Of particular importance to the effective delivery of insights, the data designer role requires the utilisation of data storytelling and data visualisation best practices to ensure clear meaning of the analysis findings. Data designers’ output should easily inform the relevant application of the insights for all business stakeholders, regardless of their technical know-how, business domain expertise, or seniority in the enterprise.

Figure 4 provides a visualisation of social mention activity across a set of core airline services and indicates the boarding process accounts for the largest percentage of consumer mentions in the last 30 days. The boarding process mentions also contain the highest degree of negativity (eg, net sentiment index reflects the ratio

of negative to positive mentions on a -100 to 100 scale). These tracking insights would be classified as descriptive analytics. This provides important information, but it does not explain ‘why’ there is so much negativity in the boarding process. By utilising additional social analytics tools such as word clouds and topic modelling we can further evaluate the negative boarding process mentions and determine that a primary root cause for the negativity is that passengers are having trouble fitting their carry-on luggage in the limited overhead space. This is an example of prescriptive-oriented insights which can be used to inform and test new approaches to storing luggage that optimise the efficiency of the boarding process.

Ideation

The last critical step to ensure companies realise the full potential of social data is to establish regular ideation sessions. The objective of these sessions is to bring the appropriate people together on a bi-monthly or quarterly basis to determine how the

business can best leverage the social insights. These sessions should include individuals that represent a cross-section of the business and are tasked with implementing customer-centric business practices. This meeting can be co-hosted with other business intelligence groups, however, it is important to keep the agenda from getting too broad because this will have a dilutive effect and impede the adoption of social insights. These meetings cannot be purely information sharing sessions. There needs to be one or more individuals responsible for clearly delivering the insights and then moderating the session to generate a list of well-informed action items. These action items could include new marketing and customer experience enhancement tests, identification of further analytics and research needed to fill knowledge gaps, or the development of new social metrics. The full potential of the social data is not realised until the business regularly uses the social insights to take meaningful actions. If it doesn't already exist, this will require the development of a culture of experimentation that embraces data-driven testing with the goal of implementing business enhancements that are in the best interest of the business and their customers. Interestingly, at the time this paper was being published, Delta Airlines was running tests to determine if removing the fees for checking luggage would reduce the number of carry-on bags and lead to a better boarding process experience.¹²

CLOSING THOUGHTS

Social listening and analytics have great potential, yet many of the benefits remain largely untapped. Turning your investment in social listening platforms from a producer of descriptive analytics to a creator of more value-added prescriptive intelligence is difficult. It takes a major leadership commitment to build an experimental culture, secure multi-skilled analytical

resources, and implement an insight delivery process that holds individuals accountable for taking data-driven actions.

The payoff to this investment is access to an entirely new source of insights. These insights can be used to react to crises in near real-time, but more importantly, used to proactively discover opportunities to grow the business, fuel innovation, and improve business performance.

The obsession to find new sources of data to inform business decisions is real. Social listening platforms should be a standard component of every company's analytics and research suite, particularly because of the unique nature of the insights that capture consumers' feelings, emotions, and attitudes. Companies that partner with social listening providers that practice transparent, ethical and responsible data collection methods will be in a good position to steer clear of consumer privacy issues and data regulation disruption. The companies that treat these social insights as a strategic asset will be rewarded with previously undiscovered opportunities to differentiate their brands because they have the insight-pipeline to continuously create new ways to impress their customers.

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