

A Survey on Social Media Analytics Tools for Business Intelligence

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Abstract— Big data is mostly generated from social media websites, sensors, devices, video/audio, networks, log files and web, and much of it is generated in real time and on a very large scale. This Big data can be analyzed to produce useful information for business people. The analytical findings can lead to more effective marketing, new revenue opportunities, better customer service, improved operational efficiency, competitive advantages over rival organizations and other business benefits. Along with opportunities, social media brings risks to companies.

Key words: Better Customer Service, Social Media

I. INTRODUCTION

Every day, millions of people around the world use social media sites like Facebook and Twitter to express themselves. Their communications often include thoughts about good and bad business experiences, and opinions about products and companies they like and dislike. This presents a valuable opportunity to get to know your customers in ways never before possible.

Across the world there are about 1.5 billion conversations an hour on social media platforms. Social media users share 30 billion pieces of content – comments, opinions, information videos, podcasts and photographs – each month. Yet just 15 years ago, none of this existed.

Companies spend millions of dollars and thousands of hours creating presences on social networks like Twitter, Facebook, Google+ and LinkedIn.

The early days of social media marketing talked about “Return on Interest” or “Return on Interaction.” In many cases, those were valid ways of looking at new communications efforts. Companies made some of their earliest efforts at one-to-one or one-to-few communications and changing the model for customer communications.

Today, we still see the power of social media in helping companies connect with customers. A recent study by the Pivot Conference states that 69 percent of marketers surveyed felt “Customer Engagement” and “Brand Lift” were their leading goals for using social media.

The influx of social media has skyrocketed over the past few years. The on-going and increasing demand of customers online has confirmed that the reality of social media is not one of fad or trend, but one that is here to stay, permanently. Social media does not only entail a place where people socialize, but has also become one of the preferred places to search for products and services.



Fig. 1: Social Media

II. BENEFITS OF SOCIAL MEDIA MARKETING

The following highlights key benefits why you should adopt social media platforms:

A. Targets Your Audience More Effectively

Knowing your audience is key for any business industry to grow more effectively. Not only does social media achieve this, but also has the tools to specifically target demographic variables of your intended audience; using customers personal information (e.g. gender, age, relationship status, language).

B. Expands Your Target Audience And Brings In New Ones

Social media platforms allows users to like, comment and share your page thereby creating free advertising to expand your business reach and bring in potential customers.

C. Allows Instantaneous Feedback from Customers

This provides valuable insight to customer’s perspectives; allows you to either enhance your product/service to better suit your customer’s needs or learn that customers are satisfied with your businesses offerings.



Fig. 2: Business Intelligence

D. Increases Website Traffic, Search Ranking and Generating Leads

The more followers, likes, comments and sharing that occurs on your social media platforms, increases your search ranking ability. Creating blogs and linking your businesses activities to your social media accounts further improves your visibility online and traffic to your website. It is important to maintain regular updates, videos and images as well as interactive and compelling content to drive this more effectively.

E. Cost Effective

For new start-up companies, SMEs and entrepreneurs, creating brand awareness on a limited budget can often be challenging. Social media is a great way to increase brand awareness at little to no costs compared to other traditional advertising and marketing methods.

F. Develops Customer Service Relations and Loyalty

The direct interaction between you and your customer is a key feature of social media platforms. It allows you to develop a direct bond with your customers and create a supportive network. The instant back and forth communication you get with social media helps establish trust and builds a loyal fan base. Loyal customers advocate your brand and can drive instant traffic to your business through social media.

G. Builds Brand Awareness and Exposure

This is what social media platforms does best: increases your brand awareness and exposure. You basically have access to many millions of potential customers signed up to these social media platforms at your disposable. Social media gets your business to be active visually and engagingly.

H. Create Brand Recognition

Gaining brand recognition is one of any business' most important marketing goals. That's because consumers want to buy brands they recognize. Thankfully, social media allows for easy and effective brand building.

Social media has a benefit over traditional media because it can get your brand in front of people much more quickly and easily. Furthermore, it gets your audience looking at your brand even when they aren't thinking about your brand or product.

I. Find out what your competitors are doing

With social media monitoring you can gain key information about your competitors. This kind of intel will allow you to make strategic business decisions to stay ahead of them. For example, you can create search streams in Hootsuite to monitor industry keywords and mentions of your competitors' names and products. Based on your search results, you can improve your business to offer product enhancements, service, or content that they may be missing.

J. Gain Marketplace Insights

One of the most valuable advantages of social media is marketplace insight. What better way to know the thoughts and needs of your consumers than by directly talking to them? By monitoring the activity on your profiles, you can see customer' interests and opinions that you might not

otherwise be aware of if your business didn't have a social media presence.

Social media may not directly generate an overwhelming amount of sales; it does however enormously promote and increase the awareness of your brand and your business profile. The main purpose of social media is to build brand engagement and customer connections at relatively low costs. This is particularly beneficial for start-up businesses, SMEs and entrepreneurs

III. SOCIAL INTELLIGENCE

Many businesses recognize that social media might lead them to a better understanding of what their customers think and want.

However, they struggle to understand how they can get the right information that will help them get ahead of the competition and make money.

To do that requires an expert analysis of social conversations and online behaviour, as well as an understanding that this is about much more than simply listening to the crowd.

It requires clarity about what a business should be monitoring, how to interpret the information received, and how to protect against the risks social media can present. This is social intelligence.

A. Identifying trends

Producing this social intelligence means applying data, technology and people to pick out the nuggets of intelligence, which, when stripped of emotional conversations, are invaluable to a company.

These nuggets are then developed to provide an understanding of what is behind the conversations, as well as the links, the networks and the location of this information. They can then be cross-referenced with other snippets that may be dotted about on the web – not just social conversations. These could include telephone numbers, email addresses, relationships to websites, domain links to friends or aliases that people use.

The intelligence is then pulled together to produce information about a particular topic, word or phrase, that is verified to determine whether it is revealing a genuine development rather than just hot air. This then gives an organisation a way of determining the value of a trend, and whether it is something that should be incorporated into its strategy.

B. Benefits of Social Intelligence

1) Identify micro-trends

The first benefit of social intelligence is the way it can be used to identify micro-trends that have not yet gained momentum.

Armed with this intelligence, a company can get ahead of the competition as there are significant profit margins to be realised in being the first to provide a service or product to the market. This applies not just to business-to-consumer transactions, but also in business-to-business.

By using social media to understand your customer's customer, you can develop better products that will enable them – and you – to profit, in a classic win-win.

2) Testing Strategies

The second key benefit is in the way it allows an organisation to test strategies.

With social intelligence, businesses can compare the outcome of different approaches and identify the best strategy. One Dutch company, for example, recently used social media to work out the best way to communicate its financial results.

Social intelligence can also help businesses plan and predict demand more effectively. PA Consulting Group was able to use social intelligence to determine the future occupancy rate of a large hotel for a specific period of time, achieving a 98% accuracy rate.

3) Building Digital Businesses

A third key benefit is the way social media gives businesses the power to collaborate with employees, customers and suppliers to innovate and build new “digital businesses”.

One major pharmaceutical company has used social media to gather ideas from a worldwide network to develop a novel solution to an intractable medical problem. Involving future customers and suppliers in this way gives businesses greater confidence that, when they go to market with new products and services, they will be well received.

IV. ANALYTICS

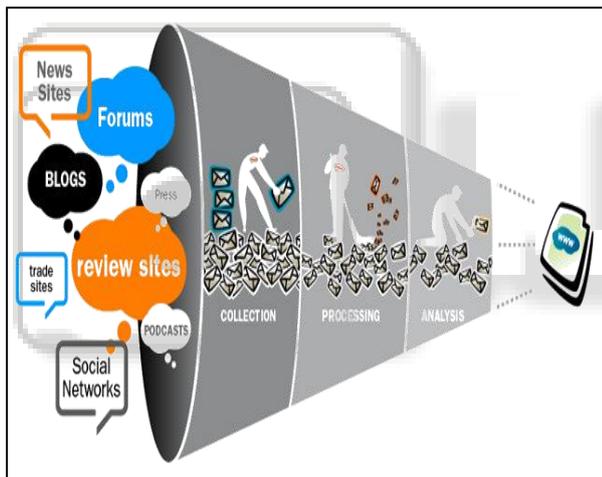


Fig. 3: Analytics Process.

What is social media analytics?

- 1) It's gathering data from social platforms to help guide your marketing strategy.
- 2) This process begins by prioritizing business goals. For example, your focus may be to double the number of new visitors to your website.

Determining key performance indicators (KPIs). In this case, your chief social media KPI would likely be based on engagement stats. By collecting this data, you can figure out how social media factors into meeting your business goal. From there, you can keep going in the direction you're headed or adjust your approach.

Tracking and reporting social media analytics used to be a hurdle for digital marketers – now the problem is finding the ideal tool.

The market is filled with different platforms, ranging in niche, effectiveness and user experience. And due to the recent Topsy shut down, more social media managers than ever are searching for a suitable alternative.

A. Analytics Tools

Following are the list of top social media analytics tools:

1) Keyhole

Use Keyhole to measure, in precise detail, a brand or trend's impact on Twitter, Facebook and Instagram. Giving you access to an intuitive and shareable dashboard, it tracks hashtag, keyword and campaign metrics in real-time. These include reach, impressions, periods of high activity and more.

You can also leverage its data to lead your influencer outreach efforts. Clicking the dashboard's Influencers tab will reveal information surrounding accounts that have the highest reach and interaction numbers. To boost your engagement, identify important accounts in your niche and re-share their most popular content.

2) Agora Pulse

Operating in multiple languages, you can use AgoraPulse to track enhanced engagement analytics across Twitter, Facebook and Instagram. Along with standard metrics, the platform ranks users who frequently share your content and notifies you when your pages and profiles have been mentioned. This information, combined with community management stats such as message response rate, will help guide your social outreach efforts. Plus, you can export analytics graphs onto a PowerPoint file.

3) Brandwatch

Offering a suite of tools that work across major social media platforms, Brandwatch is perhaps best used as a research suite. It provides information about the markets you own and want to enter, such as demographic data about gender and occupation. You can even monitor your brand's reputation in real-time, seeing if users are posting positive or negative messages about you. Best of all, the data is accurate – Brandwatch filters spam and duplicate mentions.

4) Buffer

As a comprehensive social media scheduling tool, you can log in to Buffer to see the engagement numbers for your Facebook, Twitter, Google+ and LinkedIn posts. Based on these metrics, it also identifies your top post of the day. But keep in mind, Buffer only tracks the posts you make through its platform.

5) Buzz Sumo

You can depend on BuzzSumo to track the top social content in your niche. Simply plug in a URL, phrase or keyword into the search bar to see who's sharing relevant content on each major social platform. You can then use the tool to promote your material, as it identifies the most influential sharers to reach out to.

6) Crowd booster

For a quick and simple Twitter and Facebook analytics tool, many marketers choose Crowdbooster. Through an intuitive and customizable dashboard, you have access to real-time engagement data that exports to Excel. The tool also makes recommendations about when to post, who to engage and how to improve your interaction efforts in a weekly performance summary

7) Edgar

Edgar automates social scheduling, storing content you collect in a library based on categories such as tips and blog posts. As you make a schedule based on these categories,

Edgar creates a never-ending queue that automatically cycles through your library week after week.

But the tool also tracks your engagement metrics, helping you optimize your schedule based which types of content generate the most interaction and when they should be shared.

8) *Google Analytics*

What's there to say about Google Analytics that hasn't already been said? As the clear top choice for analyzing website traffic, it's also ideal for evaluating certain social media metrics. You can use it to measure the value of traffic coming from social sites, determining how visitors behave and if they convert.

9) *Hootsuite*

Similar to Buffer, Hootsuite is a social media management dashboard. On top of scheduling posts and aggregating content, you can use its analytics tools. The platform not only tracks standard engagement numbers, but measures your team's performance. For example, it records resolution times for customer service issues.

10) *Klout*

Test out Klout to quantify your influence on each major social platform. Giving you a mark out of 100, it grades you based on your ability to engage and drive action. You can see on which platforms you're most influential, giving you an idea about how to successfully interact with your audience.

11) *Little Bird*

For an intricate influencer analytics tool, use Little Bird. Its goal is to eliminate the need for influencer research and instead let you focus on outreach. The tool tracks metrics detailing the most prominent people who interact in your space and with your brand. It discovers the most engaging topics and content for you to share or base ideas on, too. And the influencer list feature helps target qualified individuals throughout your social campaigns.

12) *Net Base*

Specifically targeting enterprise-scale brands and agencies, Net Base advertises that it processes posts nine-times faster and 50 to 70% more accurately than other comprehensive social media analytics platforms. Community managers can use it to quickly make decisions on large accounts they manage. Net Base can read millions of social posts in 42 languages and determines user sentiment regarding trends.

13) *Ok to post*

Historically, digital marketers have struggled to measure the financial impact of social media. Oktopost addresses that painpoint. The tool tracks conversions, identifying channels and messages that drive financial actions on your website. For example, it allows you to confidently say "this new customer came from our latest Facebook post."

14) *Quintly*

Use quintly to measure your profiles against competitors. Visualizing stats on standard engagement metrics through graphs, it tracks and compares your performance on the major social platforms. This makes it a go-to tool for competitive goal setting.

15) *Rival IQ*

Another analytics tool to monitor competitors, use Rival IQ to track how opposing brands perform on major social media platforms. Prioritizing growth, the tool records how

audiences develop or shrink on a weekly, monthly, quarterly or annual basis. By giving you access to historical data, you can compare growth rates to major events and business cycles to determine when rivals are expanding their fan bases.

16) *Sales force Marketing Cloud*

There isn't much you can't use the Marketing Cloud for – it has tools for email, mobile and content marketing, as well as an intuitive social media analytics suite. Through a clean dashboard, you can see metrics on which types of content are yielding the most engagement, where the most influential conversations are happening and what the general user sentiment is about your brand. You have the option of paying for the full cloud or picking the suites you want.

17) *Simply Measured*

Give Simply Measured a shot if you're after a comprehensive social media reporting platform. By connecting to Google Analytics, you can see information about how visitors from social sites are acting and converting on your website. It also has features to analyze competitors and compare accounts across major channels. Plus, you can schedule Simply Measured to automatically send reports with all of this information and more.

18) *Social bakers*

Capturing data across all major social platforms, use the Socialbakers analytics suite to leverage its comprehensive dataset. The features include custom benchmarking and competitive analysis, allowing you to create groups to track yourself against. For companies with locations across the globe, Socialbakers can segment data by individual brand and country. This lets you see where your efforts are most successful and where there's room to grow.

19) *Social Mention*

Use this tool as a social search engine with a complementary analytics suite. Just by typing in a keyword, you'll have access to a long results page of user-generated content from more than 100 platforms. Based on that content, Social Mention tracks traditional metrics along with unique ones, including user sentiment.

20) *Sum All*

Use SumAll to guide your long-term social media strategy. Along with e-commerce data, you can track information from your major social channels in a single interactive chart. As well as standard metrics, it includes features such as goal tracking and performance graphs. You can also set SumAll to send emails summarizing this data.

21) *Follower wonk (Twitter)*

Moz's Twitter tool provides a detailed look at Twitter analytics, giving you insights about your activity and audience. You can see statistics about when your followers log in, and generate demographic data such as their locations. Use it to identify and connect with influencers – Followerwonk measures social authority to track which accounts have the biggest impact on their followers.

22) *Iconosquare (Instagram)*

Although it's a platform-management tool, Iconosquare comes equipped with a thorough Instagram analytics suite. The dashboard has everything from engagement stats to optimization suggestions, such as the best times to post and which filters to use. You can also choose to receive emails that summarize your main metrics.

23) *Social Bro (Twitter)*

Offering price tiers depending on how many followers you have, try SocialBro as an all-in-one Twitter business platform. It tracks a bevy of content and audience metrics, offering tools to improve engagement and build segmented lists for campaigns. You can also use SocialBro to better understand your ads, as it tracks ROI for paid and earned media

24) *Tailwind (Pinterest)*

This platform-exclusive tool is designed to optimize your Pinterest strategy. Use it to track engagement metrics, as well as how your posts perform based on boards, keywords, hashtags and categories. Using these stats, Tailwind will find and recommend content for you to share. There's even Google Analytics integration, so you can analyze website traffic and revenue from Pinterest.

25) *Tweet Reach (Twitter)*

A search engine-esque platform, just type in a keyword, hashtag or username to get a look at the analytics behind your term. Useful for checking trends, it illustrates engagement data such as reach and impressions. TweetReach also gives you a long timeline of tweets to inspect.

26) *SoTrender*

Provide analytics for Facebook, YouTube, Instagram and Twitter. As well as providing the analytics, it gives you recommendations on how to resolve some of the issues, which is useful. Support for Facebook, YouTube, Instagram and Twitter Data-driven tips and recommendations – based on your analytics, you can access tips to improve the results.

27) *Talk Walker*

Talkwalker is an enterprise social listening platform that crawls over 500 million websites from 150 million sources. The tool can monitor and analyze mentions of a brand, company, keyword/s, key staff members, social channels across social networks, news websites, blog, forums and more. Talkwalker has an easy to use platform that is incredibly powerful and can also be easily integrated with other platforms so you can track correlations between social data and other kinds of data, such as sales data.

28) *Crimson Hexagon*

Crimson Hexagon is a leading provider of social media analysis software. Powered by patented technology and an in-house data library of more than 600 billion posts, Crimson Hexagon's platform helps hundreds of brands and agencies answer critical business questions through the insights derived from social data.

29) *Followerwonk*

This fantastic Twitter analytics tool is a favorite among many. It provides detailed information about followers along with their activity. You can even access statistics such as the number of followers that are online or your standard posting schedule etc. It also categorizes your followers based on authority, total tweets, activity, and number of followers.

30) *Sysomos*

The Sysomos tool behaves like a search engine for social media. It provides the ability to track the usage of certain topics on various social media platforms across the world. The statistics it offers, are based on past history and real-time, allowing you to see the popularity and impact of the conversations which are related to your field of interest.

V. THE FINAL VERDICT

There isn't a must-use analytics suite for social media marketers with general needs. But as your focus grows more specific, some platforms emerge as clear favourites.

With this list as your guide, you're sure to find a social media analytics tool that boosts productivity while giving you the valuable information you need.

A. *Better Than Traditional Market Research*

Fundamentally, social intelligence provides answers to questions that are critical to business strategy – and which board members need to know – but which companies often struggle to answer.

The question may be as simple as understanding how competitors compare in terms of the perception of their levels of customer service; it may be about providing evidence of how best to reach a particular target market; or discovering what products customers might want but that the business does not currently offer.

Equally, the business may need evidence to back up a major investment, perhaps with a new supplier, but needs to know how it is perceived by existing customers.

As a result of the volume of data and the sophistication of the analysis, social intelligence can provide more information and better information than traditional market research.

B. *Competitive Intelligence*

Social intelligence can also provide better competitive intelligence. In today's ever tougher business climate, knowing what your competitors are planning, and their successes and failures, is more important than ever.

Advanced social media analytics give a business the opportunity to make a broad study of its sector as a whole, encompassing clients, suppliers, competitors, potential competitors and key advocates.

This analysis can then be used to develop "influence strategies" – the blueprint for a set of consistent, reputation-enhancing signals communicated through the online channels that are most appropriate, whether that is the press, blogs or forums such as LinkedIn groups.

VI. RISKS OF SOCIAL MEDIA

Along with opportunities, social media brings risks to companies.

The speed and volume of information that is published on social media can cause significant damage. With 78% of people saying they trust what they read on social media, a misleading comment can damage a company's reputation in seconds. Here again, it is vital to have the intelligence to understand where this information is coming from, the motives behind it, and how to counteract it before it gains potentially dangerous momentum.

Another key risk from social media is cyber security. Social media can be used by hackers to acquire personal information about employees, then use it to befriend them. Having built a relationship, the criminal may be able to deceive the employee into revealing how to access to their company's systems, and so opening the door to cyber attacks.

However, this information can also be used against hackers. Cyber criminals or their associates may leave their

"footprints" on social media sites. This can make them easier to trace, and thus prevent or mitigate attacks.

VII. CONCLUSION

Businesses need to understand social intelligence, both its benefits and the risks. Once they do this, they will see that this exciting development can fundamentally change the way we do business.

There is a huge prize to be secured in better products, competitive advantage and increased value, but the winners will have to embrace and integrate social intelligence into everything they do.

Without a well-defined plan that puts social media analytics into a broader enterprise context, and a set of technologies that can effectively support that process, organizations can miss the mark -- badly -- in trying to parlay isolated insights gleaned from social networking data into strategic business intelligence.

That alone won't guarantee social media data analysis success, though a variety of challenges that organizations need to address as they plan and push forward with social media monitoring and analytics programs.

The available data has its limits. Compounding the silo issue is the fact that social media analytics offers a limited perspective on what's being said in social forums because all of the data being generated there isn't readily accessible for analysis. Take Facebook and Twitter, for example. Most companies don't have access to the complete "fire hose" of Twitter data and are only able to capture publicly available information on Facebook -- not what gets posted on people's personal walls behind privacy protections.

Overreaching is dangerous. Too much information can be the death knell for social media data analysis initiatives. Companies should avoid the temptation to try to find useful information in every corner of the social media universe. One has to focus on what matters to the business' bottom line in using these tools and not look at every mention of your product or brand."

Social media is a small part of the overall conversation. The data you can tap into on sites such as Facebook and Twitter constitutes only a fraction of what's being said about your company or products in word-of-mouth forums as a whole. "Ninety percent of the conversation and influence still happens offline.

Even when its use is managed effectively, social media analytics software is by no means a panacea for companies looking to track and respond to customer sentiment. Anybody who wants to be in business at this time needs to be listening to customers on social media, But it's not the ultimate answer to everything, and it's not the only way to be listening to customers.

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