SOME MARKET CONDUCT SUPERVISORS (MCSS) USE SUPERVISORY technology (“suptech”) to convert large amounts of unstructured data into structured data. Suptech then combines the structured data with other data sources and formats, such as regulatory reporting, ultimately feeding all the data into supervisory risk analyses.

Social media monitoring (or “social listening”) is one such unstructured data collection tool, which specifically focuses on consumer-generated data. It allows MCSs to listen to the collective voice of consumers by gathering insights into their experiences and issues with financial services and products. The tool monitors what consumers post on social media platforms such as Facebook, Twitter, Taringal, Qzone, and VKontakte (VK), as well as on digital forums, blogs, and websites. With social media as an indicator, MCSs can remain current on new products in the market and spot emerging trends in consumer protection risks in real time.

Benefits and opportunities

- **Timeliness.** Through social media monitoring, an MCS gains relevant real-time data on the most recent issues consumers face, such as complaints about the unavailability of online services or long customer wait times with call centers. This enables the MCS to immediately spot issues.

- **Supervisory effectiveness.** Social media data can rapidly feed into market conduct risk assessments, policy and regulatory development, and supervision of individual FSPs. For example, social media monitoring uncovered an unauthorized firm in Ireland that operated and traded by using fake names and email addresses. After the Central Bank of Ireland published a warning notice, the firm immediately ceased operations.

- **Proactivity.** Social media monitoring can help an MCS keep an eye on new products, services, channels, and providers, including those not yet under its remit that may generate critical financial-sector consumer risks and issues if left unattended.

- **Flexibility.** An MCS may be able to shift the focus to other topics or issues by analyzing different types of social media content. For example, it may gain insights on consumer risks that arise from marketing and advertising practices by monitoring the information FSPs disseminate via social media, which usually is directly addressed to potential consumers. As this information is publicly available, privacy concerns are not likely to arise (FinCoNet 2020).
Comprehensiveness. Sentiment analysis provided by social media monitoring can be used to analyze consumer attitudes toward financial products, services, or providers as expressed in social media posts and online customer reviews. Analysis may uncover emerging consumer issues and infer consumer trust. For example, the Bank of Italy uses social media to “assess customer sentiment towards specific companies and the effect on stock returns, volatility, and trading volumes. Twitter and news channels are used to measure economic policy uncertainty and to investigate payment card scams, with the aim of relating them to trends in consumer payments.” (FSI 2018).

Feedback. Social media can collect consumer input on the design or amendment of regulation.

Characteristics of this tool
Social media monitoring analyzes consumer posts on various social media platforms, blogs, and online forums. The tool tags posts either by key word or topic (e.g., FSP name, product type), and can categorize posts by consumer sentiment. This tool applies innovative IT and data analytics techniques and methods to unstructured data, such as natural language processing, sentiment analysis, text mining, and web scraping.

How to use this tool
MSCs usually outsource social media monitoring to specialized third-party technology providers that possess a variety of innovative IT and data analysis techniques (e.g., machine learning, sentiment analysis). The tool scrapes the internet, including a wide range of social media platforms and websites, looking for key words as part of the search criteria an MCS has established. Social media monitoring may clean the data by removing irrelevant data points and provide the MCS with data analytics and visualizations. In some cases (e.g., the Central Bank of Ireland), the MCS would take additional steps to clean, anonymize, and improve the accuracy of the data supplied by its technology provider.

An MCS may consider several criteria when selecting a specialized technology provider for social media monitoring services:

- **Range of coverage.** Ensure that the tool covers all necessary media types and websites (e.g., digital, print media, social networks, social bookmarking sites, blogs, content-sharing sites, message boards, forums).
- **Good filters.** Ensure the provider can filter out enough irrelevant data to make search results useful and not require inordinate amounts of staff time to further clean data prior to analysis.
- **Use of cutting-edge technology.** Which IT and data analytic techniques (described in the previous section) does the MCS require in a social listening tool? Providers offer various combinations of technology, so the MCS needs to ensure the chosen provider meets its needs.
• **Reporting and visualizations.** Consider the reporting capabilities the tool can provide and what types of visualizations or graphics may be required, including dashboards. Find a technology provider that is able to customize its standard package to specific requirements.

• **Support and training.** Be clear on what kind of training the provider offers upfront, how much personalized support it offers, how questions will be answered, and how robust an internal help system it provides.

A small team of supervisory staff should be involved in the configuration and initial application of the tool, and trained in how to use any specialized software developed and managed by the technology provider. Many providers offer upfront and ongoing support and training for supervisory staff. For example, the Central Bank of Ireland’s Consumer Risk Analytics team has four staff members to analyze the social media monitoring data its specialized technology vendor provides. This team shares anonymized data and analytic reports with other Central Bank teams. The Central Bank of Ireland Country Case provides further details.

### Limitations of this tool

Using social media and websites as data sources for market monitoring poses several limitations:

• **Unrepresentativeness.** Social media use may not be representative of a country’s population. For example, it is well documented that women and rural populations have less access to the internet in emerging markets.

• **Limited depth.** Information that could be relevant to either prudential or market conduct supervision only accounts for a small part of the available data.

• **Data quality issues.** The reliability of unstructured data (e.g., text, images, spoken words) may be of concern (FinCoNet 2020). As such, cleaning the data to remove irrelevant noise and extract relevant insights, even after they are processed by the social media monitoring tool, is one of the biggest challenges an MCS faces in using this tool.

• **Resource intensiveness.** The time it takes to set up the tool and for staff to learn how to use it and interpret results can be a challenge. Ensuring compliance with data protection requirements vis-à-vis personally identifying information also requires resources.

• **Complexity.** Analysis requires a strong understanding of key events, users, and techniques that may distort social media data and lead to inadequate conclusions.

Effective market monitoring requires a strong mix of tools, including basic tools such as the analysis of traditional regulatory reports. Different tools complement and reinforce each other, and positive consumer outcomes and changes in market practices depend on how an MCS uses tools; combines them with other evidence; and takes timely action to generate changes in market practices, reform regulations, clarify supervisory expectations, and penalize poor conduct.
Other resources

- Elevating the Collective Consumer Voice in Financial Regulation (CGAP 2021)
- Supervisory Toolbox (FinCoNet)
- SupTech Tools for Market Conduct Supervisors (FinCoNet 2020)
- Artificial Intelligence and Machine Learning in Financial Services (FSB 2017)
- Innovative Technology in Financial Supervision (Suptech) – The Experience of Early Users (FSI 2018)
- The Use of Big Data Analytics and Artificial Intelligence in Central Banking (IFC 2019)
- Measurement of Consumer Complaints on Social Media (Innovations for Poverty Action)
- From Spreadsheets to Suptech: Technology Solutions for Market Conduct Supervision (World Bank 2018)
- The Next Wave of Suptech Innovation: Suptech Solutions for Market Conduct Supervision (World Bank 2021)