Social media monitoring has enabled Ireland’s Central Bank to gain early knowledge of new financial services and products in the market, identify trends in consumer sentiment toward financial products and services, identify consumer issues and concerns in real time, and take quick action.

### Background

- **Regulatory and supervisory powers.** The Central Bank of Ireland (the “Central Bank”) serves the public interest by safeguarding monetary and financial stability and by working to ensure that the financial system operates in the best interest of consumers and the wider economy. The Central Bank regulates approximately 10,000 FSPs of varying nature, scale, and complexity across approximately ten retail sectors with both prudential and conduct supervision mandates.

- **Consumer protection supervision role.** Under the Central Bank Act 1942, the Central Bank has a statutory function to monitor the provision of financial services to consumers for the purpose of protecting the public interest of consumers. Its risk-based approach to supervision includes, among other processes, systems and procedures to monitor activities and detect noncompliance by financial institutions through, for example, social media monitoring. The Central Bank has also instituted codes of conduct to provide consumers with added protections when dealing with FSPs, including a Consumer Protection Code that is binding on regulated entities. The Central Bank has the power to administer sanctions for contraventions to the code.

### Factsheet

- **Country:** Ireland
- **Authority:** Central Bank of Ireland
- **Sector:** Financial services
- **Tool:** Suptech tool to identify and collate data in real time by monitoring social media channels through a specialized technology vendor
- **What is the tool used for?** To gather real-time insights about consumer experiences with financial services providers (FSPs) and emerging consumer issues
- **Third parties:** Third-party vendor
- **Estimated cost:** Not disclosed
- **Year(s) of usage:** 2013–present
- **Keywords:** Social media, social networks, data analytics, consumer issues, big data, unstructured data, Ireland, Central Bank of Ireland, suptech, consumer experience, noise, consumer voice, social media listening, consumer sentiment
Purpose and incentives

• **What is the tool used for?** The main objective of social media monitoring is to gather real-time insights about consumer experiences with FSPs and emerging consumer issues and trends by “listening” to what consumers have to say on a range of social media platforms.

• **Incentives for tool development.** The Central Bank has monitored social media and other online platforms and websites since 2013, when it recognized that social media had become an important forum for customers to discuss their experiences with FSPs. Over the years, the Central Bank has worked with a specialized technology vendor to implement its social listening tool. The vendor offered the Central Bank a “human sense check,” allowing the Central Bank team to validate data scraped from the internet and confirm how salient an issue really was. This gave the Central Bank a way to ease into new SupTech technologies and gain confidence in their use. After several years of joint collaboration with the vendor, the Central Bank has refined and fine-tuned its monitoring outputs.

Technical methodology and data ecosystem

• **The vendor tool.** The specialized technology vendor’s tool monitors, in real time, social media platforms, blogs, websites, and online forums such as Twitter, Facebook, LinkedIn, etc., based on a watchlist of FSP names and keywords. The monitoring tool records a mention when any keyword matches the watchlist of FSP names. The keywords list includes references to FSPs active in the country, as well as various financial products and services, and is regularly updated to reflect new firms and data. The tool can also identify whether consumer sentiment is neutral, positive, or negative. The Central Bank works closely with the specialized technology vendor to eliminate “noise” (i.e., irrelevant postings).

• **Data preparation.** On a weekly basis, the Central Bank receives unstructured data from the specialized technology vendor that includes sentiment, category, topic, content of mention, and platform the consumer posted on. The Central Bank receives an average of 700 line entries per week. Each consumer mention is assigned a category (e.g., whether it is a complaint, a query, or related to a new financial product or service). Complaints and queries are further analyzed according to predetermined topics (e.g., issues with mobile apps, scams and frauds, misleading advertisements). The Central Bank also clusters issues in order to determine if patterns arise. The Central Bank uses information gathered by the tool to prepare reports by topic, FSP, and product. The data feed into the Central Bank’s risk analysis and assessments, consumer protection policy formation, and FSP supervision.

• **Bespoke reporting.** The Central Bank’s contract with the specialized technology vendor includes the provision of a number of custom reports per year, which are conducted by the vendor’s analysts for additional in-depth analysis on topics of interest to financial conduct supervisors (e.g., consumer issues arising from Brexit).
Staff, expertise, and other requirements

• **Staff requirements.** Analysis of the Central Bank’s social media monitoring is conducted by members of the Consumer Risk Analytics team. This team comprises a manager and three risk analysts. The team anonymizes reported data prior to more widely sharing it within the Central Bank, removing all references to personally identifiable information (PII). When a topic of interest emerges, the data are shared with other supervisory functions within the Central Bank.

Vendor selection and cost

• **Selection criteria.** The specific criteria the Central Bank used in selecting the specialized technology vendor for its past contracts are not available. The Central Bank is currently exploring and researching additional statistical tools and the use of machine learning as part of its social media-monitoring tool. (Note: the Central Bank meets all public procurement requirements in vendor selection.)

Benefits and impact

• Social listening serves as a valuable source of data that allows the Central Bank to gain early knowledge of new financial services and products in the market. This data is also useful for identifying trends in consumer sentiment, particularly dissatisfaction with financial products and services, and feeds into supervisory risk analyses, policy formation, and supervision of individual FSPs.

• Data from social media monitoring has enabled the Central Bank to identify consumer issues and concerns in real time and take action. For example, data revealed a spike in consumer complaints on the availability of customer support services for a particular FSP. The Central Bank investigated the issue using detailed market intelligence and underlying data about call waiting times to confirm the social media indications. The Central Bank relayed its concerns to the FSP’s senior management. Based on this information, the FSP recruited additional customer service staff and agreed to change staff scheduling to accommodate consumer peak times. In another example, in 2016, social media monitoring revealed that an unauthorized firm was operating and trading by using fake names and email addresses. After the Central Bank published a warning notice, the firm immediately ceased its operations.

Limitations and implementation challenges

• **Data challenges.** Data scraped from social media can present challenges, as it is a self-reported communication and therefore inherently based on the opinion of the person posting the content. Varying human expression, local sarcasm, and tone of postings are not easily detected and captured through quantitative statistics. Additional
enhancements to the dataset may be required to recategorize postings or include new categorizations which limit the comparability of data over time as categorizations evolve. It can be difficult to distinguish between tweets, retweets, and conversation threads; if these are not correctly identified and filtered the magnitude of an issue can potentially become overinflated.

- **Consumer sentiment can be misleading.** The social listening tool cannot understand local context such as regional language, phraseology, or sarcasm. Human judgement is required to recategorize complaints and queries to more accurately reflect their actual sentiment. For example, the tool would read the phrase expressed by a frustrated customer, “Well done, [FSP name],” as a positive comment instead of the negative, sarcastic comment it actually is.

- **Data collection and storage requirements under the European Union’s General Data Protection Regulation (GDPR).** The EU’s GDPR presents several challenges for this tool due to requirements regarding the safeguarding of PII. The Central Bank ensures full compliance with GDPR.

- **Not necessarily a true representation of consumer issues or complaints.** Due to its self-reported nature by individuals with differing experience, needs, and preferences, social media data does not necessarily provide a true representation of issues or complaints in the market and must be carefully interpreted. However, it does provide a valuable indication of trends in the market and can be used to effectively supplement other sources of data or trigger further investigation. In particular, the willingness of consumers to use social media to air grievances is strongly linked with the nature of the issue or complaint and the nature of the financial product or service in question—whether that financial service is delivered using traditional or online channels. For example, consumers tend to complain more about smaller, one-off issues relating to online financial services but may be reluctant to discuss or complain about larger financial troubles.

**Future plans for the tool**

- The Central Bank is currently exploring and researching additional statistical tools and the use of machine learning as part of its social media monitoring tool. One key feature under consideration is the ability to adjust system categorizations and weightings to incorporate enhanced accuracy based on local expertise and intelligence.

**Learnings**

- Social media monitoring can give real-time insights into consumer issues—even prior to such issues being reflected through other data sources.

- Social media monitoring data cannot be used in isolation as definitive supervisory evidence. The findings must be combined with other data analytics and information, such as findings from targeted supervision.
• Depending on the tool, human judgement and intervention may be necessary to process and clean up data in order to develop meaningful outputs.
• Depending on the data regulations in place, collecting and storing personally identifiable information may not be allowed. Based on the level of data aggregation and anonymity the tool can offer, this may be a challenge for the financial conduct supervisor.

Resources
• Central Bank of Ireland Consumer Protection Code
• Central Bank of Ireland Consumer Protection Bulletin: Social Media Monitoring