Social Streaming Analytics Of Multi-structured Data

Dr. Udayaadithya Avadhanam, Mr. Meer
Mphasis Next Labs

Introduction

The rise of digital channels for communication led to a surge of information-rich data. Businesses worldwide are increasingly adopting digital communication channels to build a robust relationship between brands and consumers. Given the sheer growth trajectory of social media as compared to other channels, most businesses are intensively pursuing social media as a preferred means of interacting with consumers. However, social media is much more than just a medium of transmitting messages. The greatest business value that social media provides is in making sense of unstructured data and gaining actionable insights into customers, trends, and other valuable details. Social media also serves as a platform for fostering:

> *Customer feedback, service and engagement*

> *Market research for new product development*

> *Competitor analytics and brand positioning*

> *Social risk monitoring and mitigation*

> *Community formation and advocacy*

> *Effective campaigning and sales conversion*

Gaining business insights via a range of digital footprints, such as - web browsing history, search history, social media conversations, multimedia content sharing, blogs and comments, likes and dislikes, friends and followers, mobile and sensors, etc. - has been of interest to many organisations, especially those in the banking sector in the recent past. However, ensuring a single view of the customer, while mapping these insights to the customer journey, is a key business and analytics challenge.

As a result of the growing volume, variety and velocity of real-time social data, traditional analytical paradigms, architectures, and methodologies, are not able to cope with current business needs. Banks and other organisations have to bear in mind that connections, content, and mode and tone of communication, are all imperative to understand and extract deeper insights.

NEXT labs

Actionable Insights from Social Streaming Analytics of Multi-Structured Data

Analytics and business intelligence not only paints a picture about the health of the organisation, but also charts its future growth. However, the explosion of social data and real-time information, demand banks to look and leverage analytics from a completely different lens.
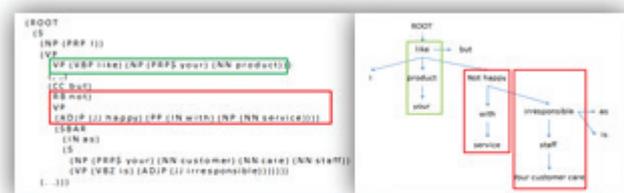
Accurate Information

Corpus linguistics methodologies like Natural Language Processing (NLP), deep parsing, critical discourse analysis, cognitive computing algorithms and self-learning mechanisms, along with industry-specific taxonomies are used to intelligently extract relevant information.

Real-time Lead Generation

In order for banks to effectively communicate and target their customers, they need to have a broad understanding of the competitor landscape and the market segmentation of their products. A customer's perspective of a particular product in relation to its competitors' products, act as the basis for this purpose.

Feature extraction methodologies along with salience analysis, are handy in this process. These methods help to micro-segment customers and understand the factors of lead generation and conversion.

N=1 personalisation of products and services is gaining momentum amongst banks and various organisations. Therefore, the real-time identification of leads, as well as understanding the reasons associated with the demand of new products and services, are the need of the hour. To enable banks to achieve on-time lead conversion, we have adopted distributed text mining architecture, along with sequential analysis.

NEXTlabs
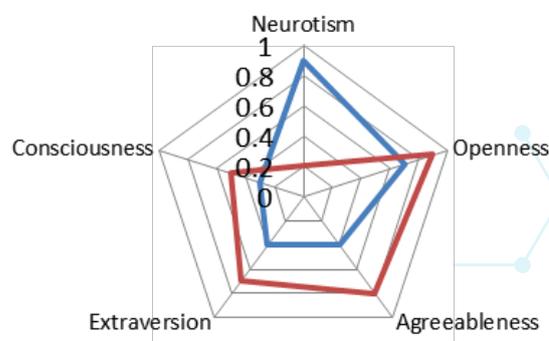
Brand Awareness

Profiling the personalities of individuals, along with understanding the cognitive expressions in various conversations, assist banks to recommend the right products or/and services to their customers.

In addition, effective campaigning is important to ensure that banks message relevant information to their customers, for creating awareness and brand value. Many organisations would like to gauge if their campaigns are reaching out to the right people with the right message. The impact of campaigns can be analysed by tracking either changes in behaviour and/or changes in the perspective of users towards a brand's products and services. Changes in brand reputation are then assessed using NPS scores, calculated with the help of social data.

Risk Mitigation

Banks are often concerned about several risks associated with the:

◆ Potential loss of customers

◆ Enterprise risk using PEST analysis

◆ Loss of brand reputation

To handle these risks, Banks can utilise cognitive linguistic methodologies, lexical based methods and discursive analysis, which will help them identify different kinds of risks. In addition, for banks to mitigate these risks, they have to engage in identifying communities and their structures, risk propagation and determining respective topics which will generate necessary actionable insights. Structural analysis and topologies are also helpful for this purpose.

NEXT labs
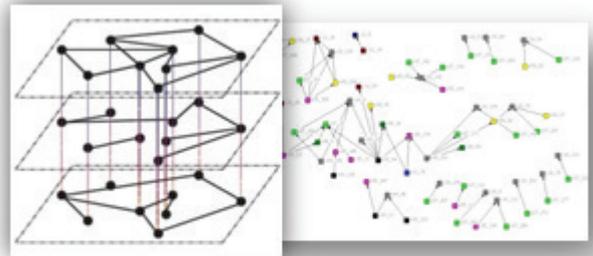
Conclusion

Digital media strategies are very different from traditional public relations strategies, due to the velocity and virality of information being shared. Hence, it is imperative for banks to identify influencers and understand their role in information diffusion, so as to chart out strategies effectively.
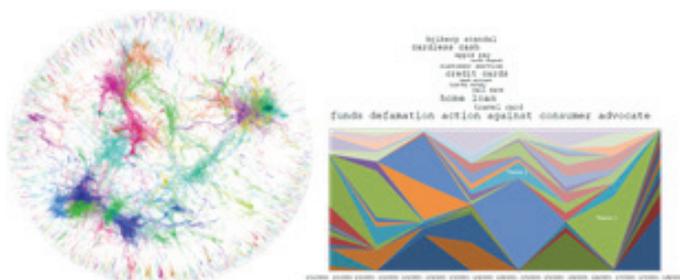
In addition, if banks can effectively carry out the analysis of social networks and understand network evolution, it allows them to identify real-time topics that are trending. It also fosters the ability to predict the most probable viral conversations, thus allowing banks to proactively react to the context.

About Mphasis

Mphasis is a leading IT solutions provider, offering Applications, Business Process Outsourcing (BPO) and Infrastructure services globally through a combination of technology knowhow, domain and process expertise.