LAB Manual

PART A

(PART A : TO BE REFFERED BY STUDENTS)

**Experiment No.01**

**A.1 Aim:**

Introduction to social media, text analysis

**A.2 Prerequisite:**

Knowledge of media and text analysis

**A.3 Outcome:**

Learn about various text and social media analysis tools and learn about the working on each of the tool.

**A.4 Theory:**

Please refer the page below.

PART B

(PART B : TO BE COMPLETED BY STUDENTS)

***(Students must submit the soft copy as per following segments within two hours of the practical. The soft copy must be uploaded on the Blackboard or emailed to the concerned lab in charge faculties at the end of the practical in case the there is no Black board access available)***

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| --- | --- |
| Roll. No. A016 | Name: Varun Khadayate |
| Class B.Tech CsBs | Batch: 1 |
| Date of Experiment: 11-07-2022 | Date of Submission: 18-07-2022 |
| Grade: | |

**B.1 Software Code written by student: N.A.**

***(Paste your code completed during the 2 hours of practical in the lab here)***

**B.2 Input and Output:**

***(Paste your program input and output in following format, If there is error then paste the specific error in the output part. In case of error with due permission of the faculty extension can be given to submit the error free code with output in due course of time. Students will be graded accordingly.)***

# Text Analytics Tools

## Amazon Comprehend

Amazon Comprehend is the company’s flagship NLP service. Its key features include keyphrase extraction, sentiment analysis, syntax analysis, language detection, topic modeling, and more. It also offers a special service for the analysis of medical text that includes medical ontology linking. Both the regular Comprehend service and the Medical service integrate with other AWS services. Well-known customers that use the service include LexisNexis, FINRA, PubNub, Deloitte and others.



## Google Cloud Natural Language

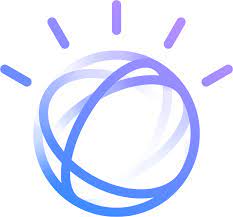
Built on Google’s AutoML machine learning technology, Google Cloud Natural Language comes in three different flavors: AutoML Natural Language for those who want to build their own models and training data; the Natural Language API for those who want to add natural language capabilities to their applications; and the Healthcare Natural Language API for real-time analysis of medical text. Key capabilities include sentiment analysis, multimedia support, multi-language support, entity extraction, receipt and invoice understanding, relationship graphs and more.



## IBM Watson Natural Language Understanding

One of the early forerunners in artificial intelligence, IBM’s Watson technology is available through IBM Cloud. IBM has less than 2 percent of the public cloud market, but the company reported that its cloud revenue rose more than 60 percent in its most recent quarter. IBM Cloud offers more than 170 services, and it is particularly focused on hybrid cloud deployments. Its customers include The Weather Company, Deutsche Bank, the US Open, Kone Corp. and KraftHeinz.

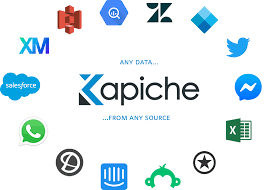
Watson Natural Language Understanding offers powerful insight extraction with built-in models for high accuracy, and it can be deployed in the IBM Cloud or behind your own firewall. Key features include support for 13 languages, sentiment analysis, emotion analysis, keywords, categories, concepts, entity extraction and more. It is useful for analyzing customer feedback, optimizing advertising and streamlining audience segmentation.



## Kapiche

Founded in 2016 by two entrepreneurs who met in the eighth grade, Kapiche is a pure-play startup focused on analyzing customer feedback. Headquartered in Brisbane, Australia, it has raised an estimated $2 million in funding. Its customers include American Express, Schindler, Kmart, Target, HCF, Nissan and others.

Kapiche’s key features include the ability to integrate data from many different sources, customizable dashboards, sentiment analysis, quadrant charts, issue tracking and more. You can get it up and running within hours, and it doesn’t require any coding expertise.



## Lexalytics

Founded in 2003, Lexalytics is a privately held company headquartered in Boston. Its text analysis platform is its only product, although the platform does come in several different flavors. Its customers include Altair, Hootsuite, Oracle, Microsoft, Biogen and others.

Designed for organizations that analyze very high volumes of text, Lexalytics is available in on-premise, cloud API or Web-Based NLP Platform versions. A very full-featured platform, it has tools suitable for use by data scientists as well as tools for use by analysts and other business users. Its capabilities include sentiment analysis, theme analysis, categorization, intention detection, entity extraction, summarization and more. It supports more than 20 different languages.



## MeaningCloud

Although the MeaningCloud name has only been around since 2017, this text analysis vendor actually has a much longer history. It began life as a data mining and language technology company called Daedalus S.A. in 1998. In 2015, Daedalus became Sngular, before becoming MeaningCloud two years later. Today it is headquartered in New York City with a customer list that includes Pfizer, World Bank Group, Telefonica, Carrefour, Le Parisien, ING and others.

MeaningCloud’s technology is available as an Excel add-in for data analysts or as a cloud API to plug into other applications. It boasts powerful sentiment analysis, a customizable interface, easy integration, commitment-free pricing and support for multiple languages. Although most customers choose to use the cloud-based APIs on-premises deployment of the APIs is also available. In addition, integrations are available for Excel, Google Sheets, RapidMiner and Zapier.



## Microsoft Azure Text Analytics

Microsoft Azure Text Analytics uses NLP to identify key phrases, entities, sentiment, trends and more. It supports numerous languages, and pre-trained medical models are available. In addition to the standard cloud deployment, it is also available for use on-premises or in edge computing environments. Customers include KPMG, Wilson Allen, IHC, LaLiga, TIBCO, Kotak and others.



## MonkeyLearn

Used by companies like Clearbit, Segment, Dell and PubNub, MonkeyLearn is a machine learning-based text analysis platform. Founded in 2014, the MonkeyLearn company is headquartered in San Francisco, California. It is privately held and has raised an estimated $3.2 million in funding.

MonkeyLearn’s platform comes in three different flavors: The Studio version is an all-in-one standalone text analysis tool. The API version plugs into your apps, and the Word Cloud version does nothing but generate word clouds. It integrates with many different data sources, extracts keywords, classifies sentiment and topics, tags data and integrates with visualization tools so that you can make sense of the findings.



## RelativeInsight

Founded in 2012, Relative Insight is a London-based company focused on text analysis to help improve brand positioning. Its customers include Twitter, Sky, R/GA, McCann London, Y&R, Hall & Partners, Kaiser Permanente and others. It is privately held and has raised an estimated $5 million in funding. The company has won a number of awards related to advertising and branding.



## SAS Visual Analytics

One of the world’s leading analytics vendors, SAS boasts more than 83,000 customers, including 92 of the top 100 companies on the 2018 Fortune Global 1000. Headquartered in Cary, NC, it has nearly 14,000 employees worldwide.

SAS Visual Text Analytics is an end-to-end solution that includes data preparation, visualization, parsing, trend analysis, information extraction, hybrid modeling and sentiment analysis. It offers flexible deployment options and includes native support for 33 languages. And it’s an open platform with REST APIs that make it easy to integrate with other applications.



# Web Analytics Tools

## Google Analytics

Google Analytics is one of the best free tools that any website owner can use to track and analyze data about Web traffic. You get to see what keywords are bringing the most visitors to your pages and what aspects of your designs are turning them off. This tool will generate a report for your website that includes information about visitors, traffic sources, goals, content and e-commerce. The downside of Google Analytics is that it can take time to update. (The real-time version is still in beta testing.) There are other tools that offer real-time updates of your data now.



## Spring Metrics

Spring Metrics has taken the analytics tool and made it simpler. You don’t have to be a professional data-miner to get the answers to your questions. You get real-time conversion analytics, top converting sources, keyword analytics, landing-page analysis, e-mail performance reports and simple point-and-click configuration. Unlike Google Analytics, Spring Metrics tracks a visitor’s path through your website from the time he landed to the time he left.



## Woopra

Woopra is another tool that offers real-time analytics tracking, whereas Google Analytics can take hours to update. It is a desktop application that feeds you live visitor stats, including where they live, what pages they are on now, where they’ve been on your site and their Web browser. You also have the ability to chat live with individual site visitors. This can be a great feature for your e-commerce site to interact with customers. Woopra offers a limited freebie plan as well as several paid options.



## Clicky

Clicky also offers a free service if you have only one website and a Pro account for a monthly fee. You get real-time analytics, including Spy View, which lets you observe what current visitors are doing on your site. Clicky's dashboard is simple to use and presents all the information you want to see clearly. They also have a mobile version that makes it easy for you to check your stats anywhere.



## Mint

Mint is an analytics tool that is self-hoste. You get the benefit of real-time stats, which you don’t get with the free Google Analytics. You can track site visitors, where they are coming from and what pages they are viewing. And Peppermill, a part of Mint, lets you make any adjustments to make it more compatible for your use with tons of free add-ons.



## Chartbeat

Chartbeat lets users get the most from their data with instant information. They keep constant watch on your visitors and what they are doing on your website. This gives you the information you need in order to make the adjustments necessary to your content or design.



## Kissmetrics

Kissmetrics is another analytics tool that allows clients to track the movements of individual visitors throughout their websites. You can see how behaviours change over time, identify patterns and see the most typical and recent referrers, among other stats.



## UserTesting

UserTesting.com is a unique way to gather information about site users. You are paying for a group of participants of your choosing to perform a set of tasks on your site. The user and his activity will be recorded on video. In about an hour, you will have your feedback. You get to hear the actual thoughts of users in your target demographic.



## Crazy Egg

Crazy Egg uses the power of Heatmap technology to give you a visual picture of what site visitors are doing on your Web pages. It shows you where people are moving their mouse on the page and where they click. There is a link between where people put the mouse and where they are moving their eyes. So, this kind of tracking helps you see what areas are catching the most attention and interaction from users.



## Mouseflow

Mouseflow is somewhat of a combination of UserTesting and Crazy Egg. You can see video of users interacting with your website, including every mouse click and movement, scrolling and keystrokes. You also get to view heat maps from different time periods so that you can see the effect of changes that you make on your page. Pricing varies depending on how many sites you want to cover and how many sessions you want.



# Social media Analytics Tools

## Sprout Social

Sprout comes complete with both templated and customizable reporting options, meaning you have multiple ways to not only gather essential social metrics, but truly understand what they mean and present them to others including only the metrics you care about most and reducing the noise

Sprout’s Advanced Listening tool arms you with valuable data related to audience demographics, industry influencers, campaign performance, share of voice and consumer sentiment.

No matter your social media analysis and reporting needs, Sprout has been built from the ground up to give you a fast, user-friendly way to discover and display social insights.



## HubSpot

With HubSpot’s analytics tools you can tie social media performance to business and revenue growth. Whether publishing directly through HubSpot, or publishing using other tools or while on the go, you’ll be able to report on the success of your social strategy across every channel. You can also compare the performance of multiple social channels to measure campaign performance.

HubSpot’s social analytics tools offer expansive graphs and visuals that break down the numbers by specific platform features, like audience, session lengths, and impressions.



## TapInfluence

TapInfluence highlights relevant influencer metrics in black and white so brands can better understand whether or not a potential relationship makes sense prior to outreach.

Influencer campaigns shouldn’t be a black hole of ROI. In addition to individual influencer metrics, the platform also measures the performance of overall campaigns against industry benchmarks.



## BuzzSumo

If you want to see how many shares your latest blog post received on Facebook, Twitter or Pinterest, BuzzSumo can provide you with that data. You can also monitor the performance of content competing for relevant industry keywords, allowing you to see how your content marketing campaigns are stacking up against the competition.

Social media remains one of the top distribution channels for content. By analyzing social shares, you can see which types of posts receive the most engagement and use that data to inform your own content strategy. BuzzSumo can also help you understand variables in top-performing content such as length, publish date and headline type.



## Snaplytics

Snaplytics focuses solely on analytics for Snapchat and Instagram Stories. The platform looks at metrics such as open and completion rate, allowing brands to see where story engagement peaks and likewise at what point viewers drop off.



## Curalate

Platforms such as [Curalate](https://www.curalate.com/" \t "_blank) serve as a hybrid storefront and analytics tool for companies looking to maximize their sales from Instagram

Chances are you’ve seen a branded or unbranded “Like2Buy” link in the wild. Major brands like Bose take advantage of Curalate for social sales.



## Keyhole

Tools such as Keyhole provide a real-time performance analysis of the industry and campaign-specific hashtags on Twitter and Instagram. Doing so allows brands to promote during peak times and likewise understand which tags are most popular among their followers.



**B.3 Observations and learning:**

***(Students are expected to comment on the output obtained with clear observations and learning for each task/ sub part assigned)***

Here in this practical we were able to learn about the various text and social media and text analysis tools and learn about the functioning of each tool for the same.

**B.4 Conclusion:**

*(****Students must write the conclusion as per the attainment of individual outcome listed above and learning/observation noted in section B.3)***

Hence we were able to achieve the goal of the practical by searching on all the social media and web analytics tools.

**B.5 Questions of Curiosity**

***(To be answered by student based on the practical performed and learning/observations)***