

## **@Starbucks**

### **Text Analysis to support Starbucks' Twitter Campaign**

#### **1. What is the problem you want to solve?**

**Starbucks** is known for lots of things: great coffee, friendly baristas, a near-complete takeover of practically every street corner in America and its excellent social media strategy. Here are some of the stats (as of July 2016):

- 36.3 million Facebook likes
- 11.7 million Twitter followers
- 9.8 million Instagram fans
- 4.7 million Google+ followers
- 259.5K Pinterest followers
- 100+K YouTube subscribers

These numbers are staggering but well-earned and there's no doubt that Starbucks is crushing social media. The focus of this project is to analyze its Twitter strategy which is very fascinating and unique. The team does post unique content but also uses the Twitter as a service to reach out to customers talking about their in-store or product experiences. All Tweets are directed at specific Twitter users who have "spoken" to Starbucks in their own timeline or as a response to a specific Starbucks update, sometimes with a complaint or negative feedback. The Starbucks team checks in several times a day and encourages dissatisfied customers to get in touch with the company. It is an unorthodox but smart approach to deal with customer.

However, this does not clearly suggest if the popularity for Starbucks on twitter is solely driven by its content. Meaning, is the information spread solely based on the SB-specific buzz-words or is it also impacted its social network, in-store experiences, traditional news media, etc. In order to properly evaluate this, the project is further developed on the theory that content is what drives SB's Twitter traffic. To test this hypothesis, we perform Topic Modelling and Linear Regression on a representative sample of SB's twitter data from July'16 and August'16.

#### **2. Who is your client and why do they care about this problem? In other words, what will your client DO or DECIDE based on your analysis that they wouldn't have otherwise?**

My client is a global coffee company and a coffeehouse chain called Starbucks. The company is well-known for its Social Media Campaign and its brand building strategies have made it one of the most popular companies on the micro-blogging site: Twitter.

The second question can be answered in two ways:

- One, there is a major element of Twitter that's about observing and learning, and, Starbucks knows this. Topic modeling will help their content marketing strategy by making content more focused. Substance is what makes content marketable and shareable. Also, creating a list of terms that should never be associated with their brand is a good start and topic modelling will achieve just that.

- Two, the science of twitter data analysis is one of the most exciting areas of research today. There is a wealth of data out there that Starbucks can put to use. The general knowledge exists and, in some cases, viable algorithmic approaches are there for the taking. This project gives a pathway for the company to take notice of its valuable social media data and implement useful analysis to improve its ever-significant, customer management system.

### **3. What data are you going to use for this? How will you acquire this data?**

Tweets can be extracted using Twitter's API for real time data.

### **4. In brief, outline your approach to solving this problem (knowing that this might change later).**

We will be using the Latent Dirichlet Allocation (LDA) mechanism to conduct topic modelling. The outcome variable will then be used to derive a Linear Regression & Tree models to predict popular topics with the help of user data.

### **5. What are your deliverables?**

Code along with technical paper & slide deck.