Predicting Brand Post Popularity in Online Social Networks: An Ex-Ante Approach

TREO Talk Paper

Amir Hassan Zadeh
Wright State University
Amir.Zadeh@wright.edu

Ramesh Sharda
Oklahoma State University
Ramesh.Sharda@okstate.edu

Abstract

Brands stand at the core of marketing, and social media is now viewed as the most prominent method to engender what we know as “word-of-mouth” (Ghiassi et al. 2013). Social media users who follow brands are growing in number, and companies are increasingly investing in social media in order to better reach their target audiences. Marketers invest in social media to increase brand exposure, facilitate dialogue, foster relationships, and interact with customers (Shi et al. 2014). Companies organize online social content so that they reach a greater and more varied target audience of users. Therefore, it is important to be able to predict the popularity of online content. Predicting whether a brand post is going to be popular and how that popularity will grow, based on the content and timing, is of much interest to social media content providers. While most previous studies have attempted to approach this problem after the content is posted i.e. the ex post prediction of underlying diffusion process using econometric models (e.g. Szabo & Huberman 2010, Zadeh & Sharda 2014, Zaman et al. 2014), this study intends to propose a methodology of an ex-ante prediction of popularity performance based on analyzing large volumes of content generated by brands. We investigate the factors that drive brand post popularity, that is, the number of impressions that a brand post receives on social media. In order to achieve this objective, we perform text mining to extract patterns and characterize brand posts with respect to vividness, interactivity, informativeness, entertainingness, time-sensitiveness, and sentimentality. We then approach this problem as a classification problem and examine several predictive models to predict the final popularity of brand post.

References


