Chapter 32

Sentiment Analysis of Social Media as Tool to Improve Customer Retention

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ABSTRACT

Sentiment analysis is a process of determining the polarity (i.e. positive, negative or neutral) of a given text. The extremely increased amount of information available on the web, especially social media, create a challenge to be retrieved and analyzed on time, timely analyzed of unstructured data provide businesses a competitive advantage by better understanding their customers’ needs and preferences. This literature review will cover a number of studies about sentiment analysis and finds the connection between sentiment analysis of social network content and customers retention; we will focus on sentiment analysis and discuss concepts related to this field, most important relevant studies and its results, its methods of applications, where it can be applied and its business applications, finally, we will discuss how can sentiment analysis improve the customer retention based on retrieved data.

INTRODUCTION

Social network sites are rapidly becoming a standard method of communication for millions of users, by sharing their updates, users enlarge their horizons and sharing their believes and opinions, thus web has become a user-centered environment (Hays, Spiers, & Paterson, 2015). Businesses which do not involve in social media marketing activities lose a lot of opportunities, competitors already use social media and gaining competitive advantage, it’s the most cost effective and easy to use communication way to share information about brands, products and services, and new events. This massive amount of information should be interpreted into measurable attitude dictionary (Khan & Khan, 2012).

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Businesses prefer to be at the heart of a community; social media platforms present the opportunities for companies to get close to their consumers, including observing and collecting information; sponsoring communities; and providing content to communities (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). There have been many examples of companies who used Facebook to position themselves at the center of community, like Pizza Hut which claimed to have more than 26 million fans in 2015, Samsung with more than 42 million fans, and television network channels MBC with more than 13 million fans (Facebook, 2015). Common rapid growing of social networks creates dynamic streams of textual unstructured information created directly from customers’ reactions and opinions on social pages, businesses need to recognize the importance of social media content created by their followers and crowd to align their position in the most successful way, where timely analysis of online information can provide businesses with a competitive advantage, by getting better understanding of customers’ preferences, having early alarms on emerging issues, and monitor competitors’ activities (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011; Culnan, McHugh, & Zubillaga, 2010). Research engines attempts to use different techniques to speed up and improve efficiency search results. Sentiment analysis is a new emergent process to facilitate measuring the attitudes of web visitors.

Sentiment analysis (opinion mining) is a sub-field of natural language processing, which analyses social media, news, and research content on the web to extract meaningful data measurements from the subjective opinions and feelings surrounding an object (i.e. positive, negative or neutral) (Duwairi & Qarqaz, 2014). To make use of sentiment analysis results, companies must learn to prioritize the results depending on influence – digging down into an opinion to understand how it really affected other users and how did they respond to it. Sentiment analysis uses two main methodologies, the machine learning methodology and the semantic orientation, both methodologies are widely used but some new researchers suggests using a hybrid of both methodologies to get more accurate results. Sentiment analysis aims to determine the attitude of a writer with respect to some topic or the overall contextual polarity of a document. The attitude may be his/her judgment or evaluation, emotional state, or the intended emotional communication (Abdulla, Ahmed, Shehab, Al-Ayyoub, Al-Kabi, & Al-rifai, 2013).

Sentiment analysis can be used by firms and organizations to measure their influence on the market, by following their customers’ interaction through social networks’ contents; therefore managers will have a better understanding of available/new products and services. Customer retention is an important scope in any marketing plan, keeping your current customer’s loyal and interested about your business is profitable more than attracting new customers, where a survey shows that “one in three respondents followed through with a friend’s recommendation received through a social media outlet like Facebook or Twitter” (Empathica, 2010)

**BACKGROUND**

**Sentiment Analysis Techniques**

As social media become more pervasive in our life, businesses should be more aware about this new power connected to customers, where it creates a new world of dominance and control in customers’ hand, searching for services or products is developed into new domains, online information created by users of social networks and through firms presence forms on the web, create new channel to exchange experiences and information “good and bad” about specific brands, organization, business…etc. analyst