Chapter 57
Sentiment Analysis of Electronic Word of Mouth (E-WoM) on E-Learning

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ABSTRACT

The proliferation of social media and the internet has given people many opportunities to air their views and to be at liberty to say what they feel without hindrance. This is beneficial to commercial organizations and the general well-being of the populace. However, the cost of this freedom is that spamming is practiced with little or no control. This chapter focuses on the electronic word of mouth (eWOM) of opinion holders and the sentiments expressed in eWOM. One of the areas of life impacted by sentiment is electronic learning because it has become a prevalent mode of learning. The study aims to analyze eWOM on e-learning which can help in identifying learners' sentiments. Findings from three thousand tweets show more neutral sentiments, followed by positive sentiments. Suggestions and recommendations as well as the future directions for sentiment analysis of eWOM on e-learning are also discussed in this chapter.

INTRODUCTION

Learning enables individuals or systems to undergo changes, thereby improving the efficiency of tasks and activities. The changes in behaviour, attitude, reasoning and general well-being are a result of conscious and unconscious learning. Knowledge acquisition, skill refinement, problem-solving, induction, analogy and discovery are some of the ways by which one can learn. We learn every time, the traditional learning methods are gradually fading away due to the advent of technology. Conventional libraries are dying, as learners seem more comfortable learning with electronic devices and resources. Newspaper vendors are thrown into the labour market because readers are at ease reading news from their mobile devices. Electronic learning(e-learning) has become a more popular method of learning by reason of its accessibility and flexibility. Despite the many advantages of e-learning, this technology still poses some challenges and these challenges are often expressed by users in the form of criticism. These criticisms are mainly escalated through electronic word of mouth (eWOM). The informal communication between people online is known as Electronic Word of Mouth. This informal communication could be through review sites, social media platforms and online forums about products and services. EWOM is a method employed by customers to review products and services and most times without any commercial intent to either promote or discredit them. Sentiment analysis is a method used to find out the emotional tone enunciated in text. According to Rani and Shivaprasad (2019), offline and online purchase decisions are based on eWOM messages, as consumers tend to rely on the opinions of other consumers when making decisions. The application of sentiment analysis to eWOM can help business owners gain significant insights into how customers feel about a particular product or service, which can assist them in identifying areas of improvement and strengthening customer loyalty. Though eWOM is not restricted to textual datasets, our study focuses on textual datasets where the source datasets are aimed at promoting or discrediting e-learning to consumers or potential consumers.

The advent of the internet cum social media has resulted in the exponential dissipation of audio and textual datasets from various sources to diverse destinations contributing to the big data syndrome in cyberspace. While emphasis has been placed on the security of image and textual data, audio data seems less secure. Audio data also contributes immensely to societal ills such as fake news. Oral and textual datasets are prone to sentiments that can cause damage to an individual's and an organization's reputation. This study develops a framework for analysing electronic word of mouth (eWOM) on electronic learning. Three thousand tweets about e-learning were gathered and analysed to find the polarity that impacts e-learning. The chapters are organised as follows; the background of the study, then the concept of eWOM, borders on e-learning and sentiment analysis will be discussed. The next section will practically demonstrate sentiment analysis of the tweets with findings and discussion, and finally, the summary and conclusion are drawn.

BACKGROUND

Electronic Word of Mouth plays a huge part in learning and knowledge acquisition by furnishing learners with access to experiences and feedback of others on social media platforms, and online discussion fora. In the process of learning, the learner acquires knowledge. This acquired knowledge which comprises information, facts, ideas and rules, is used in making informed decisions. Learning is a crucial method of acquiring knowledge, and knowledge is required to drive the nation's socioeconomic life. The abil-

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