Chapter 10
Opinion Mining: A Tool for Understanding Customers – Challenges and Approaches

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ABSTRACT

In recent years social media sites become very popular communication tools among Internet users where a significant amount of information is exchanged via computers, smart phones, etc. Internet now is not only a source of information for users to search for; regular users are now a major source of Internet information; where now regular people post daily life activities, share online pictures, and express their opinions about products, news, political debates, etc. Such noticed growing of opinion-rich resources along with user-generated content makes it worthwhile to use information technologies to collect, analyze, and understand human factors and behaviors. This chapter covers three main sections where the first section introduces the field of opinion mining in general along with a detailed exploration of its definitions and goals. Then a discussion of opinion mining related challenges is presented in the second section. The last section explores opinion mining available approaches along with possible future directions.

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INTRODUCTION

There are several recent indicators that show the importance and the significance of web information. While classical web information can be broadly classified under “pure science” where the Internet was more like a large open library, the current face of the Internet is largely seen as a major “social science” source of information. Online Social Networks (OSNs) are by large the current most popular websites through the Internet. The number of users in those OSNs is overwhelming. For example, Figure 1 shows that more than one-third of the world population are active OSN users. Statistics showed also that those numbers are continuously rising. Entities, individuals, young or adult are all trying to have their visible presence in those OSNs. Users post details and information related to their own daily life activities. In addition, they interact with activities posted by their peers or friends.

The classical “mining” term is used in two main categories: Data mining for structured data and text mining for unstructured data. While there are many commonalities between those mining categories, there are also some unique attributes. Based on techniques and algorithms used, opinion mining can fall within text mining in general where the data in opinion mining is also unstructured. Nonetheless,

Figure 1. Active OSN users
(http://devriesblog.com/)
The Role of Social Media in International Advertising
www.igi-global.com/chapter/the-role-of-social-media-in-international-advertising/175251?camid=4v1a

The Effects of Utilizing Social Media Tools During Crisis from Public Relations Practitioners’ Views in the UAE