The Primer of Social Media Analytics

Samuel Fosso Wamba, NEOMA Business School, Mont-Saint-Aignan, France
Shahriar Akter, University of Wollongong, Wollongong, Australia
Hyunjin Kang, Department of Marketing, George Washington University, Washington D.C., USA
Mithu Bhattacharya, University of Detroit Mercy, Detroit, MI, USA
Mohammed Upal, WebHawks IT, Tokyo, Japan

ABSTRACT
This article is intended to serve as a primer of social media analytics. The paper explores different dimensions of social media analytics by drawing on a review of the literature. Specifically, the paper sheds light on the definitional aspects, types of social media data and types of analytics to improve firm performance. The findings of the paper will help the reader to grasp the fundamentals of social media analytics.

KEYWORDS
Big Data Analytics, Firm Performance, Social Media Analytics, Social Media Data, Social Media

INTRODUCTION
Social media is at the core of the so called “social commerce”, which represents a new form of “Internet-based social media that allows people to participate in the marketing, selling, comparing, and buying of products and services in online marketplaces and communities” (Stephen & Toubia, 2010). Driven by the widespread adoption and diffusion of social media platforms such as Facebook, Twitter and Pinterest as well as mobile devices, social commerce is expected to generate tremendous business value in terms of operational efficiency and improved revenues in the incoming years. Some analysts estimated that the social commerce market will grow from about US$5 billion in 2011, to almost US$30 billion by 2016 (Zhou, Zhang, & Zimmerman, 2011). In a McKinsey Global Institute report, the consulting firm foresaw that in 2012 only, “$900 billion to $1.3 trillion in annual value could be unlocked in just four sectors by products and services that enable social interactions in the digital realm”. According to the same report, “[t]here’s no doubt organizations have begun to realize significant value from largely external uses of social [media]. Yet internal applications have barely begun to tap their full potential, even though about two-thirds of social’s estimated economic value stems from improved collaboration and communication within enterprises. Although more than 80 percent of executives say their companies deploy social technologies, few have figured out how to use them in ways that could have a large-scale, replicable, and measurable impact at an enterprise level” (Chui, Dewhurst, & Pollak, 2013). While business value from social media is emerging as an important field of research (Fosso Wamba, S. & Carter, L. 2014), very few empirical studies have been devoted to how to actually co-create and capture value from social media and relevant analytics.

Social media analytics (SMA) has emerged as an innovative research field after years of rapid and increasing adoption of social networks across the entire business. Due to the richness and the most dynamic evidence of social data, there are clear opportunities for theoretical and practical inquiry to create new knowledge and scientific possibilities by leveraging data, technology, analytics,
business and society (Culnan, McHugh, & Zubillaga, 2010). There is growing evidence that SMA provides a broader view of consumers, groups and society and creates business value by identifying new patterns and opportunities (Batrinca & Treleaven, 2015; Kaplan & Haenlein, 2010). However, very few studies provide a general taxonomy to explore the types of social media data and analytics. Therefore, this paper identifies different conceptual dimensions of social media data, analytics and their relevance to business value.

The special issue on “Unveiling the Impact of Social Media: Importance of the Co-creation of Business Value during the Adoption and Use Process” of the Journal of Organizational and End User Computing (JOEUC) presents this position paper to encourage more frequent and knowledgeable use of social media analytics. The remainder of this paper is structured as follows. First, the concept of social media analytics is discussed. Second, types of social media data are explained. Third, types of social media analytics are illuminated. Finally, future research directions are provided as well as a conclusion.

DEFINING SOCIAL MEDIA ANALYTICS

The use of social media to engage with customers has increased dramatically in recent years. According to the Pew Research Center (Sheet, 2014), more than 74% of online adults in the U.S use social media to connect, interact, collaborate or engage with others. Social media based recommendations influenced an average of 26 percent purchases across 30 product area and more than 100 brands (Bughin, 2015). The widespread influence of social media as a source of information and marketplace has sparked research interests for social media analytics (SMA) (A. Chen, Lu, Chau, & Gupta, 2014; Qiu, Rui, & Whinston, 2014). Although the impact of social media continues to increase, its measurement remains a challenge.

Social media refers to communication technology platforms where people share information and opinions (Agrawal, Budak, & El Abbadi, 2011), which can connect both existing and potential customers not only with each other but also with companies and organizations (Mangold & Faulds, 2009). Hansen, Shneiderman, and Smith (2010) defined social media as a set of online tools that support social interaction between users that involves monologue (one to one) to dialogue (many to many). Zeng, Chen, Lusch, and Li (2010, p.13) identified social media as “a conversational, distributed mode of content generation, dissemination, and communication among communities”. A. Chen et al. (2014) put forward social media as a form of online community to get connected with people from internal and external circles. Such social media platforms let users entertain, learn, and even to make social and political changes through interacting with others on online social connection and networks (Agrawal et al., 2011). All opportunities for various aspects of business lie in the fact that virtually every social interaction among the consumers on social media can be observed and analyzed.

People in various businesses now can derive useful information from social network data to understand their consumers more comprehensively and precisely by utilizing various types of social media analytic tools. H. Chen, Chiang, and Storey (2012) defined Social Media Analytics (SMA) as a method to uncover what customers think and feel by analyzing structured and unstructured online data dispersed across a vast array of online sources. Zeng et al. (2010) highlighted SMA as informatics tools and frameworks to collect, monitor, analyze, summarize and visualize social media data to facilitate conversations and interactions to extract useful patterns and intelligence. Fan and Gordon (2014) identified SMA as interdisciplinary modelling and analytical paradigm consisting of three steps: 1) capturing data from various courses; 2) understanding data using various analytics and models; and 3) summarizing and presenting the findings for decision making. SMA shares similarity with Big Data Analytics (BDA) in that both SMA and BDA involve analysis, management and visualization of the similar types of datasets—accumulated traces of consumers’ online activities (Kiron, Ferguson, & Prentice, 2013). Also, SMA can be similar to social network analysis as both can aim to understand underlying relational components of consumer activities on social media.

2
The Role of Trainer Behavior in End User Software Training
[www.igi-global.com/article/role-trainer-behavior-end-user/3746?camid=4v1a](www.igi-global.com/article/role-trainer-behavior-end-user/3746?camid=4v1a)

Understanding the Hidden Dissatisfaction of Users Towards End User Computing
[www.igi-global.com/chapter/understanding-hidden-dissatisfaction-users-towards/4464?camid=4v1a](www.igi-global.com/chapter/understanding-hidden-dissatisfaction-users-towards/4464?camid=4v1a)

The Role of IT Governance Practices in Creating Business Value in SMEs
[www.igi-global.com/article/role-governance-practices-creating-business/65092?camid=4v1a](www.igi-global.com/article/role-governance-practices-creating-business/65092?camid=4v1a)