

## EDITORIAL

# Social Media, Social Networks, and Accounting

## I. INTRODUCTION

The ubiquitous adoption of Internet technologies in both fixed and mobile forms has driven the widespread growth of social media that operate within global social networks. Social media platforms including Facebook, Twitter, Pinterest, LinkedIn, Tumblr, and Google+, as well as their many competitors, now touch the lives of a significant proportion of the global population. These Web 2.0 technologies build upon the earlier stages of Internet-based communication models of unidirectional websites and blogs. Accountants and accounting, broadly defined, were early adopters of these technologies in the mid- to late-1990s (Saxton 2012; Lymer, Debreceeny, Gray, and Rahman 1999; Debreceeny, Gray, and Rahman 2002; Financial Accounting Standards Board [FASB] 2001; Ettredge, Richardson, and Scholz 2002). Corporations quickly moved to build investor relations websites that provided information on their financial performance. Indeed, there are very few publicly listed corporations in established capital markets that do not have an investor relations website. Regulators also moved to leverage the Internet to support market transparency. For example, in the U.S. context, the Securities and Exchange Commission (SEC) created online access to many corporate filings in the SEC's EDGAR database, thereby providing unmatched free access to information on those corporations. At the same time as these unidirectional corporate and regulatory websites became an essential component of capital markets, unofficial discussions about the market arose in blogs and discussion fora. These modes of communication were shown to be associated with market effects (Wysocki 1998; Antweiler and Frank 2004; Hirshleifer and Teoh 2009).

Websites have also dramatically changed the nature of communication with stakeholders undertaken by regulators and standard setters. The FASB, the International Accounting Standards Board (IASB), the Public Company Accounting Oversight Board (PCAOB), and the International Audit Assurance Standards Board (IAASB) all utilize the web to provide detailed information on standards, standard setting, and strategic direction. Securities regulators such as the SEC and the Financial Services Authority (FSA) now have a myriad of corporate disclosures, rules, regulatory actions, and policy discussions on their websites.

More recently, these corporate and regulatory market actors have widely adopted Web 2.0 social media. Adoption is also seen in the broader accounting ecosystem of accounting professional services firms, consultants, software providers, and bloggers. These Web 2.0 social media platforms are distinguished from the websites, blogs, and discussion fora of Web 1.0 in several important ways. First, the underpinning social network is typically clearly defined and understood. For example, for Twitter, registered users follow other tweeters. This provides one measure of the relative importance of tweeters within the network. There are also other characteristics of Twitter that encourage registration. Information consumers can read tweets by searching the Twitter.com website. However, to comment or retweet requires information consumers to register. The explicit

definition of the social network allows researchers to understand the dynamics of the social network. Second, these social media platforms are either based on mobile technologies or have successfully transitioned to an information environment that is increasingly dominated by mobile technologies. For example, in late 2014 some 86 percent of Facebook monthly active users (MAUs) used mobile technologies and nearly a third only used mobile to access the network. Twitter reported similar characteristics of their social network. Third, these social networks are large. In late 2014, Facebook had 1.4 billion MAUs, and Twitter had 0.3 billion MAUs. The LinkedIn professional network had 0.35 billion registered members in the same period. These significant volumes allow users to coalesce around highly specialized areas of interest. Fourth, with differing levels of support, these platforms support social tagging or folksonomies of areas of concern (Derntl, Hampel, Motschnig-Pitrik, and Pitner 2011; Kim, Rawashdeh, Alghamdi, and El Saddik 2012). The most common form of social tagging is the hashtag (e.g., #pcaob). In the domain of accounting and auditing, stocktwits are also an important form of tagging. The stocktwit combines the ticker symbol with the “\$” prefix (e.g., \$AMZN).

## II. SUMMARY OF FINDINGS

The papers in this theme issue on social media and social networks consider a range of interesting questions for an accounting and auditing audience. Eschenbrenner, Nah, and Telaprolu (2015) address the as yet unexplored issue of social media usage by accounting professional services firms. They investigate Twitter and Facebook usage by Big 4 and second-tier firms. Using categories of social media use from prior literature, they find that “knowledge sharing,” “socialization and onboarding,” and “branding and marketing” are the most common modes of communication. The study provides an early perspective on social media usage by professional services firms.

Du and Jiang (2015) investigate the market effects of social media adoption by a sample of S&P 1500 firms. They collect data on the use of Facebook, Twitter, YouTube, blogs, discussion forums, RSS, and LinkedIn from the websites of the sampled firms. Du and Jiang (2014) find that firm use of social media is associated with firm performance, measured by stock price and return on assets. When testing the individual association of the various platforms and firm performance, the authors find that only Facebook and Twitter has a statistically significant relationship. They observe that half of the firms use one or both of these platforms.

Zhou, Lei, J. Wang, Fan, and A. Wang (2015) address the market effects of Facebook and Twitter usage of nearly 10,000 U.S. publicly listed corporations. They track both the first time adoption of these platforms and all the subsequent messages in the period from 2009 to 2013. They find that adoption of Twitter was prevalent early in the study period, with Facebook being more prevalent in the later period. Interestingly, they note the rate of adoption is slowing. Using machine learning techniques, they analyze the content of the 1.1 million Facebook posts and 3.4 million tweets. As might be expected, the majority of these messages cover matters other than the disclosures that are the subject of most studies of mandated and voluntary disclosures in the accounting discipline. Zhou et al. (2015) do find, however, that 7 percent of Facebook messages and 3.5 percent of Twitter messages are disclosures of this type.

Prokofieva (2015) also considers the market effects of Twitter. Prokofieva (2015) studies the unique environment that mandated continuous disclosures by Australian publicly listed companies provides. She studies whether Twitter dissemination of these disclosures is market relevant, when those disclosures are also available earlier or contemporaneously from the local stock exchange’s (ASX) information dissemination channels. She finds a “negative association between abnormal bid-ask spread and Twitter.” Importantly, and intuitively understandable, Prokofieva (2015) finds

that this association is stronger for firms that have lower levels of analyst coverage and/or lesser visibility in traditional media.

Taking a somewhat different tack, [Perdana, Robb, and Rohde \(2015\)](#) consider social media from the perspective as a vehicle for community learning, information dissemination, and the institutionalization of knowledge. In particular, they research the community use of LinkedIn by those interested in the nature and implications of XBRL (eXtensible Business Reporting Language). [Perdana et al. \(2015\)](#) review, at a relatively high level, the communication in the nearly 90 XBRL-focused groups on LinkedIn and at a more in-depth level for the three most active groups. Employing automated textual analysis techniques, they find that members of these active groups had a foundational understanding of the theoretical arguments for XBRL. As a result, information diffusion on XBRL was more concentrated on translation of that theory to the practice of XBRL, in particular national and regulatory environments. These issues included “data quality issues,” “applicability of XBRL taxonomies in different jurisdictions,” and the “advancement of XBRL as a driver of internal efficiency rather than merely as a tool for aiding [mandated] corporate disclosures” ([Perdana et al. 2015](#)). These papers collectively provide an important portrayal of the nature and effect of social media usage in accounting and auditing. They show that social media usage by corporations is associated with measurable market effects. The papers demonstrate that social media is becoming an important element of the accounting information environment.

### III. FUTURE RESEARCH OPPORTUNITIES

While the papers in this theme issue provide an important first step in building an understanding of social media in accounting, there are a number of as yet unexplored research opportunities. First, we know little yet about the nature of discourse that takes place on social media around corporate events. What is the role played by increasingly real-time interaction between market participants on Twitter and elsewhere? How does use of social media by corporations influence those discussions and any potential market impact? Second, how is interaction on social media influencing the actions of actors such as standard setters and regulators? We know that an active discussion takes place on Twitter about the actions of organizations such as the FASB and the PCAOB. What is the nature of those discussions? How do they influence standard setting? How influential are those discussions *vis-à-vis* the more traditional modes of formal submissions, news items, and blogging? Third, we have seen surprisingly little behavioral research on social media in the accounting and auditing domain. The various aspects of social media, including temporality and the role of influencers, leaders, and followers in a social network, seem ripe for exploration from a behavioral research perspective. Fourth, exploration of social media trends would appear to provide powerful insights on corporations that auditors could leverage for the purposes of engagement planning and risk management. Fifth, from a design science viewpoint, there seems to be many opportunities for creation of new technologies for integration of existing social media into accounting information systems as well as analytical systems. Sixth, there are a variety of realms in which accounting plays an important role and where social media is particularly influential. These include corporate social responsibility accounting and integrated reporting. Seventh, we have only seen the earliest analysis, in an accounting context, of the sentiment within social media engagements. Sentiment has been explored in the sedate areas such as annual and quarterly financial reports but not in the more frenzied world of social media. Finally, social media is now playing an important role within organizations with technologies such as Yammer. There is a need for investigation of the role played by organizational social media in support of management accounting and decision making. At this stage of theory development, it may be that intra-

organizational research on social media from an accounting viewpoint would employ a case study approach.

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