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Voluntary information disclosure on social media

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ABSTRACT

Companies are increasingly using social media to communicate with consumers, and the content of those media affects consumer decision making. We investigate the adoption of new communication media (social media, mobile apps, email alerts, etc.) by companies to disclose company news to consumers and investors. Using a cluster analysis, we group companies either into a cluster with high adoption of new media or into one with low adoption, based on their use of new media for disclosure. We find that a company's voluntary information disclosure on social media is positively related to its adoption level of new media. Our findings suggest that the engagement of information disclosure on new media increases a company's influence and reach.

1. Introduction and motivation

In July 2012, Netflix CEO Reed Hastings and Facebook were put on the front line of corporate disclosure. Hastings posted the news on Facebook that the number of monthly online viewing hours on Netflix in June 2012 had exceeded one billion for the first time. Netflix's stock price at the time of this post was $70.45; it went up to $81.72 by the close of the following day. This was the first time that Hastings had disclosed Netflix's monthly viewing hours on his Facebook wall. The Security and Exchange Commission (SEC) investigated whether the posting violated the regulation of fair disclosure (Regulation FD), since the performance information was not released in official filings, press release, or other traditional disclosure outlets. Eventually, the SEC chose not to charge Hastings with any wrongdoings. However, it confirmed that Regulation FD applies to social media and other emerging communication outlets [20].

In April 2013, the SEC stated that companies can use social media to announce material information to investors [29], but companies should first alert investors as to which media they plan to use. The media must also be publicly accessible and nonexclusive. Earlier, in 2008, SEC had ruled that companies can use their websites to disseminate key information. The more recent ruling means that social media are as acceptable as company websites in disseminating information.

Companies are increasingly making use of social media to blog corporate news and reach out to consumers [23]. Among Fortune 500 companies, 79% show fresh content on corporate blogs, 77% have an active Twitter account, and 69% maintain a YouTube channel. They produce a variety of social media content, such as blogs and videos, and use multiple social-network sites to communicate with consumers. In addition, companies are also seeking social media to disclose sensitive information [29]. For example, eBay, PepsiCo, and Dell use Twitter to announce their earnings and profit numbers. Surveys show social media to be the most powerful outlet of information [12]; it is through social media that people get updated with the latest corporate news, market trends, investment information, and so on.

Even though more companies are embracing social media, some are cautious about using new media to disclose financial information. Many are worried about the uncertainty of social media and are reluctant to adopt new media for information disclosure.

In this study, we examine the factors affecting both a company's overall information disclosure and its financial information disclosure on social media. We select publically traded companies and collect the data of their new media adoption. Using a cluster analysis, we group those companies into two clusters based on their adoption of new communication media. We investigate whether voluntary information disclosure on social media is affected by the level of new media adoption or other factors such as information environment, information asymmetry, or firm profitability. To the best of our knowledge, this is the first study of information disclosure and social media adoption. We summarize the contributions of this paper below:

(1) We investigate information disclosure on social media from the perspective of companies rather than consumers. Information Systems (IS) literature focuses on User Generated Content (UGC) and examines the value of social media content provided by users. However, here we consider how companies disclose information on social media, i.e., Enterprise Generated Content (EGC), which differs from the existing social media literature in the IS field.

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(2) We explore the cutting-edge communication media for information disclosure. Researchers of voluntary information disclosure widely study traditional media, such as official SEC reports or government filings. New technologies are increasingly made available for the use of information release; for instance, RSS (Rich Site Summary), email alerts, mobile apps, social media platforms, etc. However, until now, no one had yet investigated new communication media for voluntary information disclosure.

(3) We cluster companies into two groups based on their adoption of new media (social media, mobile apps, RSS, email alerts, etc.) for disclosure. Using the North American Industry Classification System (NAICS), we randomly selected companies from the information industry and the manufacturing industry. We find that companies in the information industry do not lead in the adoption of new media for disclosure or in the amount of news released through social media. Our analysis clusters companies into either the group with a high adoption level or one with a low adoption level, regardless of their NAICS industry classification. We find that the companies in the high adoption group embrace a larger audience on social media and also lead in the intensity of information disclosure on social media.

(4) We show that the level of new media adoption—as well as such other factors as the information environment, information asymmetry, and firm profitability—determines voluntary information disclosure on social media. We also find that a company's adoption level affects its intensity of information disclosure on social media. In addition, after a new medium becomes widely adopted and more popular for disclosure, voluntary information disclosure on that medium then follows the pattern of voluntary information disclosure in traditional filings and reports. Voluntary information disclosure on the medium can be explained by the determinants of voluntary information disclosure on traditional media (i.e., SEC filings or reports).

In the next section, we review IS studies on social media content and corporate finance. We focus on the issue of voluntary information disclosure in the finance field and review the traditional determinants of voluntary information disclosure. In Section 3, we describe data collection and new communication media for information dissemination, and provide basic statistics from collected data. In Section 4, we perform a cluster analysis to group the selected companies. In Section 5, we compare the intensity of information disclosure on social media between the two clusters and investigate the determinants of voluntary information disclosure on social media. We discuss the managerial implications of our study in Section 6. We present our conclusion and note future work in Section 7.

2. Literature review

Researchers in the IS field who study social media mainly work on the information value of UGC [e.g., 4,8,21,22,32], information quality of UGC [e.g., 4], or information sharing on social networks [e.g., 30,32]. Most related to our work are the studies [22,33] that examine the relationship between social media content and firm stock performance. Yu et al. [33] focus on sentiment analysis and show that different social media (blogs, forums, Twitter) have different impacts on firm financial performance, and the overall media have a stronger relationship to that performance than traditional media (television, newspapers, magazines). Luo et al. [22] study whether social media can be used to predict firm equity value. They suggest that social media have stronger and faster leading prediction power of firm equity value than traditional online behavioral metrics, including Google Search and web traffic. They find that social media are a significant leading indicator of firm equity value. The study examines the value of social media in finance and justifies the investment in social media and new technology initiatives. DiStaso and Bortree [7] study the value of social media in the improvement of company transparency.

The IS studies of social media differ from our study in several ways. First, they examine such UGC as product ratings or web logs written by individual consumers, while our study investigates EGC, the information that companies release through social media. Second, these social media studies analyze the value of UGC as an influence factor on product sales or a firm's equity value. Seldom have they addressed the motivations of companies to disclose information on social media. Our work examines which factors affect voluntary information disclosure on social media.

Another branch of related studies is voluntary information disclosure in the finance field. These studies identify such determinants of voluntary information disclosure as firm size [e.g. 5,6,9,10,24–26], information asymmetry [17–19], firm profitability [24,25,28], debt structure [6,25,26], or information environment [27]. Large firms generally have a better information environment and are more transparent. As for the proxy of firm size, some studies [e.g., 26] use the logarithm of assets, while others may use the number of employees [5] or sales turnover [25]. In this work, we follow the existing study [26] and use the logarithm of assets as the proxy of firm size. Regarding information asymmetry, one study [1] shows that when a company has more intangible assets, it is considered to have higher uncertainty in the future; the degree of information asymmetry is associated with the intangible assets. Therefore, we use intangible assets as the proxy of information asymmetry. Firm performance is highly correlated with EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) or EBIT (Earnings Before Interest, Taxes) as a percent of sales or total assets [24,25]. EBITDA is a more conservative earning measurement than EBIT, so we use EBITDA for firm profitability. The debt structure is commonly measured by the debt in relation to assets [e.g., 6]. We use debt as the proxy of debt structure.

The existing literature of voluntary information disclosure mainly focuses on traditional media such as reports or government filings. Only a few studies investigate voluntary information disclosure on new technologies, and those studies are limited to company websites [e.g., 2,9,10,24]. Little attention has been devoted to voluntary information disclosure using new communication paradigms including social media, RSS, mobile apps, or other media.

Table 1
Summary of technology adoption.

Industry		Twitter	YouTube	Facebook	LinkedIn	Pinterest	Blogs	Mobile apps	RSS	Web casting	Conf. calls	Email alerts
NAICS	1	9%	2%	0%	17%	0%	5%	7%	77%	95%	95%	57%
#51 sector	0	75%	69%	95%	63%	10%	22%	33%	0%	0%	0%	0%
	−1	16%	29%	5%	20%	90%	73%	60%	23%	5%	5%	43%
NAICS	1	38%	3%	7%	7%	2%	5%	24%	84%	96%	96%	100%
#31–33	0	20%	60%	52%	91%	5%	67%	51%	4%	2%	4%	0%
	−1	42%	37%	42%	2%	93%	27%	25%	13%	2%	0%	0%
Overall	1	24%	3%	3%	12%	1%	5%	15%	80%	96%	96%	77%
	0	46%	63%	72%	77%	8%	43%	42%	2%	1%	2%	0%
	−1	30%	34%	24%	11%	91%	51%	43%	18%	3%	3%	23%