Ensuring Student Awareness of Corporate Social Media Usage: An Accounting Information Systems Course Project

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This paper describes an Accounting Information Systems course project that required students to research Fortune 500 companies' presence on Facebook, Twitter, and Wikipedia. The project was designed to address the disparity between what college students think social media technologies are used for and how social media are actually used by businesses. Through the project described in this paper, students learned that corporations are using social media for a variety of purposes, with marketing being the most prevalent. Accounting and financial information was found to be much more prevalent on Wikipedia than on Facebook or Twitter.

BACKGROUND

There is no question that social media plays a significant role in the lives of college students. College students are avid users of social media such as Facebook, Twitter, and Wikipedia (Peluchette & Karl, 2008; Hargittai & Hsieh, 2011; Head & Eisenberg, 2010). Problems can arise, however, when student perceptions of the purpose and use of these outlets do not match with the reality of how these sites are being used. For example, students view social networking platforms as a means to communicate with friends and family (Lampe et al., 2008) and are comfortable with their friends and family viewing their profiles (Peluchette & Karl, 2008). However, Peluchette & Karl (2008) surveyed 433 undergraduate students and found that 20 percent of the students who used a social networking site had information or photographs on their profiles that they would not want an employer to be able to access. Students seem to view social media such as Facebook as their domain, despite the fact that many employers are now making use of those sites to help them screen potential employees (Cuesta, 2006). In a 2009 survey, Careerbuilder.com found that 45 percent of employers were already using social media to perform background investigations on prospective employees and an additional 11 percent planned to begin to use social media sites for that purpose in the near future (Grasz, 2009). Of the companies that reported using the social networks for finding information about prospective employees, Facebook was used the most (29 percent) followed closely by LinkedIn (26 percent), and MySpace (21 percent). Only 7 percent were using Twitter, and another 11 percent were using blog searches to find information. The survey provided insight into both positive and negative consequences for job seekers, as 35 percent of the companies reported that they denied employment to candidates based on information found on social media sites,

while 18 percent said they hired candidates specifically because of favorable information found on the social media sites.

While Lampe et al. (2008) reported an increase in awareness by students that employers may look at their Facebook profiles and that the medium was not just for students anymore, the majority of students still viewed the medium as just a place for them to communicate with friends and family. As a result, students could face negative consequences, such as finding themselves being denied employment because of something they have posted in an online profile. Students may also miss out on opportunities for networking with potential employers or learning how to utilize social media to their career advantage in the workplace. The more students can learn about how corporations utilize social media, the more they can be poised to both protect their own privacy and yet take advantage of the opportunities that social media can offer in the business world.

Businesses are also using social media outlets such as Facebook and Twitter to market products to consumers (Lavallee, 2010). In fact, the use of Twitter by companies or company employees to disseminate information about product promotions, sales, or the company in general increased over 250 percent during 2009, while the growth in the use of Facebook for the same purposes was 192 percent (Gaudin, 2009). According to Twitter's webpage, there were 175 million registered users as of September 2010 and there are approximately 95 million tweets posted on a daily basis. Twitter enables individuals to track topics, groups, companies or individuals they are interested in. Those individuals, companies, or groups post "tweets" to the site to communicate with their followers. A tweet is a short message, limited to 140 characters. The site points out the benefits of Twitter use for business: "Twitter connects businesses to customers in real-time. Businesses use Twitter to quickly share information with people interested in their products and services, gather real-time market intelligence and feedback, and build relationships with customers, partners and influential people. From brand lift, to CRM, to direct sales, Twitter offers businesses a chance to reach an engaged audience." (Twitter.com, 2010). However, companies may not be connecting with the demographic they expect to connect with the most. A recent study suggests that college students are not connecting with businesses online as much as businesses would like (Cooper, 2009). The study found that while 99 percent of students surveyed use social networking sites to some degree, only 15 percent were registered Twitter users and of those, many did not use the site often, if at all. A vast majority of the students (75 percent) said they were not interested in following companies or "brands" on Twitter. As with the previously discussed studies on Facebook usage, students view Twitter as a means to connect with family and friends, not as a business or marketing tool. Students appeared to be unaware that Twitter was a vehicle for business marketing efforts.

Wikipedia differs from Twitter and Facebook in that it is used by students as a source of information about topics, not as a vehicle to connect with friends and family. It is significant, though, as a majority of college students are Wikipedia users (Head & Eisenberg, 2010). Wikipedia is essentially an online, free encyclopedia that is editable by anyone through the Internet. Wikipedia's policies state that information posted to the site should be "neutral" and, therefore, it is not a vehicle through which businesses can actively advertise and easily control the information posted about them. Even so, there is a substantial amount of information on Wikipedia about businesses, and students should be aware of the types of information available and how to discern what is information provided by the company itself versus what is provided by third parties.

While there is potential for companies to reap great rewards from social media marketing efforts, they also expose themselves to security issues (Gaudin, 2009). Business students should be aware of what companies are doing in this realm so that they are prepared to help their future employers capitalize on these opportunities. Additionally, accounting students should be aware of the potential security issues in regard to internal control evaluations and financial statement audits. In general, it appears that there is a disconnect between student perceptions of the uses of social media and corporate America's vision for the use of social media. In preparing business students for their careers, educators must meet the challenge of broadening student perspectives on how social media is utilized for business, what the opportunities are and how to avoid the potential pitfalls of social media exposure. In that regard, an assignment was created

for use in an undergraduate Accounting Information Systems course. The purpose of designing a social media assignment for the class was to expose students to new ways in which companies are disseminating information using social media.

THE SOCIAL MEDIA ASSIGNMENT

Within the assignment, students examined three different forms of social media: Twitter, Facebook and Wikipedia. In conducting the assignment, the instructor learned that, consistent with studies referenced above, students were very familiar with the "friends" portion of Facebook, using it on a daily if not hourly basis, but never knew about or explored becoming a "fan" of a company on Facebook. Students were also very familiar with Wikipedia but did not seem to realize that companies may add information to the wiki or that companies may request that information be removed from the wiki. Twitter was a relatively new phenomenon for the vast majority of the students. Almost all of the students had heard about Twitter but only a handful had a Twitter account. This also is consistent with previously published reports (i.e. Cooper, 2009).

At the beginning of the semester, each student was given a blue card with a number on it. The numbers ranged from 1 to 60. The number on the card indicated a company starting place in the Fortune 500 listing (http://money.cnn.com/magazines/fortune/). From each student's starting point, students were instructed to add 60 until they came up with eight companies. For example, if a student's starting number was five, his or her companies on the Fortune 500 listing would be 5, 65, 125, 185, 245, 305, 365, and 425. The students used all eight of their companies on a preliminary assignment for which they extracted information from BusinessWeek, the Wall Street Journal and SEC filings in order to complete an assignment about finding financial and non-financial information on a particular company using Internet resources. The students then used the same companies for the social media project.

An announcement about the social media assignment was posted on the news page of the class course management system, Desire2Learn (D2L). Students were instructed to go to the Content section of D2L and locate the course module for Social Media. Within the module, students were able to access a Word document with details about the assignment, an Excel spreadsheet to be used in the assignment, and three tutorial videos developed by the instructor using Jing. The first video tutorial showed students how to enter data into the spreadsheet from information that they obtained from the Fortune 500 companies that they examined. The second video tutorial showed students how to find companies on Twitter and how to classify tweets into various categories. The final video tutorial explained how to enter into the Excel spreadsheet various categorical information found in Twitter, Facebook and Wikipedia. In addition, the students were provided with links to YouTube videos about Twitter, Facebook and Wikis, and links to Twitter, Facebook and Wikipedia sites. Figure 1 shows links to available videos that may be helpful in teaching students about social media.

In their instructions students were told that, of the three forms of social media, Twitter might be the most time consuming because almost all of them were new to Twitter. In the instructions and video tutorials they were instructed on how to identify a company from a Twitter search (many different individuals or groups may be using a company's name) and how to classify tweets if a company was found. Students were provided with examples of companies that did have official Twitter accounts, such as BestBuy, United Airlines, Delta Airlines and Southwest Airlines. If one or more of a student's companies were found in Twitter, they were instructed to count out 50 tweets from the date of the assignment. Once the student located the 50th tweet, he/she was asked to record the date. If a company had less than 50 tweets, the student was asked to record the ending date. Next, the student was asked to classify the tweets found into one of five categories: Marketing, Financial, Employment Recruiting, Personal Experience and Other. Marketing relates to advertising or describing a product. Financial relates to any financial information such as EPS, net income, assets, liabilities, stock offered, bonds offered, stock price, and other financial or accounting information. Employment recruiting relates to employment opportunities. Personal Experiences refer to an individual's experiences with the company or an

employee's personal story. If something did not fit into any of the other four categories, the students were told to place the tweet(s) in the "Other" category.

FIGURE 1
SOCIAL MEDIA INSTRUCTIONAL VIDEOS

Twitter in Plain English- YouTube http://www.youtube.com/watch?v=ddO9idmax0o&feature=fvw
Twitter Search in Plain English- YouTube http://www.youtube.com/watch?v=jGbLWQYJ6iM&feature=channel
Twitter Means Business- Fortune 500 Video http://money.cnn.com/video/fortune/2009/04/17/fortune.500.twitter.fortune/
Facebook For Business http://www.facebook.com/business
What is a Wiki?- YouTube http://www.youtube.com/watch?v=icUR1A5eCKs&NR=1
Wikis in Plain English- YouTube http://www.youtube.com/watch?index=0&feature=PlayList&v=-dnL00TdmLY&list=PL140D84C7537A1F34
Get Connected- Web Trends- Wikis- YouTube http://www.youtube.com/watch?v=XtaLyDcgxSY&feature=related

Finally, the students were instructed to complete the Facebook and Wikipedia sections of the Excel spreadsheet. They were once again instructed to use the five categories mentioned above. For Facebook, the students were instructed to only examine what was on the "wall" of the Facebook listing. The students' task was made easier because they only had to state if a certain type of information could be found, without trying to measure the extent of the information provided. For example, if a student encountered no financial related information on the "wall," then he or she recorded a "0" under Financial Type, whereas if they did encounter financial information on the "wall," then they recorded a "1" under Financial Type. They repeated this process for the remaining four categories. The students were then instructed to use the same "0" or "1" classification system for Wikipedia. When the students completed the assignment, they were asked to upload the assignment to their course management system's dropbox.

THE CLASS AND THE INFORMATION FOUND

The social media investigation task was given as an assignment in an Accounting Information Systems class at a medium sized public university in the Midwest. The Accounting Information Systems class is a required class for all accounting majors, an elective for corporate finance majors and an elective for management information systems majors. Approximately 85% of the students in the class were accounting majors. A total of 59 students were enrolled in two sections of the course. Fifty seven students completed the assignment. Of the 57 students, 30 (52.6%) were male and 27 (47.4%) were female. The assignment was worth ten points (1.7% of a student's grade) out of a total of 593 points. The grades ranged from 5 to 10 with a mean of 9.75 points.

After the students completed the assignment, all of the individual Excel files that were stored in the course management system's dropbox were combined into one large Excel spreadsheet. As previously stated, each student was assigned eight Fortune 500 companies. Because only 59 students were enrolled in the class, 28 companies were not assigned to any student. Furthermore, two students did not complete the assignment and two students did not report all of their companies or did not use the correct companies. Thus, the number of Fortune 500 companies examined fell to 442. The resulting companies

represent 69 different industries as defined by Fortune magazine's taxonomy. The top ten industries are featured in Table 1.

TABLE 1
TOP 10 INDUSTRIES EXAMINED

Industry Classification	Number of Companies
Specialty Retailers	23
Utilities: Gas and Electric	22
Commercial Banks	19
Insurance: Property and Casualty	17
Chemicals	17
Food Consumer Products	14
Motor Vehicles and Parts	14
Insurance: Life, Health	13
Telecommunications	12
Petroleum Refining	12

The data gathered from students indicated that 191 (43.2 percent) of the 442 companies were using Twitter. When the total number of tweets reported by the students for a particular company was reconciled with the sum of the tweets found for the categories of use (marketing, financial, employment, personal experiences and other), the number of useable companies fell to 146 (33 percent). This was either because the students did not record anything in the category blanks or the total number of tweets did not agree with the sum of the categories. Table 2 shows the number of companies that had at least one tweet in a particular category, the total number of tweets that were found for all 146 companies and the range of tweets found for a particular category.

As can be seen from Table 2, more tweets were reported in the Marketing and Other categories. The financial category had the lowest range of tweets and lowest number of tweets. The financial category ranked fourth in the number of companies reporting tweets. One explanation for this phenomenon might be that financial reporting on Twitter might either be in an infancy stage or an experimental stage. Regardless, this data shows that companies are using Twitter to communicate with consumers, investors, and potential employees.

TABLE 2
TWITTER USAGE BY COMPANIES EXAMINED

	Marketing	Financial	Employment	Personal Experiences	Other
Number of Companies	133	62	46	94	131
Total Number of Tweets	2298	276	500	931	2119
Range of Tweets	1 to 50	1 to 18	1 to 50	1 to 50	1 to 50

As shown in Table 3, even more companies are using Facebook than are using Twitter. However, the breakdown by types of information shows that, just like with Twitter, the Facebook usage is primarily for purposes of marketing or other purposes, with much smaller instances related to financial information. However, as can be seen in Table 4, Wikipedia is the one outlet examined for which financial data was a significant component of the companies' communications.

TABLE 3
FACEBOOK USAGE BY COMPANIES EXAMINED

	Companies Reporting	Marketing	Financial	Employment	Personal Experiences	Other
Number of Companies	215	171	34	59	133	167

By engaging students in this exercise of examining company usage of social media, this assignment enabled students to learn first-hand about the breadth of corporate information available through social media outlets. Students became aware of the need to be adept at the use of social media technologies, not just for maintaining relationships with friends, but in order to be effective business professionals. This assignment could be expanded to have students research and brainstorm the potential internal control and security issues that companies should address when embarking into the world of social media.

TABLE 4
WIKIPEDIA USAGE BY COMPANIES EXAMINED

	Companies Reporting	Marketing	Financial	Employment	Personal Experiences	Other
Number of Companies	423	244	348	37	84	390

LIMITATIONS REGARDING COMPANY DATA

This project was a student assignment that was graded for completeness. The information that the students reported was not audited or verified. Thus, a student who did not take the assignment seriously could have fabricated results. The purpose of this assignment, however, was not to collect data but to familiarize students with how companies use social media outlets to convey information.

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