Social Technology Use in Public Accounting Firms

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ABSTRACT

Social technology has revolutionized how public accounting firms communicate with both external and internal stakeholders. Despite the rapid growth in social technology use, little is known about how public accounting firms use social technology. This study examines how the largest U.S. accounting firms use social technology. Results indicate that all firms used at least one type of social technology for three functions: attract clients, recruit staff, and provide client service. Further social technology use varied by type, functionality, and firm size. Firms used (1) websites to attract clients, recruit staff, and provide client service, (2) Facebook and blogs to enhance public relations, and (3) blogs to obtain knowledge and communicate with employee. Finally, the largest eight firms (i.e., Big 4 and Second Tier) used social technology more often than most but not all smaller firms.

Key Words: social technology, public accounting firms, technology adoption
Social technology use in public accounting firms

“Social media are changing the way companies can interact and engage with their customers, as well as the way they can interact and collaborate internally with their employees. Social media initiatives have resulted in a restructuring of the marketing function, as well as the way companies think about their relationships with customers, business partners and internal employees” [Deans. 2011, 187]

1. Introduction

Accountants are often required to meet the demands of new and changing technologies (Banker et al., 2002; Beaman and Richardson, 2007; Carson and Dowling, 2012; Dowling and Leech, 2014). Today, accountants and the firms they work for are challenged to engage in the rapidly changing world of social technology (Golden, 2011; Shneiderman et al., 2011). Social technology (also known as social media or social networking) can be defined as ‘using Internet-based applications or broadcast capabilities to disseminate and n/or collaborate on information’ (ISACA, 2011, 11). The growth of social technology has generated attention by several academic disciplines as well as accountant practitioners. This attention reflects recognition that social technology can improve communications within public accounting firms and between the firms and their constituents (Parameswaran and Whinston, 2007; Saxton, 2012; Kane et al., 2014). At the same time, some researchers and practitioners argue that social technology may hinder communication especially between audit partners and may negatively impact firm reputation (Hoffman and Foder, 2010; Smith et al., 2012). For example, employees may disclose client information or information the firm views as providing it a competitive advantage in personal blogs or tweets. The goal of this exploratory study is to advance our understanding of current social technology use by public accounting firms, how social technology use may enhance or hinder public accounting firm communication and reputation, and provide practical recommendations to firms for using these tools.
Social technology use may vary by type, functionality, and firm size. For example, social technology may vary by type and includes social networking sites such as Facebook and LinkedIn, blogs and micro-blogs such as Twitter, video-sharing sites such as YouTube, and websites (Bockius and Selby, 2011; Cain, 2012). Further, social technology often varies by business communication functions (ISACA 2011; Huang et al., 2013). For example, accounting firms often solicit clients via social networking sites. For many accounting firms, a social networking presence is now necessary to attract talented new employees. Some accounting firms view social technology as an important factor in public relations. Accounting firms may use social technology to obtain knowledge by posting questions for constituents to respond to in blogs and on websites. In addition, many firms communicate today with employees and/or alumni via webcasts, podcast, and mobile applications. Finally, since large public accounting firms generally have more resources to invest in new technology, social technology use may vary by firm size.

While social technology may assist in performing business communication functions, it comes with risks that may hinder firm reputation, client confidence and/or disclose firm assets and sensitive information to unauthorized individuals. For example, social technology offers increasingly less control over the information available about accounting firms in cyberspace and may negatively impact firm reputation if users create content that includes bogus firm information (Kaplan and Haenlein, 2010; Lehrman, 2010; Steinman and Hawkins, 2010; Hildebrand et al., 2013). In addition, some question whether social technology is here to stay or a fad (Catanach, 2013; McIntyre, 2013).

Although social technology appears to have caught on as a communication tool (DeFelice, 2009), the scientific literature has failed to keep pace with the developments (Zafarani
and Liu, 2015). Textbooks and articles in the business press on social technology abound (DeFelice, 2009; Li and Bernoff, 2008; Percy, 2013). However, only a handful of studies can be found in academic journals, providing little guidance for practitioners and researchers. The few academic studies on social technology have examined its use in system project development (O’Leary 2011a) and blog mining (O’Leary, 2011b) which leaves the issue regarding its impact on public accounting firms relatively unaddressed.

Attention to social technology use by public accounting firms is warranted for four major reasons. First, recent evidence suggests that social technology use has grown exponentially in the past decade (Engen, 2012; Tysiac, 2012; Percy, 2013) and may be necessary for attracting new clients and qualified employees. While several studies examine social technology use by individuals (Heinrichs et al., 2011; Scott and Orlikowski, 2012), few study examine how growth in social technology from an organizational perspective (Schaupp and Belanger, 2014). Specifically, this study explores how public accounting firms use social technology. Second, while social technology use has grown exponentially, quantifying the benefits and risks of social technology is often difficult (Hoffman and Foder, 2010). Given the emphasis on efficient and effective operations, the study assumes that social technology use signals that the public accounting firms finds social technology beneficial. Thus, this exploratory study contributes to the literature by identifying how public accounting firms currently use social technology. Third, this study adds to the literature examining public accounting firm management issues (Gibbins and Wright, 1999; Barr and McNeilly, 2003; Brierley and Gwilliam, 2003). Finally, public accounting firms make strategic choices regarding the role of systems in their audit production process (Dowling and Leech, 2007; Carson and Dowling, 2012). This study contributes to our
understanding of these strategic choices by examining which sizes of accounting firms are currently using various types of social technology.

Given the lack of academic studies on social technology use from the organizational perspective (Schaupp and Belanger, 2014), this research uses the Information Systems Audit and Control Association (ISACA)’s social technology approach (ISACA, 2010) as a guide to examine social technology use by the largest 100 U.S. public accounting firms. We chose to examine only the largest U.S. public accounting firms since they are more likely to have both the monetary and human resources to invest in social technology than do smaller firms (Cassell et al., 2013; Swanquist et al., 2012). In addition, generally larger public accounting firms compete against leading corporations more often to obtain and retain top talent.

The next section discusses social technology use and factors affecting how it may enhance or hinder public accounting firm communication and reputation. Based on this discussion, the study evaluates current social technology use by the 100 largest U.S. public accounting firms. Finally, recommendations on how to improve social technology use by public accounting firms and future research opportunities are discussed.

2. Social technology background and research questions

2.1. What is social technology?

Social technology can be defined as using Internet-based applications to disseminate and/or collaborate on information (ISACA, 2011, 11). Social technology is a recent development, emerging out of the evolution over the past decade of so-called Web 2.0 technologies that are designed to facilitate active website participation from users (Scott and Orlikowski, 2011). In contrast, prior Web 1.0 technologies were designed to facilitate largely one-way information publication and distribution with limited opportunities for user engagement.
and interaction. Web 2.0 technologies are also known as ‘“social media”’ or “social technology” to highlight their central distinguishing feature—the active creation of content information by their users or members. Depending upon the access privileges of each social technology type, anyone with an Internet-attached device can, with near anonymity and without accountability, participate in public or private information or disinformation sharing. Social technology is much more than information transfer as it becomes increasingly social and communal (Preece and Shneiderman, 2009). Social technology websites often have one or more functions: content development (e.g., websites such as Wikipedia and Digg), networking where members build and maintain relationships with friends or colleagues (e.g., websites such as Facebook and LinkedIn), and common interest where participants with similar interests can share ideas, views, and information (e.g., websites such as Epinions and TripAdvisor) (Hensley, 2011; Scott and Orlikowski, 2011).

2.2. Types of social technology

Several types of social technology exist (ISACA, 2011). This study examines social networking sites such as Facebook and LinkedIn, blogs and micro-blogs such as Twitter, video-sharing sites such as YouTube, and websites (Bockius and Selby, 2011; Cain, 2012; Aggarwal and Singh, 2013). To distinguish between the many types of social technology, theories from media research and social processes may be helpful (Kaplan and Haenlein, 2010). Social technology may be classified by its self-presentation / self-disclosure goals and its social presence / media richness characteristics. In any type of social interaction, people generally have the desire to control the impressions others form of them. Self-disclosure refers to communicating personal information and is a critical step in the development of close relations but can also occur between complete strangers.
Within media research, the social presence theory (Kaplan and Haenlein, 2010) suggests that different media types may vary in the degree of social presence (i.e. acoustic, visual, and physical contact) that can be achieved between two communication partners. Further, social presence may be influenced by the degree of richness media possess. Media richness is based on the assumption that the goal of any communication is to resolve ambiguity and reduce uncertainty (Culnan et al., 2010). As media differs in the degree of richness they possess (that is the amount of information they allow to be transmitted in a given time interval), some media are more effective than others in resolving ambiguity and uncertainty.

Blogs and micro blogs such as Twitter encourage self-presentation and self-disclosure but the social presence / media richness may be low (Culnan et al., 2010; Aggarwal and Singh, 2013). Social networking sites such as LinkedIn and Facebook may also encourage self-presentation / self-disclosure but in a richer media environment with more social interaction. Finally, video-sharing sites such as YouTube may be lower in self-presentation / self-disclosure but higher in social presence / media richness. Further, in addition to differences in social presence and objectives between social technology types, the costs to implement social technology types may vary. Finally, the risks related to social technology may vary by social technology type. This discussion suggests that social technology use by accounting firms may vary by social technology type as stated below:

RQ1: Does social technology use by accounting firms vary by social technology type?

2.3. Social technology functionality

As with any business, public accounting firms must attract customers (known as clients), recruit employees, provide service to clients, enhance public relations, obtain additional knowledge, and communicate with employees. To achieve these objectives, organizations often
depend upon business communication functions. In today’s environment, social technology is increasingly used to perform these business communication functions (Warlick, 2012; Huang et al., 2013). Specifically, ISACA (2010, 2011) suggests that social technology offers an approach to realize the benefits (or functionalities) of improved customer satisfaction and loyalty, recruit and retain the best talent, enhance brand awareness and perception, strengthen connections and relationships and access internal expertise and insight, and use social technology channels to address any negative publicity or misunderstanding. To summarize, we classify social technology functionalities as attract clients, recruit employees, provide service to clients, enhance public relations, obtain knowledge, and communicate with employees.

2.3.1. Attract clients

To attract clients, most organizations employ marketing professionals and spend heavily on advertising expenses (Shepard and Helms, 1996; Barr and McNeilly, 2003; Markos-Kujbus and Gati, 2012; Lee et al. 2015). Recent information systems research suggests that engaging clients with social technology may increase profitability (Rishika et al., 2013). However, marketing and advertising efforts are relatively new to public accounting firms (AAM, 2011) and are below average amounts spent by other industries. For example, data available indicated that since 2006, accounting firms have spent an average of just 2.7 percent of their annual revenues on marketing (AAM, 2011). Today, how these dollars are spent is changing as some accounting firms are now increasing the amount spent on social technology marketing often at the expense of traditional marketing (AAM, 2011). Examples of using social technology to attract client include:

We'll start by getting to know you. You do the talking, we'll do the listening. Our tailored solutions will help you meet the challenges and opportunities of doing business in the US market, and beyond.

Source: public accounting firm website
The healthcare industry is navigating a crucial time of transition. View our 2014-2015 New Ideas for Health Care that explores the changing state of health care from providers and accounting firm experts.

*Source: public accounting firm Facebook page*

### 2.3.2. Recruit employees

To recruit employees, many organizations balance the need to spend money to obtain top talent vs the pressure to keep operating costs low (Doherty, 2010; Henderson and Bowley, 2010; Caers and Castelyns, 2011). Accounting firms are no exception to this situation as shown in the following examples:

There's no wrong time or wrong role to start building your leadership skills. See more from #ACCOUNTING FIRM NAME @employeename:

*Source: public accounting firm twitter feed*

Reviving up for 2013 Campus Recruiting 09.06.2013. College students, sharpen your resumes, refine your elevator pitch and launder your suits because campus recruiting season is here!

*Source: public accounting firm blog*

Whether public accounting firms consistently use multifaceted strategies that include social networking sites such as LinkedIn, Facebook, and Twitter to recruit employees remains an open question to examine.

### 2.3.3. Provide service to clients

An important role of organizations and particularly public accounting firms is to provide service to clients. Appropriate and responsive business communication is key to providing service to clients. For example, consider the following examples of how social technology can be used to provide service to clients:

Tips for Small Business Owners in a Tough Economy

ACCOUNTING FIRM NAME-Assess the landscape, know the network: advice for #CIOs combatting #Crimeware-as-a-Service @ACCOUNTING FIRM NAME Risks

How many public accounting firms use social technology to provide service to clients is unknown.

2.3.4. **Enhance public relations**

Public accounting firms often direct significant time and resources toward establishing and maintain public relations. Public relations is critical to accounting firms given their mission is to provide protection for investors in publicly-traded companies. For example, consider the following LinkedIn notice:

“ACCOUNTING FIRM NAME Through programs like the College MAP program, which shows high school students a path to college, ACCOUNTING FIRM NAME helps develop a thriving global community that is able to protect its environment, educate its children and become prosperous by fostering innovation and generating new businesses.”

Recent practitioner articles suggest that social technology is becoming an important element in an organization’s strategy to enhance public relations. Whether this holds for public accounting firms is an unanswered question.

2.3.5. **Obtain knowledge**

To obtain additional knowledge before the development of social technology, accounting firms developed expertise and knowledge management strategies (Gibbins and Wright, 1999; Salleh et al., 2012) and accountants participated in both on-sight and online training programs. Today, many organizations have expanded their methods to obtain knowledge to include posting questions on their websites and blogs to encourage interaction with their clients and between clients (Henderson and Bowley, 2010). Examples include:
ACCOUNTING FIRM NAME: Tell us how worried you are about real estate bankruptcies? Complete a short three question survey here.
http://blog.ACCOUNTING FIRM NAME.com/
Source: public accounting firm blog account

We were unable to identify research that examines whether accounting firms are following this trend.

2.3.6. Communicate with employees

Given communicating with employees is a critical component of employee retention, organizations are constantly looking for ways to improve the communication process (Huang et al., 2013). Social technology may provide a personal touch, increased arena (connecting with others in your niche automatically brings an association with their sphere of influence that adds to yours), near-universal use (your competition is using social technology), showcases thought leadership, and provides useful feedback. Examples of how firms use social technology to communicate with employees include:

ACCOUNTING FIRM NAME-What can you accomplish during a one-hour lunch break? http://bit.ly/1yircxs #WomenInBusiness #Mentoring
https://twitter.com/ACCOUNTING FIRM NAME
Source: public accounting firm twitter feed

What role does technology play in creating a more collaborative workplace? Find out on September 16 at in a Webinar featuring Anne Donovan, author of ACCOUNTING FIRM NAME’s global NextGen study: http://bit.ly/1uXiiD6
https://www.facebook.com/ACCOUNTINGFIRMNAMEfanpage/timeline
Source: public accounting firm Facebook post
Thus, many organizations have invested heavily in social technology as a tool to communicate with employees (Warlick, 2012). Whether accounting firms use social technology to communicate with employees is a question of interest.¹ 

This discussion of social technology functions used by public accounting firms suggests a second research question:

RQ2: Does social technology use by accounting firms vary by functionality?

2.4. Social technology use and firm size

Larger public accounting firms have more resources available to them and have a larger international base of operations in which to respond to current technology developments than smaller firms (Gist and Davidson, 1999; Palmrose, 1986). These differences may enable larger firms to have the time and resources to invest in social technology. Further, larger accounting firms may be more adaptive and more likely to adjust their business communication activities by incorporating social technology. However, one needs to consider that social technology entry costs are relatively low and one important factor needed is social technology knowledge which may be in fairly easy to find particularly if accounting firms turn to their younger employees. Thus, the possibility exists that some smaller accounting firms may have social technology use rates similar to larger firms. Thus, we surmise that social technology usage may vary by firm size but do not predict whether larger or smaller firms are more likely to use social technology.

Early research on firm size differences compared the Big 4 firms with all other firms (Palmrose, 1986; Ghosh and Lustgarten, 2006). However, recent research (Cassell et al., 2007; Church and Shefchik, 2012; Swanquist et al., 2012) suggests that national accounting firms ¹ It should be acknowledged that identifying use of social technology to communicate with employees may be difficult as some organizations may elect to keep all communications with employees internal and this study examines social technology use by public accounting firms from publicly available data.
known as the Second Tier have gained significant market share and influence since the passage of Sarbanes-Oxley Act in 2002. Hence, this study explores differences in social technology use between Big 4, Second Tier and smaller accounting firms. To summarize, the following research question is posed:

RQ3: Does social technology use by accounting firms vary by firm size?

3. Method

The study examines social technology use by the largest 100 U.S. public accounting firms per Accounting Today as of March 31, 2012. For each firm, two research assistants independently reviewed their social technology activities. For each social technology use identified, the author with assistance from the research assistants developed a guide to classify the use as one or more of the following business functionalities: attract clients; recruit staff, provide client service/advice, enhance public relations, obtain knowledge, and communicate with employees. The initial review was done in late spring 2012 and a follow-up review done in fall 2012. Conflicts were resolved in consultation with the author in both spring 2012 and fall 2012. Further, research assistants in both fall 2013 and fall 2014 reviewed each firm’s social technology to identify any changes.

4. Results

In this section, the results are presented as guided by the aforementioned research questions.

4.1. Types of social technology

RQ1 examines whether social technology use varies by social technology type. Table 1 identifies the number of times each social technology type is present in our sample. As shown,

2 Note two firms merged in 2012; thus the total results are reported for 99 rather than 100 accounting firms.
all public accounting firms have a website presence. Almost all firms (i.e. 96 of the 99) use Twitter and have at least one blog. Eighty-seven firms are on LinkedIn and 86 firms are on Facebook. Finally, 80 firms have at least one video on YouTube.

4.2. Social technology functionality

RQ2 explores whether social technology use varies by functionality. Table 2 lists the number of times each social technology type was used for each function. All firms used at least one type of social technology to attract clients, recruit staff, and provide client service. Eighty-seven percent used at least one type of social technology to enhance public relations and 72 percent of firms used at least one type of social technology to obtain knowledge and communicate with employees.

4.3. Social technology use and firm size

RQ3 examines whether social technology use varies by firm size. Given investment in social technology requires time and resources, we expect that larger firms are more likely to use social technology. Following current research on firm size differences (Cassell et al., 2007; Church and Shefchik, 2012; Swanquist et al., 2012), this study groups the largest 20 accounting firms into three categories: the Big 4 (Deliotte, PWC, Ernst & Young, and KPMG), the Second
Tier (Crowe, BDO Seidman, Grant Thornton, and McGladrey), and the next 12 largest firms. Further, firms 21 to 100 are divided into groups of 20 (i.e. firms 21 to 40, firms 41 to 60, etc.).

Results for the Big 4 firms are shown in Table 3 and for the Second Tier firms in Table 4. Website use was similar for Big 4 and Second Tier firms. Big 4 firms tended to use Facebook, Twitter, and YouTube more than Second Tier firms. LinkedIn use was higher for Second Tier than Big 4 firms. Blog use was the lowest type of social technology used for both groups of firms.

<< Insert Tables 3 and 4 here >>

Table 5 presents results for firms 9 to 20. Website, LinkedIn, and Twitter use is similar to the largest firms. However, these firms are more likely to use Facebook and less likely to use blogs and YouTube than are larger firms. Tables 6 to 9 present results for firms 21 to 100. In general, these firms are less likely to use social technology than the larger firms.

<< Insert Tables 5 to 9 here >>

Further, due to small sample sizes, the Fisher exact test is used to determine if social technology type varies by firm size. Results (not tabled) indicate that use of YouTube varies by firm size (p = 0.01). Further, whether social technology use by functionality varies by firm size is examined. Results note that use of websites to obtain knowledge (p < 0.01), Facebook to attract clients (p < 0.01), Facebook to obtain knowledge (p = 0.02), Twitter to attract clients (p = 0.04), Twitter for enhance public relations (p < 0.01), YouTube to recruit staff (p < 0.01), and YouTube for enhance public relations (p = 0.05) vary by firm size.
Finally, six firms in the 41 to 100 firm groupings use the same social technology types as the Big 4 and Second Tier firms.\textsuperscript{3} Further research could examine these smaller firms’ motivation to use social technology, and whether firms achieve their investment objectives with social technology.

5. \textit{Discussion, limitations, and future research}

Social technology use in general and specifically by public accounting firms is expected to grow exponentially in the next decade. Given its ability to disseminate information and interactivity, social technology use will impact both the internal operations of accounting firms and its audit production process (Dowling and Leech, 2007; Carson and Dowling, 2012). The study examines how public accounting firms currently use social technology, identifies how current social technology use differs by social technology type, functionality, and audit firm size, and discusses implications for both research and practitioners.

Results indicate that social technology use varies by social technology type, functionality, and firm size. Most accounting firms have websites and many have established a LinkedIn presence. However, fewer firms have a presence on Facebook or YouTube. Most firms use social technology to provide client service/advice, followed by recruiting staff and attracting clients. Far fewer firms use social technology to improve public relations, communicate with employees, or obtain knowledge. Finally, while the largest accounting firms tend to have similar rather extensive social technology use, some smaller firms are almost as advanced as the larger firms in their social technology use.

\textsuperscript{3} Note, as discussed later in the limitation section, the current research design does not identify the extent of social technology use. For example, a smaller accounting firm may only maintain one blog while most Big 4 and Second Tier firms maintain several blogs.
These results are important for several reasons. First, while prior research has examined social technology use by individuals (Heinrichs, et al. 2011; Scott and Orlikowski, 2012), this paper examines growth in social technology from an organizational perspective in an unique and important setting, public accounting firms. Second, the extensive use of social technology by public accounting firms implies that these firms find social technology beneficial. Third, the research extends work examining public accounting firm management issues (Gibbins and Wright, 1999; Barr and McNeilly, 2003; Brierley and Gwilliam, 2003). Finally, this research enhances our understanding of how accounting firms choices of social technology types and functions may impact the audit production process (Dowling and Leech, 2007; Carson and Dowling, 2012).

For practitioners, the results suggest that public accounting firms that still want to enter social technology could start with websites and LinkedIn presence to provide client service/advice, recruit staff and attract clients. Firms with more experience in social technology may want to branch into blogs, YouTube, and Twitter to improve public relations, communicate with employees, and obtain knowledge. Finally, the fact that some smaller firms have similar social technology use as larger firms suggests that either social technology entry costs are relatively low or these firms have dedicated significant resources to social technology to potentially gain a competitive advantage.

5.1. Limitations and future research opportunities

As with all exploratory research, limitations exist. For example, the study investigates current social technology use via examining public accounting firm websites and social media outlets such as LinkedIn and Facebook. However, it may be missing some significant social technology types by limiting its examination to these media. Second, this study examines social
technology use but not the extent of use. For example, our current methodology does not allow one to distinguish between firms that maintain only one blog and those that maintain several blogs. Future research to examine the extent of social technology use may be helpful. Third, the study does not examine whether the content contained in the social technology message mattered. For example, does the extent of use by the largest public accounting firms just a mechanism to create an impression of ubiquity?

Further, the research investigates the social technology activity of the largest 100 U.S. public accounting firms. Additional research examining could examine whether social technology activity varies internationally or how smaller public accounting firms use social technology. Fifth, readers need to use caution when interpreting study results indicating that few accounting firms use social technology to communicate with employees since some firms may elect to keep all communications with employees internal. While this study examines the use of social technology from publicly available data only, further research may be able to explore internal use of social technology to communicate with employees. Finally, this study assumes that public accounting firms use social technology to perform basic business communication functions such as attract clients, recruit staff, etc. However, Piskorski (2014) suggests that while many firms use social technology to perform business communication functions, a second and potentially more profitable role for social technology exists: connecting customers with each other and subsequently linking these customer actions to increases in profitability (Piskorski, 2014). Further research could examle whether public accounting firms are using social technology to encourage communication among clients.
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Table 1
Number of times (and percent) used for each social technology type – entire sample

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of times</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td>Facebook</td>
<td>86</td>
<td>87</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>87</td>
<td>86</td>
</tr>
<tr>
<td>Twitter</td>
<td>96</td>
<td>97</td>
</tr>
<tr>
<td>Blog</td>
<td>96</td>
<td>97</td>
</tr>
<tr>
<td>YouTube</td>
<td>80</td>
<td>81</td>
</tr>
</tbody>
</table>
Table 2
Number of times (percent) function used for each social technology type – entire sample

<table>
<thead>
<tr>
<th>Type</th>
<th>Attract clients</th>
<th>Recruit staff</th>
<th>Provide client service</th>
<th>Enhance public relations</th>
<th>Obtain knowledge</th>
<th>Communicate with employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
<td>99 (100)</td>
<td>99 (100)</td>
<td>99 (100)</td>
<td>64 (65)</td>
<td>27 (27)</td>
<td>6 (6)</td>
</tr>
<tr>
<td>Facebook</td>
<td>64 (65)</td>
<td>81 (82)</td>
<td>86 (87)</td>
<td>86 (87)</td>
<td>38 (38)</td>
<td>26 (26)</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>58 (59)</td>
<td>87 (88)</td>
<td>62 (63)</td>
<td>10 (10)</td>
<td>7 (7)</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Twitter</td>
<td>46 (46)</td>
<td>67 (68)</td>
<td>96 (97)</td>
<td>56 (57)</td>
<td>36 (36)</td>
<td>26 (26)</td>
</tr>
<tr>
<td>Blog</td>
<td>74 (75)</td>
<td>81 (82)</td>
<td>96 (97)</td>
<td>75 (76)</td>
<td>72 (73)</td>
<td>72 (73)</td>
</tr>
<tr>
<td>YouTube</td>
<td>71 (72)</td>
<td>62 (63)</td>
<td>80 (81)</td>
<td>52 (53)</td>
<td>38 (38)</td>
<td>38 (38)</td>
</tr>
</tbody>
</table>
### Table 3
Number of times (percent) function used for each social technology type – Big 4

<table>
<thead>
<tr>
<th>Type</th>
<th>Attract clients (percent)</th>
<th>Recruit staff (percent)</th>
<th>Provide client service (percent)</th>
<th>Enhance public relations (percent)</th>
<th>Obtain knowledge (percent)</th>
<th>Communicate with employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
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<td>Website</td>
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<tr>
<td>Facebook</td>
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<tr>
<td>LinkedIn</td>
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<td>3 (75)</td>
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<td>Twitter</td>
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Table 5
Number of times (percent) function used for each social technology type – firms 9 to 20

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Table 9
Number of times (percent) function used for each social technology type – firms 81 to 100

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