



A Delphi study of the future of new technology research in public relations



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ABSTRACT

New technology has dramatically expanded over the past decade. New features on websites, powerful mobile devices, and the subsequent restructuring of news services have dramatically changed the profession. This study sought to learn about the broader issues of technology, and forecast trends in online communication technologies. In an effort to learn what technology professionals outside of public relations know about new technology and social media, this study used a Delphi methodology and solicited the participation of technology professionals from computer science, professional writing, communication studies, art, business, music and other areas. The first two rounds of the Delphi findings are reported and suggest that public relations professionals need to broaden their understanding of new technology to consider social and relational issues, rather than the current focus on practice.

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A quarter century ago, in an article titled, "Forecasting Tomorrow's Public Relations", Judy VanSlyke Turk (1986) wrote, "The future is not something today's institution or organization can afford to ignore, or something that can be left to chance. From a need and desire to intervene in the future come the necessity of futures research" (p. 12). Turk's basic argument was that public relations professionals needed to become skilled strategists and innovators rather than mere technicians who act as "the chairman's boys or girls" (p. 13). Ironically, however, the future that Turk envisioned where professionals would become forward thinking organizational counselors and leaders, has been eroding in the face of social media technology and the push to make public relations professionals into blog masters and "Tweeters in Chief." New technology has not brought us closer to Turk's vision but farther away.

Subtle changes in the professional practice of public relations occur on an almost daily basis. As public relations agencies and professional associations struggle to remain relevant (cf., Elliot, 2013), the field has seen a gradual shift in the profession from the organizational counselors and relationship managers Turk wrote of, to social media specialists and a return to technical "communication managers" and marketers, rather than strategic thinkers (Taylor & Kent, 2010). The relevance of public relations is threatened, as communication professionals become minions of new technology, rather than the masters.

Turk (1986) suggested a number of techniques for "revealing the future" and making public relations professionals more relevant that included "analogy, trend extrapolation, scanning, Delphi, cross-impact analysis, scenario-building, mapping, simulation and modeling" (p. 16). This study employs the Delphi method, with an eye toward discovering what scholars and researchers *should* be examining in order to advance the field. Technology experts from six countries participated in our

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study to identify trends in new technology that are important for public relations professionals to be aware of as they enact Turk's vision of becoming organizational counselors rather than "tweeters in residence." We believe that public relations professionals have a broader role to play in technology use and policy development. The paper has three sections: (1) A brief discussion of new technology and a review of the Delphi method. (2) A report of the results of our Delphi study of technology experts. And (3), a discussion section exploring what scholars and professionals can learn from the experts studied here.

1. New technology in public relations and the Delphi method

In just over a decade, communication professionals have seen the emergence of an assortment of social media and new technologies. How should public relations professionals use such technology? One answer might be, keep up with it all, do some research, and use what is best. At the core of all effective public relations is research. But how can a professional be sure of what the next trend in social media will be, what technology to invest in, or where to allocate scarce organizational resources?

Much of the current social media scholarship has focused on determining whether particular organizations or industries have used social media effectively in marketing and advertising settings, or whether organizational websites are meeting the status needs of organizational communicators (e.g., [Hill & White, 2000](#); [Kim, Park, & Wertz, 2010](#); [Park & Reber, 2008](#)). Most previous studies of new technology look at the consequences of technology after-the-fact. Few have explored the issues management charge of identifying, forecasting, and spotting trends *before* they arrive (cf., [Crable & Vibbert, 1985](#); [Heath & Cousino, 1990](#); [Jones & Chase, 1979](#); [Kent, Taylor, & Veil 2011](#); [Veil & Kent, 2008](#)). This article seeks to identify some trends *before* they become apparent.

1.1. The Delphi method

The Delphi method is a unique research approach because of the ability to learn about ideas and issues that are not widely recognized among a group. In contrast to survey methodology and content analysis, which both start inductively, from the assumption that the researcher already knows what questions need to be asked, or hypotheses tested, a Delphi panel begins deductively, gathering a variety of information obtained from experts and stakeholders, and trying to discern what to ask. Moreover, unlike surveys, which ask participants to give their opinion on a variety of predetermined topics, the Delphi method asks experts to participate in the research process. The elaboration process that is part of many Delphi studies brings participants together to explore ideas and issues to a greater extent than other methods, often generating consensus among participants, as well as obtaining new information to guide future activities.

The Delphi method can be used both qualitatively and quantitatively, and works well for combining both types of data gathering in successive waves of research. Central features of the Delphi method are repeated iterations, anonymity, controlled feedback, statistical aggregation of group responses, participation by geographically dispersed individuals, and participation of experts. A Delphi panel conducts successive waves of surveys until the researcher is confident that an answer has been found or that no further waves of questions will yield insight.

1.2. The Delphi method in public relations

The Delphi method is not a new method. Tens of thousands of Delphi studies have been conducted by scholars in a number of fields going back more than fifty years (cf., [Brown, 1968](#); [Dalkey, 1969](#)). Although a number of public relations scholars and professionals have spoken of using the Delphi method (cf., [Jones & Chase, 1979](#); [Kalupa & Allen, 1982](#)), only a few have actually used it.

Most recently, [Verčič, Verčič, and Sriramesh \(2012\)](#) reported the results of a two-round Delphi study of "internal communication" with eight participants. [Watson \(2008a,b\)](#) reported on the results of a Delphi replication, trying to identify the most important topics for research in public relations. [Boynton \(2006\)](#) examined key values of PRSA members. And [Verčič, van Ruler, Butschi, and Flodin \(2001\)](#) conducted a definitional study of public relations among academics and professionals in Europe. The earliest discussion of the Delphi method in public relations is probably [Turk's \(1986\)](#) overview on the Delphi method from 28 years ago. Turk used the Delphi method to study technology experts, as we do in the current study.

2. A Delphi study of technology experts

We conducted a Delphi study of new technology issues relevant to public relations professionals. The purpose of the study was both to answer questions about new technology, as well as to identify relevant trends in new technology that public relations professionals are not aware of.

2.1. Methodology

The study began with open-ended questions and progressed to more structured questions. Questions in the first round were delivered via e-mail. Participants were given two weeks to respond, reminded after one week, and then asked to have all final responses in by the end of week three. Late participants were sent personal messages, asked to confirm their

continued interest in the study, and to respond by the end of the fourth week—all of these procedures were expected and planned for in the research calendar. Individuals who did not respond to any of the messages, or did not deliver on their promises to answer the questions, were thanked for their time at the end of the fourth week.

The procedure outlined above was followed in subsequent rounds of the Delphi study. At the completion of the study, participants were sent a report of the results of the study and thanked for their participation. The procedures followed represent standard Delphi methods (Brown, 1968; Dalkey, 1969; Linstone & Turoff, 1975).

2.2. Participants

Experts were identified by a variety of methods. First, the research team met to discuss possible academics and professionals whose work was familiar to the researchers and who were considered knowledgeable and innovative professionals. Next, the researchers conducted exploratory research to find possible participants from a set of predetermined areas: art/music, computer science, technology, technology authors (e.g., bloggers or writers), technology researchers, etc. Finally, influential experts were targeted based on a recent conference paper by So (2010), that identified the 100 most influential Internet technology articles.

The professional experience of the participants ranged from 5–30 years ($M = 14.46$, $SD = 5.88$). The researchers contacted 52 technology professionals and academicians from more than a dozen countries. About half (27), agreed to participate. However, by the end of the study, only 14 experts from six countries (Australia, Greece, Finland, Israel, Romania, USA) completed both rounds of the Delphi study. Of the 52 people contacted, 13 never responded to repeated contact attempts, 11 declined to participate, 24 returned the informed consent form, and 10 dropped out after the first round, or after the first round questions were distributed.

The final (14) participants included a mix of technology professionals, academicians, administrators, and entrepreneurs, and included experts in new technology, art, engineering, communication, public relations, professional writing, organizational communication, computer science, and other fields. Participants were invited to participate in the study via a tailored letter sent to each participant through e-mail.

Participants were asked to sign an informed consent form and asked to give permission for their name to be associated with their comments and observations. All participants who completed the study agreed to allow their names and comments to be referenced in articles and reports. The authors' Institutional Review Board approved the procedures used in this study.

2.3. Assumptions and biases of the Delphi participants

The data from each round of the Delphi are compelling and also instructive for public relations. Some may ask why a study of social media and new technology in public relations involved no public relations agency or corporate communication professionals, and no experts from the various public relations professional associations? The simple reason is that none were willing to participate in the study. But that answer is unsatisfying. Although finding competent and willing participants is one of the biggest challenges when conducting a Delphi study, we intentionally invited experts from across the technology spectrum, inviting only a select few public relations scholars and practitioners, in order to make the study a broad overview of technology experts, and not simply a survey of public relations professionals. Additionally, one of our concerns was that an abundance of public relations professionals would introduce professional biases into the results.

Many agency and corporate communicators reduce public relations to media influence, marketing support, brand management, or sales support. Many communication professionals treat social media as one-way information dissemination tools, rather than tools for two-way communication (cf., Lovejoy, Waters, & Saxton, 2012).

Additionally, many public relations scholars and professionals have ignored the disconfirming data about the impact of social media coming from organizations like the Pew Internet and American Life Project for almost a decade. Social media play a large role in more than a billion peoples' *social* lives, but few have an impact on the average citizen's organizational, corporate, or brand interaction (cf., Lenhart, Purcell, Smith, & Zichuhr, 2010; Rainie, Smith, & Duggan, 2013). In short, people do not use social media as ubiquitously as many communication professionals assume. Many of the assumptions about social media are informed by scholar's and professional's personal biases, rather than through a critical examination of the media tools themselves (cf., Kent, 2008).

2.4. Research questions

Although three rounds of Delphi were conducted, given the abundance of information obtained, we report only the first two round of the Delphi study in this essay. The first round of the Delphi study consisted of three open-ended research questions intended to identify the issues surrounding the use of the Internet and related technologies.

Questions were carefully selected to be both broad enough to allow professionals from very diverse fields to be able to respond, but narrow enough not to be off-putting to participants. Additionally, since the researchers were interested in identifying broad technology trends, questions were open-ended, asking the participants to identify the key issues, rather than asking them to rate predetermined items. The first round of questions included the following:

RQ1: What do experts, such as yourself, know about Internet communication technologies or social media that no one else knows?

RQ2: What Internet communication technologies, social media innovations, or trends might prove to be the most important over the next decade and why?

RQ3: What do technology experts believe will happen with technology over the next 10 years?

2.5. Results

Four broad background and demographic questions were asked of participants to determine their self-assessed level of technological savvy, their perceived level of technological knowledge in relation to the average person, the number of years that participants had studied technology, and the country of origin of participants. Participants' responses to "Understanding of new technology in relation to your fellow professional colleagues" yielded a mean of 7 (SD 1.04) on a 9-point scale. The median was also 7. Responses to "Understanding of new technology in relation to the average citizen" yielded a mean of 8.46 (SD .78) on a 9-point scale. The median was 9. Responses to "How many years have you studied or examined new technology issues" yielded a mean of 14.46 years (SD 5.88). The median was 15 years, and the range was 5–30 years. The majority (8) of the participants were from the U.S., although two participants were from Romania, one was from Australia, one was from Finland, one was from Greece, and one was from Israel.

The first round of the Delphi study began with broad, open-ended questions that allowed the participants to set the agenda and share their unique insights. Participant responses to the initial open-ended questions yielded qualitative data that were analyzed thematically. The themes were used to generate the data for the second round of the study where the participants rank ordered the themes from round one.

Based on the thematic analysis of the data from round one, 12 themes emerged and formulated the second round of questions (see [Table 1](#) below). The 12 themes were subsequently broken down into subthemes that ranged from 4–11 items each.

Table 1

Round one themes and round two rankings.

Theme	Reverse weighted score (higher is better) #	Selected	High	Low
Identities/social relations bound up with technology	111	11	10	1
Social media and new technology as tools for democratization	94	10	9	1
Ubiquity and scale: technology will be everywhere and part of everything	92	12	8	4
Location based services, cloud computing, wireless connectivity dominate social lives	87	10	9	1
Increased computer literacy as privacy is threatened	72	9	6	3
Threats to privacy will emerge as technology expands	63	7	6	1
Better life through technology. Hardware/software merge	60	9	5	4
Social technologies and the Internet are ultimately knowable	41	11	2	9
Metaphor of the "Web" is misleading. Internet is more like corporation or private club	23	8	1	7
Extreme self evaluations (humility and hubris)	22	9	1	8
Hyper-reality will define and problematize social worlds	20	4	2	2
Technology meets needs in developing world, serving non-mainstream publics	10	1	1	0

The thematic ranking from round one, and the participants' responses to the thematic ranking from round two. Column one indicates the theme. Column two shows the combined scores from participant rankings. Participants ranked the most important themes and least important themes on incremental scales (one was most important, two was less important, etc.). Rankings were then reversed weighted, so that higher scores would indicate the themes that were perceived as most significant, and lower scores would indicate the themes perceived to be least important. Themes could receive scores of from 1–12 (the number of items to be ranked). Unranked items were assigned scores of zero. Column three indicates the number of people who ranked each theme. Columns four and five indicate how many people either ranked an item as important (high) or unimportant (low).

Three themes were ranked as significant by ten or more of the participants: (1) Identities and social relations bound up with technology; (2) Social media and new technology as tools for democratization; and (3), Ubiquity and scale: technology will be everywhere and part of everything.

The three major themes were comprised of 24 subthemes (see [Table 2](#) below). In the second round of the study, participants ranked the subthemes within their most and least important theme rankings.

As noted above, the themes from [Table 1](#) were used to assess both the most important and least important themes, and then to rank order the most important subthemes. Little agreement existed among the participants regarding what subthemes were most important. The three themes judged least significant, and the 18 subthemes ranked by the participants are listed in [Table 3](#). The next section discusses the findings by describing the implications for public relations professionals.

3. Discussion

The Delphi method had been invoked as a tool of issue management, research, and identifying points of agreement. The power of the Delphi is to harness the crowd. We see that in the data reported here. Our focus on technology brings to light dozens of important issues that are diffused throughout the community of technology experts. Many of the issues identified by the experts in this study are only now being talked about by mainstream media sources. The discussion that

Table 2

Top themes/subthemes ranked in round two.

Theme/Sub-themes	Total ^a	# Selected ^a
Identities/social relations bound up with technology		
1. Time shifted content, content on demand, and content enjoyed by individuals networked with others but not in proximity will replace slotted television programming.	111 30	11 9
2. Content super-providers are emerging and will come to dominate what is offered, perhaps creating status, income, occupation, and social class based networks.	29	8
3. Social media and integration will make identity harder to manipulate and change.	26	7
4. Fragmentation not integration will characterize the Internet and society.	25	8
5. Remote collaboration technology will be the norm for professionals.	25	8
6. Individualization and identity are disappearing. We are fostering the first generation of individuals who will leave behind their individuality and uniqueness for a hive mind conglomeration.	12	4
7. The influence of online gaming will increase and create groups around specific interactions.	9	4
Social media and new technology as tools for democratization		
1. The cliquishness of the Internet and social media is making people increasingly partisan and insulating people from the views of others.	94 28	10 8
2. Social media will change the political landscape as information becomes more public, and future political candidates' lives will become open books.	26	8
3. Governmental agents and lawmakers need to learn how to use technologies such as crowd-sourcing more effectively.	25	8
4. Many new communication technologies are not democratic, given that they are controlled by large corporations and serve investor interests. Facebook sells users' profile information to advertisers.	24	8
5. Peer networks are springing up to fill social-emotional and political voids, but most of these are not government led initiatives.	17	6
6. The democratizing potential of the Internet becomes/or may become, more diluted and less valuable as more people add their voice to the mix. More will not mean better.	14	6
Ubiquity & scale: technology will be everywhere and part of everything		
1. Technology will become smaller, faster, and lighter.	92 31	12 8
2. Online technology will eventually become as ubiquitous as electricity and not be seen as something unique but as an everyday part of life.	22	7
3. Information will become platform independent.	18	5
4. Ubiquitous integration has its downsides: The "persistent memory" afforded by technology will make it harder to escape our pasts or remake ourselves.	12	3
5. Social media will make forgetting things that need to be forgotten harder: breakups, disappointments, embarrassments, etc. Our failures will follow us around forever.	11	4
6. As we approach the limit on what people need from their technologies, the growth in applications, online tools, and esthetics will become more important.	8	3
7. Location and context data will allow us to seamlessly integrate with fellow members of our communities. We may, for example, while looking at a menu, see information about what dishes our friends had and what they thought of them, be able to "Google" a political candidate's record while standing in the voting booth, etc.	8	4
8. Social media has and is changing our perception of what "friends" are.	7	2
9. Pathological involvement in hyper-real states (online gaming, virtual worlds, etc.) will make it harder for many people to form rewarding and lasting relationships.	5	2
10. Conviviality (rewarding, easy to use) will characterize technology.	3	2
11. Gameplay (making things fun) will come to characterize how we interact in many online activities.	3	1

^a The headings in tables two and three contain the composite score for each respective theme, as well as the number of people who responded to the theme positively or negatively. Higher scores mean respondents saw that item as more significant than other items within the thematic category. The scores for each sub-theme are lower than the scores for the major themes because of a lack of agreement among the respondents, and because the total scores represent top five choices within each group of subthemes. Thus, the highest score any sub-theme could receive was five points, times the number people ranking it.

follows focuses on three issues culled from the data that we believe are highly relevant to practitioners and concludes with recommendations based on the data for moving research on technology and public relations forward.

3.1. The power of our technology tools

The highest ranked theme suggests that citizens' identities and social relations are bound up with their technology. Yet, do people realize this? The literature would suggest not. Consider for example [Heaven's \(2013\)](#) recent study surveying people about their understanding and use of cloud storage, a relatively simple concept. Heaven found that 54% of the people surveyed claimed that they do not use any sort of cloud storage, while 95% actually do (email, cell phones, etc.).

We found further evidence that people do not know the power of their own tools when we asked our participants to rate their level of technological knowledge in relation to their fellow professionals and then in relation to the average citizen. Our participants rated their level of technological knowledge in relation to other experts as a 7/9 and in relation to the average citizen an 8.46/9. In spite of having an average of 15 years of experience studying technology among participants, the participants all feel some sense of humility. Among everyday citizens, the majority believes that they know more about technology than they actually do ([Heaven, 2013](#)).

Table 3

Bottom themes/subthemes ranked in round two.

Theme/Sub-themes	Total ^a	# Selected ^a
Social technologies and the Internet are ultimately knowable	41	11
1. Expert voices need to be recognized and brought to the fore.	25	7
2. Online communities are not a mystery and they can be nurtured, guided, and cultivated.	22	8
3. We should privilege excellence not mediocrity. We should privilege the voice of experts in our online communities not “anonymous cowards.”	20	5
4. Academics need to develop better social media analysis tools.	20	8
5. Understanding technology requires understanding people: norms, values, and online activities.	15	9
The metaphor of the “web” is misleading. Internet more like corporation or private club	23	8
1. Technologies need to evolve to allow for multiple levels of relationships and be more representative of the complexities of actual social/personal relationships.	24	7
2. Marketers and advertisers want to have increased ability to narrowcast their messages.	19	6
3. Search engine technology is being designed to return results that people want to find, not necessarily the central results.	16	4
4. Social media tend to be used as one-way broadcast technologies rather than a social/relational/dialogic tools.	14	5
5. No one knows whether having a large social network (i.e., lots of Facebook friends) will make people's lives better, or provide a competitive advantage.	13	5
6. Reputation and influence scales will create groups of technology gurus.	9	4
Extreme self evaluations (humility and hubris)	22	9
1. In general, people do not understand how information retrieval works—but think that they do—including what the algorithms do, the meaning of their search results, how their data are being used by advertisers and marketers, etc.	29	7
2. People have exaggerated perceptions of their skills.	24	7
3. We do not know whether cognitive shortcuts are good or bad. The debate on whether Google makes you stupid is not resolved.	15	6
4. People do not want to be told that they do not know everything and are resistant to technological literacy issues.	13	5
5. People are “cognitive misers” relying on the same heuristics over and over to find what they are looking for or live their online lives.	12	5
6. The future is unknowable.	11	3
7. So many people know more about online technologies than me, I do not know anything special.	0	0

^a See note on Table 2, above. Note also, some respondents ranked every item in every subcategory, while other respondents bullet ranked only their top choice(s). Scores were adjusted to reflect the same rating formula.

The gulf between what our technology can actually do, and how public relations professionals are using social media and new technology, is wide. Firth (2013a), for example, reported that neuroscientists are developing a way to use Twitter to diagnose depression, while health and crisis scholars have developed tools to track disease outbreaks and provide emergency services via social media and text messaging. More importantly, there is no reason to believe that the “average public relations professional” is significantly more technologically savvy than those surveyed in Heaven’s study—especially in light of public relations professionals relatively simplistic use of technology. Public relations professionals need to refocus their attention from the technology to the publics, and start asking how social media can serve the needs of stakeholders and publics.

3.2. The risks of technology

Given the emphasis on crisis, risk, and issues management in public relations, the Delphi participants’ agreement on the importance of risk is significant. Consider briefly some of the subthemes culled from the items listed in Tables 2 and 3, and some of the implications for public relations:

- Content super-providers are emerging and will come to dominate what is offered, perhaps creating status, income, occupation, and social class based networks. This theme is rapidly becoming a reality. As ISPs have been allowed to throttle down the service of unpopular/undesirable sites or charge some customers more for the same service provided to others for free. Entities like Facebook make changes to their interfaces solely to serve the needs of advertisers and investors, citizens, small organizations, educational institutions, and non-profit organizations are harmed in the process, forced to behave as advertisers prefer.
- The cliquishness of the Internet and social media is making people increasingly partisan and insulating them from the views of others (Rainie & Smith, 2012). From the standpoint of political participation, democracy, and civil society, our current social media offer society little. As people construct their friend and acquaintance networks around liking and similarity, they stop having their ideas challenged and stop growing intellectually and emotionally. The long-term harms to society and public relations from a culture of narcissism (cf. Lasch, 1979; Silva, 2013; Spinny, 2012) are substantial.

Public relations practitioners will soon be faced with the challenge of trying to persuade or present contrary information to publics that are not receptive to conflicting information. Indeed, the way that communication professionals will need to engage in persuasion over the next decade will be radically different. More diverse skills in persuasion will be needed, as well as an understanding of framing (Hallahan, 1999), cognition (Elkan, 2009; Thomson, 2009), decision and game theory

(Murphy, 1991; Saini, 2009), and rhetorical principles like Bryant's (1953) notion of "adjusting ideas to people and people to ideas" (p. 413; cf. also, Lawton, 2013).

- *Ubiquitous integration also has its downsides: The "persistent memory" afforded by technology will make it harder to escape our pasts or remake ourselves.* The persistency of mediated memory will soon prove to be particularly onerous for organizations. Many anecdotes already exist about organizations that have been harmed by the "Streisand Effect" (widespread media publicity after an organization tries to censor unfavorable information or Internet rumors). However, the Streisand Effect, and the many anecdotes about the impact from negative Internet publicity will pale in comparison to the psychological harms caused by social networks that constantly remind members of their personal failures or about negative organizational events (oil spills, animal cruelty, corporate scandals, etc.).

Organizations, like people, who can never escape from their past cannot move on. The literature on crisis and renewal (cf., Ulmer, Seeger, & Sellnow, 2007) presupposes organizations can repair their images, improve on poor practices, and move on. If moving on becomes impossible, the results could be dire.

A dozen more significant subthemes could easily be culled from this study. Indeed, even the themes considered least important highlight important issues. However, we next consider what public relations professionals can do with the themes and subthemes identified above.

3.3. What can professionals do that they are not doing?

A theme common among many of the participants was the emerging ability of individuals and organizations to mine social media data for insight into humanity, or in our case, stakeholders and publics, and to be able to use social media for research and professional purposes. In public relations, we see an almost exclusive focus on the one-way, sender-receiver, features of new technology, while ignoring the many collaborative possibilities such as crowd sourcing, creating knowledge networks and dialogic social media spaces [populated by dozens rather than millions], directly delivering organizational content via mobile devices and communication apps, etc. Additionally, we often ignore the negative features such as loss of privacy, risks to identity formation, and of course, loss of control over data and creative work. The list of what we can or should do, verses what we have or are doing is long.

One important activity that needs to be understood is how to foster participation and development of online communities. If the past history of technology is any indicator, public relations professionals will be adapting to a number of new social media spaces over the next decade, as older technologies are replaced by newer ones. As one participant, Rob Malda, creator of the influential website Slashdot.org suggested in his response to the first round of questions, he understands how to build effective online communities—something that public relations professionals should be more interested in doing. As Malda wrote:

I have a pretty good understanding of how on-line communities form, how to manage them, and better yet, how to build systems that they can use to maximize their collective gains. I think most people tend to oversimplify the problem and sort of miss the point. The first problem is to weed out the noise, and that's actually not too hard. But after that you need to start raising the best stuff up out of the primordial soup.

Malda describes social media spaces that are interactive rather than one-way. Other issues include doing more with the data mining software that already exists (analytics, social and hyperlink network analysis, etc., cf. Saffer, Taylor, & Yang, 2013; Sommerfeldt & Taylor, 2011; Kent, Carr, Husted, & Pop, 2011), the role of mobile devices and technology in global communication contexts, and learning to do more with our social media technology as communication professionals than simply two-way messaging with the occasional "customer service" type response to someone on Facebook.

Whether public relations and communication professionals want to use location based services, cloud computing, or social media is immaterial. These communication tools are already widespread among smartphone device users and how to integrate them ethically and effectively needs to be considered.

3.4. Moving forward—looking "10 years out"

The third research question that we asked was "Thinking 10 years out, how do you see software, technology, social trends, etc. influencing Internet communication or social media?" This last section turns our attention to what is to come. Communication and public relations professionals should stop seeing new technology as a passive phenomenon. We should be at the forefront of establishing, and enforcing ethical norms and rules of conduct and stop treating every new technology like something the world has never seen before. Instead, we should devote some time to understanding each new technology in light of what already exists. Our ethical positions on issues like the invasions of privacy that many employers, and in some cases educational institutions, have engaged in—tricking people into providing access to Facebook pages to look at individual's private lives, Astroturfing, Greenwashing, etc.—need to be addressed.

Social media research needs to move beyond simply counting tweets, and examining blog posts and move into prediction, understanding what our communication tools can tell us about strategic decision making (an entire body of literature all its

own), crisis management (not just which apologia strategy works best in the media, but what arguments do *individuals* find the most compelling), and collaboration (how can online spaces foster real organization–public communication).

Another prediction comes from professional writer Mel Odom, who predicts that society will fragment into virtual worlds surrounding work, play, friends, and peer groups. Although Odom's predictions might seem far-fetched to some, we have already seen a lot of what he predicts take place in only the last five years. Many science fiction writers have written about seemingly fantastic events such as flying to the moon, visiting Mars, wearable communication devices, loss of privacy, and of course, Huxley's future (our present) where people voluntarily give up their privacy for access to entertainment programming (cf., Postman, 1984). Many of us know the outcome of those "stories." Google Glass recently integrated the Internet experience into a pair of glasses, and Oculus Rift (Firth, 2013b) is reviving the moribund virtual reality field. The future is today.

Public relations professionals need to be aware of the social implications of our technologies as much, or more, than the number of people tweeting, or whether an organizational blog will bring prestige to an organization. If only one in ten of the predictions made in this study turn out to be true, public relations professionals will be far behind the ball when we look around and start asking why we do not know what is happening and have no advice to offer to our organizations or clients. We risk driving farther down the road of irrelevance than we are already headed if all we can bring to an organization is our willingness to produce Facebook posts or tweets for our clients.

4. Conclusion

Public relations scholars have adopted a myopic view of new technology. Over the last ten years, dozens of studies of new technology have been conducted by organizations like the PEW Internet and American Life Project suggesting that social media represent more of a personal relationship tool than a general business tool. And yet, scholars continue to ignore data about social media, conducted by independent sources that suggest that social media are not very important in business settings. Many academics persist in trying to study each new social media technology as if it was a new species emerging from the primordial sea, rather than understanding the technology in the context of the others that have come before.

The Delphi study we conducted took four months to complete and generated dozens of informational themes that have been largely overlooked or ignored by public relations professionals. We believe that the data presented here are sufficient to support our contention that public relations professionals need to begin pressing farther in their research efforts and scholarly sophistication.

Of course social media have important applications, but within more narrow settings. Most types of organizations probably do not need a blog or Twitter account. Forgotten in the abundant studies of social media have been other technologies, such as the lowly website which probably plays a bigger role in communicating organizational messages than professionals and scholars give it credit (Kent, Carr, et al., 2011; Kent, Taylor, et al., 2011). In our rush to content analyze more social media sites, we have ignored many of the other important questions that beg to be asked about our technologies.

Although one study is not enough to reorient the direction of the field, we believe that our study has raised enough red flags about the direction of social media research and new technology to require, at the very least, scholars and researchers to be able to justify how their studies are advancing our knowledge of social media. Researchers should be able to contextualize their research within wider frameworks. Concluding incorrectly, as some have, that organizational communicators are not using Twitter because of a "lack of research indicating that social media use produces support for short-term or long-term financial benefits for the organization" (Lovejoy et al., 2012, p. 316), misses the point entirely. Rather than concluding paternalistically that social media producers are just uninformed about social media, perhaps we should start by asking "What kinds of organizations actually need social media?" Not all do. And, "how could social media be used to compliment offline relationship building?" A concept at the heart of public relations, rather than "How can social media be used to turn a profit?"—Something that is not a top issue for most public relations professionals outside of agency and corporate settings.

We are managers of communication, organizational counselors, protectors of organizational reputation and image, cultivators of relationships, environmental scanners, and dozens of other things, but not corporate tweeters, marketing managers, chief bloggers, or sales support staff. Let us reclaim public relations technology research and begin asking and answering more substantive and complex questions.

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