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## **Applications and implementations of new media in corporate communications:**

### **An action research approach**

Greg Hearn g.hearn@qut.edu.au

Marcus Foth m.foth@qut.edu.au

Heather Gray heather.gray@qut.edu.au

Institute for Creative Industries and Innovation

Queensland University of Technology

Brisbane QLD 4059, Australia

### **ABSTRACT**

Advances in new media and web technology are making it easier for organizations and their employees, suppliers, customers and stakeholders to participate in the creation and management of content. It is therefore, useful to understand how a corporate communication strategy can leverage these trends. **Purpose**; this paper discusses the take-up and use of new media in organizations, highlighting a current approach to implementation issues. **Methodology/approach**; we review and explore new media in organizations from three ecological layers: the social, discursive and technical, addressing who is communicating, the communication content and new media technology used. **Findings**; the paper recommends a customer-centered

approach to implementing new media adoption in organisations using action research.

**Practical implications;** new media and Web 2.0 services can be employed to work in tandem with conventional communication tools such as phone, fax and corporate intranets. Such a hybrid approach enables organizations to maintain and strengthen existing stakeholder relationships, but also reach out and build relationships with new stakeholders who were previously inaccessible or invisible. **Research limitations/implications;** academic literature is lagging behind the pace of technological change, and evaluation studies are limited.

**Keywords:** New Media; Corporate Communication; Communication Strategy; Action Research.

**Classifications:** Viewpoint, Literature review, General review.

## **INTRODUCTION**

The new media industry itself is spearheading the trend of using new media such as “blogging, MySpace, wikis, podcasts and social networking sites” (AIMIA, 2007). In this context these new web-based services were originally used by corporations to interact with existing customers, maintain a corporate image, improve internal communications, and reach out to new markets and audiences. However, participatory culture, enabled by recent technological innovations, shifts the communication flows away from a central business-to-consumer model. The trend is towards consumer-to-consumer or even ‘prosumer-to-prosumer’ flows of communication as consumers start to produce content on their own accord using new media applications and services. These are arguably more open, collaborative, personalisable, and therefore

participatory than the previous Internet experience. Other industry sectors that are also starting to explore how to take advantage of using and appropriating new media applications for corporate communications need to consider how to engage effectively in this dynamic new media environment.

There is of course a semantic problem with the term ‘new media’ that some have suggested renders the term meaningless, as many new media are no longer exactly ‘new.’ Indeed, Rice (1984) defined and mapped the field some time ago. What is new about ‘new media’ has also been the subject of two special issues of the *New Media & Society* journal (Jankowski et al., 1999; Jankowski et al., 2004). However, we propose the term ‘new media’ is more relevant to our discussion than other terms, such as information and communication technology (ICT) or Web 2.0, because it reminds us that we are dealing with communicative or discursive content rather than just technical infrastructure and systems. We think of new media embedded within a communicative ecology with three layers: the social, discursive, and technical layers (Hearn et al., 2008). Innovations are occurring rapidly in all three layers. Therefore, when implementing new media communication in organizations, three classic questions are particularly relevant: who is communicating, what is the content, and what media are being used?

This paper reviews and explores the uses of new media in organizations guided by these three questions. We find that this dynamic area has only been the subject of a few rigorous studies so far that map out current uses of new media. Since new media are deployed in such a dynamic fashion, we argue that organizations are best to adopt an experimental customer-centered approach at this stage of the evolution of the

technology both in terms of use and implementation. Action research ideally lends itself to this task as a methodological framework that combines explicit stages of research and reflection with phases of implementation and evaluation. It also fosters the participation and engagement of external stakeholders.

## **NEW MEDIA IN ORGANIZATIONS**

The once dominant image of an office building filled with people sitting in front of their PCs, is inadequate to capture life in contemporary organizations. The spatial organization of work is evolving rapidly (for example, see Castells, 2001). While a company mainly located in a monolithic corporate center is still common, workforces are now increasingly mobile and distributed in a anytime–anywhere work style. The ‘corporation’ may be composed of completely mobile sales and knowledge service operatives (Miles, 2008); networks of retail outlets (Rifkin, 2000); flight crews; or ad hoc project-based constellations of independent agents (for example, in a film shoot or special event). Furthermore, telework has also become pivotal to the operations of global corporations. Employees are expected to virtually cross time zones, and require increased flexibility in work arrangements to manage international connections and services (Meyers et al., 2006). Moreover, there is a renaissance of interest in the use of corporate telecenters as a viable alternative for both employers and teleworkers in the face of urban problems (Chan & Yoong, 2003) and pandemic security risks (United States Government, 2006). In short, the evolution of agile and distributed new media is arriving to complement the evolution of the agile workforce and distributed organizations. Komito (2008) points out that this communications evolution is driven by three technological developments: inexpensive online storage; inexpensive and

widely available fast broadband access to remote sites; and a proliferation of inexpensive digital devices that can capture audio and visual data. Yet, a shift towards an agile distributed nature of content itself is also evident in the structure of the information being communicated.

The cutting edge of new media is found in Internet applications such as YouTube, Flickr, Wikipedia, del.icio.us, Digg, and social networking sites such as MySpace and Facebook. Komito (2008, pp. 87–88) points out that:

Where discussion previously focused on the consumption of digital information, as individuals accessed information provided by organizations, these popular new Internet applications enable sharing of information amongst users who are now individual information providers. [...] There is good empirical evidence that the Internet is, decreasingly, a means by which corporate information is provided to users than a means by which user-generated information is shared amongst other Internet users. This collection of applications enables individuals to share information (including videos, photos, news items, and audio footage) and create virtual communities on the web. The previous growth in the amount of information in digital form has been replaced by growth in the communication of that digital information (Komito, 2008).

New media are evolving into a recombinant form. Mash-ups (web applications that combine multiple content sources and distributed processing modules) are a good example of this trend, but so too are Google Maps, which provide a simple interface to navigate geographical maps available to everyone (a process dubbed ‘neogeography’), and Amazon.com, which complement their online bookstore with

user-generated reviews. The secret to this success is due to the fact that each new iteration adds communicative value for users.

In other words, these new media enable a world of networked co-creation, which contrasts strongly with the hierarchical structure of the one-to-many broadcast paradigm still predominating in much of corporate communications. This is the point of departure for this article. Our review of emerging trends suggests that approaches to corporate communications will require at least some reinvention as these new media continue to evolve. Although it is still early in the diffusion process some clear trends and implications are emerging. Because the academic literature is lagging behind the pace of technological change, evaluation studies are limited. Hence, our objective here is to provide a timely early warning to corporate communications practitioners of trends and implications for uses and implementations of new media communication strategies. In the following sections we introduce new media, then briefly describe a number of new media tools and their uses within the corporate environment. We then offer a course of action to implement these new media.

### **Mobile media**

Use of mobile media includes our direct communications through the mobile phone, 'email, SMS, and voicemail,' and our indirect interactions 'through meeting scheduling systems, workflow management systems and through up/downloading documents from shared file-servers' (Sorensen, 2004, p. 14). One challenge of new media in the organization is the management of information work. Mobile media supports the mobile worker's autonomy as well as offering simple collaborative tools

that are accessible anywhere-anytime. Therefore, it is not the media that is mobile, but the worker or consumer who uses the media. While it is accessible anywhere-anytime, mobile media may also be accessible through many devices. The mobile worker may require a virtual office and virtual office tools, rather than the traditional 'bricks and mortar' (Sorensen, 2004).

However, the use of mobile media within communities and organizations has been blurred, as mobile media are used in relationship building, whether this is related to work or social life (Kim et al., 2007). This fusion is much stronger when the technologies are used by younger employees from Generations X and Y – the so-called 'digital natives,' through the merging of social and work contexts, pertaining to SMS, email and mobile phone use (Kim et al., 2007). The new media we are particularly discussing are: Web 2.0, blogs, Wikis, multi-user gaming environments, digital storytelling and chat usage. As we delve into these mobile media, we will also discuss some of the content control issues pertaining to each.

## **Web 2.0**

As the development of knowledge-sharing collaborative software on the Internet has grown over the past decade, the term Web 2.0 has been used to try to differentiate this new approach to knowledge and information sharing. Web 2.0 more specifically deals with blogs, wikis, RSS feeds, peer-to-peer networks, and knowledge and information systems, which draw on the expertise of the user community (for example, see Tredinnick, 2006; Kolbitsch and Maurer, 2006; Boulos et al., 2006).

Web 2.0 in the organization uses or combines these collaborative social networks to form a powerful knowledge management system owned and maintained by the user. ‘The technologies involved place a greater emphasis on the contributions of users in creating and organizing information than traditional information organization and retrieval approaches’ (Tredinnick, 2006, p. 231). Web 2.0 tools such as wikis, blogs and RSS feeds are becoming powerful implements and resources for the organization’s collaborative knowledge, which have an impact on customer relations, workplace demographics and corporate culture (Creese, 2007). Berman et al. (2007) identified new business models, which by incorporating Web 2.0 technology, suggest innovative concepts for flexible business designs – for example, the Disney Corporations implementation of Web 2.0 technology to address some of its communications needs – the models identified can also be applied to other types of organizations. These Web 2.0 technologies are gaining more attention as computer communication becomes more fundamental in business practices (Jackson, 2007).

## **Blogs**

Blogs are a highly controlled media that enable an individual or group of individuals (bloggers) to publish information in a diary or journal style. Bloggers control the information that they publish, and moderate comments that viewers (non-authors) add to the blog (Bruns & Jacobs, 2006). Within organizations, Lee et al. (2006) identified two main strategies for corporate blogs: those using a bottom-up strategy and those using a top-down strategy. Bottom-up blogging strategies tend to focus on product development and customer service content, while top-down blogging focuses on thought leadership or promotional content (Lee et al., 2006). This enables

organizations to embrace blogging as a new communication opportunity, rather than focusing on controlling or limiting the employee's voice (Lee et al., 2006).

Executive blogs, top-down blogging, tend to have a different audience, as they can be used to enhance the image of the company, connect with stakeholders, and can be an outlet for exchanging ideas (Lee et al., 2006). As the clientele can comprise shareholders, developers, employees, consumers, and suppliers (Joyce, 2005), this is the executive's opportunity to have a voice, and promote products and services in a way that engages the various stakeholders. Furthermore, these blogs can gain a daily readership to promote particular ideas (McKenna, 2007) and attract the attention of mainstream media, which may or may not be warranted (Fletcher, 2007). However, 'sticking press releases on the front of the blog just doesn't cut it' (Hourihan as cited in Joyce, 2005, p. A01).

## **Wikis**

Wikis take customer centricity to another level. Customer-centric wikis, offer a sense of the custodianship to the customer, for example, in Wikipedia users 'assume administrative, promotion, measurement and asset protection responsibilities' (Wagner & Majchrzak, 2006, p. 30). The control of the content however, is no longer in the hands of a single entity, as is the case with most blogs (Majchrzak et al., 2006).

Within the organization, Wagner (2006) suggests wikis are a feasible and effective solution to knowledge management bottlenecks. Hasan and Pfaff, (2006) also suggest the 'wiki has succeeded in helping employees collaborate and communicate better electronically by transforming fragmented knowledge in corporations into usable and

easily accessible data' (p. 378). Majchrzak et al. (2006, p. 100) identify a number of uses of wikis in organizations including: software development, e-learning, project management, posting of general information and knowledge management, communities of practice and user groups, ad-hoc collaboration, technical support, marketing and customer relationship management, resource management, and research and development (Majchrzak et al., 2006). In this way wikis have somewhat alleviated the drudgery of report writing for project managers, as the wiki software maintains the history of entries (Louridas, 2006).

### **Multi-user gaming environments**

Multi-user gaming environments such as Linden Lab's *Second Life*, while having a focus on the end user's enjoyment of the 'game,' are becoming powerful tools for promoting community activities, expanding knowledge and offering the user a new environment for learning, training and professional development. The platforms for multi-user gaming environments are being explored and promoted by developers for marketing and information dissemination purposes (Kitson, 2005). As a virtual world environment *Second Life* offers a new dimension for corporate marketing. Developers have also addressed concerns about the cost of working (gaming) in this type of environment by developing multi-user gaming for the mobile telephony environment. Peltola et al. (2007) successfully developed a low cost mobile gaming application that can be used on mobile phones. This has been successfully tested during community festivals that support and promote local industry, and offers the potential for further marketing, knowledge dissemination, and community and organizational promotion.

## **Digital storytelling**

New media have opened opportunities for collaboration across political, cultural, social and business groups for the sharing of ideas and the development of future community environments that can be either physical or virtual (for example, see Klaebe et al., 2007). This includes narratives relayed through a combination of digital media: texts, audio recordings, photos, and video in the form of podcasts or digital TV (see Freidus & Hlubinka, 2002; Kidd, 2006). Organizations have used storytelling to engage the community in urban-planning discussions and cultural exchange (Klaebe et al., 2007; Burgess et al., 2006), as well as collaborative entertainment (Kidd, 2006). Most successfully, these new media collaborations engage the community at many levels. Engagement can occur from a high-level community outlook, or at an individual, cultural or political perspective, by offering a platform for stakeholder debate, inspiring community engagement, and for developing and relaying community narratives through digital creativity (Foth et al., 2007). These innovative ways of using new media for business, education, political motivation, and entertainment, test the realms of new media possibilities, transforming cross-corporate, community and cultural collaboration and engagement.

## **Chat**

As with mobile media (SMS and mobile phones), chat is used within organizations for quick response communication with colleagues, as well as maintaining social networks (Muller et al., 2003). Muller et al. (2003) in their research on the use of *Lotus Sametime* chat (instant messaging) within organizations, found that individuals

used the tool to communicate with team members/co-workers, managers, other departments, friends, technical support staff, family, and online, for quick response communication needs. The reasons given for using the instant messaging tool were to ‘get a quick response to a question, avoid using the phone, know who is available’ and ‘to clarify a question’ (Muller et al., 2003, p. 52). Scheduling and socializing were also given as reasons to use instant messaging, but to a much lesser degree (Muller et al., 2003).

## **IMPLEMENTING NEW MEDIA**

The implementation of new media based corporate communication faces two primary challenges. The first is that, typically, communication utilizing new media requires several different disciplinary skill sets. For instance, corporate communication departments usually handle all facets of a communication campaign, which use traditional media. New media campaigns, however, frequently require the amalgamation of different disciplines (for example, creative producers, software designers, technical systems engineers). Only when both the code and design aspects work together seamlessly to create a functional and useful entity do new media products come to life. Usually though, programmers and designers come from significantly different occupational backgrounds; they do not necessarily understand each other when they are communicating and acting in their respective professional arenas. As a result, stakeholder management is much more complex during implementation.

The second is that new media change frequently. This happens both in terms of their content and message and in their technology platforms. Content in many applications is not controlled by corporate communication departments, instead it is somewhat self-organizing. Further, not only do new media systems or applications have a relatively young history, they may also be particularly transitory. Because of this, implementation of new media can be understood as cycles of re-design and implementation, which highlights the value of adopting an action research approach as a guiding meta-process for putting new media into practice (Hearn et al., 2008; Hearn & Foth, 2005).

New media potentially reflect wider trends to the democratization of knowledge production. Action research has a democratic and participatory approach that focuses on practical problem solving. As such, we make a case for action research as particularly appropriate to new media initiatives in corporate communications that involve constant innovation and change, have unpredictable outcomes, and require flexibility, creativity, and an inclusive, user-centered approach. Action research has strong links with organisational development approaches notably in the work of Argyris (1978, 1982, 1990). These approaches share an emphasis on participation of key stakeholders in a meaningful way. In the Scandinavian tradition, consideration of participation from the operating core is essential for the success of organizational change (e.g., Bodker, et al., 2000). Failures of, for instance, corporate intranets or other ICT solutions are in many cases due to implementations that are carried out without participation from the operating core. An action research approach subscribes to principles of inclusive participation in the design and deployment of such interventions (Foth & Axuop, 2006; Reason, 1998).

In parallel with the trend to participatory approaches is a trend towards demassification is a trend that has been in evidence for several decades. The knowledge economy offers many examples of this. A similar trend is evident in relation to media systems. Cunningham (2008) proposes that the major media organizations have underestimated the influence of Internet-based news sourcing and ‘collective intelligence.’ He argues that in terms of new forms of news-gathering and distribution a fundamental transformation is at work; this shift in architecture is towards grassroots or citizen journalism.

Komito (2008) highlights the fact that the notion of a peer produced information cornucopia is not new, but now the technologies that make them possible are readily available: inexpensive online storage; inexpensive and widely available fast broadband access; and inexpensive digital devices for audio and visual data capture. These technologies assist the democratization of knowledge production. Similarly, Quiggin (2008) points out that rather than continuing a model of centrally produced and disseminated information, the Internet and related modes of communication allow the aggregation and integration of unprecedented volumes of information contributed by users. Multiple sorts of information are being produced in this way – from open source software to artistic creativity via the Creative Commons movement. As well, innovation has proceeded from an ‘open source’ approach to knowledge rather than via proprietary mechanisms.

Action research involves integrating research into the creation and growth of a new media initiative. As such it also involves the staff members who are working on the

initiative. The result of this is that the intended audience becomes a stakeholder in the initiative and builds a sense of ownership.

Using action research means that the research process is intertwined with ICT project activities in three possible ways (Hearn and Foth, 2005):

1. **Active participation:** those who should benefit from the research contribute to defining the aims and direction of the research and in interpreting and drawing conclusions from it.
2. **Action-based methods:** activities and experiences of participants generate knowledge alongside, or in combination with, more formal methods. New initiatives and activities can be viewed as research as they produce new knowledge if they are understood in structured and reflexive ways.
3. **Generating action:** research is specifically designed to produce short, medium and long-term plans, including business plans; concepts for new initiatives; solving problems; targeting particular kinds of users; and finding new resources or partners.

All participants in an action research project are encouraged to contribute to the research by both providing feedback – their thoughts and observations – and actively engaging with the research process. Through the process of working on ICT projects, participants generate large amounts of knowledge. Typically we call this ‘experience,’ ‘instinct’ or ‘knowing the ropes’ but when gathered, documented and reflected upon, this knowledge becomes useful data. For participants, engaging in the research

process may be as simple as taking a different attitude to what they already know and sharing this knowledge with others through both formal and informal processes.

Through these processes they can be encouraged to reflect on what they and their colleagues are learning. The action cycle has multiple challenges that need to be considered. These include many political, technical and cultural barriers to effective action. Differences in power and knowledge must be taken into account, as well as ethical issues and the issue of gaining commitment to the process over an extended period of time.

As Hearn et al. (2008) suggest this approach can make use of online tools to: a) allow for quick cycles of data/reflection/action amongst distributed participants; b) allow rapid design prototyping; and c) allow strong traction between offline and online research events. Both Reason and Bradbury (2001) and Hearn et al. (2008) offer useful advice, guidelines and examples that support the designers and practitioners of corporate communication strategies to appreciate and leverage the advantages of new media.

## **CONCLUSIONS**

With advances in new media and web technology making it easier for organizations and their employees, suppliers, customers and stakeholders to participate in the creation and management of content, it is useful to understand how a corporate communication strategy can leverage these trends. New media and Web 2.0 services can be employed to work in tandem with conventional communication tools such as phone, fax and corporate intranets. Such a hybrid approach could enable organizations

to maintain and strengthen existing stakeholder relationships, but also reach out and build relationships with new stakeholders who were previously inaccessible or invisible.

Our experience with new media is that a co-evolutionary stance is not only a valuable conceptual aid but also an important practical imperative. This is because all three layers of the new media communicative ecology - the social, content and technology - are co-evolving. Innovations in each layer are in many cases mutually enabling. Sometimes technologies do not work without a corresponding shift in some aspect of the social context including norms, values and literacy's. For example, the first generation of email users actually increased the use of paper in the office but this trend has now reversed because the new generation of email users are very comfortable with paper backups or reading copies. At last the paperless office may become a reality (Economist 2008).

In discussing the co-evolution of technology and society sociologist William Ogburn (in Volti, 2006) suggests "The whole interconnected mass (i.e. social institutions, customs, technology and science) is in motion - no reasonable person could deny that technology has been a major force in making the world we live in, but it is important to always keep in mind that technology has not operated as an agent independent of the society in which it is embedded" (p.272);

The practical imperatives of a co-evolutionary view are to advance and resource technical, social and creative issues together. The operational principles that derive from such an approach are as follows:

- Respect the social context;
- Take a holistic approach
- Recognise multi-causality;
- Utilise constant cycles which review outcomes in relation to objectives
- Encourage participation

In our experience unfortunately new media innovations are still mainly driven via the technical frame of reference. Although some trail and error and informal learning obvious take place there is very little by way of either formal evaluation or systematic experimental learning. We call therefore for both scientific studies of the use of new media which will allow for careful evaluation of use and impacts in corporate communication; and more experiential action research approaches (Hearn et al 2008).

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## **The Authors**

### **Greg Hearn**

For more than 10 years, Greg Hearn has been a national leader in assessing the effects and outcomes of new digital technologies. His consulting and research has focused on the cultural impacts and opportunities of global communication networks for a range of organizations and industries. In 1994, Hearn was a consultant to the Broadband Services Expert Group, the national policy group that formulated Australia's foundation framework for the information superhighway. He was also involved in high-level consultancy and applied research with organizations including British Airways and many Australian government agencies, focusing on adaptation to new media technologies. He has authored or co-authored more than 16 major industry reports. Hearn has also worked internationally, and has been a visiting fellow at Brunel University's Centre for Research in Innovation, Culture and Technology in the UK, and Cornell University in the US. From 1990 to 1996, Hearn was assistant director of QUT's Communication Centre, and led many research project teams and successfully negotiated and executed industry research. In 1999, he received the Henry Mayer Prize for writing the most provocative theoretical article in the Australian Journal of Communication.

### **Marcus Foth**

Marcus Foth is a Senior Research Fellow at the Institute for Creative Industries and Innovation, Queensland University of Technology (QUT), Brisbane, Australia. He

received a BCompSc(Hon) from Furtwangen University, Germany, a BMultimedia from Griffith University, Australia and an MA and PhD in digital media and urban sociology from QUT. Dr Foth is the recipient of an Australian Postdoctoral Fellowship supported under the Australian Research Council's Discovery funding scheme. He was a 2007 Visiting Fellow at the Oxford Internet Institute, University of Oxford, UK. Employing participatory design and action research, he is working on cross-disciplinary research and development at the intersection of people, place and technology with a focus on urban informatics, locative media and mobile applications. Dr Foth has published over fifty articles in journals, edited books, and conference proceedings in the last four years. He is the conference chair of OZCHI 2009, a member of the Australian Computer Society and the Executive Committee of the Association of Internet Researchers. More information at [www.urbaninformatics.net](http://www.urbaninformatics.net)

### **Heather Gray**

Heather Gray is a Research Associate at the Institute for Creative Industries and Innovation, Queensland University of Technology (QUT), Brisbane, Australia, researching productivity using mobile technologies. Ms Gray has published articles in refereed journals, books chapters, and conference proceedings. Currently undertaking her PhD, Gray is also a learning facilitator working with an innovative team using Wikis, and other Web 2.0 new media as tools for collaborative information and knowledge management systems. She is a member of Women in Technology (WIT) and the Association of Information Systems (AIS).