

Branded Meeting Places Final Report

Description

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Branded Meeting Places

Ubiquitous technologies and the design of places for meaningful human encounter

<http://ace.caad.ed.ac.uk/Branded/> [inactive]

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In this project we examine the changing character of semi-formal meetings between people and the technologies that support them. Paradigm cases include conferences and meetings between participants in a research project. In the latter case there are objectives, high levels of motivation around a series of open-ended task, and outcomes generally thought of by the participants as creative rather than administrative or bureaucratic. Meetings rarely exist as isolated events, but come in series. There are important pre- and post-meeting activities. Much of the business of the meeting is conducted between meetings. Meetings move between venues, are sometimes conducted on the move, and participants may be present or remote to varying degrees.

The holding, linking and outcome of meetings is shaped to a considerable degree by the configuration of technologies and spaces. Much research into meetings and the technologies that support them focuses on the hermetic meeting event conducted in highly specialised spaces, and the various means of conducting meetings at a distance, through video conferencing etc. We think that meetings are not static and isolated events, but come in series, and form "ecologies" that "migrate." The technologies are also evolving, creating a climate of change that has important implications for management, and the productivity and experience of collaborative work.

In this project we employed a research by design methodology, where we invented and deployed technologies in actual meeting contexts, and pushed these to extremes. Success was measured not merely through the demonstrable capability of any meeting technology, but by a range of factors: the revelation of a further direction for investigation, the termination of a line of investigation, or the production of greater understanding of the nature of semi-formal meetings and therefore pointers to subsequent development of technologies, procedures, and methods by others. Our methodology involves reflective engagement between designers, users and meeting participants. We take evidence from: reports on a series of workshops involving designers, programmers and users; several hours of video blogs summarising a series of project meetings; and the researchers' own successes and failures in developing and deploying mobile phone mashups to assist meetings.

Increasingly, people are able to locate and converge with the assistance of GPS navigation. The project contrasts the GPS approach to pinpointing the place of meetings with technologies that deploy context awareness, through mobile phone imaging and smart, server-based pattern matching. The latter also open up possibilities not only for locating participants, but also arguably impinge on the “sense of place.” Invisible labels and documents can be deposited in arbitrary or public meeting environments. They can then be “unlocked” by mobile phones, revealing something about the character of physical and online spaces. Such depositions constitute tags acting as clues to others and memory traces of what took place at a meeting. Such techniques raise questions about the nature of the increasingly varied environments in which meetings might take place, and through which they migrate. The territory of the meeting assumes further the vexed and varying character of non-places for which we have to design accordingly.

We followed our original plan for the project in setting up three themed workshops involving outside participants and designers: (1) brands and groups, (2) branded documents (in which we focussed on tags), and (3) the changing brandscape (about memory spaces). These were preceded by a series of in-house exploratory workshop. We developed a toolbox of 12 different but interacting modules or applications that facilitate communications between mobile phones, web servers and other devices deploying images, text and voice. These applications and their development are further described in the attached file.

Outcomes

As planned, the project engaged with designers to produce a suite of cross-platform mobile-phone applications to facilitate communications during, leading up to and following meetings between people. Teams of designers and users collaborated to generate, implement and test ideas that focussed on image-matching and GPS as means of locating and contextualising meeting participants. These innovations fed back into the development of the Mobile Acuity software system, were written up and presented at conferences, a book chapter, a book, and further disseminated through 3 intensive workshops involving 28 external participants. We followed 8 aims.

1. Translate branded space to everyday concerns with space

Social media (Facebook, SecondLife, etc) had developed in significance during the first few months of our project, representing an interesting hybrid between the corporation and the community. We translated the social network model to physical space, an idea that emerged through our research by design methodology.

2. Provide strategies for lessening the alienating aspects of non-places and branded places

We developed several tactics to enhance the capability of mobile phones and to test the familiarizing aspects of mobile technologies. Eg

- a. Use of voice to leave messages about a place, thereby constructing a thread of personalized commentary that could be accessed via the phone, while you are actually in that space, or through a website.
- b. Develop the sense of a space of memories, so that computer files, images and SMS/MMS mobile messages could be geotagged and accessed according to your location.

3. Provide for more user- and client-centred design

We developed and tested a research by design methodology in which user participants contributed to the development of ideas for products that were subsequently developed by programmers and then

tested by the users again. This approach informed the whole research project, but was evident in particular in the workshops that involved rapid prototyping. We also conducted an attitudinal study involving 30 digital social network users (sociology students).

4. Foster productive alliances

Interaction with the staff of Mobile Acuity (2 staff), our project partners, provided the main practice engagement, as they enhanced and developed their software in response to our role as users. Designers were recruited from graduates and graduate students (9) who were taking time out from practice, and design academics, many of whom are also art and design practitioners.

5. Focus the findings of the Design21 Non-Place project

The project provided a natural transition, recruiting participants from the Non-Place project network.

6. Demonstrate how ubiquitous mobile devices can improve human interaction in branded spaces

The project produced a suite of software and hardware innovations, design and user experiments that demonstrated the potential of mobile applications as mediators of socio-spatial experience.

7. Develop and evaluate enhancements to an existing system (Spellbinder), as a toolbox for iterative design

The project produced a suite of software and hardware innovations:

- a. Enhancements to the Spellbinder system (Mobile Acuity Ltd), installed it on our own servers and provided an interface to other web-based services.
- b. Interfaced with social network sites: Facebook, Flickr, SecondLife, and mapping sites
- c. Developed innovative "augmented reality" software for processing images in context

8. Generalise our findings to other ubiquitous technologies

The initial platform used image matching on ordinary 2G phones. Later work included smart phones including the iphone and GPS. Cultural, social and philosophical implications of these technologies are elaborated critically in our outputs, including the book: Coyne, Richard. 2009. The Tuning of Place: Sociable spaces and pervasive digital media. Cambridge, MA: MIT Press (to appear).

The Changing Research Landscape

We are working a field that moves very rapidly: in terms of platforms, markets, and social practices. The research adopted 7 major developments only latent in our original grant application, but that proved to be relevant to our aims.

1. Social networking sites as a means for people to organise their social and business interactions

An early designer workshops brought this to light as a way of keeping track of social and business contacts. You "log on" to a space as you would a social network group online. As you enter a building you take a picture with your mobile phone of the entrance, dispatch that via MMS to the server, which then automatically notifies your FaceBook or Twitter friends where you are. We developed and tested this system with designers and users that revealed further insights into understandings of privacy and place.

2. SecondLife (SL) as a variant of social networking that introduces mixed media and 3d representations of spaces and social groups

We interfaced our system with SL so that photographs captured by mobile phone would then appear on

the surfaces of a 3d virtual space, to form a kind of ‘‘brand theatre.’’ Through the Spellbinder image-matching software it was possible to operationalise these images: the SL environment would change in response to the image being transmitted, eg if the server recognised that you had just taken a picture inside the conference room then a series of conference room images would appear on the surfaces of the virtual brand theatre. This responsive environment provided an interesting setting for meetings of avatars, with a view to enhancing the interaction between place and media. Convincing evidence of the practical uses of such a place eluded us, but the process enhanced our understanding of the nature of ‘‘augmented realities’’ in social contexts.

3. The capability within many web-based systems (including the above) to provide APIs (application programming interfaces) that make it possible to link programs and data between systems
Through expert inventiveness and skills of our programmer (Ekeus) we were able to implement and test elaborate interlinkings between many platforms.

4. The widespread adoption of GPS (global positioning systems) technology within mobile phones and cameras

The potential of this technology was brought to light by work at the San Francisco Exploratorium that provided online feeds of the coordinates of taxi journeys. We used this data to harvest images from Flickr to create a sense of memory spaces and traces, and expanded the idea to our own domain of meeting places. We originally thought of using Spellbinder to identify where you are, and thus say something about the context of a meeting. We decided to supplement this capability with the use of GPS (or postcode information) for providing coordinates for any data uploaded from a phone or laptop. That could then be accessed from the location to which it was ‘‘attached’’ to facilitate the meeting.

5. Tagging as a practice for organising online data (eg tagging Flickr photographs with keywords)
This development led us to think of the tag as a form of branding. Branded spaces are also tagged spaces in which are deposited graffiti marks, small fliers or symbols adhered to surfaces or left lying around, corporate symbols, documents, and digital media.

6. Augmentation of imagery

We were able to implement means of inserting real time moving images into SL suggestive of avatar ‘‘ghosts.’’ We improved the Spellbinder software to create superimposed and transformed composites.

7. Media for documentation

We acquired access to a podcast server and started to record meeting summaries as video blogs. These could then be reviewed, listened to while on the move, and feed into the development process. We then began to think of our own numerous project meetings as valid exemplars of the kinds of meetings we hoped our developments would support (see [video blogs](#) of meetings).

IMPLEMENTATION OF METHODOLOGY

We arrived at the current research focus through a development path spanning four years. The project began in stage 1 of the Design 21 initiative with a series of workshop interventions on the concept of non-place, exploring the past and future of public spaces such as airports and shopping centres. We identified communication and media technologies as important drivers for change in the design and experience of such places. In stage 2 of the Design 21 initiative we subjected the way people use these places to greater scrutiny, using a tool, Spellbinder, developed by our partner company Mobile Acuity,

which uses image recognition of photos sent to a server by MMS [1] to trigger a range of responses, such as “unlocking” invisible images “embedded” in the environment. The tool conceptualised places and objects as the sites of digital content and as physical instantiations of hyperlinks [2], providing a tangible focus for our research method. Several studies enabled us to extend our conceptual view and open up new directions for research based on working with people, technology and theory. (See [illustrations](#) [13Mb PDF] for some of these studies.)

Scoping Studies

This current research project began with a series of scoping studies aimed at exploring “the use of ubiquitous technology for meaningful social encounter in urban spaces.” As the project developed issues of memory and temporality emerged. We began with scoping studies or design interventions involving groups of designer-users (digital media graduate students). Successful early interventions were branded *Invisible Art* and *Comera* by the design teams.

Invisible Art enabled artists to embed “invisible” art works in the public facades of buildings, envisioned as a tool for creating public art. We then began to conceive of user-generated art and a simple interface for members of the public to upload images to facades. Thus began the notion of providing tools for embedding and retrieving geo-referenced [3] digital media, enabling anyone to add signs, brands or tags to the urban landscape, places of social encounter, and meeting places.

Comera was a social network application which allowed people to “log on” to buildings and inform friends where they were. People logged on by taking a picture of the building’s entrance with a mobile phone and sending it to our server. Those using the system were already registered as friends on Facebook. Members of the friends group would then be informed by SMS text and through the Facebook web site when a friend entered a particular building. The system left a short-term working memory of people’s location and a long term record of their paths. This was developed over a series of interventions with subjects (students) using the system, and working around its shortcomings as a medium for social communication. Subjects reported how the logs of images dispatched to the server provided an extra dimension of interest. One could explore through often obscure images where friends had been, reconstructing paths and routines. It also gave us a way of seeing what images users chose to portray the places they frequented, and therefore to construct meaning. These symbolic images constituted the user’s own ad-hoc brandscape.

Secret Postcards was a simple variation to *Invisible Art* in which the released content was a personal text message rather than an image [4]. This study took the project beyond the visual and helped us further explore the putative democratization of social media.

Memory Theme

The persistent 3d social network environment of Second Life presented us with the idea of communities of users able to share memories of objects, environments and media. The surreal aspect of such virtual environments recalls Salvador Dalí’s painting “The persistence of memory.” Memory objects could be placed in a Second Life space to support social encounters between avatars. Iterative interventions by our design team explored the idea of a mixed reality room, leading to ideas about “augmented duality” as an extended social metaverse parallel to the everyday world and connected through portals. We theorised the use of such a social duality to encounter cultural memory in the context of museums and heritage, and had discussions with museum curators.

The Tag

The project addressed the role of the “branded document.” The studies above led us to think of the document in terms of the tag (a minimal document), a theme we explored extensively in one of the research-by-design workshops, examining the many different types of physical and online tagging, how they work semantically, socially, politically, visually and electronically. Tags involve labelling ownership, classification [5], signalling that one has encountered or noted an object or text, or passed through a place. Tags also provide a means of linking two concepts, objects or people. We propose that tagging involves a process of appropriation, a means of making sense of the world and establishing an individual order of experiences, that eventually leads to emergent collective meaning-making, social ordering or defining difference and grounds for conflict.

Mass tagging is ubiquitous in online digital media. Flickr, the popular online image repository, supports geo-tagged image database [6], where users simultaneously tag their images with geographic coordinates and use their images as tags on a map. A research-by-design workshop [7] was set up to explore how we could take the rich use of tagging that now occurs in Web2.0 environments and link that more closely to the tagging of physical space.

A brainstorming session at the tagging workshop generated an idea for translating the popular thumbs-up signal (as affirmation or insult) into a digital format for expressing opinion: *visual thumbs*, which in turn translated into the use of signals that are vocal *thumbs*. The groups tested the idea by depositing paper tags in the street to indicate that someone had left a voice message that could be unlocked by sending a message to a special phone number. Text messages could also be embedded and shared through Facebook. Geo-spatial referencing was combined with the sharing of social discourses on topics with a geographic dimension such as the impact of urban development [8]. The features were implemented overnight by an extreme programming team during the workshop (and refined later) and tested and reviewed by the workshop participants as a means of calling people to action: as a catalyst for community meetings.

Place Making by Place Marking

The final workshop of the Branded Spaces project was originally to focus on “brandscapes,” a theme that we transformed to a concern with “tagscapes.” Contemporary urban and private spaces commonly present as palimpsests of competing corporate branding [9], sometimes overlaid or interspersed with graffiti tags. Such urban spaces or non-places may also assume the patina of mass or individual tagging practices that flow across from digital environments. Our workshop involved 25 participants who gathered to explore the possibilities of open electronic tagging as a means of appropriating space, a tactic we termed *placemaking by placemarking*. The common use of user-tagging in online mapping systems, and the availability of these on Internet-enabled mobile devices presented us with new ways of visualising the locations of tags and messages while roaming the streets as well as from a desktop computer.

By this stage we had assembled a rich network of technologies, applications case studies and theoretical perspectives. The idea of the memory space had social and experiential dimensions that we could think of as both spatial and symbolic, operating across many forms of media. Tags of any data type (text, image, voice or video) could be deposited and shared online, in online or material urban environments. Applicable technologies include those for recognising places via image matching, GPS, street indexes, content and location services with open APIs (Applications Program Interfaces) such as

Flickr and Google Maps, and social network systems such as Facebook and Twitter, all able to interoperate as digital “mashups.” All of these functions were accessible through mobile devices via voice, SMS, WAP, and HTML. The next section describes the context within which we asked our user-designers to explore tags, and the re-emergence of the “memory space” concept.

Google Street Level and Flickr Geo-referencing

We also explored the use of images from public Internet applications such as Google Street Level and Flickr. We developed methodologies to harvest resources from these applications spatially and temporally to access narratives and perspectives that capture the general, the ephemeral and the personal. Examples include photographic trails through the Obama inauguration, or glimpses behind the windows to private events in the buildings along urban walks, deploying Michel de Certeau’s concepts of “walking the city.” Certeau theorises the inhabitants of the city as invisible authors unaware of the “text” their activity “writes” on the fabric of the City. We conjecture that the cultural significance of developments in social and locative media, of which our work is a part, is to provide tools to make visible these narratives and help co-create new forms of media with which to construct, experience and share narratives.

THE CONFERENCE AND THE “MEMORY SPACE ENGINE”

We chose the idea of the conference as a prime test case of a rich meeting context, involving intensive communication, fast-paced human interactions, the creation and annotation of new knowledge, and formal and informal branding. Focussing on the conference as branded meeting provided the advantage that any technical system developed could be used as an intervention in an actual conference event. The following discussion of conferences was drawn from the work of the workshop participants and based on our earlier work on meetings.

The concept of “the conference” as formulated by our workshop participants

Conferences are physically, interpersonally and intellectually intense and demanding. They have become an important aspect of many people’s everyday working activities, thus deserving critical analysis and practical innovation.

Conferences serve a range of formal and informal aims and uses: explicitly, they bring people together to share ideas and experiences they have developed elsewhere, and often to develop common understandings and to negotiate future activities. They are highly social, enabling us to meet new people, re-establish old relationships, share ideas, develop new ideas, and plan future cooperation. Conferences are seldom one-off. Like other meetings, they are part of a series, with an established structure, and a cohort of regular attendees drawn from a larger community. Conferences are often central to a larger occupational community, or community of interest or practice, and serve to foster a common identity, involving rituals such as elections, awarding prizes, celebrating current leaders, and honouring deceased members. These are important memory practices.

Small workshops and conferences are relatively easy to convene and to attend, especially if small enough for everyone to interact and share common experiences. Our concern is for the super-conference, with hundreds or thousands of participants, often taking place in a vast conference centre in a strange city. These types of conferences can be disorientating in many ways, with the risk of getting lost, physically, socially and emotionally. They are not clearly focused in one location and with a

clear social group, but involve formal and informal venues and networks. The workshop participants explored a range of issues related to this type of event, and were keen to imagine improvements.

In recent years we have seen the emergence of new ICT tools to facilitate conference attendance. Some of these are provided by conference organisers, some are deployed by attendees. Example of the former include setting up social networking sites for participants, or creating groups on systems used by many of the attendees [10]. These are sophisticated versions of the participant list, enabling people to see who will attend, look up people afterwards, and sometimes start and continue discussions, as well as share pictures, documents etc. These are memory spaces that link three stages of the conference: (i) the lead up to the conference, (ii) the conference itself, and (iii) the follow-up.

With the arrival of mobile phones and Wifi we now see the conference emerging as a concentration of high ICT use. There are live online discussion boards projected in conference halls which allow those not in the room to comment, to create dialogues between audience and speakers and at the end of the talk to provide shared notes. Conferences might deploy Wikis and blogs to support dialogues and become repositories of information, links and views that exist after the event. Other experiments include RFID badges to help identify people with common interests or to register meetings on a social network service [11]. With mobile social media now in common usage, group messaging, and systems such as Twitter [12], the discussions in and out of formal sessions can be shared in real time, but also recorded to provide a textual and visual record of events. These real-time communications make it easier to identify the concerns and interests of participants.

Conference organisers sometimes post images of the event on Web2.0 sites such as Facebook and Flickr. These new uses of ICTs start to provide records of many of the informal interactions not usually captured by the formal preparation and reporting processes.

In summary, the conference is a complex, multilayered activity fragmented across locations and times. There is considerable scope for rethinking how conferences work and can be experienced in light of new technologies and technology-mediated practices.

The Design Intervention

The workshop participants reflected on what aspects of any conference they would like to focus on as a design intervention. Ideas included better preplanning and coordination tools, and ways to deal with uncertainties and social problems. However, the informal aspects, especially those conversations and moments of idea creation that occur at interstitial moments, emerged as a key concern: to capture aspects of the many informal exchanges and meetings that are not recorded centrally, but exist in the memories of participants, and form in the company of rows of empty coffee cups and beer glasses. To this end, the designers proposed the development of a shared “memory space”: a system which would catalyse and record informal social interaction off the main conference stage. The key technical outcome proposed was the creation of a general platform for media embedding, retrieval and memory-making completing what we call the “memory space engine.” Images, text, video can all be embedded and shared. Geo-referencing can be by image matching, GPS or Google place search on street and city names.

The technical developers spent the night creating the memory space engine, choosing to base its operation on GPS devices linked to mobile phones, and a website with a map interface. The next morning the workshop participants were briefed on progress and shown how to access and use the

memory space engine online and with their mobiles.

Workshop participants could send text messages from wherever they happened to be, entering the street name in order to place it on a map automatically; record and send audio and videos blogs of conversations with GPS coordinates and submit their notes from discussions or private thoughts. These could then be visualised on a map of the conference area, that showed where these media objects had been created, and by whom. The messages could be tagged with any extra information. An added feature enabled people to find these files on a mobile device â?? receiving a text message triggered by GPS, to see notes or hear recordings that other participants had created in the same place at another time. Workshop participants were then asked to use the system online and in the city. By the end of half a day of activity the map was heavily populated with messages and files. There is scope for improvement in the implementation. We propose integrating the memory engine with social network tools, with visualisation of data based on time and social networking as well as space, and automatic linking of different text formats. The receiving of location-based â??pushedâ?? text messages was an interesting experience, but far from ideal as an interface for spatially and temporally distributed media. The use of mobile phones in this way created the most interest, probably since most participants had not experienced location-based media on their own phone before.

The map view of the memory spaces gives a spatial visualisation of the conference postings, most clustered around the main conference venue, but others were located in bars, restaurants and in the street.

SUMMARY

This report describes one aspect of our research journey, built through a multidisciplinary approach that engaged with practices of design and intervention to explore and enrich material and conceptual development. We proposed an intervention that explored an increasingly common form of work meeting, the conference, ready for improvement through the use of tools to capture and integrate a wide range of interactions and information. The technologies are still limited, and we require further work to build on the new practices that emerge.

We are keen to develop the memory space concept along the axes of both memory and space. Memory practices are likely to change radically with new media as we are able to recall not only â??factsâ?? from the Web, or communicate in real-time, but selectively leave and reuse traces of our public and private activities. On the spatial dimension we have a range of new ways of activating our experience and the use of space and place deploying new ICTS. We conclude that the conjunction of memory, space and temporality opens up considerable scope for design, technical development and research enquiry.

This account has focussed largely on technological development and our research by design methodology, elaborated further in several of our printed outputs.

Coyne, Richard, Mark Wright, James Stewart, and Henrik Ekeus. 2009. Virtual flagships and sociable media. In A. Kent, and R. Brown (eds.), *Flagship Marketing: Concepts and Places*: 46-62. London: Routledge.

Stewart, James, Mark Wright, Henrik Ekeus, Richard Coyne, and Penny Travlou. 2009. The memory space: Exploring future uses of Web 2.0 and mobile internet through design interventions. *Proc. COST (Collaborations on Science and Technology) 298*: (to appear). Copenhagen: COST.

Coyne, Richard, and James Stewart. 2008. Orienting the future: design strategies for non-place. In T. Inns (ed.), *Design for the 21st Century*, London: Gower Ashgate.

Coyne, Richard, and Jenny Triggs. 2007. Training for practice-based research: adaptation, integration and diversity. In T. Bianchi (ed.), *Creativity or Conformity: Building Cultures of Creativity in Higher Education, 8-10 January*. Cardiff: Metropolitan University.

[Full paper](#)

Cultural, social and philosophical implications of these technologies are elaborated critically in the following outputs.

Coyne, Richard. 2008. Creativity and sound: the agony of the senses. In T. Rickards (ed.), *Companion to Creativity*: 25-36. Routledge: London.

Coyne, Richard. 2009. *The Tuning of Place*: Sociable spaces and pervasive digital media. Cambridge, MA: MIT Press (to appear).

Coyne, Richard. 2007. Thinking through virtual reality: Place, non-place, and situated cognition in technological society. *Technē: Research in Philosophy and Technology, Special Issue: Real and Virtual Places* [Full paper](#), (10) 3, 26-38.

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Footnotes

[1] Multimedia messaging is a rather clumsy and unstandardised method of sending images and other multimedia content via mobile phone. However, at the time of the research it was more widely available than mobile Internet and GPS.

[2] An unusual â??memory practiceâ?? which was put forward at this time was to construct personal memorials. Spellbinder used images rather than position sensing so the emphasis is on what is looked at rather than the position of the phone as determined by GPS.

[3] Geo-referencing can use any technical system to pinpoint location, not necessarily numerical coordinates. We recognise places by sound, smell, vision, branding, and human occupation.

[4] It enabled a traveller to send a picture of a place or object to her/his friends, who would then have to find and visit the same place to photograph the same object/place. This action would unlock a secret message: for example, telling the receiver that the sender had arranged to pay for the drink in the caf   if they showed the message to the staff.

[5] In the field of mass tagging practices, concepts such as folksonomy have been developed to try and understand â??bottom-upâ?? tag practices with emergent classifications.

[6] [Flickr](#)

[7] UBIQr 2 Workshop: < Tagable > Media, 8-9 May 2008. [Details](#).

[8] This was to a certain degree inspired by the [Yellow Arrow project](#), and various systems for citizens to complain about their urban environment that are now being implemented in mobile and online forums around the world.

[9] Corporate being both commercial and governmental: city governments were previously know as "Corporations."

[10] e.g. LinkedIn [Mobile City](#) conference

[11] e.g. the RFID system developed by [Mediamatic](#) the [PICNIC conference](#).

[12] e.g. Steve O'Hear Twitter, the ultimate conference "backchannel" ZD Net 12/03/2007 or blogs of personal experiences: [Netsquared Blog](#); [Karen Blakeman's Blog](#).

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