

Innovation Networks: A Report on Creating a Specialist Professional Social Network, Offline and Online, to Foster Innovation in the New Media Sector

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Abstract. This paper is a report on the building of an online professional social network (<http://nm-x.com>) supported by a programme of live events, focused on innovation in the digital media content-design and development sector in London, late 2006-present. Starting with a summary of the state of the digital media design and development sector in this period, the Creative London strategy and the development team, the Report then focuses on the interface design issues, the creation of nm-x, and the supporting programme of live events. A reflective conclusion summarises the development and poses some questions and feedback that may be useful for others developing similar projects. A new contribution, a 'Connections Module' (allowing semantic links between nodes) is made to Drupal.

Keywords: innovation, social network, interface-design, Drupal.

1 Introduction

This paper is a report on the new media exchange (nm-x) - an attempt to build both an online and a real professional innovation network in London, from 2006 to the present day.

1.1 Personal Contribution

My contribution to this project was as one of a team assembled by Neil Johnson - the CEO of the Paddington Development Trust (PDT) and Susan O'Reilly (managing the London Westside project), an award-winning regeneration trust drawing upon local, national and regional funds. The New Media Exchange was a spin-off from a programme initiated by PDT called *London Westside*. (The PDT area covers Notting Hill Gate, Bayswater, and parts of North Kensington, Marylebone, and the City of Westminster - the area covers London's West End, Soho and adjoining areas - thus '*London Westside*'.) [1]

1.2 Context: The New Media Sector in London 2005-7

Before describing the nm-x innovation social network, it's important to remember the context in which we were working around three years ago.

2 A Reminder about the Mid-Decade New Media Scene

Google (1998) bought YouTube (2005)
Ajax (2005) became a developer buzzword
 Second Life (2003) became really important, and widely used for real world business activities
viral marketing (through blogs, Youtube, MySpace and other social media) adopted as standard promotional tool
 Microsoft and Toshiba announce the Zune media player (2006)
 Al Gore releases *An Inconvenient Truth* (2006)
 Google launch *Google Earth* (2006)
 Blender make the first open-source movie: *Elephant's Dream* (2006)
 Google launched *Sketchup* (2006)
 Stamen's cab-tracking experiment (2006)
 Royal DeLuxe *Sultan's Elephant* animatronic street theatre in London (2006)
 Will Wright revealed work on *Spore* (2006)
 Apple launch *iphone* (2007)
 blogs became really big - and featured as promotional tools in political campaigns - and they became multimedia tools
 Michio Kaku reviews the future in *Visions of the Future* (2007)
 Web 2.0 (2005) became the buzz-word among the design and development community
 social media (2003) are increasingly popular
 RSS (1997) became really popular(IE7 includes built-in RSS reader)
 Moodle becoming popular as an educational CMS
 Massive launch their *Prime* animation agent software
 mobile media were taking off

The period was rich in digital innovation, but on the other hand, the new media business sector, although it had recovered from the 2001 crash, had not yet fully taken on board the implications of the shift to Web 2.0 modes of thinking - that is, not just Tim O'Reilly's brilliant 2005 insights [2], but Kevin Kelly's 'network thinking' as expressed in *Out of Control* [3] and other books[4] of the early 1990s. There was more of a disparity at that time between what the leading-edge developers and designers were aware of and what the boss was actually doing. This group (designers, developers, creatives) had been identified by Tom Fleming [5] and others [6] as the digital content creators who are drivers of innovation and enterprise, and central to the regeneration plans encapsulated in the Creative London strategy.

2.1 Digital Content Creators

We can take as including all those engaged in new media: digital designers, digital effects designers, animators, writers, film-makers, music-makers, web-designers, games developers, installation and performance artists, ICT developers, actors, dancers, theatrical directors, programme format developers, copy-writers, art directors,

admen, marketeers, animators, radio producers (both BBC and Sky, as well as LBC, Classic FM, Smooth FM, Magic, Virgin and Heart are in the Westside area), video-makers, post-production designers, VJs, audio-visual artists, DJs, journalists, photographers, (and so on...).

2.2 Target Market

Among the 70,000 or more creatives based in West London [5] that were our target audience - and the thousands of businesses they represented, some were already leading-edge studios, producing state of the art content (from mid-size production companies like Endemol, up to major broadcasters and media publishers like Sky, the BBC, and Warner Bros). Many more (how many?) were in need of the kind of services we could offer. The universities with a large presence in West London (including University of the Arts, comprising Chelsea, Central St Martins, London College of Communication, London College of Fashion, Wimbledon School of Art), and Imperial College, Royal College of Art, University College London, Brunel University, University of Westminster (and others)[7], were ready for an umbrella strategy to help optimise their knowledge transfer programmes, training and higher-education services, improve the entrepreneurial opportunities of their alumni, and of course to optimise their own income from research and industry-related partnerships. PDT's London Westside strategy discussions, (out of which nm-x emerged), considered all these opportunities, as well as the more local creative cultural initiatives like the Notting Hill Carnival, The Notting Hill Film Festival, and the many art and media related festivals and events that thrived in the Westside area.

3 Target Catalyst Groups

- Developers working on the fringes – evangelists, public-sector and voluntary sector open source evangelists
- Designers leaving college, multi-media experimenters
- Post-graduate designers on higher degrees
- Researchers, artists, media-makers

The nm-x project came out of a series of experiments with new geo-locative and Semantic Web technologies. The aspirations of these experiments were to see what kinds of interactions and economies could emerge from an enriched, shared resource of semantically coherent, spatially bound information such as the relationships between events, venues, people, projects and organizations within a locality. [10]

4 Issues to Address

How best to reach this traditionally disparate, but recently digitally interconnected audience? And what to do to encourage the range of initiatives suggested both by the LDA and resulting from our own brain-storming and problem-solving?

We quickly focused on two principle target sectors, which we reasoned were essential to innovation in the digital content arena - designers and developers. This

stemmed also from our personal professional background. In all our experiences, the best work in digital media comes from the synergetic potential of these two disciplines: both of which are required to create successful interfaces and screen experiences, and in which all other media interfaces (ie for video, virtual worlds, applications, simulations, e-books and the like) can be composited into a seamless experience for the user/audience.

The art of interface design then, synthesized a number of related disciplines - for example: graphic design, interaction design, information design, and experience design - all integrated in code by developers or coders.

Designers and Developers in our thinking, comprised this range of specialisms, which were and are still relatively disparate, and we discussed how best to address this audience and to draw designers and developers together into a network in which our aims might be fulfilled?

4.1 Social Networks

Of all the products of the network-thinking that Tim O'Reilly dubbed Web 2.0 [2], it was social networks or 'social media' that most galvanized both consumer and business users in mid-decade: the one I used most, *Linked-In* had launched in 2003 (the same year as *mySpace* and *Del.icio.us*), a year or two ahead of *Flickr* (2004), and *youtube* (2005).

Networks have existed in every economy. What's different now is that networks, enhanced and multiplied by technology, penetrate our lives so deeply that 'network' has become the central metaphor around which our thinking and our economy are organized. Unless we can understand the distinctive logic of networks, we can't profit from the economic transformation now underway. [3]

The online social network was, as Kelly suggested in *Out of Control* (1994) *distributed* (global); *decentralized*, *collaborative* and *adaptive*. The potential of the online social network as a tool for promoting knowledge transfer, competitive intelligence scoping, skilling and re-skilling, and other aspects of innovation practice, was obvious, and this became clear quite early on in our discussions on the central platform for nm-x. It was to be a *new media exchange* - an exchange of ideas, information, resources, events, tools, jobs, voluntary projects - of all the components necessary to promote innovation in, and expand a cluster that while widely distributed over west London, was nevertheless aware of itself as an innovation-driver. Such a professional - sector specific - online social network would have the following aims:

- promote a shared common interest (innovation in digital content design and development)
- enable rapid dissemination and P2P networking of information
- encourage a growing awareness of the diversity of the sector (it's not all about web-design)
- provide a notice-board for relevant events, workshops, conferences, talks, showcases, exhibitions etc.
- provide links to entrepreneurial resources, funding, venture-capital, grants, business-advice, digital rights and design-rights, and other support networks

- support the knowledge transfer from universities and college to commerce
- provide a focused employment exchange
- support an ongoing programme of live events, to include workshops, seminars, briefings, master-classes, show and tells, industry overviews, business-development programmes, kick-starts (etc etc).

4.2 Supportive Live Events

What was important - a key aspect of nm-x as far as I was concerned, was to use live events to showcase interesting non-commercial work - from researchers and artists - as well as from performance artists, V/Js, installation and site-specific artists. I wanted nm-x to be an exchange of information between all the disparate elements covered by the term new media. This would also include the work of mobile content developers, engineers; and researchers exploring the technologies of big-screens - public displays, grid networking, hyperfiction, and digital storytelling experiments.

4.3 Drupal and Open-Source Frameworks

There was a strong interest also in evangelizing open-source and other open-development tools, notably the range of content-management frameworks and associated libraries relating to social media and digital content design, such as Joomla, Drupal, Wikimedia and Moodle. We settled on Drupal. The interface was designed by Liz Turner and programmed in Java by an anonymous genius:

“We really stretched Drupal's capabilities, thanks to the wonderful Drupal hands of Peter Brownell. Liz and our project manager Susan O'Reilly were keen to stress the importance of providing visual summaries of the networks that nm-x was describing. If we were going to appeal to the vanguardist design community, we needed to look hot, not like an identikit Drupal site. Also, we made rods for our backs by deciding against the easy route of using Flash for illustrative purposes. We wanted what we were doing to be open source - from the ground up - so that we could redistribute it under the same GPL as Drupal, as a module. This led to us commissioning a very talented designer, whose contract at the time meant that he has to (unfortunately) remain nameless, to write a javascript-based visualisation, showing the relationships between a network of nodes (people, projects, organisations), connected to each page. Peter Brownell then started what will eventually become a core element of Drupal - the 'connections' module, allowing semantic links between nodes. Node relationships if you will. This prints out on each page in the site as XML, or spits out the visualisation javascript that you see when you 'visualise connections' on each page of nm-x.com.” [10]

4.4 Programme of Live Networking Events

The ideas discussed at this stage of the project encompassed the wide variety of informal networking events that we could devise to support the growth of the online



Fig. 1. L. Saul Albert: *Futurefilm* workshops Feb 2007

Fig. 2. C. Bob Cotton: *Kickstart* seminars, University of Westminster and London June 2007

Fig. 3. R. Bob Cotton, Susan O'Reilly: *Design in an Era of Continuous Innovation* at College of Communication, Central St Martins Innovation Centre June 2008

nm-x network. These included: talk-a-okes (Saul Albert’s innovative chat forum), mini-bars, show and tell, quick-fire presentations, kick-starts, workshops, master-classes, angel forums, and business and enterprise development programmes.

A few of the programmes delivered in 2006-2008, are illustrated below, a complete programme is archived at <http://nm-x.com>.

5 Developing an Appropriate Network and Interface

We reasoned that to appeal to the target leading-edge designers and developers, we would need an interface that was both well-designed and brilliantly coded. The most appropriate approach to the nm-x interface is illustrated by the many examples of bubble-map or concept-map dynamic data-visualizations, first demonstrated by Plumb Design’s *Visual Thesaurus* (1997) (Fig 4), and recently exemplified in Frédéric Vavrille’s highly successful *Live Plasma* (2004) and *Musicoverly* (2007) (Fig 5) interface designs. These designs had the following advantages:

- Illustrated the network and its relationships
- Illustrated the interconnections between nodes
- Provided a map of the content of large and complex databases
- Provided a means for interrogating the map and browsing, examining or playing with the content
- Could be easily operated, personalised and navigated by the (non-database specialist) user

Liz Turner’s work on *foafnaut* (Liz Turner and Dean Jackson 2002-2005) (Fig 6) had been the principle reason for inviting her to design the user-interface for nm-x, and we had decided that a visual mapping of the nm-x network and its operations would be the best approach, appealing to both developers and designers. The interface was to represent the hierarchy of activities, and network



Fig. 4. L Plumb Design: *Visual Thesaurus* 1997 web-page interface design: A revolutionary insight into dynamic data visualization

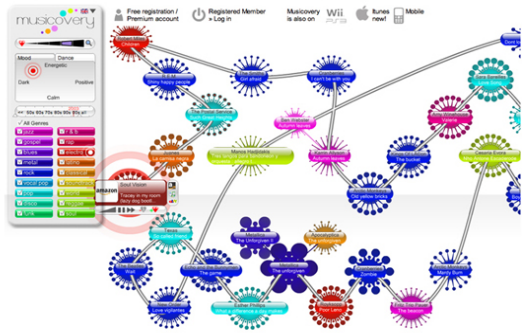


Fig. 5. R Frédéric Vavrille: *Musiccovery* 2007 web-page interface design for a customisable net radio

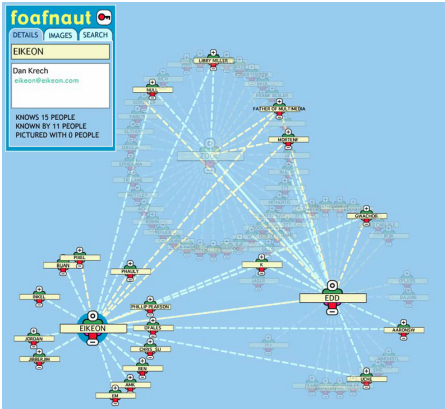


Fig. 6. (L). Liz Turner: interface for *foafnaut* (friend of a friend browser) 2002-2005

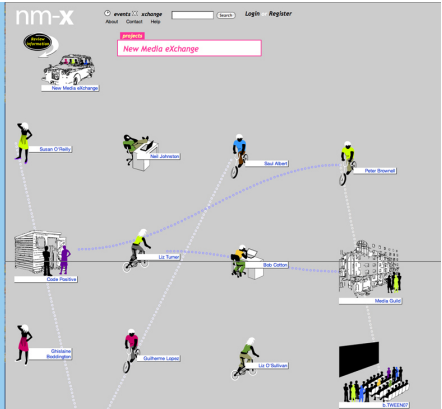


Fig. 7. (R). Liz Turner et al: home page interface for *nm-x*, showing network connections

interconnections among the locations, organizations and individuals engaged in *nm-x* activities, each with an iconic representation devised by Liz Turner.

The network connections dynamic diagrams could be revealed as the background under-pinning a layer of information (text and images). (Fig 7), or as information panes (Fig 8). The composite layered page included a degree of transparency to visually integrate both elements of the interface (Fig 9).

These interfaces hint at the real power of what Lev Manovich calls ‘database art’ [8] - the functional use of illustration to provide flexible and user-centred interfaces to large complex sets of data. We can speculate that such interface ideas will be an



Fig. 8. Liz Turner et al: home-page for nm-x showing information panes

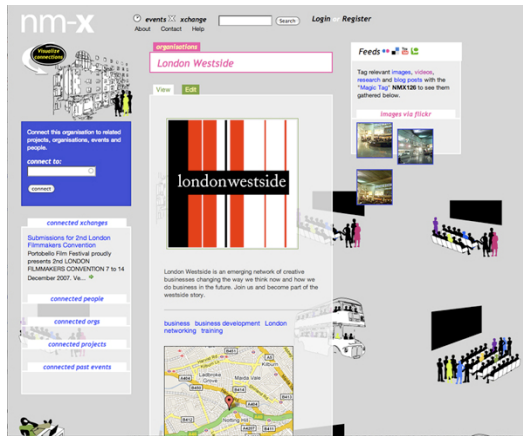


Fig. 9. Liz Turner et al: home page for nm-x/London Westside <http://www.w3.org/2004/Talks/0120-semweb-umich/slide23-2.html> accessed 250209

important ingredient of the next generation of public interface with the ‘semantic web’.

6 The Development Platform

The open-source CMS (content-management system) Drupal was chosen as the development platform, and Peter Brownell - a leading Drupal developer in the UK, heading-up the London Drupal Users Group, and director of the Drupal development team Code Positive - was chosen to supervise the technical development. The author is a new media creative director who was part of the team developing the nm-x concept. The project was managed by Susan O’Reilly (of London Westside), directed and produced by Saul Albert (of The People Speak) [9], working alongside the

designer, illustrator and web-media creator LizTurner and Drupal developer Peter Brownell. For once, the author was able to play the role of a detached observer of the online social network development, while helping to formulate and organise the live networking events.

7 Results

What are the results of the nm-x project? By late 2008, towards the end of LDA funding for this project, we have built the framework for a specialist professional social network, have attracted a small but high-quality user-group (ie our target marketplace of designers, web-developers and coders), have developed and run a number of innovative live events, including show-and-tells, workshops, showcases and seminars. The feedback from both designers and developers has been good, and Liz Turner's ideas for the 'visual connections map' have elicited very favourable comment, as has Peter Brownell's implementation of the concept in Drupal. Saul Albert proved to be a dynamically hands-on producer, and the live events also serve to provide a method of attracting membership to the nm-x social network.

8 Reflections

The issues of marketing and growing a specialist professional social network of this kind are different from the mass advertising approach of Entertainment Social Media like MySpace, though they share the peer-invitation method. With a limited budget however, our principle tools were recruitment through live events, creating exciting and essential live events to link nm-x within the innovation community. In retrospect, we would rethink this strategy.

9 Conclusions

It is premature to draw finite conclusions from a project whose life-span is currently only 2 years, and while we feel that the overall nm-x strategy was well-thought-through, in retrospect, we did not produce live events on a sufficiently large-scale, sufficiently often enough to trigger a self-sustaining critical mass of users. Our target of attracting 'serious' players in the new media innovation sector has been achieved, though membership is still in the hundreds. It is also necessary to produce frequent and regular live events of sufficient cross-sector interest to attract young designers and developers - and if this is being provided 'free', quite extensive funding is required. However, in retrospect, had this project aimed to be self-financing, the fees necessary for a professional, commercial series of event would perhaps have been a disincentive for the young designers, developers and studio start-ups we were aiming to attract. On the upside, a potentially important contribution to Drupal was produced. Overall, as an attempt at creating a 'semantic web' interface onto an online professional social network, this is an ongoing, interesting and forward-looking experiment, another pointer to the data-visualization interfaces of the future.

“The nm-x project is ongoing. What differentiates your aspirations for nm-x from other professional/business social networks?”

Nm-x still hopes to resurrect itself with another round of development. I think the main difference between nm-x and other networks is how abstract and unfocused nm-x is. I don't necessarily think this is a problem. It is still a speculative project, more an infrastructure, a set of tools and conceptual attitudes towards networking that might yet find their niche, and grow on an open source, distributive model rather than the information silo social network we've seen achieve preeminence in the noughties.” [10]

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