

University of Nottingham

**How can local communities develop on-line strategies
that complement global internet trends?**

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MBA

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by

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Abstract

The local community of place is one of many different types of community that exist in the context of the network society, social networks, networked individualism and the internet. The project looks to the literature of local community practice in the internet age and global internet trends, combined with primary research from a local community setting and a case study of a web2.0 platform for sports clubs, to produce practical suggestions for how local communities can develop on-line strategies that complement global internet trends. The suggestions are made at both the micro level of *an* individual local community and the macro level of *all* local communities. They aim to be practical in the sense that this implies a need, a realistic method of delivery and a chance of sustainability.

The micro level conclusions are that an individual local community should wait for the arrival of a platform that meets their needs and that local community organisations should regularly test the appropriateness of their on-line presence via a simple review process. The first suggestion at the macro level is for every local community to be defined by on-line crowdsourcing guided by a synthesised definition based on boundaries. The very act of creating meaningful areas could well be sufficient to spark innovation in the community informatics space. The second, an audacious suggestion to bring the best of the internet to a local setting, considers whether steps could be taken towards a platform for local communities; with global ambition, built by a legitimate organisation and with the cooperation of global internet oligopolies. The last comments cover thoughts on further research.

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1 Introduction

For over a century Sociologists have been analysing changes in community and the interplay with technological advances. The founding fathers of Sociology in the late 19th and early 20th centuries had a concern for loss of community from rapid industrialisation, urbanisation, capitalism and the enabling technologies. Today the context has moved on to the network society, social networks, networked individualism and the internet, but concern for loss of community still remains. Over the years it has been shown that community, in its broadest sense, has not been lost but the nature of community has changed and the relative importance of local community has declined. While reacting to arguments that "Internet relationships aren't real", or "we've lost community", a recent Google+ post by Howard Rheingold sums things up:

Arguing about the nature of community -- and reacting fearfully to the changes in European life posed by modernity (cities, industry, nation-states, bureaucracies, laws, contracts, technology) -- is what the last century of sociology (Tönnies, Weber, Marx, Durkheim) has been about (Rheingold, 2011).

The Internet revolution has seen rapid growth, both in terms of *users* and *uses*, and has significantly impacted many areas of our lives. It joins a long line of technology revolutions that have been adopted by individuals, groups and organisations to shape society and communities in both positive and negative ways, and of course the technologies themselves are shaped by their use. Over a short number of years the internet has changed beyond recognition with high level trends that are self-evident: there are more people connected, doing more things, in more places, on better technology, using more devices and for more of their time. It is growing up and there are warnings against underestimating its impacts:

It seems passé today to speak of the "Internet revolution". In some academic circles, it is positively naïve. But it should not be. The change brought about by the networked information environment is deep. It is structural (Benkler, 2006, p. 1).

The internet users are also growing up, and as we get more and more digital natives we are now arguably at the tipping point for an internet generational change.

All technological change is generational change. The full power and consequence of a new technology are unleashed only when those who have grown up with it become adults and begin to push their outdated parents to the margins (Carr, 2009, p. 233)

Against this background how can a local community make the best use of the internet? This is the starting point for developing the research question.

1.1 The Research Question & Design

The development of the research question was triggered by twin personal frustrations. The first is an overriding impression that most local on-line efforts are poor, although I will admit to occasionally stumbling across good sites by a local organisation, or less often a local community. This frustration runs from a basic inability to find out what's on locally through to a lack of an effective communication method within the local community, which all contrasts vividly with the experiences that the best of the internet has to offer. There is an aim to test this viewpoint and, if proven, gain understanding as to why it should be.

The second frustration comes from the fact that I feel bad about my relative lack of involvement in the local community but do nothing about it. It is has been too easy to ignore the local dimension of life and more difficult than it perhaps should be to interact locally. The local community feels out of step, built on fixed time commitments that are difficult to fit in with my other commitments of work, the commute, family time and other interests. The local community competes for my leisure time against other interests that are seemingly more fun, easier to access and have flexible timing. I do not prioritise the local community and take it for granted, free riding on the efforts of others.

Contemporary writers looking at internet and community have a spectrum of views between the utopian that internet can enhance community (E.g. Day, Rheingold, Schuler, Wellman are towards this end of the spectrum), to the dystopian that it accelerates the fragmentation of society. The process of enabling communities with Information and Communications Technologies (ICT) is covered in the emerging subject of community informatics, a disciplinary hybrid at the confluence between theory, practice and policy. Sustainability is considered a crucial issue and its prominence is seen as a measure of the underdevelopment and immaturity of the subject (Gurstein, 2005).

From my perspective it seems that individuals, firms, industries, markets, government and societies are all facing the challenges posed by the internet and adjusting their approaches according to their particular circumstances. The clock speed for innovation has increased and I suspect that local community operates at a far slower speed than many other areas of our lives. This seems to be reflected in much of the academic work on the subject that appears out of step with the current state of networked individualism and the rapid rise of internet giants such as Google, Facebook, Amazon, eBay, Twitter, YouTube and Wikipedia and the technology and philosophies that support them.

The project takes the view that for local communities to play their fullest part in the network society there are gains to be had by increased adoption of the internet, and that these gains may go a small way to redress the balance somewhat in favour of the local community. The overall aim of the research is to make practical suggestions as to how local communities can improve their internet use, and there is an ambitious aim to explore suggestions at both the micro level of *an* individual community and the macro level of *all* local communities. For any such suggestions to be practical there has to be both a need for the service and a realistic method of delivering it and to stand any chance of sustainability the suggestions need to align with the global internet trends rather than local communities adopting a King Canute type approach to their circumstances.

The combination of these points leads to the research question: How can local communities develop on-line strategies that complement global internet trends?

The bulk of the primary research focuses on the micro level, using methods of questionnaire, interview and desk-top review to build up a broad base of understanding of local community organisations, their use of the internet, resources, feelings towards it, future plans and major constraints. There is also a brief case study which applies to both the micro and macro levels and provides a base for supporting the extension of local suggestions to the macro level.

The approach at the start of the project is in the tradition of community development as a "bottom-up" approach. It thinks about the problem from the perspective of what can be done by a local community rather than what can be done to it and is concerned with the empowerment of communities to define and meet their own needs via self-help. As the arguments develop it moves to inject realism about the constraints facing local communities in terms of time pressures, abilities and their environment and moves to a more holistic approach trying to connect the local to the global.

1.2 Importance of the Research

There may be a gap in the literature to some extent as there is no obvious answer to the research question at either the micro level of *an* individual community, or the macro level of *all* local communities.

At the micro level the project considers local community using a synthesised definition which looks for the smallest bounded area recognised, by the majority of individuals and organisations that participate within it, as a community of place with a certain critical mass. Much of the research on local community and internet looks at larger geographical areas than this, which I suspect stems from the fact that many early community efforts with the internet were supported from resources provided via government institutions and as such tended to be for the larger community areas.

The early literature seems to show a lack of consideration given to the alignment of particular community internet initiatives with the current global internet trends. This necessarily requires a good understanding of the internet, the likely direction of development and gazing into an uncertain future to pick the powerful trends shaping the environment the local community operates in. Perhaps this is just a reflection of the early stages of the internet or a hope that it could be used to achieve normative goals for community.

Finally the research looks at a local community at a particular point in time and therefore is a unique opportunity for insight, particularly given the rate of change of the internet. The raw data and its analysis may be of some use in its own right.

At the macro level the extremely complicated issue of how to successfully connect the local to the global is a current theme in the literature of community informatics as exemplified by the status of a project to develop and use a pattern language for liberating voices headed by Douglas Schuler (Schuler, 2008). If my project can add a little to that important debate I will consider it to have been successful.

Finally a personal perspective that makes a case that the importance of local community itself is under-estimated. My home, which is the base for my family, is physically located in a local community whose connections play a significant part of my social network, and even more so for children, the elderly and economically disadvantaged. For many our homes are the single largest financial asset we possess. The world's population has nearly doubled since I was born in 1966 to stand at 7 billion people and resource consumption has increased enormously due to these extra people and their ever increasing living standards. From a sustainability point of view local resilience may become more important in the future as we leave the age of plenty (Barnatt, 2012) and

face potential constraints associated with peak oil, peak water, climate change, food shortages, etc. It feels like a tragedy of the commons played out quite slowly at a global level. It seems unlikely that the developed world will reduce consumption and it is not hard to imagine the strains that could come from the expectations of increased living standards flowing from an additional few billion internet users in developing nations. So anything that aims to redress the balance a little bit in favour of the local community is itself potentially important.

1.3 Structure of the Management Project

This introductory section has described the background to the management project, the development of the research question and specific research aims. It has also introduced the research design before concluding with the importance of the research.

The literature review comprises two self-contained, equally weighted, sections which are self-evidently required to support the research question:

- Local Community Practice in the Internet Age
 - Placing the local community in its global context
 - Local community practice and its use of the internet.
- Global Internet Trends

The community piece was extremely difficult to write as my own starting point in community studies was pretty close to zero having spent the majority of my career in business from a Maths academic background some 20 years ago. I eventually settled on writing quite a large contextual piece to ensure that my personal foundations, and those of any general readers, were strong enough to tackle the research question. I recognise that much of this section is probably of little relevance to those well versed in community studies but hope it is a useful summary.

The methodology section includes a discussion on the scope of the research and introduces the research setting, including its boundary and demographics. The process of selecting and developing the research methods is covered with consideration given to the strengths and limitations of the approach. The results are analysed at the micro level, before the final section focuses on the practical steps a local community can take and wraps up by extending these to the macro level.

2 Local Community Practice in the Internet Age

Community practice is a method for promoting policies that encourage the planning, building and sustainability of healthy communities (Day & Schuler, 2004, p. 14). The practical implications of this at a local level need to be considered in the global context.

Over the centuries much of the world has become a *network society* with complex *social networks* comprising *networked individuals*. Across this time there has been much fear for the loss of community countered by much evidence that it is thriving, but there is no doubt that its nature has changed. Local community, a subset of the broader community, has also changed in this period and it is a widely accepted view that its importance has declined. From an individual's perspective the importance varies depending where it fits in relation to the other communities and groups they belong to, and changes across life with personal circumstances and the prevailing macro environment.

These points will be developed in a structure that firstly places the local community in its global context before concluding with a perspective of how local community practice can utilise the internet.

2.1 The Context

The context starts with an historical perspective covering difficulties with definitions of community, its changing nature and the early fears for loss of community. Despite the rapidly changing environment in which we live this historical perspective is important as human nature is relatively constant by comparison. The literature may have been written in eras before important technology developments in transport and ICT, but it has considered the effects of the many other enormous social, political and technological changes. For instance the industrial revolution, rapid urbanisation, rise of capitalism/communism, rise of democracy, the railroads and the inter-continental telegraphs, to name but a few. It forms the base on which to consider the current context and the contemporary themes of network society, social networks and networked individualism.

2.1.1 Historical Perspective and Definitions

The seminal scholars of the late 19th and early 20th century, such as Durkheim, Weber, Tönnies, Simmel, Comte, Le Play, Marx, and Tocqueville all start with a characterisation of community as "a good thing, its passing was to be deplored, feared and regretted" (Bell & Newby, 1971, p. 21). This fear for loss of community carries forward through much of the early literature and into some contemporary work. The outlook could be attributed to a "selective perception of the present" (Wellman, 2001).

The early approaches saddle community with emotive overtones that are nostalgic and backward looking. For instance in Tönnie's 1887 book *Gemeinschaft and Gesellschaft*, he sets out the community-society dichotomy, the best known version of the polar types of institutional structure (Bell & Newby, 1971, p. 26):

Gemeinschaft (Community)	Human relations are intimate, enduring and based on a clear understanding of where each person stands in society. Worth is estimated according to who you are not what you have done.
Gesellschaft (Society)	Everything that community is not; large scale, impersonal based on contractual ties.

This illustrates a view that community has been "highly resistant to satisfactory definition perhaps for the simple reason that all definitions contain or imply theories, and the theory of community has been very contentious" (Cohen, 1985, p. 11). Part of the reason for this is a distinction between what community *is* (Empirical Description) and what sociologists feel it *should* be (Normative Prescription) (Bell & Newby, 1971, p. 21). An analysis of ninety four definitions reached a conclusion that "all of the definitions deal with people, beyond this common basis there is no agreement" (Hillery Jr, 1955). However, a majority of definitions of community do include the following components in increasing importance: territorial area, common ties and social interaction (Bell & Newby, 1971, p. 29)

Howard Rheingold sums up problems with definition and fear for loss community as:

"Arguing about the nature of community -- and reacting fearfully to the changes in European life posed by modernity (cities, industry, nation-states, bureaucracies, laws, contracts, technology) -- is what the last century of sociology (Tönnies, Weber, Marx, Durkheim) has been about" (Rheingold, 2011).

A more current definition, used in *Networked Neighbourhoods* (Purcell, 2006), sees community as "networks of interpersonal ties that provide sociability, support, information, a sense of belonging and social identity" (Wellman, 2001, p. 228). This definition has the benefit that it could cover the many different types of community that exist. One classification of these splits the community at a macro level into partial communities that can be viewed as belonging to five main types (Frazer, 1999).

Figure 2-1 : Varieties of Partial Community Without Multiplexity

Community Types				
Place	Foundation	Scope	Practice	Resource Constraint
The local c Urban c Rural c	Ethical c Political c Traditional c	Total c Universal c Partial c	Linguistic c Religious c Cultural c	c of fate c of interest economic c business c policy c
Alternative Terms				
Neighbourhood Locality Area Denizens Etc.	Polity Society Nation Democracy Etc.	Humankind Group Etc.	Anglophone world Inuit speakers Jewish people Etc.	Producers Capitalists Policy makers Workers Etc.

The existence of alternative terms which are not preferred descriptions, serves to highlight the importance of the word community. All these types could also have a geographic scale associated with them, for example a business community has meaning at global, continental, national, regional or local levels. The classification shows that the local community sits in a context of both the macro level community and the many other types of community.

To counter this view Stacey suggests an avoidance of the term 'community' altogether, instead saying that if institutions are locality based and interrelated they may well be a local social system that is worthy of sociological attention (Stacey & Margaret, 1969).

Cohen "avoids another definition" rather he looks to the *use* of the term. Community implies simultaneously similarity and difference (Cohen, 1985, p. 12):

- Similarity the members of a group of people have something in common with each other

- Difference which distinguishes them in a significant way from members of other putative groups.

As a consequence of this, the focus is the boundary of the community as it is the element that describes distinctions between communities. This approach is concerned with what the boundary means to people, and applies whether the boundary is physical, administrative, racial etc. and to whichever type of community it is. As you zoom in from say country to local community, boundaries "become more important to their members for they relate to increasingly intimate areas of their lives or refer to more substantial areas of their identities" (Cohen, 1985, p. 13).

To conclude before considering contemporary themes: Community exists in many forms but is difficult to define. It changes in nature and with those changes there are associated fears for loss of community.

2.1.2 Contemporary Themes

In 1969 Anthony Richmond, a migration academic, recorded the traits of an extended rural-urban continuum that included post-industrial society (Bell & Newby, 1971, p. 47). In this more modern form of society electronic communication and social networks were already considered important aspects, long before the network society was put forward by Dijk (Dijk, 1996) and popularised by Castells (Castells, 1996).

Figure 2-2 : Traits Associated with the Rural-Urban Continuum

Trait	Era		
	Traditional	Industrial	Post-Industrial
Form of organisations	Gemeinschaft	Gesellschaft	Verbinding ouretzschafft
Typical way of interaction	Communities	Associations	Social Networks
Principal mode of production	Agricultural	Mechanical	Automated
System of Stratification	Quasi-feudal	Class	Meritocracy
Main means of communication	Oral	Written	Electronic
Main means of transport	Horse & Sail	Rural-Urban	Inter-Urban

The recognition of the importance of social networks in these traits reflects its increasing importance. Social networks, which have their origins in the work of Georg Simmel, are a set of relations among network members – be they people, organisations or nations. Social network analysts focus more on the characteristics of these relationships than on the characteristics of individual members (Rainie & Wellman, 2012, p. 21).

The post-industrial age matures into the network society which is perhaps the most favoured description of the current nature of society. "The network society is precisely that: a social structure built on networks. The networks that characterise contemporary social organisation are information networks powered by micro-electronics based information technology." (Castells, 2002, p. xxix). This new form of society radically changes many aspects of life; cultural expression, governance, social protest and sociability. It sees the rise of individualism as a predominant pattern of behaviour whose source of meaning is constructed around the projects and desires of the individual (Castells, 2002, p. xxx).

The fear for loss of community continues to have importance with Robert Putnam in his landmark book, *Bowling Alone*, charting a collapse of American community in the last several decades of the 20th century. He concludes that the most important factor in this decline is a generational change: "the slow, steady and ineluctable replacement of the long civic generation by their less involved children and grandchildren" (Putnam, 2000). The second major factor is privatization of leisure time by electronic entertainment, mainly TV, and that this is more important than the combined pressures of time and money & suburbanization, commuting and sprawl (Putnam, 2000, pp. 283-4).

A key concept in Putnam's work is social capital theory, the core idea of which is that social networks have value (Putnam, 2000, p. 19). The book serves to popularise social capital which is referred to as connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them (Putnam, 2000, p. 19). He positions social capital as a conceptual cousin of community (Putnam, 2000, p. 21).

On the other side of the argument the fear for loss of community is strongly rejected by a number of leading voices.

- Wherever they have looked, researchers have found thriving communities. This is so well documented that there is no longer any scholarly need to demonstrate that community ties exist everywhere (Wellman, 1998).
- Individualism is not social isolation or even alienation, as superficial observers or nostalgic commentators often suggest (Castells, 2002, p. xxx)
- I suggest we have become more adept at filling some of the emotional and context-generating functions that have been traditionally associated with the importance of community with a network of overlapping social ties that are limited in duration or intensity (Benkler, 2006, p. 16).

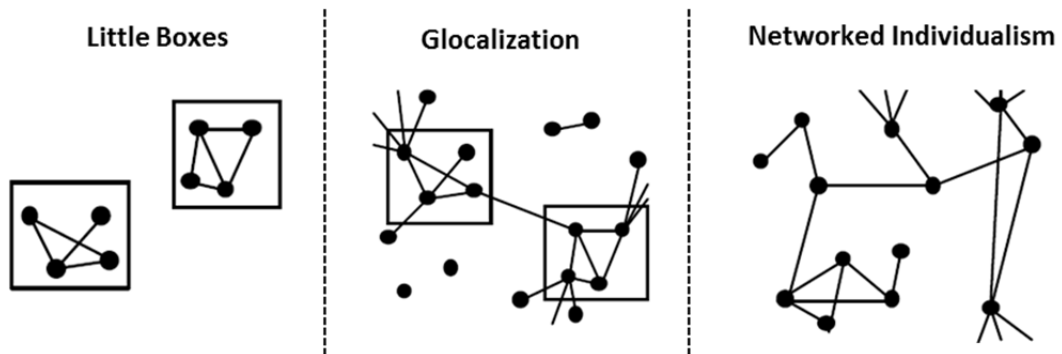
Putnam can be criticised for overemphasising decline rather than change, perhaps by focusing on community as community of place. The concern for loss of community should be noted but not overstated and the key point is that the nature of community has changed.

The internet is the latest technology to contribute to the changes. It is of critical importance as a new medium of communication and as the proper technology for the expression and organisation of individualism (Castells, 2002). The term virtual community is coined by Rheingold in 1993 (Rheingold, 2000) but later he recognises that "If I had encountered sociologist Barry Wellman and learned about social network analysis when I first wrote about cyberspace cultures I could have saved us all a decade of debate by calling them *on-line social networks* instead of *virtual communities*" (Purcell,

2006, p. 47). This is a strong message that the internet is just the latest technology to be adopted and adapted by an increasingly networked society.

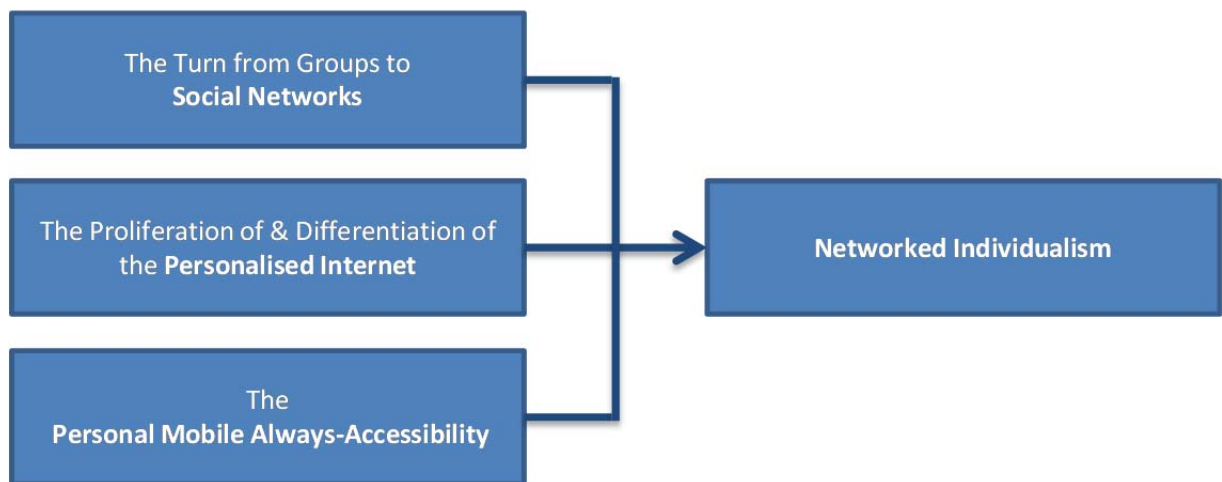
The types of social networks, and therefore communities, have changed from densely-knit "Little Boxes" (densely-knit, linking people door-to-door) to "Glocalized" networks (sparselyknit but with clusters, linking households both locally and globally) to "Networked Individualism" (sparsely -knit, linking individuals with little regard to space) (Wellman, 2002).

Figure 2-3 : Representation of Types of Social Networks



The concept of networked individualism is further developed by considering the interaction of social networks, the internet and the rise of mobile individualism (Rainie & Wellman, 2012).:

Figure 2-4 : Three Revolutions Powering Networked Individualism



The combined voices of Day and Schuler argue that "the notion that there is no alternative to the current techno-economic direction of network society developments and that people, their cultures, and society in general just have to adapt to it is both deterministic and undemocratic" (Day & Schuler, 2004, p. 10). They do not reject the

current description of network society or networked individualism but assert that they are predicated on underlying assumptions of technological determinism and economic rationalism. They have a communitarian stance that “other paths exist that might lead to richer, friendlier and more fertile levels of social development (Day & Schuler, 2004, p. 5).”

It is this contemporary environment of the network society, social networks and networked individualism in which the local community operates. The next section considers issues facing the local community when using the internet as part of their community practice.

2.2 Using the Internet in Local Community Practice

As stated earlier, community practice is a method for promoting policies that encourage the planning, building and sustainability of healthy communities and, since there is a clear implication that this *should* be done, it is a normative approach (Day & Schuler, 2004, p. 14). One example of this normative nature is a proposed community policy framework where community policy should (Day & Schuler, 2004):

- Understand and meet community needs
- Work in partnership with active community groups and organisations
- Be based on at least one of the community values of solidarity, participation and coherence
- Prioritise the needs of community’s socially excluded, marginalised, disadvantaged and oppressed
- Valorise and celebrate cultural diversity
- Reflect a commitment to the objectives of community autonomy and responsibility for community initiatives

Community practice tends to be delivered either top-down or bottom-up, either “doing to” or “being done by” (Day & Schuler, 2004, p. 15), and its various approaches can be categorised as (Glen, 1993):

Figure 2-5 : Community Practice Approaches

Approach	Description	Stance
Community Services	Focused on the development of community-oriented organisations and services.	Most often top-down.
Community Development	Concerned with the empowerment of communities to define and meet their own needs via self-help.	Bottom Up.
Community Action	Comprises planning, mobilisation and campaigning for community interest and policies to achieve community goals.	Mostly bottom up.

Interest in using the internet for community practice, and more specifically local community practice, has been around nearly as long as the internet itself. For instance in his 1996 book Stephen Doheny-Farina highlights the development of community networks and the rise of wired communitarians but also sounds a note of caution suggesting a "middle way between anti-technological hopelessness and electronic ecstasy" (Doheny-Farina, 1996, p. 182).

Community Informatics has emerged as the name given to enabling communities with ICT and is a new take on an old subject "in the sense that information and communications, and using technologies to support these are as old as communities themselves" (Gurstein, 2004). It is a disciplinary hybrid at the confluence between theory, practice and policy, concerned with the "processes of communities adapting and transforming, networking and binding, responding to and becoming the authors in the unending and increasingly rapid flow of information within and among communities and between communities and the larger society (Gurstein, 2004). It considers the subject with regard to:

How	The infrastructure, the devices, the connectivity of enabling and empowering
How to	the training, the community and organisational development
Necessary conditions	the funding, regulatory environment, the policy frameworks
Why	the goals and objectives of enabling and empowering communities

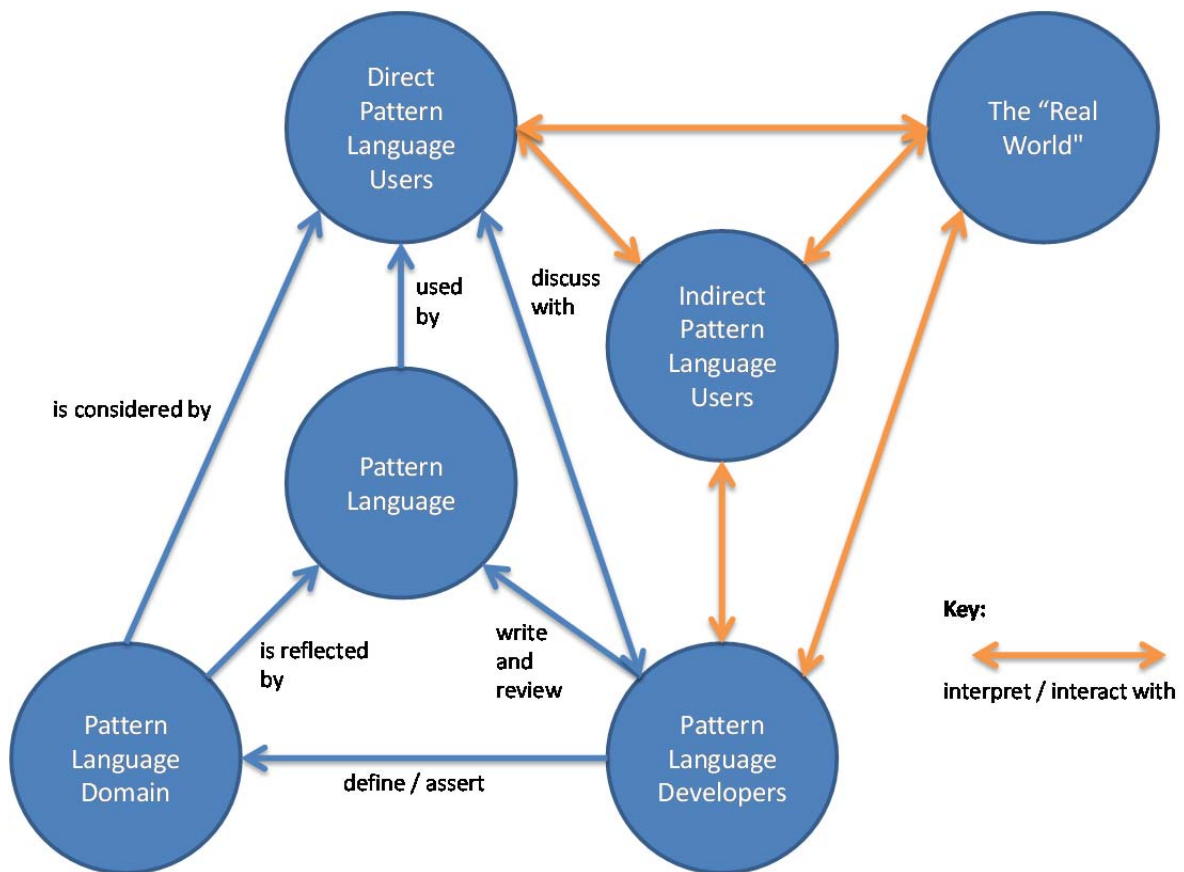
Sustainability is seen as a crucial issue to Community Informatics, "however, to a considerable degree, a discussion on sustainability is a measure of the underdevelopment and immaturity of our work" (Gurstein, 2005). Would the early successes of community networks such as Cleveland Free-Net lead to the communitarian goals of the movement's visionaries (Doheny-Farina, 1996, p. 128)? Unfortunately by 1999 their parting words were, "The years went by and the Internet, formerly the realm of academics and government, came to the public's attention. The multimedia experience of the web and the increasing availability of commercial Internet providers greatly reduced the appeal that we had once held" (Cleveland Free-Net, n.d.). In essence it failed from an inability to keep up with the evolution of the internet.

The Cleveland Free-Net is not alone in struggling to keep up with the rapid pace of change in our current age. Individuals, firms, industries, markets, government and societies are all facing the challenge and adjusting their approaches according to their particular circumstances. The clock speed for innovation has increased and I suspect that local community operates at a far slower speed than many other areas of our lives. This appears to be reflected in much of the academic work on the subject that seems out of step with the current state of networked individualism and the rapid rise of internet

giants such as Google, Facebook, Amazon, eBay, Twitter, YouTube and Wikipedia and the technology and philosophies that support them.

A notable exception to this critical assessment can be found in Doug Schuler’s 2008 book *Liberating Voices: A Pattern Language for Communication Revolution*. According to Schuler a pattern language is simply a linked set of patterns that contains the same elements: typically, the pattern name, the problem, context, discussion, solution, and links to other patterns. The patterns must work together to describe a totality of a field, reflect a “timeless way” and have a moral centre. Individual patterns should be non-trivial and reflect the values described (Schuler, 2008, pp. 522-523). A pattern language has to be validated in an appropriate way and the 136 patterns produced for *Liberating Voices* had the following validation components (Schuler, 2008, p. 523):

Figure 2-6 : Liberating Voices Pattern Language Validation Components



The complete list of patterns is too long for this project as they cover theory, organising principles, enabling systems, policy, collaboration, community and organisational building, self-representation, projects and tactics. Of particular interest are enabling systems which are characterised generally as “concrete expressions of our objectives, often integrating institutions and technological systems. They are enabling because they

actively encourage the multiplication of ideas and actions upon which people can help create a better society". A subset of the enabling systems is concerned with the issue that "globalization does not obviate the need to support the local community as well".

One pattern of note is 62: On-line Community Service Engine, which highlights that "researchers and practitioners often trivialise the relevance of software in determining the sustainability and success of on-line communities. Opinions differ widely between two extremes: some implicitly assume that any software for managing on-line forums is sufficient; others suggest that a large set of features (up to 73) must be included in software for managing on-line communities" (Schuler, 2008, p. 290). These services include *user management; communication and dialogue; information and publishing; community awareness; calendaring; work group support features; and monitoring and statistics*. (De Cindio & Sonnante, 2011).

There are two further patterns that are highly appropriate for community informatics and act as a summary of this section:

Pattern 61 – Community Networks

Communities often lack the information and communication infrastructure needed for two critical functions. The first is supporting and sustaining the social networks of clubs, organisations, associations, groups, agencies, families and individual citizens that constitute the structures, organisation and activities of community life. The second is enabling effective organisation, planning and enactment of local campaigns when threatened from outside. The potential scope for ICT to support, enhance and sustain community communications is immense but effective community networks can only be built through meaningful and mutual partnerships of knowledge exchange. If Community Networks are to emerge as significant components of modern community life, external partners must understand this in context and content. Only then can they contribute in a meaningful way (Day, 2011).

Pattern 60 – Digital Emancipation

"The opposition between local and global and the relative devaluing of space and region in the face of the ubiquity, mobility, portability, and interconnection provided by digital networks has become central to globalization and the virtualization of life. These features also support decentralization, telecommuting, and the intangible revaluation of each local space. Thus a new space-time "glocal" dimension creates human development challenges that require new skills and new approaches to employment and ownership, control and freedom.

Digital *emancipation*, as opposed to digital *inclusion*, aims at income generation and identity creation rather than merely "bridging the digital divide." While access to digital networks is increasing, especially within developing countries, there is less confidence and actual, verified outcomes when it comes to job opportunities, entrepreneurship, solidarity, and organisation of civil society. Digital Emancipation refers to greater autonomy and skills to avoid, when necessary, automation and digitalization when necessary, rather than an overall commitment to a "digital life." New forms of exchange, gifts, collaboration, and collective action involve not only technical choices but a fundamental consideration for the emancipatory potential of policy and technological options (Schwartz, 2011)."

There is no doubt that the internet could be used as a tool for underpinning community practice, in all its forms, in the network society, however the *how* of community informatics is uncertain. The community and voluntary sector groups are the cornerstone of community life but the daily pressure for survival on such groups often means that enabling active community is a major task (Day & Schuler, 2004, p. 13). Also a distrust of bureaucrats and politicians often means that achieving a shared value base is problematic (Day & Schuler, 2004, p. 13) and of course community is a contested space.

3 Global Internet Trends

The internet is important. "In a relatively short period of time it has had an amazing impact on almost every facet of our lives. With it, we are able to access new ideas, more information, unlimited possibilities, and a whole new world of communities. It has grown and evolved to influence how we interact, how we conduct business, how we learn, and how we proceed day to day" (The Internet Society, 2012). There are warnings against underestimating its impacts:

It seems passé today to speak of the "Internet revolution". In some academic circles, it is positively naïve. But it should not be. The change brought about by the networked information environment is deep. It is structural (Benkler, 2006).

The internet joins a long line of technology revolutions that have been adopted by individuals, groups and organisations to shape society and communities in both positive and negative ways, and of course the technologies themselves are shaped by their use in a clear case of co-evolution between technology and society (Castells, 2002). Its definition isn't easy, because unlike any other technology, the Internet can be whatever we make it (The Internet Society, 2012). It can be viewed from a purely network perspective as the global information system that is logically linked together on the Internet Protocol (IP) (Federal Networking Council, 2012), but more generally it is an umbrella term for the hardware, software, data and networks that combine to deliver our on-line user experiences. To support this definition, consider the example of finding a restaurant using a smartphone: the task requires a wide range of technologies such as a high-tech handset, mobile and fixed line networks, routers, servers, web software, cloud computing, databases and operating systems but to the user it's just using the internet to find a restaurant. This review uses internet as an umbrella term.

Over a short number of years the internet has changed beyond recognition, with high level trends that are self-evident: there are more people connected, doing more things, in more places, on better technology, using more devices and for more of their time. The approach to highlighting important global trends is to consider the evolution of the internet from three separate perspectives:

- The first looks at the internet's overall rapid and widespread growth to support the claims made for its global impact, to understand the main reasons behind the growth and to inject a note of realism by considering digital divides.
- The second breaks the growth story into separate eras giving historical context to the trends that started in each era and which continue into the present. This is technology biased.

- The third considers major impacts of the internet on society to catch any trends from the *use* of the technology that haven't emerged from the previous perspectives.

Any data used to support the trends is included in Appendix 1, referenced as [1A-1F], to avoid interrupting the flow of the analysis. The conclusion brings together a summary of the major trends identified and touches on future developments.

3.1 Rapid and Widespread Growth

The internet had been around for twenty years before Tim Berners-Lee's widely credited invention of the World Wide Web in 1989. By the time his first web client and server were released in the summer of 1991 (World Wide Web Consortium (W3C), 2012) there were probably fewer than five million early internet adopters requiring specialist knowledge to find the first web sites (Rainie & Wellman, 2012, p. 61). Fast forward a mere twenty years to data regarding internet users in 2010 [1A] and it's a very different picture in terms of:

- Scale There are over 2 billion internet users, or nearly a third of the world's population.
- Growth 1 in 10 people on the planet became internet users in the three years from 2007-10.
- Breadth A truly global network.
- Continuing Growth Penetration rates are increasing, particularly in emerging economies.
- Tipping Points Most developed countries have the majority of their population on the Internet. America and Europe at around three quarters.

Of course the most obvious digital divide is that two thirds of the world's population don't use the internet, creating a source of inequality between users and non-users. These divides also exist at many other levels. For instance compare the 79% penetration in the USA with 8% in India, or the 22% of USA adults that do not use the internet in 2011 (Rainie & Wellman, 2012). European data for 2011 shows the levels of non-users falling over the last 5 years from 42% to 24% but the rate of has slowed over period [1B].

In the US several factors stand out as the significant predictors of non-use: age, the socioeconomic factors of educational attainment and household income, English proficiency and household income. (Rainie & Wellman, 2012, p. 75). European data [1C] highlights the age and educational divides and shows a similar level of usage between the sexes.

Wellman and Rainie provide eight factors behind the rapid and widespread growth, which are condensed in the following table (Rainie & Wellman, 2012, pp. 62-64):

Figure 3-1 : Summary of Factors in the Growth of the Internet

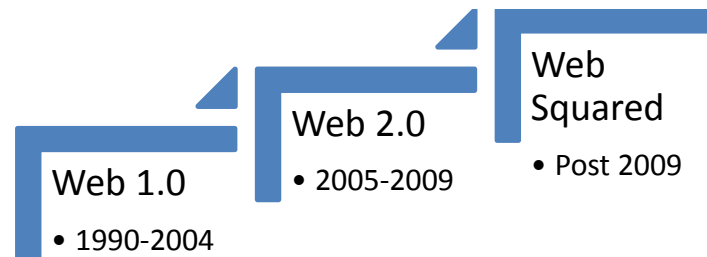
Growth Factors
1. Post 1995 the US allowed the private sector and market to drive the development of the internet and adopted a light regulation approach. User demand and feedback played major roles in shaping the environment.
2. The technology (devices) improved rapidly and dramatically, which increased its usability and attractiveness.
3. The communication network increased capacity and speed. Significantly lowering transmission time and costs for larger stores of data.
4. Improvements in radio technologies allowed wireless data transfer, breaking the umbilical cord tethering users to desktop connections. This ultimately triggers a mobile revolution.
5. The internet remained one interconnected network as opposed to different competing networks.
6. Internet service providers provided bandwidth at a flat rate regardless of usage.
7. Storage vastly improved.
8. New and compelling applications built on the above

The internet continues to grow rapidly, partly due to increased penetration in developed countries but also due to mobile connectivity bringing new services and audiences, but it still has a long way to go before it is the all-inclusive medium that it may one day become. Growth is only part of the story as the today's internet is fundamentally different from that of 1995, or even 2005. The next section considers the stages of the development.

3.2 Stages of Internet Development

The evolution of the internet can be considered in three eras using the framework of web 1.0, to 2.0 (O'Reilly, 2005) and subsequently onto web squared (O'Reilly & Battelle, 2009). Although the eras are presented in three time frames, in reality they are overlapping to some extent:

Figure 3-2 : Web Eras



3.2.1 Web 1.0

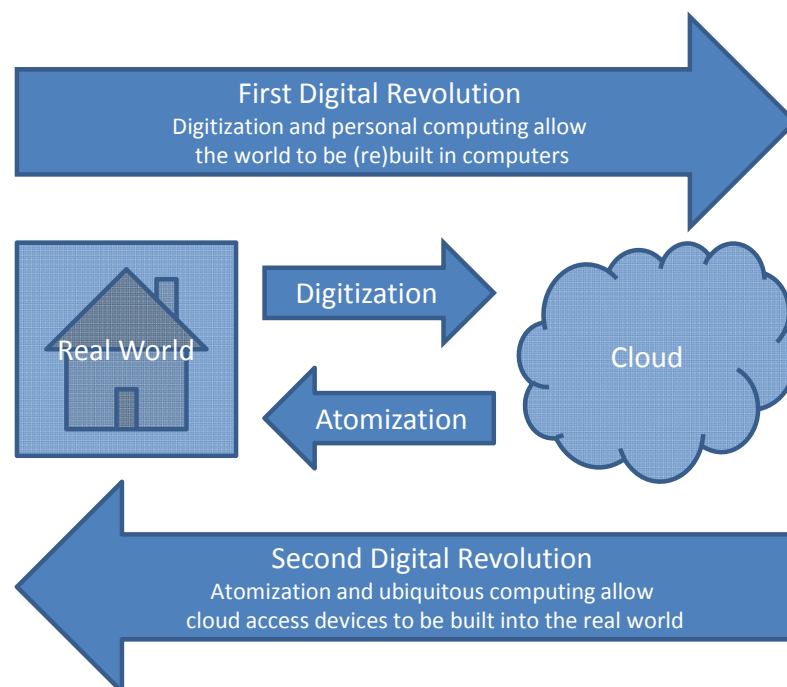
The main device in this era was a PC with local processing, storage and data. The user interfaces were moving from text to graphics but were still cumbersome compared to those we enjoy today. The dominant software paradigm was desktop applications and our connection to the internet was via modem and a relatively slow fixed line. The main internet applications were search, browsers, email, file transfer and forums and these remain important today.

The Web was about publishing not participation and many websites could be characterised as “brochureware” consisting of mainly static information which was updated infrequently. Web pages themselves comprised images, navigation icons, menus and text which were mainly written in an impersonal or professional manner. Some sites allowed interactivity, such as a form, but they were often slow and clunky and there was little interaction between sites. A lot of web content is still like this.

The development of the search application highlights important trends. The earliest search engines (e.g. Yahoo) used humans to produce their indexes but quickly moved to automated crawlers that searched text (e.g. WebCrawler). They then added more powerful and natural query language (e.g. AltaVista) but remained ignorant of the relevance of results. Google’s PageRank algorithm addressed this, possibly signalling the arrival of Web 2.0, and now dominates the search environment. Now we have voice input for searches, location context for results and prominence given to current information. This continual and rapid evolution is found across many of the internet’s main building blocks.

Digitization of the written word, still images, moving images, music, games and numerical data had already taken hold before the arrival of Web 1.0 but the mechanisms and devices to make full use of this data in the internet age didn't yet exist. By 2003 Apple had launched the iTunes store, marking a point where the devices, market and bandwidth associated with the internet was capable, at least in part, of delivering some of this digital data, music, to consumers in a new and highly desirable way. The iPod, like a printer, turns the digital content back into atoms in a form we can see, hear or touch, through a process named atomization. This simple example is extended into a framework with a "First Digital Revolution", cloud computing and a "Second Digital Revolution" which is represented diagrammatically as (Barnatt, 2010, p. 130):

Figure 3-3 : The First and Second Digital Revolutions



This trend continues to develop as new devices are produced, allowing more digitized data to be atomized. A futuristic example may see 3D printers becoming common-place enabling us to atomize objects; from mundane spare parts for our *things* to biological spares for *ourselves*.

This diagram introduces the important concept of cloud computing which provides infrastructure, and software platforms as services without requiring organisations to build their own which in turn allows software to run as a service over the internet. "Effectively after water, electricity, gas and telephony, computing is becoming the fifth utility. (Carr, 2009)"

The combined effect of these changes provides the foundations for the Web 2.0 era.

3.2.2 Web 2.0

The era of web 2.0 sees radical changes in the capability of the web as it evolves, which O'Reilly's captures as:

Web 2.0 is a concept with a "gravitational core" with a "set of principles and practices that tie together a veritable solar system of sites that demonstrate some or all of those principles at a varying distance from the core" (O'Reilly, 2005).

Each of these seven principals will be considered in some detail because they represent major internet trends in their own right but the first two are very important. They are "web as a platform" and "harnessing collective intelligence" which advocate that applications are built that literally get better the more people use them, harnessing network effects not only to acquire users, but also to learn from them and build on their contributions. Software is co-created by and for the community of connected users. Others have used the term crowdsourcing (Howe, 2009) to describe the process of harnessing collective intelligence. This is a profound change in the capabilities of the web and is evidenced by the examples of Google, Amazon, Wikipedia, eBay, Craigslist, YouTube, Facebook & Twitter all of which feature heavily in a current list of top 10 internet properties [1D]. The main applications of these companies include updated Web 1.0 offerings along with the Web 2.0 staples of social networking, user-created content and eCommerce.

Ebay, Amazon and to a lesser extent Craigslist, exemplify the rise of eCommerce, where in the USA it has reached about 8% of total retail sales in Q2 2011 and is on a linear growth trend estimated to deliver 10% by the end of 2013 (Meeker, 2011). A key reason for this is the long tail phenomena popularised by Chris Anderson (Anderson, 2004).

Google, Facebook, Twitter and YouTube rely on advertising as their main source of income to provide their offerings free to consumers. This "eye-ball" based revenue stream is a key part of the internet's growth and a site's reach and time per person are important measures of its ability to generate revenue in this way. A global estimate is that internet advertising revenue was \$73 billion in 2011 (Meeker, 2011), with the UK alone approaching £5 billion or 30% of total advertising expenditure [A6]. The last 5 years in the UK have seen a fairly flat overall advertising market, but internet revenues have enjoyed a 19% compound annual growth rate from 2006 at the expense of negative CAGR for press and direct mail of -10% and -6 % respectively [A6].

As the internet has evolved it has commercialised rapidly and the ecosystems are dominated by global oligopolies. One notable exception to this is Wikimedia which is a form of social production that is a major trend covered in the next section.

Returning to the theme of collective intelligence applications, they depend on managing, understanding, and responding to massive amounts of user-generated data in real time. This leads to the third principle of "Data is the next Intel Inside". There has been a concerted effort by commercial organisations to gain controlling positions of the valuable data behind major internet applications.

The next three principles are important technical points that are changing the landscape of the software industry. They are "software above the level of the single device", "end of the software release cycle" and "lightweight programming models". When I use the web as a platform I can use Google Docs on my laptop or smartphone without having to install any software and it's always the latest version, however it is a prerequisite that I have an internet connection.

The final principle is the very important "Rich user experiences", which is framed as "web developers finally able to build web applications as rich as local PC-based applications" based on programming technologies such as JavaScripts and XHTML. From a user experience perspective Web 2.0 pages are a stark contrast to those described above in Web 1.0. They are dynamic as opposed to static have very regular updates, the whole look and feel of the pages have improved and the style has moved away from the impersonal and highly professional. Interactivity is common and easy and there is a lot of interaction between sites as various elements of web pages are delivered from other providers.

The rich user experience can be seen in other areas (Meeker, 2011):

- Devices have moved from computers being a utilitarian tool for computation to beautiful objects we could use in thousands of ways to make life better.
- The user interfaces of text and graphics are now extended to include touch, sound and move, creating new possibilities.
- eCommerce needs to be fast, easy, fun and offer savings.

Not only are devices more "beautiful" but the types of devices have expanded greatly, creating a device cloud with individuals owning multiple devices (Barnatt, 2010) ushering in an age of ubiquitous computing for some. The US trends are included in Appendix 1 [A6].

The mobile internet revolution gained real momentum jump started by Apple's 2007 iPhone and 2008 App Store. Before the smartphone a mobile handled calls and texts but by adding the capabilities of the internet, Apple once again built on advances in device and network bandwidth technologies to create a new and highly desirable way to access the internet whilst mobile. A key aspect of smartphones is the "app", where a large eco-

system of developers provide relatively simple software to meet specific needs of an enormous number of users for free or at low cost. The devices, apps and mobility combine to create an easy-to-use winning combination and by February 2012 46% of US adults had a Smartphone (Pew Internet & American Life Project, 2012). The smartphone heralds another profound change in internet development as it ushers in an age where some individuals are always connected and their location is known to some extent.

3.2.3 Web Squared

The name for the current era of the internet is still somewhat contested; Riley and Battelle neatly sidestep this by stating that Web Squared is the semantic web, the social web, the mobile web, a form of virtual reality and more (O'Reilly & Battelle, 2009). The choice of Web Squared, over 3.0, reflects the exponential increase in the scale of participation, not just from human inputs and their device sensors but also the other *things* that have sensors and are connected to the internet; this phenomenon is called the internet of things. Web Squared is summarised as:

“Increasingly, the web is the world – everything and everyone in the world casts an information shadow, an aura of data which, when captured and processed intelligently, offers extraordinary opportunity and mind-bending implications. Web Squared is our way of exploring this phenomenon and giving it a name.”

The paper highlights four aspects contributing to Web Squared:

Aspect	Summary of point
1. Redefining collective Intelligence	The web is getting smarter as it grows up.
2. How the web learns	Giving structure to what appears to be unstructured data. Meaning is learned inferentially from a body of data
3. Web meets world	The Information shadow and the internet of things
4. The rise of real time	A collective mind and real time feedback loops.

One of the effects of the increased *users* and *uses* of the internet is that the amount of data is now enormous and the term “Big Data” has emerged to cover the issues that this brings. There is a trend for more open data from governments and the open source movement which is driven by a mixture of desire to get as much value as possible out of the data and for reasons of transparency and general philosophy.

In the concluding sentences of Riley's web squared paper he is perhaps guilty of rhetoric but makes important points.

"If we are going to solve the world's most pressing problems, we must put the power of the Web to work – its technologies, its business models and perhaps most importantly, its philosophies of openness, collective intelligence and transparency."

Further consideration will be given to these ideas in the final section on the major social impacts of the internet.

3.3 Major Social Impacts

This section covers two important trends arising from the use of the internet by society, rather than trends that seem to flow from a more technical perspective as described in the last section.

3.3.1 Social Production

The basis of this section is Yochai Benkler's opening chapter in *The Wealth of Networks* (Benkler, 2006). He positions social production as a new, or perhaps revitalized, category of non-market decentralized transaction and proposes that it is the critical long term shift caused by the internet. It is exemplified by the open-source movement and Wikipedia which illustrate that social production can have dramatically more economic impact than it had in the past. For instance, Wikipedia has competed very effectively with the pre-digital age *Encyclopedia Britannica* and the now defunct *Microsoft Encarta*.

The case for the importance of social production starts with the statements that "Information, knowledge and culture being central to human freedom and development. How they are produced and exchanged in our society critically affects the way we see the state of the world as it is and might be."

The reason that social production can have more importance than in the past is that a series of changes in technologies, economic organisation and social practices of production in the environment has created new opportunities for how we make and exchange information, knowledge and culture. The economic changes are conceptualised as a change from an industrial information economy to a networked information economy, where the world's most advanced economies are centered on information and cultural production, and the manipulation of images, combined with a communication environment built on cheap processors with high computation capabilities, interconnected in a pervasive network. Concurrent to this change the material means of information and cultural production moved into the hands of a significant fraction of the world's

population, as opposed to being the preserve of firms and government in the industrial information economy. Hence the rise in social production and it taking an important place in the types of possible transactions:

Figure 3-4 : Types of Transaction

	Market-based	Non-market
Decentralized	Price-System	Social Sharing & Exchange
Centralized	Firm Hierarchy	Government/Non-profits

3.3.2 The Social Web and Crowdsourcing

The social web can be traced through all eras of the web but really takes off with Web 2.0 allowing individuals to participate on platforms such as Facebook and Twitter. Mary Meeker uses the example of Facebook’s 800 million active users to highlight that there’s nowhere to hide and therefore there is a trend for authentic identity (Meeker, 2011). Gartner make similar points talking of trends for a diminishing expectation of privacy with lifeblogging and activity streams (Miller, 2011).

Web2.0 also triggers the rise of crowdsourcing where crowds are used for four types of task either individually or more powerfully, in combination (Howe, 2009):

- Collective Intelligence Crowds contain more knowledge than individuals
- Creation Crowds have creative energy and the time and tools to create
- Voting Crowds can express their opinion
- Funding Crowds can provide

In 2002 questions were posed (Rheingold, 2002, p. 215):

Over the next few years will nascent smart mobs be neutralised into passive, if mobile, consumers of another centrally controlled mass medium? Or will an innovation commons flourish, in which a large number of consumers also have the power to produce? Technologies of cooperation, or the ultimate disinfotainment apparatus?

The trends that have emerged suggest a balance in favour of the positive view. The voting power can be seen in Google's PageRank, Amazon's reviews and Facebook's Likes and it's creating an extreme meritocracy. Authentic identity could be considered as transparency because it's fairly hard to keep secrets in the age of the information shadows and collective intelligence and content creation in real time. This will bring about real challenges regarding what degree of anonymity is to be preserved in the future. Perhaps with the Arab Spring we are seeing a trend for increased democracy.

Combining the social web and crowdsourcing ideas leads to a mega-trend of the 21st century: empowerment of people via connected mobile devices (Meeker, 2011), which is all played out in real time and of course applies to organisations and individuals alike.

3.4 Summary

I stated earlier that the high level trends are self-evident: there are more people connected, doing more things, in more places, on better technology, using more devices and for more of their time. The approach of considering the evolution of the internet from three separate perspectives has identified many detailed trends; the huge size and growth of the internet was tempered by the digital divides, the eras of growth highlighted the change from the static Web 1.0 to the collaborative and dynamic platform of Web 2.0 with always-connected mobile devices in the hands of many and Web Squared promises more growth, more devices and a smarter internet of things.

The final section highlighted that social production is emerging as a powerful constituent of the economy and the impact the social web and crowdsourcing have had leading to considerations about democracy, extreme meritocracy, transparency and authentic identity.

The future will be unpredictable and as the internet evolves there will be new unimagined trends and some of the ones identified will advance and others fall back, however there is little doubt that the internet will play an important and increasing role in that future.

4 Methodology

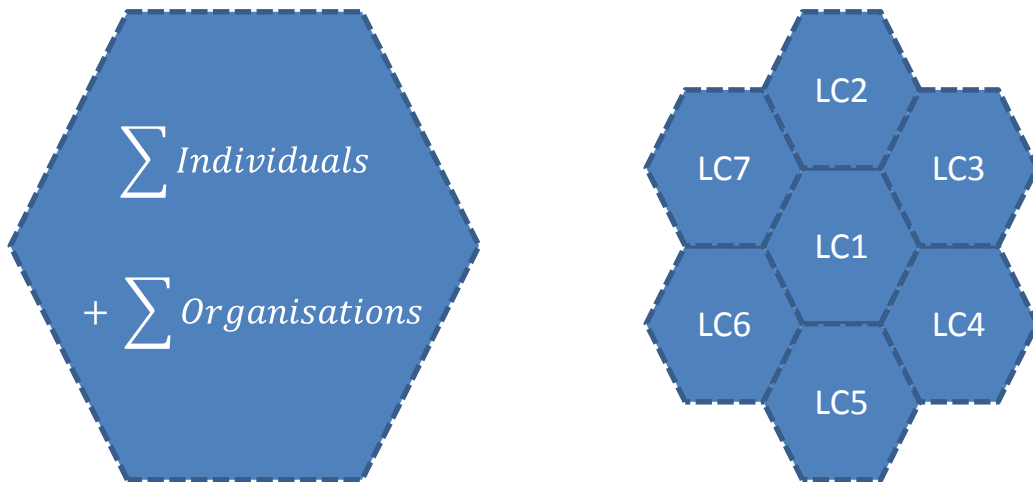
As stated in the introduction, the overall aim of the research is to provide practical suggestions as to how local communities can improve their internet use at both the micro level of *an* individual community and the macro level of *all* local communities. The micro level is approached from the tradition of community development considering the question from the perspective of what can be done by a local community rather than what can be done to it. The key requirements are to build up a broad base of understanding of local community use of the internet, resources available, feelings towards it, future plans and major constraints. At the macro level, connecting the local to the global has a more holistic approach. At the end of this section is a case-study selected to illustrate the suggestions at both the micro and macro level, the methodology for which is considered as it is presented.

The choices made regarding research scope, the selection of the setting and the specific methods to be used are discussed; however before any of this it's necessary to have a definition of local community. I have adopted a synthesised definition based to a large extent on Cohen's work on boundaries (Cohen, 1985), where local community is:

- The smallest bounded area, recognised by the majority of individuals and organisations that participate within it, as a community of place with a certain critical mass.
- The boundaries are porous and individuals and organisations can belong to multiple local communities that reflect their circumstances. For instance an individual may live in one, work in another and play in a third.
- The local community is surrounded by other local communities.

The actors in the Local Community, LC, are the individuals and organisations that act there, where organisations are a broad category, capturing formal and informal structures such as firms, government bodies or the voluntary sector groups. This suggests a visual representation of:

Figure 4-1 : Synthesised Definition of Local Community



There is a degree of controversy in this definition because boundaries can be seen as negative or divisive, and the importance and very nature of boundaries has changed significantly over time due to the network society, social networks and networked individualism. However to be clear, this definition is deliberate and states that bounded local community exists. There are of course practical problems: How to decide where the boundary is? Who decides it? How to change it? What is the size of a community (area or people)? Who decides who belongs to it? Can individuals or organisations belong to multiple? These issues are addressed in the practical suggestions in the final section.

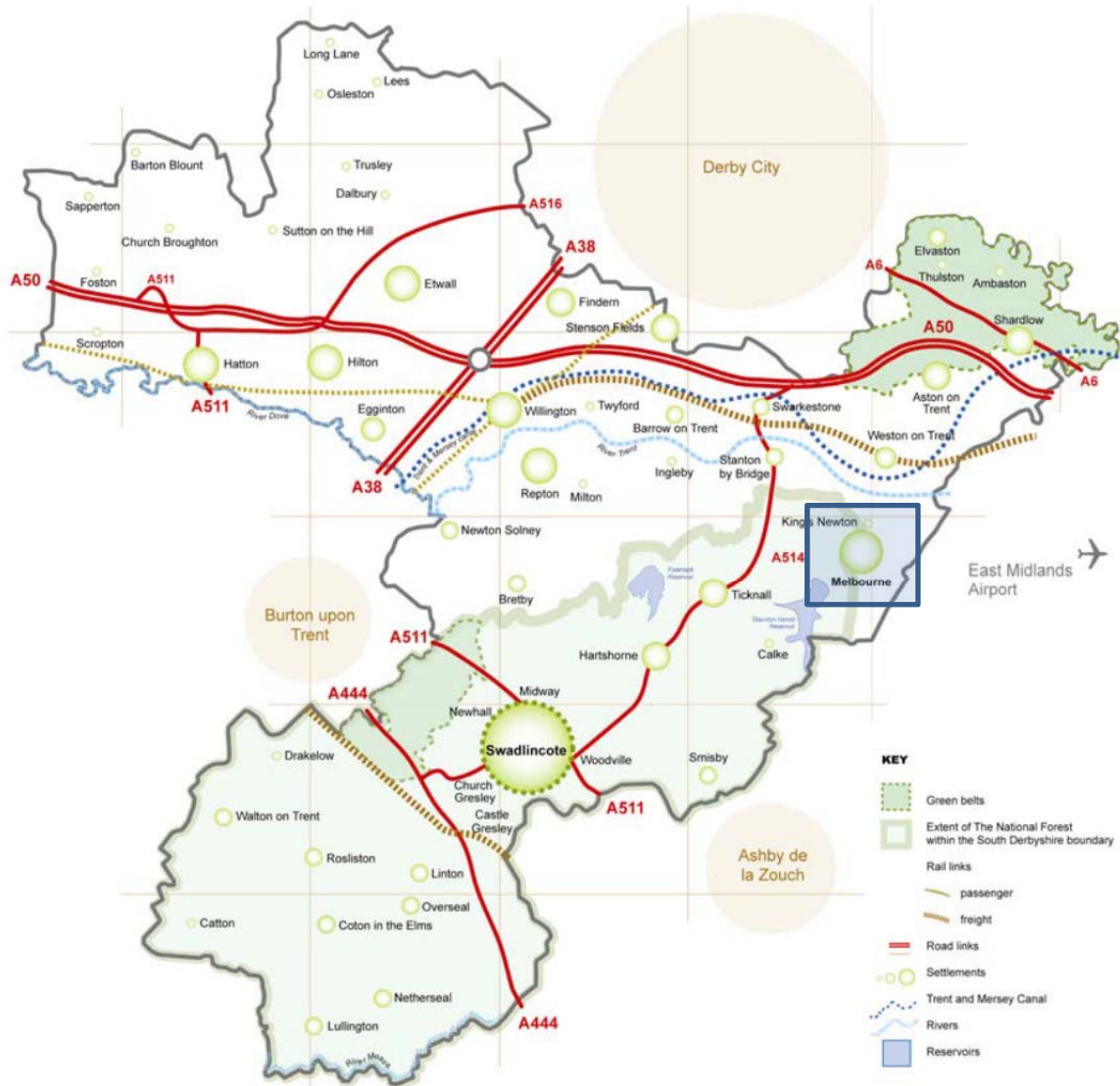
The most basic questions in determining the scope of the research are how many local communities to study and where. It's impossible to study them all, impractical to study many due to time constraints and so in the end I decided on a single community. I felt it was better to focus my efforts, with the limitations that brings, rather than risk spreading my efforts too thinly over a handful of communities with different characteristics, such as urban/rural or affluent/deprived. After some consideration I chose Melbourne, Derbyshire, as the research setting. It's a community I have lived in for nearly 20 years with my wife and kids, so I have a vested interest in it, a degree of knowledge of it and a local social network that could help with gathering information, but I need to guard against bias. The next section describes the research setting.

4.1 Research Setting

Melbourne, is in the north-east of the district council of South Derbyshire, close to the county border with Leicestershire. It is shown in a square below but the research setting needs a boundary.

Figure 4-2 : South Derbyshire - Key Diagram

(South Derbyshire District Council, 2010, p. 8)

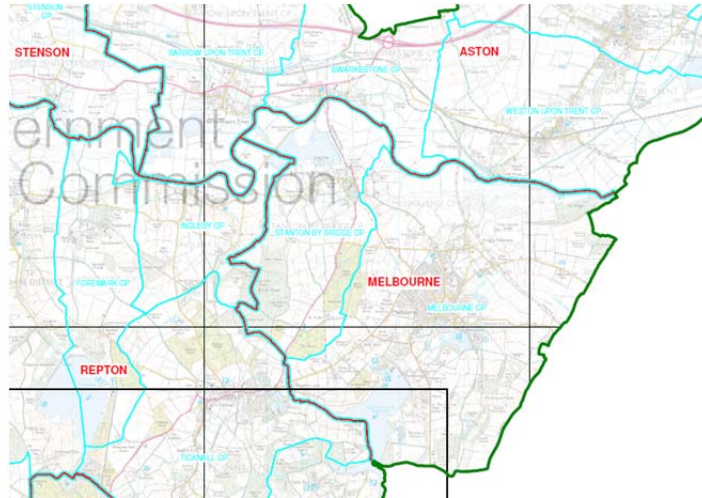


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South Derbyshire District Council. OS Licence No. LA 100019461. 2009

The next smallest administrative layer in South Derbyshire comprises thirteen electoral wards. Melbourne is a self-named ward bounded to the East by three wards in North West Leicestershire and two in South Derbyshire; Aston to the North, across the physical boundary of the River Trent, and the rural Repton along the West and South boundaries. In my opinion the wards define neighbouring local communities as each is clearly different from the other, but is there a smaller community?

Figure 4-3 : Melbourne Electoral Ward

(The Local Government Boundary Commission for England, 2010)



Melbourne ward comprises two parish councils; the smallest administrative units used in England. The larger Melbourne and smaller Stanton by Bridge, which in my opinion is not a separate local community; it lacks critical mass, with no schools, pubs or shops. Checking the ward boundary against the synthesised definition; I recognise it as the smallest bounded area but it has not been possible to test whether that is the majority opinion, it has a porous boundary and is surrounded by other local communities. So Melbourne's boundary can be considered as that of the electoral ward.

Melbourne is an attractive, appealing and historic settlement, with a vibrant and varied social mix and a strong community spirit (Melbourne Parish Council, 2009). The local paper characterizes the area as having an unusually buoyant social and economic life with a strong sense of community, exemplified by five churches and many lively local clubs and societies. There are two large-scale community events; a very local traditional July Carnival, dating back to the 1920's, and an arts festival in September that has been held for the past five years. It adds that the town is primarily a commuter town, with an unusually varied small business community and the area is recognized for having a notably affluent population, validated by superior house values (Melbourne Village Voice, 2012).

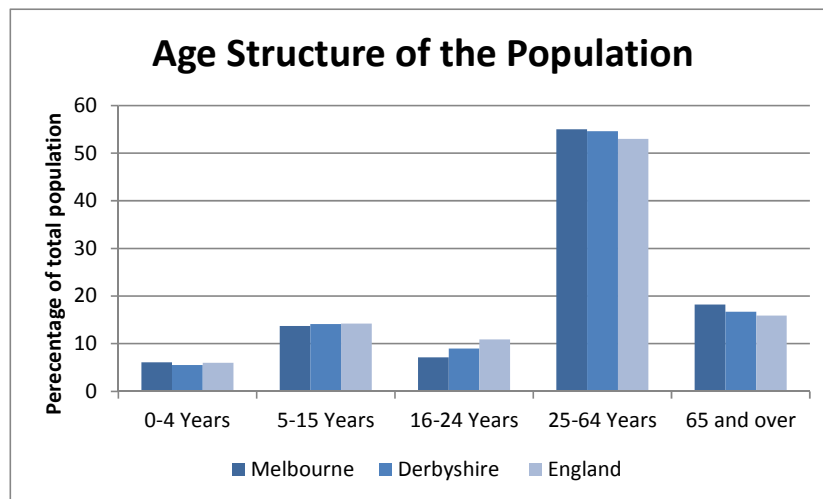
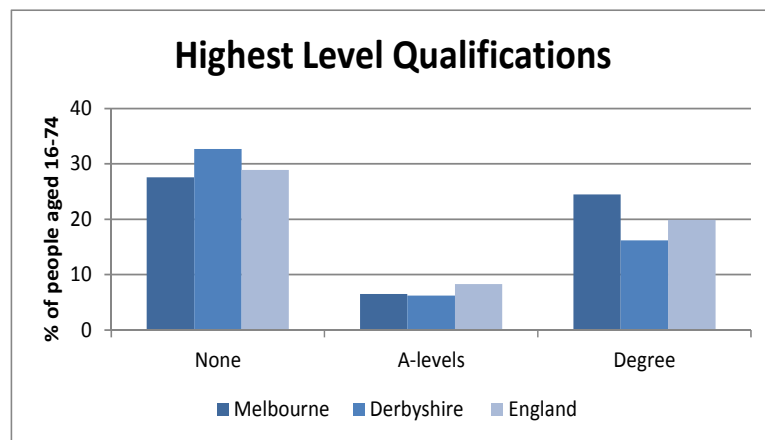
A more factual representation of the ward comes from its summary profile from the 2001 Census with contextual comparatives for Derbyshire and England (Derbyshire County Council, 2012), which give insight into how representative Melbourne might be to those larger areas.

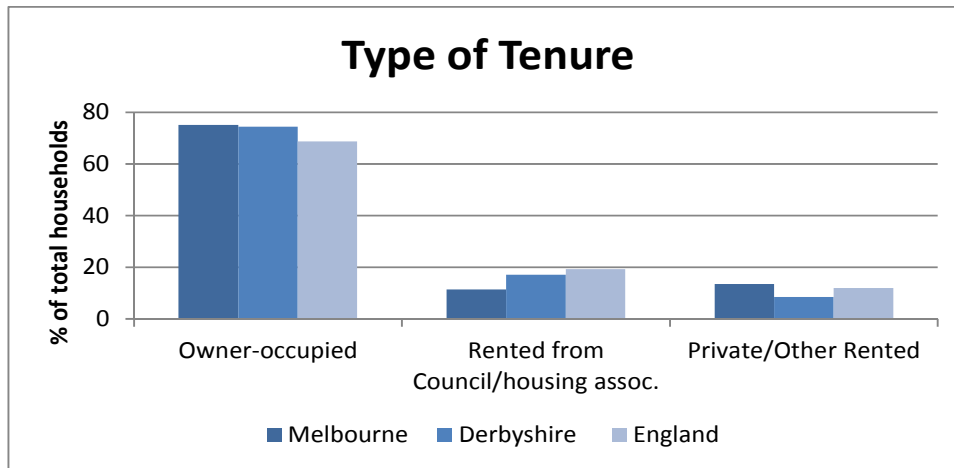
The resident population is 4,599 which, in terms of factors contributing to digital divides, has a slightly higher level of education than the national picture and an age structure that

is fairly representative. Other descriptive demographics are that households exhibit similar properties to England as a whole with average size of 2.27 (England 2.36) and those with dependent children 28.2% (England 29.4%). There are more all-pensioner households in the ward at 27.8% (England 23.7%) and fewer lone parent ones with dependent children at 4.0% (England 6.4%). The ethnicity is overwhelmingly white at 99.2% (England 90.9%) and religious grouping is mainly Christian at 82.4% (England 71.7%).

There is less renting of accommodation from the government with corresponding increased levels of owner occupation and private rental.

Figure 4-4 : Melbourne Demographics





Although every community is unique there is some evidence to suggest that Melbourne is fairly representative of England, but clearly it can't be wholly representative and looking further afield the degree of representation is undoubtedly lower still. Care must be taken when it comes to extending any suggestions arising from the micro primary research to the macro level.

4.2 Specific Research Methods

The key micro requirements are to build up a broad base of understanding of use of the internet, resources available, feelings towards it, future plans and major constraints. Much of the data needed to support this is of a factual nature and some is opinion, but before considering specific methods a decision is needed on what to study.

The local community, in the sense of a single entity, doesn't really exist and consequently has to be studied indirectly via its individuals and organisations. Studying individuals has practical problems of access and sufficient participation, but also many of the facts that could be gathered are already incorporated in the global internet trends discussed earlier, and much of an individual's local community life is played out within local organisations. Organisations have advantages as they comprise and serve many individuals and their existence points to a need for them, but potential disadvantages are that they may not be inclusive or could obscure the views of individuals. Organisations are an efficient unit to study that they should provide sufficient data for the project.

The next step, which proved unexpectedly difficult, was to get a complete list of organisations belonging to the electoral ward. The Parish, District and County Councils were contacted via e-mail, but whilst feedback was supportive I got nowhere. I tried a couple of commercial databases which produced lists of organisations which looked fairly complete from a business perspective but lacked the local community ones. The lists tended to be selected on postcode, postal town, county or radius from a point rather than

a bounded local community and it was too time-consuming to align to the research setting. In the end I turned to other methods:

- Approaching local organisations of organisations
 - Promote Melbourne, an aptly named business association, and Melbourne Festival and Melbourne Carnival committees, who organise the two largest community events.
- Using the internet
 - General search, links from websites and Google Street View
- Using local knowledge and common sense to check for completeness

The final list of 183 organisations at Appendix 2 appears fairly complete and can be summarised by type:

Table 4-1 : Summary of Melbourne Organisations

Community Organisations		Business Organisations	
Clubs & Societies	18	Other	67
Sport	10	Retail	42
Education	8	Pubs, Restaurants, Fast Food	17
Venues & Events	5	Prof Services	8
Religious	5		
Government, Public Services	3		
Total	49		134

The factual data required from the organisations lent itself to a questionnaire approach, with its standardised questions, possibility of a high return rate and relatively straightforward analysis methods (Munn & Drever, 2004, pp. 1-4). The rationale for the questions is covered in detail in the next section along with the questionnaire design. I recognised the limitations that questionnaires tend to describe rather than explain, have the potential to be superficial, and can require a lot of time to draft and pilot.

To explore issues in more detail a small number of short informal interviews were planned as they have the major advantage of adaptability (Bell, 2005, p. 157). I particularly wanted to try to explain any matters arising from the questionnaires and to potentially probe further into the overall community use of the internet. This method was a relatively small part of the research.

There were dangers of the number of responses from the questionnaire being too low, it being biased in some way or that judgemental questions would be answered poorly. I wanted to find an alternative viewpoint of organisations' use of the internet and decided

that a desk-top review of selected websites would be a good method. This would also allow lines of enquiry to develop organically as the project progressed and allow me to consider whether there was any evidence of a presence of the local community as an entity rather than the individual organisations.

Other methods were considered but I felt sufficient information could be gathered from these approaches.

4.2.1 The Questionnaire to Organisations

The design needed to be attractive, brief, easy to understand and reasonably quick to complete (Munn & Drever, 2004, p. 20). The questions themselves, as well as being drafted in appropriate language, clearly have to be selected carefully to provide the information needed, the actual questionnaire is included at Appendix 3 in the form it appeared to the participants. The following is an overview of the questions with explanations and comments where necessary.

The introduction covers the basics: name of organisation, name and role of the person completing it and whether they agree to participate or not. The remaining questions are split into sections about the organisation, its internet use and future plans. The questions are closed unless otherwise stated. In the first section they reflect hunches about variables that might explain the organisation's use of the internet.

Figure 4-5 : Questions about the Organisation

Question Area	Question Type & Description
What does it do?	Open. Organisation name may not reflect what they do.
Type	Private , public, third sector or other
Area of operation	Scale from Melbourne & within 5 miles to national.
Part of larger group	Y/N
Scale of Organisation	Number of employees, volunteers and customers from a range
Hours of Operation	Average weekly hours from a range.
Customer Types	Private, public, third sectors, other or individuals. Each type from a range of percentage
Customers Age Groups	From a range.

The section concludes with an option to clarify any answers or provide any further information, before asking the participant to continue. The questions in the next section cover current internet use:

Figure 4-6 : Questions about Current Use of Internet

Question Area	Question Type and Description
Web 1.0 Building Blocks	Y/N/Don't know. For general email, personal email, website & domain name.
Web 2.0 Building Blocks	Y/N/Don't know. For social networking - Facebook, Twitter, Other and for registered user area & RSS Feed.
Website	Type – Range from basic to full e-commerce. Revenue Stream – Y/N if yes from advertising, sales or both.
Resources	IT Resources – Range from internal to external. Budget – From a range with opt out.
The next group of questions tests sentiment using a 5 point disagree/agree scale	
Feedback Mechanisms	Do they exist?
Internet Access	Customers/Users Employees/Volunteers at work and at home
Presence	Is internet presence appropriate? Is web presence a source of pride?

Again the section concludes with an option to clarify any answers or provide any further information, before inviting participants to complete the last section on future plans, which explores sentiment about important internet trends using a five point scale from not important to extremely important for the following areas:

- Having a vibrant on-line community specifically for your organisation
- Actively participating in web-based social networking e.g. Facebook
- Specifically using crowd-sourcing for some of your organisation's innovation initiatives
- Having a review, rating or voting mechanism on your website

The section concludes with an open question regarding any significant plans to change web presence in the next year, from where there is a final page with a brief thank-you with an opportunity for comments, ideas or questions for me, before asking for contact details for any follow ups. Once "submit" is pressed there's a final message of thanks and confirmation that the response has been recorded.

The biggest constraint involved in the design of the questionnaire was the time to complete it. Given the audience I estimated ten minutes was probably the most I could ask for and to avoid misleading participants it was important that it actually took around ten minutes for the majority of users to avoid abandonment or disgruntled submissions.

Important questions were selected from a larger pool, worded clearly at an appropriate language level and arranged in a helpful manner to maximise the results.

The next step was to decide whether to use a paper or on-line questionnaire. I concluded that most people would be comfortable with an on-line form and that the practical side of distribution, preparation and collecting responses would be better, outweighing the disadvantages of biasing the sample away from those that disliked the internet or were unfamiliar with internet forms.

The questionnaire was drafted in Google Docs and piloted on a small sample of three people; two completed it on their own and I worked through it with another as I wanted to see first-hand the thought process they went through when answering. Aside from some minor changes to language to clarify a couple of confusing questions, it was positively received. One person completed it within the ten minutes but the others took significantly longer as they were critically reviewing the questions. I was confident that ten minutes was not an unrealistic estimate for an averagely IT literate participant.

The Organisations were invited to participate via e-mail with an attached participant information sheet, which also featured in the other methods used in this project. The questionnaire was presented in a web site created using Google's cloud services whose template nature helped make it attractive. The e-mail, participants information sheet and Google Site are included in Appendix 4. Most e-mails were sent out directly but those to the business members of Promote Melbourne were sent on my behalf, hoping to increase response rates. Deadlines were set, chasing e-mails sent out, deadlines extended and social capital applied, until eventually 38 responses were received, yielding 36 completed questionnaires as one response was a duplicate and another formally declined to participate. Completed questionnaires were received for nearly 20% of all organisations identified.

The single duplicate return allowed me to review the answers for consistency, particularly for the closed questions where 70% of answers were the same, and 15% differed due to a less well informed participant answering either "don't know" or factually incorrectly. The remaining variations came equally from minor differences of opinion and picking a slightly different mix in the tricky customer profile section. I recognise that this is not statistically significant but it was encouraging, whilst at the same time a useful reminder that questions can be answered incorrectly. Only included the more accurate response was included in the analysis of results.

4.3 Potential Limitations

The overall approach asks questions aimed at collecting data about an organisation's internet use in a single research setting with a defined boundary. This has the advantage of being tightly focused but there are clearly limitations and potentially serious weaknesses if any element of the approach is wrong. The single research setting is a limitation, but a necessary one given the time available to conduct this project. The boundary has been selected from a range of alternatives with a degree of logic, but only represents my opinion. The actual local community could be larger or smaller than I have selected although it is unlikely that this would make a material difference to the analysis as most of the organisations are centred on Melbourne rather than in the surrounding rural areas.

The decision to talk to organisations rather than individuals excludes any needs that are currently unmet by local organisations, which in turn could introduce bias into the results. It is also recognised that the three methods are an individual's own particular view, which could well change with time or differ to others, even within a given organisation. Another potential problem is that each organisation carries an equal weight in the results but their importance to the community is not equal, for instance consider a local window cleaning business compared to the primary school. This problem of importance could well be exacerbated if certain key "cornerstone" organisations do not respond to the questionnaire.

The questions asked need to get to the data required to start answering the research question. There is always a danger of omission of important questions or bias in the way questions are chosen or asked. Significant thought was put into the questions and hopefully they will be sufficient to capture the major factors in an unbiased manner.

At a practical level for the questionnaire I had intended to do a full sample but due to time pressures only found 137 of the 184 email addresses, however the overall response rate was good at just over a quarter, representing nearly 20% of all organisations identified. A negative of this approach was to potentially introduce a bias into my study as organisations without an e-mail address wouldn't get invited to participate. Also the on-line questionnaire may have deterred the less IT literate organisations or individuals. On balance I felt the issues were no worse than if I'd used a paper version by mail and that given the nature of the research question the on-line approach was more appropriate. This risk was balanced by the desktop review approach.

The next section considers the analysis of the micro level primary research.

5 Analysis of Data and Interpretation of Results

The analysis of the micro level primary research is presented for each method, and the similarities and differences between the results are considered in a summary for the micro level. The section concludes with a case-study relevant to both the micro and macro level.

5.1 The Questionnaire

In the methodology section the organisations were classified as community or business for convenience of presenting information and this is continued for analysing the questionnaire responses. The decision to use a partial sample based on availability of e-mail addresses slightly increased the community organisations from 27% to 30%, which rose to 44% for completed questionnaires as the response rate for community was nearly double that of business. This point is somewhat mute because the mix percentages are simply derived from number of organisations rather than trying to approximate their importance in the local community by applying a weighting of some kind.

The completed questionnaires included responses from each of the organisational sub-types identified, although sample sizes are too small to propose any analysis of the data at this degree of granularity. The responses are summarised as:

Table 5-1 : Questionnaire Responses

Type of Organisation	Number of Organisations			Response Rate	Mix of Organisations		
	All	Invited	Completed		All	Invited	Completed
Community	49	40	16	40%	27%	30%	44%
Business	134	93	20	22%	73%	70%	56%
Total	183	133	36	27%	100%	100%	100%

Community Organisations		Business Organisations	
Clubs & Societies	8 of 18	Other	13 of 67
Sport	2 of 10	Retail	5 of 42
Education	1 of 8	Pubs, Restaurants, Fast Food	1 of 17
Venues & Events	2 of 5	Prof Services	1 of 8
Religious	1 of 5		
Government, Public Services	2 of 3		
Total	16 of 49	Total	20 of 134

The analysis for the first section continues with the distinction between community and business organisations with results presented as a summary table with the supporting graphs in Appendix 5 in the form of 100% stacked bars, to aid comparison of the differences between community and business organisations. The graphs include the actual number of organisations in each bar to highlight the very small numbers in each sub-category to guard against over-stating any conclusions.

Figure 5-1 : Summary of Responses About the Organisations

Question	Community Organisations	Business Organisations
Type	Variety of forms, but the Third sector dominates.	All private firms
Area of Operation	Main areas of operation all within South Derbyshire and most within Melbourne.	Half operate mainly within South Derbyshire.
Part of larger group	About a third belonged to a larger group. E.g. Scouts	Only one.
Hours of Operation	40% operate for less than 4 hours per week.	Most operate for at least a working week.
Number of Employees	Most don't employ anyone. None have over 30.	Most have 10 or less. None have over 30.
Number of Volunteers	Most rely on volunteers to some extent. Only 4 have over 30.	Only one.
Number of Customers	A high number of participants incorrectly answered not applicable to this question undermining any further analysis.	
Customer Type	Mainly serve individuals	Equally split between individuals and other organisations.
Customer Age Profile	The largest group with 40% served all ages, with a further 14% focused on children. The remaining mainly served adults with 20% the 45's and overs, 13% the under 45's and 13% over 25's.	Main customers are working aged adults, only one had a majority of customers over 64, and none had a majority of children.

For this sample the main points are that the organisations within a local community are generally small or very small in terms of number of employees, volunteers or customers and they mainly operate locally, with 72% in Melbourne or South Derbyshire. These

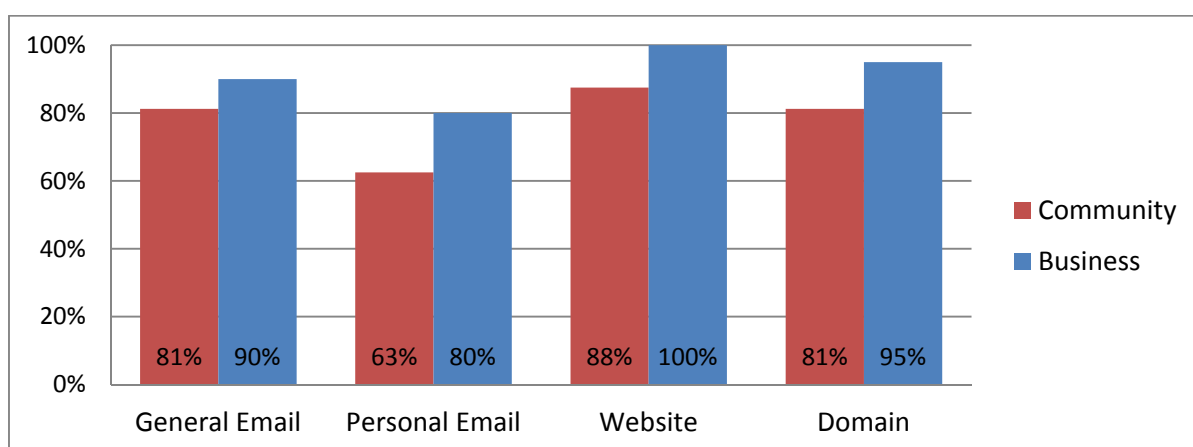
points may be self-evident given the scale of the local community itself but are important considerations when it comes to realistic suggestions later in the project.

On reflection the questions on customer type and age could have been improved for both participant and researcher. Several respondents had problems, commenting that “we don’t have customers” or “the questions do not really apply”, and the answers were difficult to analyse for what were relatively simple distinctions. A better question would have been “Does your organisation mainly serve individuals or firms or a balanced mix of both?” The answer to this would then trigger a fork in the questionnaire to specific age questions for each type, which again would have been worded differently; “do you serve all age groups or mainly children, younger adults, older adults, all adults or retirees”. A larger pilot or running more dummy answers through data analysis would have identified this minor problem earlier.

It is clear that there are differences between the community and business organisations, but the remaining analysis will explore whether they explain current internet use or whether there are other factors from above that are more important. I considered using statistical analysis in IBM SPSS but given the small sample size, limited variables and a potentially steep learning curve I decided to manually analyse the data. The method for this and the detailed analysis is included in Appendix 6.

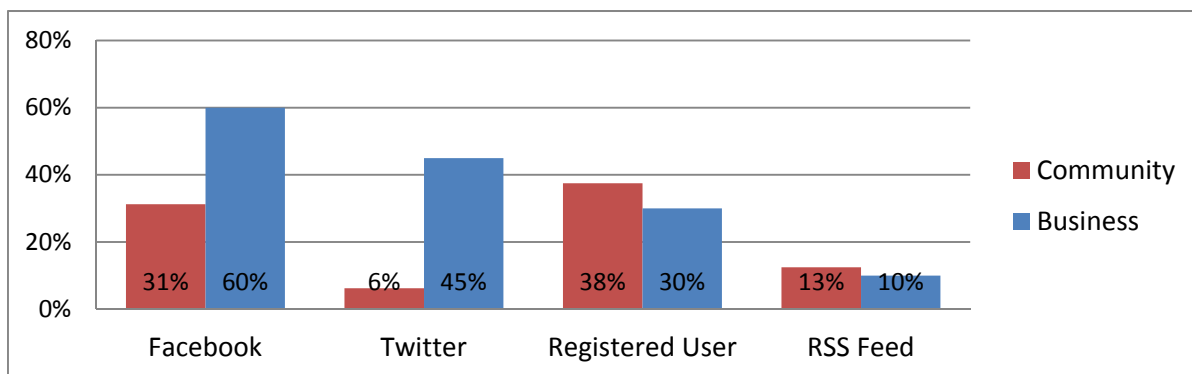
There is overwhelming adoption of the basics of Web 1.0, where all but one community organisation has e-mail at a general and/or personal level, and only two community organisations are not on the web. Business organisations are slightly ahead of the community on every question. Over 75% of the “no”s come from organisations mainly operating locally and none from the larger organisations.

Figure 5-2 : Web 1.0 Building Blocks



By comparison, the adoption rates for some of the basics of Web 2.0 are low. The only one above 50% is business use of Facebook which has nearly twice as many adopters than the community. Only one community organisation is on Twitter. RSS feeds have poor adoption rates for all organisations but, perhaps surprisingly, 38% of community websites have a registered user area, ahead of the business organisations. Again the “no”s come disproportionately from organisations that mainly operating locally.

Figure 5-3 : Web 2.0 Building Blocks



The next group of questions are presented as a summary table with the supporting graphs grouped in Appendix 5.

Figure 5-4 : Summary of Responses Regarding Current Internet Use

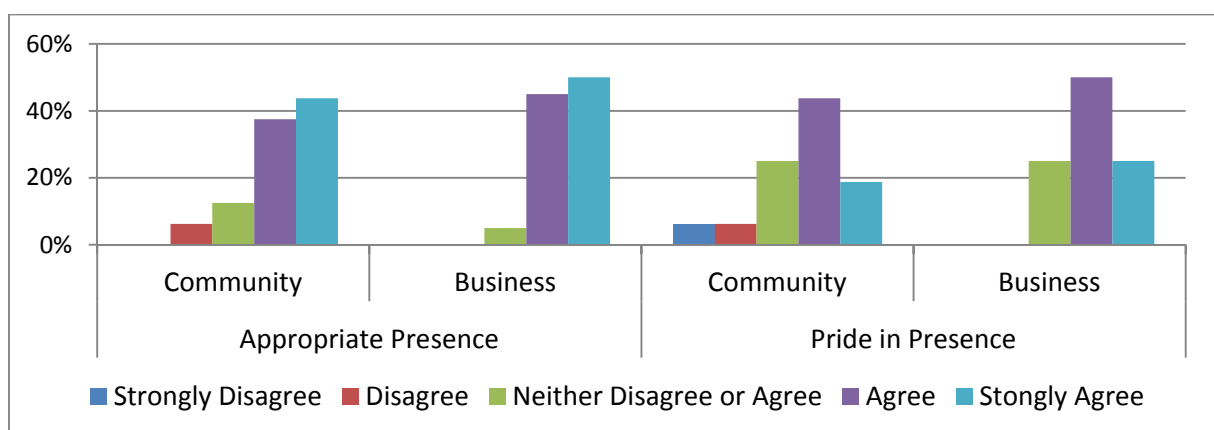
Question	Community Organisations	Business Organisations
Website Type	Mostly introductions with substantial content that changes on a monthly basis. 2 without a website.	Mostly introductions, half with static content. 25% are eCommerce and all have a website of some type.
Website Revenue	None generate any revenue.	All are private firms and only one has advertising revenue.
IT Resources	88% is completely internal and only 6% outsourced.	60% of IT is outsourced, mainly or fully, with only 25% internal.
Budget	All under £500. One opted out.	20% opted out but of those that answered 70% spent less than £500. One spent over £5,000. The larger spenders mainly operated outside the local area.
Customer Internet Access	56% agreed but 25% disagreed for most of their customers.	80% agreed but 15% disagreed for most of their customers.

Question	Community Organisations	Business Organisations
Ee/Volunteer Work Access	20% strongly disagreed and only 40% agreed.	80% Agreed, 50% strongly.
Ee/Volunteer Home Access	80% agreed, 30% strongly	85% agreed, 70% strongly.
On-line Feedback Mechanism	The question used an agree/disagree scale and would have been better phrased as yes/no and included in the web2.0 building blocks area. The results were mixed suggestion most organisations don't have on-line feedback mechanisms.	

A review of the organisations disagreeing with the customer internet access point showed that their views were highly unlikely to be correct given the nature of their organisations, which perhaps shows that the participants don't recognise the adoption of the internet in their customers. Of the business organisations that disagreed they all had websites, e-mail and Facebook presence.

Both business and community organisations are very sure that their web presences are appropriate, with most expressing the strongest opinion possible. There was only a single voice that disagreed which came from a Melbourne organisation as did all those that were ambivalent. The strength of feeling was only slightly less for the web presence as a source of pride with only two community organisations disagreeing.

Figure 5-5 : Organisation's Views of Web Presence

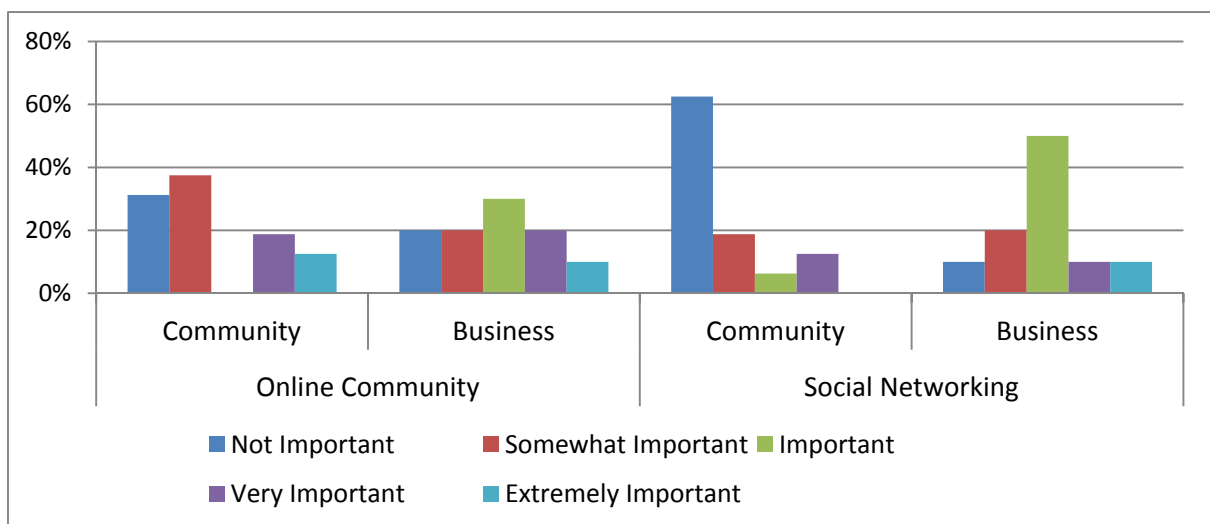


The main points are that organisations recognise that the vast majority of their customers and employees have internet access and virtually all have adopted many web1.0 features although web2.0 basics have some way to go. The level of business adoption of social networking is well in advance of the communities, which may be

because with employees and longer operational hours they are better suited to the real time nature of these media. Also business organisations outsource their IT more than local communities. The area of operation of an organisation was also an important factor in several cases. In general budgets are very low, but in spite of this, and perhaps most importantly, most organisations consider themselves appropriately represented on the internet and are generally proud of their efforts.

The final section explored views on future plans. The importance of a vibrant on-line community specifically for their organisation had a varied response when analysed by any variable, but about a third of organisations think it's very or extremely important. This compares with actively participating in social networking where 63% of community organisations think it unimportant and only 19% important or greater, compared to 70% of businesses. There was a strong correlation between this pair of questions, with participants voting strongly either way.

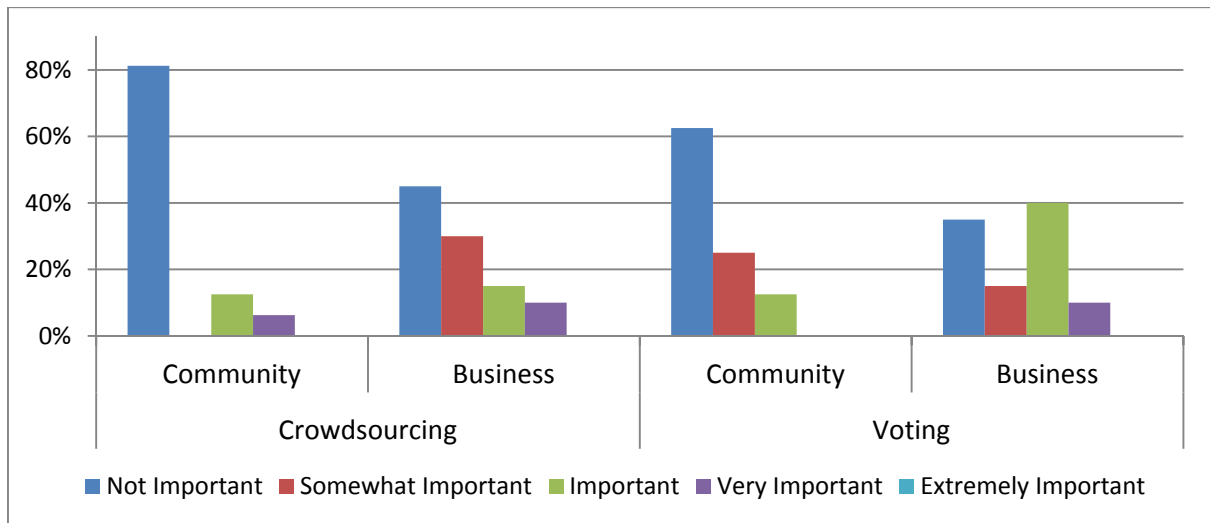
Figure 5-6 : Importance of On-line Community and Social Networking



The crowdsourcing question asked specifically about innovation initiatives. The most popular answer was "not important" with 81% for community, which was a similar level to businesses ranking it "somewhat" and "not" important. On reflection this was an unsuccessful question and it may have been better to ask whether an organisation understands the term and if yes then reveal a question about what they might use it for within the next year.

The final question asked about the importance of having a review, rating or voting mechanism on a website. About two thirds of community organisations and a third of business thought this unimportant with a small proportion of both rating it as "very" or "extremely" important.

Figure 5-7 : Importance of Crowdsourcing for Innovation and Feedback Mechanisms



About a quarter of all organisations answered “not important” to three or more of the four questions in this section and the answers to the open questions for future plans showed that most organisations were not planning any major changes, such as thinking about mobile. This supports their overall stance that their current presence is appropriate.

5.2 Interviews

Interviews were conducted informally with four community organisations over the course of the project. I was very aware that the time given up by the participants was valuable and another demand on them arising out of their completely voluntary involvement with their organisations. I tried to incorporate the interviews with questionnaire piloting to get the best use of their time and mine. Interviews lasted about an hour.

The interviews confirmed that improvements to organisation’s on-line presences would be nice to have rather than essential and were a long way down the priorities of the respective organisations. It was fairly clear that the day to day pressures of running a predominantly voluntary, small organisation in the real world left very little time for the on-line world. The level of knowledge about current internet trends was quite good from their personal and work use of the internet.

Even if a pressing need was identified then the next issue was resource constraints in terms of time, money and ability and it was worth noting with regard to time and money particularly that there are invariably more pressing needs in the real world for those resources.

At the outset I planned to interview more organisations but concluded that there was little to be gained from further interviews as the information from the questionnaire plus the small sample of interviews seemed sufficient to tackle practical suggestions.

5.3 Desk-top Review

As stated earlier this method was selected because there was a perceived danger that the number of responses to the questionnaire would be too low, biased in some way or that judgemental questions would be answered poorly. It was to provide an alternative viewpoint of organisations' use of the internet and allow lines of enquiry to develop organically as the project progressed. It also provided a method within which to consider whether there was any evidence of a presence of the local community as an entity rather than the individual organisations.

Review of Individual Websites

A random sample of 10% (19) of the organisations was selected for review which yielded two organisations that had responded to the questionnaire and only three categorised as community, removing the possibility of analysis by category. The review focused on the main points covered in the questionnaire: Does the organisation have a website, is it web 1.0 or 2.0, what type of site is it, do they use social networking and is the site appropriate? It also looked to see if there were any links to other local community websites or any user generated content.

The data from the review is at Appendix 7 and shows 63% (12) have a website and that they can all be considered as web1.0 rather than web2.0. The sites are all basic informational, although one has a link through to an eCommerce engine for bookings, and there is no user generated content. Only three of the sites have links to other local community sites, which prompted a more detailed look at this type of networking later in this section, and a different three have social networking in the form of Facebook presence.

The overall impression is that all the sites are fairly minimal efforts at representing the organisations on-line, but probably appropriate for the type and size of organisation. The review showed that most organisations have very little current content. Combining this with the conclusions from the questionnaire & interview made me wonder how local organisations were adapting to the real-time, always on, nature of Facebook.

Facebook Review

Of the twenty organisations with Facebook presence five could not be located and one was a personal page rather than an organisation page. As of 16th September a further two organisations had no details on their Facebook page and one was inactive for over a year. That left 11 organisations of which 3 had posted within the last day, 3 in the last week, 4 in the last month, with the other one nearly 4 months ago. So overall only 10, or 50%, of the organisations with presence are active, the remainder appear to have dipped their toes in the water but done little else.

To assess the level of activity the Facebook Likes information was studied for each organisation with regard to the most popular age groups and number of people talking about them. These ten organisations averaged 116 likes, ranging from 29-304, with about 50% between 50 and 100. The most popular age groups were roughly split 50:50 between 25-34 and 35-44. 60% of the sites had more than 5 people talking about them with Melbourne Festival having an impressive 98, although this result was taken when this major local event was running.

The network of website links

All the 183 Melbourne organisations were checked for web links to other local organisations. This process was somewhat laborious but gave a useful feel for the on-line environment of the whole research setting. The review identified 23 (13%) additional organisations, bringing the total to 206, of which only 24 had links *from* their sites whereas 84 benefitted from links *to* them from other Melbourne organisations. The main linking sites, apart from Melbourne UK, are community organisations with a degree of reliance on local networking to achieve their objectives. The main linking sites are:

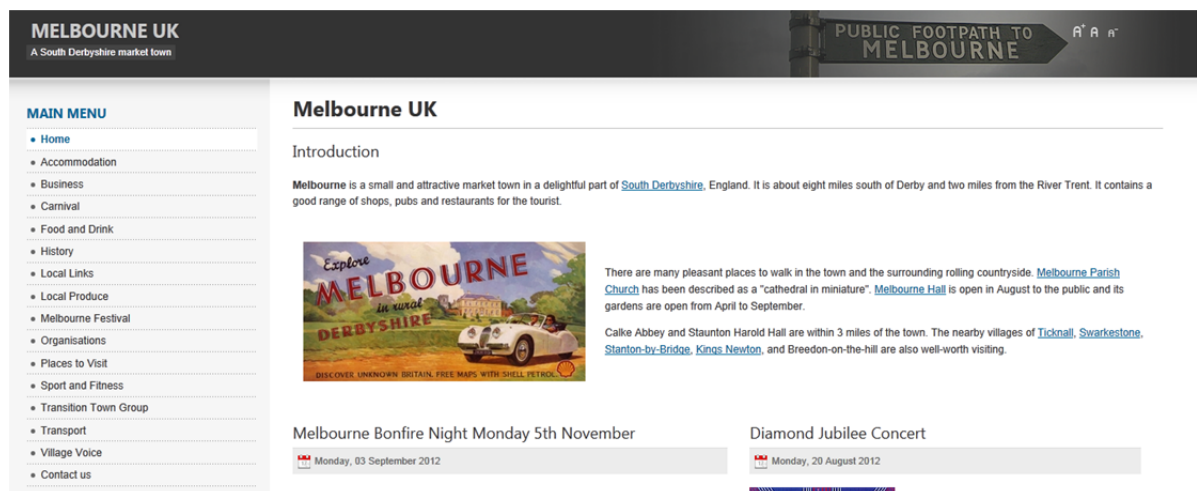
Table 5-2 : Organisations with Five or More Links, To or From, Their Website

Rank	Organisation	Links	
		From	To
1	Melbourne UK	60	15
2	Melbourne Festival	20	9
3	Melbourne Community Care	15	0
4	Melbourne Area Transitions	9	2
5	Melbourne Assembly Rooms	8	0
6=	Friends of Melbourne Parish Church	6	3
6=	Melbourne Parish Church	6	6
6=	Melbourne Village Voice	6	6

Rank	Organisation	Links	
		From	To
9	Melbourne Fellowship of Churches	5	7
10	Melbourne Historical Research Group	4	6
11	Melbourne Parish Council	1	6
	The Rest (13 for From and 73 for To)	25	105
	Total Links	165	165

Melbourne UK had by far the most links from it and is the nearest the research setting has to a community web-site, but it's not clear who owns the site other than by using the internet's "whois" service, which reveals a local individual. The site is mainly a basic Web1.0 site with local information and details of local organisations that change infrequently. It has a few updates a month on local events which include photos and a couple of YouTube videos. There is no way to belong to the site nor contribute to it, and the data on local organisations and events is clearly incomplete. However it is at least something representing the research setting on-line and without it there would be nothing.

Figure 5-8 : Melbourne UK Home Page (Melbourne UK, 2012)



5.4 Summary at Micro Level

Before summarising it is necessary to compare the results from the desktop review of individual sites and those obtained via the questionnaire as there was a concern for bias in some way or that judgemental questions would be answered poorly.

Figure 5-9 : Comparison of Results from Questionnaire and Desktop Review

Question	Questionnaire Responses	Desktop Review
Website	86% have a website.	About two thirds have a website.
Website Type	Nearly half of organisations claim to be introductory but with substantial content that changes monthly. A further third are fairly static.	All are basic introductions to the organisations.
Website Revenue	About 20% generate revenue.	About 5% generate revenue.
Facebook	Nearly half have Facebook	About 15% have Facebook

With regard to sample bias, the questionnaire responses gave "better" answers than the desktop review for each question. With small sample sizes it is difficult to statistically analyse differences for an individual question, but for all four questions a simple probability can be considered. If there were no bias then it would 50/50 as to who would have the better answer on each question. So the overall chance of these results is the same as for tossing a coin and obtaining 4 heads in a row, or 1 in 16. This would suggest that there is some sample bias in the responses to the questionnaire which probably gives an overly optimistic view of the situation. The Facebook analysis, which showed that only 50% of organisations with a presence were active, supports this optimistic bias.

The website type question has a large discrepancy between the questionnaire and the desk-top review but it requires an opinion on what substantial content means and perhaps my interpretation is overly harsh. Considering this with the general view that presences are appropriate, means I am not too concerned.

The primary research at the micro level shows a picture of small organisations with limited resources available for their on-line presence but who believe that they have appropriate presences for their organisations which many see as a source of pride. There is little to suggest that there will be any major changes over the coming years. There is widespread adoption of web 1.0 attributes and some of the social networking aspects of

web 2.0, but there is concern that many organisations may not be making much use of them, if they use them at all. For instance there is very little user generated content.

The research setting has one site that could possibly be classified as a community website but it is only a basic Web 1.0 effort by one active individual. I do not consider it to be an appropriate representation of the setting. I did find a more high quality effort from another small South Derbyshire community and approached the author, who was too busy to participate but did offer the following interesting comment:

“I can tell you, however that the involvement of the community is precious little. There is a deep seated fear of the internet amongst many people - not just older people. Some even actively discourage others from getting involved.”

It seems to me that involvement is the key to producing and sustaining a site for the local community; without it can any representative site have legitimacy?

At the outset of the project I wrote that the research question was triggered by twin personal frustrations, the first of which was an overriding impression that most local on-line efforts were poor, including a basic inability to find out what's on locally, through to a lack of an effective communication method within the local community. There was a stated aim to test this and my conclusion is that I stand by this point of view, although I might rephrase it to emphasise the lack of an effective local community web presence, as compared to reasonably adequate organisation presences.

The second frustration was that I do nothing about my relative lack of involvement in the local community. The excuses being that it's more difficult than it perhaps should be to interact locally, that it competes badly for my leisure time and that it feels out of step and built on fixed time commitments. Of course these could be just excuses and I should simply pick an organisation to commit to and join in, however, let's consider participation on an ad-hoc basis rather than a long-term commitment to an organisation. For instance, volunteering to do something for a community project at some point for half an hour a week but not at a fixed time. There is no mechanism to match of tasks to potential labour.

This leads to the concluding section where practical suggestions are developed, but first a case-study.

5.5 Pitchero – A Case Study

As part of the primary research for the project I'd been looking outside the setting for a web 2.0 style platform used by local community organisations to deliver rich user experiences. I had expected to come across one while reviewing the local organisations but didn't until I had a bit of good fortune. After the questionnaire and desk-top review were completed I spotted a football report in the local paper's sport section for a team I didn't recognise. A quick look around the elements of Melbourne Dynamo FC's website (Melbourne Dynamo FC, 2012) should be sufficient to justify it as a rich user experience: there are logins, important information, a communication platform and lots of current user-generated content. The platform for this is provided for free by Pitchero, effectively paid for by the advertising revenue generated from access to the users' "eyeballs".

Figure 5-10 : Melbourne Dynamo FC Webpage

The screenshot displays the Melbourne Dynamo FC website homepage. At the top, there is a header with the club's crest and name. Below this is a green navigation menu with links for HOME, NEWS, EVENTS, SENIOR, FORUM, SHOP, CONTACTS & LOCATION, VIDEOS & PHOTOS, and CLUB INFO. A blue bar below the navigation contains a 'Member Sign Up' button and a 'Create your free online profile...' link. To the right of this bar are login fields for 'Email' and 'Password', and a 'Login' button. Below the navigation bar is a red banner for '123 CREDIT CARD' and 'Santander' with the slogan 'Driven to do better.' The main content area is divided into several sections. On the left is a 'SENIOR' menu with a dropdown arrow, containing links to 'Senior Homepage', 'Melbourne Dynamo', 'Team News', 'Players & Coaches', 'Team Selections', 'Fixtures & Results', 'Match Reports', 'League Table', 'Statistics', and 'Premier Division'. The main content area features a 'MELBOURNE DYNAMO - HOMEPAGE' section with a 'Latest Result' for a match on Saturday 8th September 2012, where Allenton United defeated Melbourne Dynamo 5-1. The result is marked as 'LOST'. Below the result are buttons for 'VIEW REPORT', 'STATISTICS', 'VIDEOS', and 'PHOTOS'. To the right of the latest result is the 'Next Fixture' for Punjab United on Saturday 22nd September at 15:00, with a 'MATCH INFO' button. Below these sections is a 'CONTACTS' section listing three team administrators: Vinny Hallifield, Jak Ward, and Mark Swallow. To the right of the contacts is an 'ACTIVITY FEED' section with a 'Match Report' for Allenton 5-1 Melbourne Dynamo, dated 7 days ago. The match report text reads: 'Allenton United 5 - 1 Melbourne Dynamo Championship out of our hands now admits manager Salisbury... and it's only September! View Report >'. On the far right, there is a 'TEAM SPONSORS' section with logos for melbourne print, HARPUR'S, G.J GRAY & SON, and star.

The material for the rest of the case study is drawn from the Pitchero site (Pitchero, 2012), early press reports, blogs and an interview with Mark Fletcher, the founding CEO (Fletcher, 2012).

Pitchero was formed in June 2007 by two school friends, Mark Fletcher and Jon Milson, as they graduated university. An early press interview with Mark, a keen rugby player, describes where the idea came from:

Sat in my room at Loughborough University I was using Facebook, Youtube and Skysports.com every day. But my club website back home was never up-to-date. It seemed obvious to build a platform which took all the great elements of social networking and create a bespoke platform specifically for semi professional and amateur sports clubs. (Startups, n.d.)

Exploring this with Paul, the original frustrations were clear as was a strong belief that things could be done better and cheaper, probably free, by adopting the communications ideas in Facebook and Youtube combined with the detailed statistics he was used to with Skysports. The first three years were challenging, described as a period of firefighting, as the platform for the club websites developed and strong early demand meant that the organisation had to evolve rapidly. About a year after launch the advertising market collapsed at the start of the financial crisis, with banking and auto advertising drying up and rates plummeting, but after 18 months the business was cash positive with the advertising revenue covering a low cost base. One interesting reason given for joining was the ability to have multiple webmasters which removed reliance for website updates from a single volunteer with their abilities, personalities and level of commitment.

In 2010 a leagues template launched and across 2011 traffic and user registrations doubled as they reached 8,000 websites. They acquired a provider to 900 non-league football clubs making them the UK's number one website for amateur and semi-professional sport (Pitchero, 2011) and claim to have 56% of UK & Irish amateur rugby clubs. The current monthly stats are 2.2 million unique visits, generating 25 million page impressions from 380,000 registered users of which 78% are male (Pitchero, 2012).

Table 5-3 : Pitchero Age Profile and Roles

Age Profile	
19 & under	22%
20-29	20%
30-39	24%
40-49	22%
50-59	8%
60+	4%

Primary Role	
Player	40%
Parent	28%
Coach/Manager/Official	12%
Supporter	30%

There are now website templates for counties reinforcing a key aspect of their offering; each website is linked together by sport, location and competition creating a network of websites. There are growing global locations from Sydney to Nashville. Future development plans involve extending the offering to bespoke environments for National Governing Bodies, writing new code to support clubs with subscriptions, financial record keeping and online shopping and the challenge of going mobile.

Evidently this is a business built on the principles of web 2.0 and it is enjoying tremendous growth. From my perspective the key challenge is sustainability, and in particular, maintaining the legitimacy of the platform by keeping pace with technology and user requirements whilst trying to avoid any backlash from their dominant market position. Potential problems are illustrated in a blog on an improved video feature where users are questioning why they can't just use YouTube and add that (Pitchero Blog, 2012):

"Pitchero seems to think it must do everything, whereas the reality is that people want building blocks that can be used to construct a coherent service."

"Pitchero are wasting their time and effort on that feature when they could be improving others."

The company response appears sensible and is very open. It states that they:

"host and moderate all videos for two reasons: To block excessive swearing, fighting and drinking, and to ensure all videos, where possible, remain sports focused. It is essential Pitchero remains a 'family friendly' environment for all our users which includes a huge number of younger players and parents. If we allowed YouTube videos to appear we would lose this control and risk upsetting users and advertising partners. We could place the responsibility to police videos on clubs but this is not a risk we are willing to take at the moment."

Whilst it's very difficult to strike the right balance, to me this approach could do with refining as there's a sense of "benign dictatorship" rather than an "open democracy" which could be a very risky impression to give with a revenue stream which relies on being a dominant exchange (Hax & Wilde II, 2001, p. 41) built on user-generated content. Also, perhaps if they could find a way to satisfy their requirements whilst using the YouTube platform their offering might develop faster.

This case study informs the suggestions set out in the conclusion at both the micro and macro level.

6 Discussion and Conclusion

This section combines the interpretation of the research results with salient points from the literature reviews to meet the main aim of the research; namely to produce practical suggestions for how local communities can develop on-line strategies that complement global internet trends at both the micro level of *an* individual community and the macro level of *all* local communities. Practical in this sense implies a need, a realistic method of delivery and a chance of sustainability and these attributes will be assessed while looking for limitations in the suggestions. The final part considers suggestions for future research.

6.1 Practical Suggestions for the Micro Level

The definition used for local community styles it as the smallest bounded area recognised as a community of place with a critical mass. The contextual setting is still a "little box" but within the mesh of networked individualism that makes up our network society. It is one of many different types of community that exist at many geographic scales, which could be thought of as a multitude of little boxes. Perhaps, because it is difficult to draw a networked individual belonging to many different types of community at different geographic levels, Wellman's evolutionary diagram, Figure 2-3 : Representation of Types of Social Networks, is misleading as the boxes have disappeared by the time networked individualism develops. Whereas the reality is that they still exist but in new forms. The boundaries are now highly porous and our social ties are, as Benkler puts it, limited in duration or intensity. Cohen's view of boundaries at the micro end of the geographic scale, that they are more important and relate to increasingly intimate areas of lives or more substantial areas of identities, has been eroded to some extent by the rise of network individualism and social networking platforms. However he still describes characteristics that apply to the local community, but which can also be found in some other communities that a person may belong to.

The primary research shows that the local community presence, in the sense of a single entity, is poorly represented and in my opinion not appropriately. In terms of local organisations most are small with appropriate web presences supported by limited resources and there are no major plans for change. In the case study we saw a platform incorporating many elements of web2.0 in its philosophy and functionality, which produced the stand-out site in the research setting.

It is tempting to suggest that the umbrella and larger organisations should get together to launch a new web site for the Melbourne area, which individuals and organisations could register to belong to, but it's not the right approach. Pitchero shows that local organisations can have better presence, should they need it, by being users of platforms, and exactly the same point holds for a local community. This is reinforced by Pattern 62 for the On-line Community Service Engine. Also there are far more pressing problems facing local communities and organisations in the real world that demand their limited resources. The steps towards a local community platform are considered in the suggestions at the macro level.

My suggestion for local community itself is that it does nothing more until a suitable platform emerges which a large percentage of individuals and organisations could belong to. A limitation could arise where there is a pressing need for a better local community platform, for instance as suggested in Pattern 61 for Community Networks to support and sustain social networks or to respond to outside threats. Even here though, I would suggest adopting a less than ideal existing platform rather than wasting time and resources trying to build a new one.

For the local community organisations I suggest a straightforward review process for the appropriateness of internet presence on at least a yearly basis. Such a review would consider the following points:

- Compare your presence to:
 - Three other local organisations you admire
 - Five similar organisations: Try three from your country, one from the USA and one from a developing nation.
- Ask some of your customers, users, employees or volunteers what they think

If after this, you no longer feel the presence is appropriate and you've found presences better than yours, try to contact the organisation and ask them how theirs is done. They are unlikely to be in a competitive situation with you, and you may be surprised how open and helpful people can be. At the very least look for evidence of any platform based sites that you might be able to use.

How these suggestions are communicated to the local community is a fundamental issue to solve in any practical suggestions at the macro level.

6.2 Practical Suggestions for the Macro Level

The scale of a local community platform at the global level is enormous, but the nature of the internet, network society and the economy all mean that this scale can, and has to be, considered. Estimates of the global numbers of local communities, individuals and organisations that may be served by a local community platform, can be made by assuming that the research setting's approximate 5,000 population and 200 organisations is representative of all local communities, and then applying adoption and internet penetration rates. The adoption rates for individuals are considered at 10% and 25%, and for organisations at the higher levels of 50% and 75%, as it is hard to see why they would not join such a platform if it were available. The data is presented by increasing geographic area:

Table 6-1 : Estimated Number of Local Communities and Individual Users

Geographic Area	Pop. '000	Local Communities	Internet Penetration	Users '000	
				10% Adopt	25% Adopt
Melbourne	5	1	75%	0.4	0.9
Derbyshire	1,011	202	75%	76	190
East Midlands	4,481	896	75%	336	840
UK	62,262	12,452	75%	4,670	11,674
Europe 27	501,000	100,200	75%	37,575	93,937
World	6,991,000	1,398,200	33%	230,703	576,757

Table 6-2 : Estimated Number of Local Organisations

Geographic Area	Organisations	
	50% Adopt	75% Adopt
Melbourne	100	150
Derbyshire	20,200	30,300
East Midlands	89,600	134,400
UK	1,245,200	1,867,800
Europe 27	10,020,000	15,030,000
World	139,820,000	209,730,000

The case study has a sustainable business model based on a platform with 380,000 registered users and 8,000 websites and the above data suggests that these user numbers could be surpassed just in the East Midlands. Pitchero works because it has successfully competed based on being strategically positioned as a dominant exchange (Hax & Wilde II, 2001), with its users' eyeballs generating the advertising revenue. It is easy to see why the model works for a network of tightly defined sports clubs and their associated leagues, counties, national governing bodies, players, parents, spectators and

coaches. Their product is tightly bonded with customers and complementors, but could the same approach work for a local community? The first steps are to identify the product, customers and complementors.

Defining Local Communities

My first suggestion, which identifies customers and begins to develop product features, is for every local community to be defined along the lines of the synthesised definition. This raises potentially contentious questions, starting with the boundary itself: How do you decide where it is, who decides it, how do you change it and what is the size of a community (area or people)? The methods for doing this would be key product features and should be developed using Web2.0 principles, specifically relying on crowdsourcing for the intelligence to suggest boundaries, the names for the local community and the votes to approve them. A starting point could be to use a government administrative area, with its name and boundary, covering at least 3,000 people to create a global mesh for the crowd to refine in an environment like Google Earth. Algorithms would need to be developed that allowed disputes between adjacent local communities to be determined in a transparent and democratic way with a possible appeal to a governing body.

This triggers a whole range of supplementary questions about the crowd; who can vote or belong to a community, how do they get involved, why would they want to and what is to be done about the inevitable digital divides? Any process would need to be open and democratic allowing any interested individual or organisation to participate if they wish. Votes could rank equally with the expectation that individuals should outnumber organisations. There would need to be mechanisms developed to tackle abuse but with the trend for authentic identity then perhaps it could be self-policing with users logging in with their identity of choice, such as Facebook, Twitter or Google+. Participation cannot be taken for granted and the importance of this definitional step would have to be marketed in an appropriate manner. Many local communities have already passed the tipping point with regard to internet access but digital divides remain and methods for inclusivity would need to be developed, which could be a mix of community access points in accessible places, device donation and community training programmes.

The very act of defining all local communities and creating a mechanism whereby they represent meaningful areas could well be sufficient to spark innovation in the community informatics space which has the potential to solve my first personal frustration driving the research question; a basic inability to find out what's on locally through to a lack of an effective communication method within the local community. If individuals and organisations belonged to local communities and tagged their events with local community location, then there's a global method for search providers to deliver what's

on locally. Other complementors, such as social networking platforms, could allow their users to register as belonging to a local community and provide a seamless local communication service across all social networking platforms. For instance, consider sending an emergency message to all Melbourne individuals and organisations via their chosen communication platform.

From a purely financing perspective this suggestion could be sustainable from sponsors or government if they felt the outcomes worthwhile, but it's difficult to see how a platform which only defined local community areas could keep the attention of the crowd sufficiently to generate advertising revenue. More importantly, the crowds are essential to keep the definitions meaningful, casting doubt about the sustainability of this suggestion. I think of it like Pitchero if it just had the football results; a useful thing but not really good enough. The product offering needs to be deeper to attract most individuals and organisations on at least a weekly basis and to create a network of sites. This could be thought of as bringing some of the best aspects of the internet to the local community setting.

Towards a Platform for Local Communities

The second suggestion builds on the definitional step by considering the possible next steps towards a platform for local communities, designed to bring the best of the internet to a local setting. It imagines the best possible product tightly bonded to local communities. It has global ambition and sets out to cooperate with global internet oligopolies allowing the platform to be built on their technologies by a legitimate organisation. This approach contrasts to Pitchero who have social networking and video hosting functionality within the firm boundary and may face legitimacy problems as a dominant commercial organisation in their market.

I do not underestimate the difficulties involved in this suggestion. It is very difficult for global firms to meaningfully engage with a local community as defined, and it's equally difficult for the local community, with its organisations and individuals, to deal with the global firms, but perhaps by setting out the intent for a global platform, and by considering how to have a legitimate organisation to run it, then perhaps some of the difficulties can be resolved allowing a start to be made on the building process.

Turning to platform features, consider the following table with an idealised list of activities with potential global complementors for each, and imagine they are presented in an integrated manner to the local community as a rich user-experience that's fun and easy to use on any device.

Figure 6-1 : Platform Features and Global Complementors

Local Community Activity	Global Internet Oligopolies
Exchange	
New Goods	Amazon
Used Goods	eBay, Craigslist
Services	
Volunteering	Sony's Plus U initiative (Sony, 2012)
Content	
Social Media	Facebook, Twitter
Blogs	Blogger
Video, Photos	YouTube, Flickr, Apple
News	Reddit, Huffington Post
Other Services	
Search	Google, Bing, Ask
Login	Google, Microsoft, Apple, Facebook, Twitter
Payment Mechanism	Paypal
Advertising	Google
Cloud Computing	Amazon, Google, Apple,
Website Templates for Local Communities and Organisations.	Google
Mobile	Google, Apple, Microsoft

A platform able to facilitate these activities could certainly tackle my second personal frustration; that it's more difficult than it should be to interact locally, that it competes badly for my leisure time and that it feels out of step and built on fixed time commitments. However it also has to be remembered that local communities are about far more than on-line activities and perhaps I should still simply pick an organisation to commit to and join in the real world.

Aside from a corporate social responsibility angle, could there be any potential benefits to internet oligopolies in getting involved? Take for example a local auction market powered by eBay where unsold items move into the full eBay marketplace or even ripple out to adjacent local communities, marketed jointly in the platform for local exchange and on eBay as a local and green offering which minimises delivery distances. Another example could see Amazon powering local organisations' eCommerce giving them more access to products in the long-tail and very specific local ratings. The benefits should not be overstated as many may be available through other routes but I don't think the internet giants are competing with local communities, or the platform as proposed, so the negatives to involvement appear limited making for a potential net positive.

With regard to sustainability of the platform, the nature of activities considered would give it a good chance, but it would still be competing with many other routes to the same, or similar, information or services. The overall legitimacy of the platform would need to be unquestionable for the global firms to get behind it and the constituents of local communities to want to belong to it. It would be need to avoid competing with global firms at all times and it would probably need to be organised as a not for profit venture, perhaps even based on social production. Any profits could be distributed to local community organisations, again using democratic and open principals utilising crowdsourcing. Whatever form it to takes, the platform needs regular and significant involvement of individuals to succeed and in turn that could provide the advertising revenue for financial sustainability.

The practical suggestions conclude with a possible way of testing the need for the platform via a short duration project to develop the product and delivery method across a 6 month period. The aim would be to have an operational platform for 100 local communities, based on the following approach:

1. A global effort to name and define boundaries for local communities. This forces an organisation into existence, the first operational website delivering the required functionality and the marketing to name a website, say "ourjigsaw.com" and attract participants.
2. The first 100 local communities to sign up with 200 individuals and 20 organisations are invited to participate in the design process for the launch of the platform.
3. The development tasks are prioritised democratically and evolve with feedback mechanisms connecting the participants with the developers.
4. The short project needs funding either by crowdsourcing or sponsorship by leading global firms. Maybe social production is tried for some of the software code.

There are many possible objections or stumbling blocks to deliver such an audacious goal but if the need were proven and a delivery method was working with the support of the global oligopolies, then it would have a real chance to evolve into a global platform. This gets to the very heart of Pattern 60 for Digital Emancipation, provides the best answer I can give to the research question and attempts to put "the power of the Web to work – its technologies, its business models and perhaps most importantly, its philosophies of openness, collective intelligence and transparency" (O'Reilly & Battelle, 2009).

6.3 Suggestions for Future Research

There are three particular areas of further research that come to mind:

- The willingness of individuals and organisations to join a local community platform and the features they would most value to get them visiting it on a regular basis.
- A wider search for platforms that might exist in different geographies or for different types of community.
- Appropriate ownership structures for community informatics platforms.

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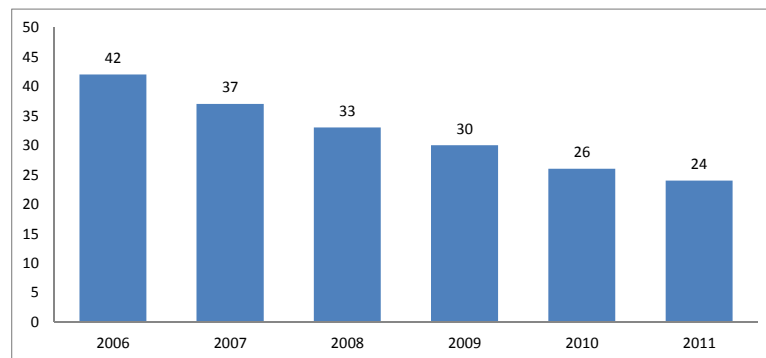
Appendix 1

Supporting Data for Global Internet Trends

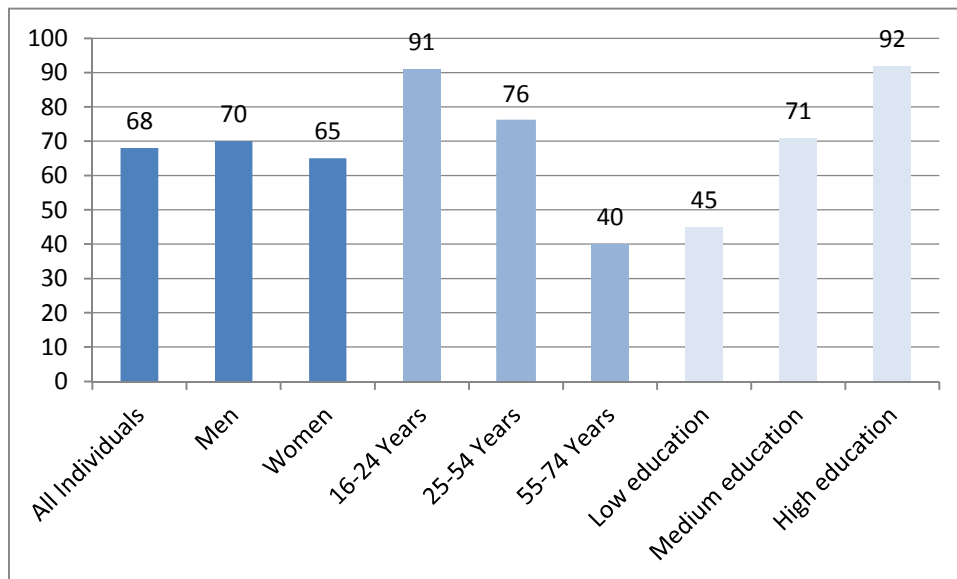
1A: Internet Users as at 2010 ranked by User Additions in the last 3 years. (Meeker, 2011)

Rank	Country	2010 Internet Users (Millions)	Population Penetration (%)	07-10 Internet User Additions (Millions)
1	China	513	34	246
2	India	88	8	42
3	Nigeria	45	28	35
4	Russia	60	42	25
5	Iran	37	49	24
6	USA	244	79	22
7	Brazil	79	41	21
8	Philippines	23	25	18
9	Mexico	35	31	13
10	Pakistan	29	17	12
	Top 10	1,153	29	458
	World	2,054	30	693

1B: Individuals who have never used the internet, EU27, 2006-2011 (% of individuals) (Eurostat, 2011)



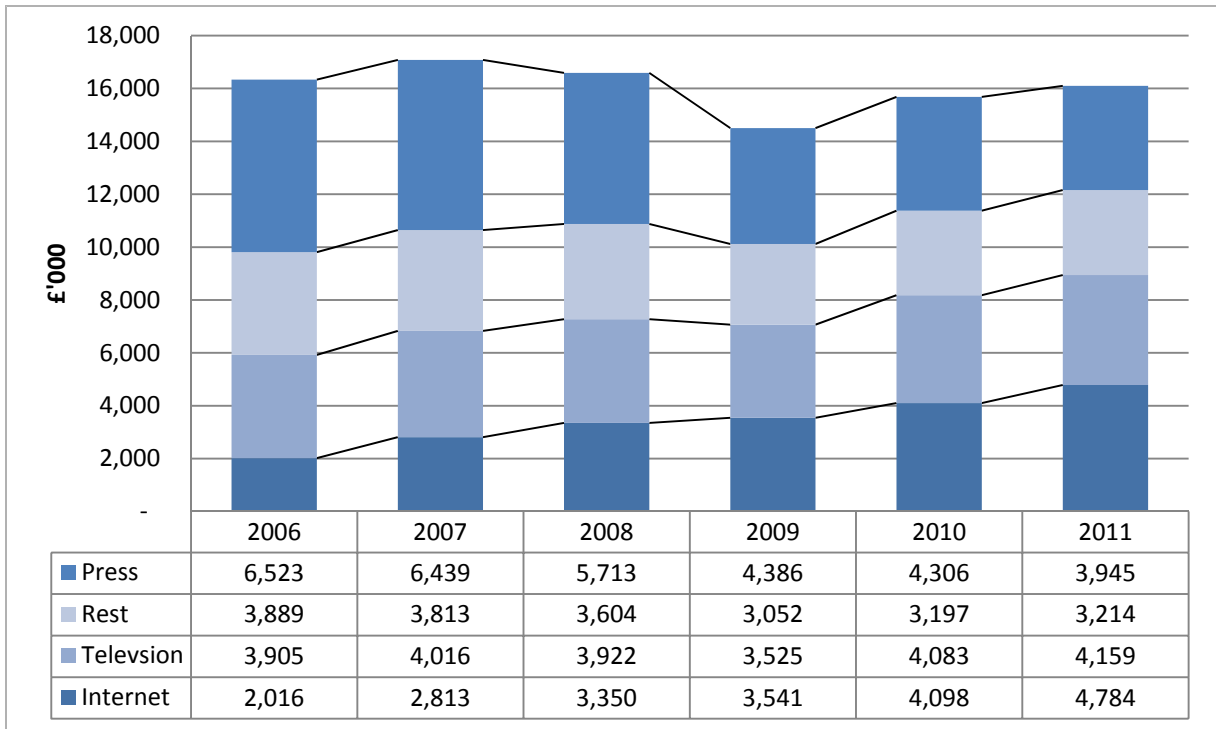
1C: Individuals who use the internet on average at least once per week, by gender, age group and level of formal education, EU27, 2011 (% of individuals)
(Eurostat, 2011)



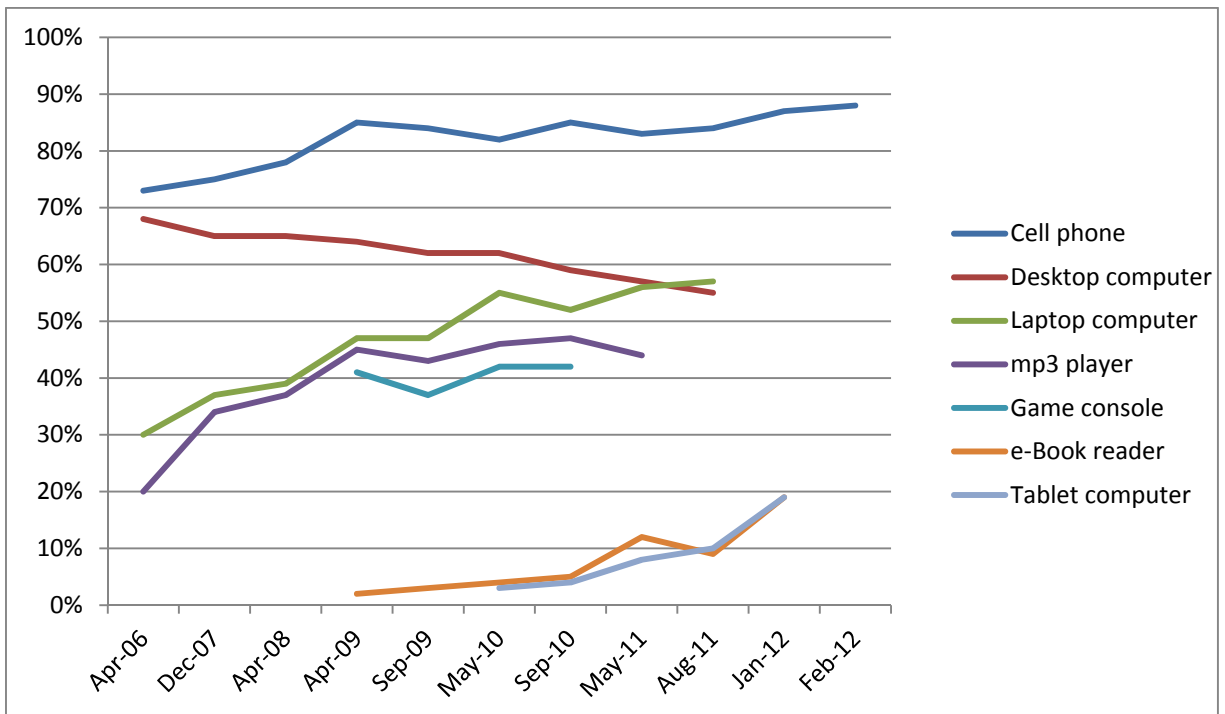
1D: Top 10 Global Web Parent Companies, Home and Work February 2012 (Nielsen, 2012)

Rank	Parent	Unique Audience (Million)	Active Reach %	Time Per Person (HH:MM)
1	Google	403.6	90.9	03:38
2	Microsoft	338.8	76.3	02:05
3	Facebook	314.9	70.9	06:29
4	Yahoo!	238.0	53.6	02:35
5	Wikimedia Foundation	168.6	38.0	00:14
6	Amazon	143.8	32.4	00:28
7	eBay	143.2	32.3	02:33
8	InterActiveCorp	130.2	29.3	00:10
9	Apple Computer	129.0	29.0	01:55
10	youtube-nocookie.com	110.6	24.9	00:12

1E: UK Advertising Expenditure (OFCOM, 2012)



1F:Gadget Ownership Over Time (2006-12) (Pew Research Center's Internet & American Life Project, 2012)



Appendix 2

List of Melbourne Organisations

Types of Organisaton	Count	Name of Organisation
Community		
Clubs & Societies	1	A Choir'd Taste
	2	Bowls Club
	3	Melbourne Area Transition
	4	Melbourne Cadets
	5	Melbourne Civic Society
	6	Melbourne Footpaths Group
	7	Melbourne Historic Research Group
	8	Melbourne Male Voice Choir
	9	Melbourne Music
	10	Melbourne Operatic Society
	11	Melbourne Photographic Society
	12	Melbourne RBL Marksmen Club
	13	Melbourne Rotary Club
	14	Melbourne Royal British Legion
	15	Melbourne Town Band
	16	Scout Hut
	17	St Michaels Players
	18	The Friends of Melbourne Parish Church
Education	19	Infant School
	20	Junior School
	21	Kangaroos Jump Ahead Learning
	22	Melbourne Adult Community Education Centre
	23	Puddleducks
	24	Scallywags
	25	Tiddlers
	26	Tiddleywinks
Government, Public Services	27	Melbourne Fire Station
	28	Melbourne Medical Centre
	29	Parish Council
Religious	30	Baptist Church
	31	Catholic Church
	32	Melbourne Methodist Church
	33	Parish Church
	34	URC
Sport	35	1st Melbourne Scout Group
	36	Icke Fitness
	37	Kings Newton Bowls Club
	38	Maximum Response Karate
	39	Melbourne LTC
	40	Melbourne Rugby Football Club
	41	Melbourne Town CC
	42	Melbourne United FC
	43	South Derbyshire Karate Academy
	44	Staunton Harold Sailing Club
Venues & Events	45	Melbourne Assembly Rooms
	46	Melbourne Festival
	47	Melbourne Fete and Carnival

Types of Organisaton	Count	Name of Organisation
	48	Melbourne Senior Citizens Centre
	49	Thomas Cook Hall
Business		
Other	50	1St Call Environmental Services Ltd.
	51	A N Gale
	52	Abc Assist Ltd.
	53	Acres (Willington) Ltd.
	54	Advance Lighting Ltd.
	55	Advance Packing Ltd.
	56	Art Of Brilliance Ltd.
	57	Autos Great Britain Ltd.
	58	Azorie Blue
	59	Bampton Communications Limited
	60	Barry Thomas
	61	Bitter Sweet Chocolates
	62	Box Construction Ltd.
	63	Chaffeurline Connections Ltd
	64	CompLog Tyres
	65	Craft Centre
	66	Craig Barker
	67	Creative Little People
	68	Cryptic Art
	69	Deejay Machining Services Ltd.
	70	Des Gosling Mobility
	71	Diana Sims
	72	Dowells
	73	Estates Manager
	74	Fleet Services Online Ltd
	75	George W. Heath & Sons (Builders) Ltd.
	76	Gill Weston
	77	Grenyer Valuations
	78	Guy Symmonds Training Centre
	79	Handmade2measure
	80	Harry The Kidz Bus
	81	Helen Burrell Fine Jewellery
	82	Home Boutique
	83	J P Springthorpe & Co
	84	J.S. Body & Paint
	85	Jean Eustace
	86	Jeani Accessories Ltd.
	87	Jill Tivey
	88	La Vie en Rose
	89	Lily and Lime
	90	Lomas Opticians
	91	Luxury Linen Hire Ltd.
	92	Martin Underwood
	93	Melbourne Arts and Crafts Market
	94	Melbourne Dental Laboratory

Types of Organisaton	Count	Name of Organisation
	95	Melbourne Dental Practice
	96	Melbourne Sunrooms
	97	Melbourne UK . Com
	98	Pamela Hollingworth
	99	Picture of Health
	100	Quill International Group Ltd.
	101	S.P Photographics
	102	Sharon Hurd Bridal & tailoring
	103	Sheila Hicklin
	104	Shenpar
	105	So Let's
	106	Star Micronics
	107	Sue Masters
	108	Sunfish Services Ltd.
	109	Tara Roadair Ltd.
	110	The Coach House Hotel
	111	The Melbourne Cake Company
	112	The One Off
	113	Waterloo House Vetinary Surgery
	114	White Hollows Studio
	115	William Rowley
	116	Zest Business Coaching Llp
Prof Services	117	Andersons
	118	Ashley Adams
	119	Austin Property
	120	Crane and Walton
	121	H Pipes & Co
	122	Melbourne Lets
	123	Newton Fallowell
	124	Reeds Rains
Pubs,Restaurants,Fast Food	125	Alma
	126	Harpurs of Melbourne
	127	High Hill Chinese Takeaway
	128	Melbourne Arms, Cuisine India Restaurant, B& B
	129	Melbourne Fish & Chip Shop
	130	Melbourne Hall Tea Rooms
	131	Melbourne Kitchen
	132	Mileburne Restaurant
	133	The Bay Tree
	134	The Bluebell Inn
	135	The Lamb Inn
	136	The Paddock Hotel
	137	Welcome Café
	138	White Swan
	139	Ye Olde Pack Horse
	140	Yim Siam Thai
	141	Zeerah
Retail	142	Alive n Klippin
	143	Bare Necessities

Types of Organisaton	Count	Name of Organisation
	144	Birds
	145	Blatch's
	146	Budgens
	147	Chantry Farm Shop
	148	Coop Travel
	149	Cottage Antiques
	150	Crème Interior Design
	151	Doves Garages Ltd
	152	Elizabeth
	153	Flaxen Hair
	154	Hairdresser
	155	Haynes Furnishings
	156	Heaths Farm Shop & Nursery
	157	Isobel the Florist
	158	Jacks
	159	Jill Clark Shoes
	160	Kidz Closet
	161	Kit & Caboodle
	162	L. Ward
	163	Ladies Hairdresser
	164	Melbourne Carpets
	165	Melbourne Cobbler
	166	Melbourne Garage
	167	Melbourne News
	168	Melbourne Print Shop
	169	Melbourne Tackle & Gun
	170	Mimi Interiors
	171	NatWest
	172	PG Clips
	173	Post Office
	174	Rebecca Henry
	175	Rekoh
	176	Rococo
	177	Spa Shop
	178	Sweets & Treats
	179	Texaco Filling Station
	180	The Blossom Tree
	181	The Coop Pharmacy
	182	The Fair Trading Place Melbourne
	183	Wayne Spiers
Additional Organisations Found		
Community		
	184	The Athenaeum
	185	Melbourne Community Care
	186	Melbourne Wanderers FC
	187	Melbourne Fellowship of Churches
Business		
	188	Asbestos Matters
	189	Blackwell Produce
	190	Breezeva

Types of Organisaton	Count	Name of Organisation
	191	ef-webs
	192	F Jackson and Sons
	193	Fergiland
	194	Hardinge Arms
	195	Melbourne Cake Company
	196	Melbourne Garden Machinery
	197	Melbourne Hall
	198	Melbourne Pizza Company
	199	Melbourne Property Services
	200	Melbourne Village Voice
	201	National Forest Spring Water
	202	Origin Design
	203	S P Photographics
	204	Springwood Fisheries
	205	Tupman Photography
	206	World to Writers

Appendix 3

The Questionnaire

Melbourne Organisations & The Internet

Your organisation is being invited to complete a short questionnaire designed to help me gather information for a postgraduate research project. I am a Melbourne resident and a part-time student within the Business School at the University of Nottingham working towards an executive MBA.

The question I'm exploring for my project is "How can local communities develop on-line strategies that complement global internet trends?" A crucial part of this is to gain an understanding of the diverse range of organisations that make up a local community, how they currently use the internet and what are their near-term plans.

The questionnaire has been designed to try to explore these points in a straightforward manner with an aim that it should take no longer than 10 minutes to complete. I am hoping to collect data from as many organisations in the Melbourne area as possible to produce a representative sample and to give substance to my work.

Further information can be found in the Participants Information Sheet.

If there are any questions at all please don't hesitate to get in touch. I appreciate that there are many demands on your time but I'm hoping you can help.

Thanks

Glenn Robinson

*Required

Your Organisation *

Please enter the name of your organisation

Your Name *

Name of Person Completing the Questionnaire

Your Role in the Organisation *

Having read the attached Participant Information Sheet will you participate in this questionnaire? *

- I agree to participate in this questionnaire
- I do not wish to participate in this questionnaire - Please hit continue and then submit to let me know.

Continue »

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Melbourne Organisations & The Internet

*Required

Section 1: About Your Organisation

This section aims to capture basic details about your organisation. This will hopefully enable me to analyse the responses to the internet questions that follow later on.

There are a diverse range of organisations that exist in the local community and I've tried to write the questions in a form that is applicable to all. However I'm sure that I won't always have succeeded, so please bear with me if the language doesn't quite match your particular organisation, in which case just go with your first instinct. There is an opportunity at the end of this section to clarify any answers given or provide additional information you believe may be useful.

*What does your Organisation do? **

Please provide a brief narrative description of your organisation.

*What is your Organisation Type? **

- Private Sector - E.g Company, Sole-Trader, Partnership etc.
- Public Sector - E.g Education, Health, Government etc.
- Third Sector - E.g Voluntary, Charitable, Not for Profit etc.
- Other - Eg. Hybrid of the above

*Which of the following best describes the area of operation of your Organisation? **

Please select the best match. Area of Operation is trying to get at where most of your customers/users come from.

- Melbourne and within 5 miles
- South Derbyshire and within 10 Miles
- East Midlands
- National - UK
- International

*Is your Organisation part of a larger group of Organisations where most internet related decisions are made away from your Local Organisation? **

E.g a local branch of a regional or national organisation - say Birds (the bakers) or a Scout troop.

- No
- Yes - Please attempt the rest of the questionnaire from the local perspective.

*What is the scale of your Organisation? **

Please answer each one. You can't continue to the next Section unless there's an answer against each sub-question.

	Not applicable	1 - 10	11 - 30	31 - 100	Over 100
Number of Paid Employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of Volunteer Workers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estimated Customers per week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*What are your Organisations average weekly hours of operation? **

- 0 - 4 Hours E.g One evening a week
- 5 - 20 Hours E.g 5 half days monday to friday
- 21 - 50 Hours E.g 40 Hours for a 9 to 5 monday to friday
- 51 - 70 Hours E.g 56 Hours for a 9 to 5 whole week
- Over 70 Hours

*What types of customers/users does your organisation serve? **

The percentages are trying to capture the revenue/effort for each type. Please answer for each type.

	Under 5%	5 - 25%	25 - 50%	Over 50%	Not Applicable
Private Sector - E.g Company...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public Sector - E.g Education...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third Sector - E.g Voluntary...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individuals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*What age groups of customers/users does your organisation serve? **

The percentages are trying to capture the revenue/effort associated with each group. Please answer for each group.

	Under 5%	5 - 25%	25 - 50%	Over 50%	Not Applicable
Under 15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15 to 24	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25 to 44	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45 to 64	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
65+	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

That's the first of the three sections done. If you want to clarify any answers given or provide any further information about your organisation please do so here, or please continue to Section 2.



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Melbourne Organisations & The Internet

*Required

Section 2: How does your Organisation Currently Use the Internet

This section aims to capture details of your organisation's external use of the internet and its many technologies.

I've tried to write the questions in a straightforward way but I'm sure some will be more technical than others, so I've included a "don't know" option.

Again, there is an opportunity at the end of this section to clarify any answers given or provide additional information you believe may be useful.

*Which of the building blocks for an internet presence does your Organisation have? **

Please answer each question.

	Yes	No	Don't Know
A general e-mail address e.g info@organisation.co.uk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal e-mail addresses for most members of the organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A domain name e.g. www.organisation.co.uk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facebook presence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Twitter presence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Social Networking Presence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is there a registered user area of your website for customers/users?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A RSS Feed for people to subscribe to?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*If your Organisation has a website, which of these statements best describes it? **

- It's a basic introduction to our organisation - Majority of the content is not changed regularly
- It's an introduction but with substantial content that changes at least monthly
- It's a full e-commerce site - Items can be bought on it
- Other:

If your Organisation has a website does it directly produce a revenue stream?

- No
- Yes - Advertising Revenue
- Yes - On-line Sales
- Yes - Multiple Revenue Streams

*Which statement best describes the IT resources in your Organisation? **

IT Resources cover; Website design and Hosting, Server hosting, User Support,

- All IT resources needed are within our Organisation.
- Strong internal IT resources supplemented by external skills as required.
- Some internal IT resources but mainly outsourced
- No internal IT resources, completely outsourced

*Please provide your view on the following statements: **

Please answer each statement.

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
Most of our customers/users have internet access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We have on-line feedback mechanisms for users of our products/services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Most of our

employees/volunteers have internet access at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most of our employees/volunteers have internet access at home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our presence on the internet is appropriate for our organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our web presence is a source of pride to our organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*What would you estimate your Organisations' annual web activities budget is? **

- Under £500
- £500 - £1,500
- £1,500 - £5,000
- Over £5,000
- Rather not say or don't know

That's the end of Section 2. If you want to clarify any answers given or provide any further information on your organisations internet use then please do so here, otherwise please continue to the last section.

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Melbourne Organisations & The Internet

Future Plans

This section aims to capture your Organisation's attitudes to future internet trends.

How important over the next few years are the following for your Organisation?

Please answer each one.

	Not Important	Somewhat Important	Important	Very Important	Extremely Important
Having a vibrant on-line community specifically for your Organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Actively participating in web-based Social Networking e.g Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specifically using crowd-sourcing for some of your Organisation's innovation initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a review, rating or voting mechanism on your website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you have any significant plans to change your Organisations web presence in the next year I'd be grateful for you were able to share them?

The purpose of this question is to try to see which on-line trends are causing Organisations to act. E.g The explosive growth of mobile internet on smartphones.

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Appendix 4

Administering the Questionnaire

Email to Participants

Hi

I'm a Melbourneite (if that's what we call ourselves) currently doing a project to complete an MBA at the University of Nottingham. I've got a questionnaire relating to organisations and their use of the internet that I'm trying to get completed by as many local organisations as possible, across all sectors. The detailed purpose of the questionnaire is set out in the attached Participant Information sheet.

I would be really grateful if somebody at your organisation could complete the on-line questionnaire, which should take around 10 minutes, and can be found at:

<https://sites.google.com/site/grmbamangproject/>

The questions are best answered quickly rather than over-thinking to make sure it doesn't take too long.

I hope to graduate in the summer and really need to get the responses back by next Friday the 9th March. I appreciate that you've many pressures on your time but could really do with some help. If there are any questions please get in touch either by mail or the numbers below.

Participant Information Sheet

Introduction

Your organisation is being invited to complete a short questionnaire designed to help me gather information for a postgraduate research project. I am a Melbourne resident and a part-time student within the Business School at the University of Nottingham working towards an executive MBA.

The question I'm exploring for my project is "How can local communities develop on-line strategies that complement global internet trends?" A crucial part of this is to gain an understanding of the diverse range of organisations that make up a local community, how they currently use the internet and what are their near-term plans.

The attached questionnaire has been designed to try to explore these points in a straightforward manner with an aim that it should take no longer than 10 minutes to complete. I am hoping to collect data from as many organisations in the Melbourne area as possible to produce a representative sample and to give substance to my work.

If there you have any questions at all please don't hesitate to get in touch. I appreciate that there are many demands on your time but I'm hoping you can help.

Thanks for reading

Glenn Robinson

My e-mail, mobile and home address were provided and contact e-mail for my supervisor:

Supervisor: Christopher Barnatt
Associate Professor of Computing & Future Studies



Further Information

How do I participate?	Complete the questionnaire on-line at: https://sites.google.com/site/grmbamangproject/ There is a consent question as part of the questionnaire. Alternatively e-mail me if you would prefer a paper copy.
Do you have to take part?	No – Taking part in this questionnaire is entirely voluntary and you can withdraw at any time. If you don't participate there will be no negative consequences.
What are the possible benefits of taking part?	There are no individual benefits to you or your organisation, but we hope that an increase in awareness and knowledge in this area will help organisations and local communities in the future.
What are the possible risks of taking part?	Apart from the time taken to complete the questionnaire it's difficult to imagine any risks.
What if there is a problem?	If you have any questions or concerns, you can raise these at any time with me or my supervisor. If you feel unable to do so, or wish to make a formal complaint about your treatment in any way, you can do this through the Universities' complaints procedures. Further details are available on the University websites.
Will my taking part in the study be kept confidential?	All information which is collected about you during the course of the study will be anonymised and kept strictly confidential. Only the research team will have access to this information.
What will happen to the results of the questionnaire?	This will be presented as part of a Management Project for a university master's degree. Your individual participation will not be personally identifiable in any way in the document.
Who has reviewed the study?	The Nottingham University Business School Research Ethics Committee, whose contact details are: Business School Research Ethics Coordinator Adam.Golberg@nottingham.ac.uk

Thank you for taking the time to read this.

Google Sites

Landing Page

Melbourne Organisations and the Internet

- Home
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Home

Your organisation is being invited to complete a short questionnaire designed to help me gather information for a postgraduate research project. I am a Melbourne resident and a part-time student within the Business School at the University of Nottingham working towards an executive MBA.

The question I'm exploring for my project is "How can local communities develop on-line strategies that complement global internet trends?" A crucial part of this is to gain an understanding of the diverse range of organisations that make up a local community, how they currently use the internet and what are their near-term plans.

The attached questionnaire has been designed to try to explore these points in a straightforward manner with an aim that it should take no longer than 10 minutes to complete. I am hoping to collect data from as many organisations in the Melbourne area as possible to produce a representative sample and to give substance to my work.

If there you have any questions at all please don't hesitate to get in touch. I appreciate that there are many demands on your time but I'm hoping you can help.

Thanks for reading

Questionnaire Page

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Questionnaire

Glenn Robinson - MBA Project Questionnaire

Your Name *

Name of Person Completing the Questionnaire

Your Role in the Organisation *

Having read the attached Participant Information Sheet will you participate in this questionnaire? *

I agree to participate in this questionnaire

I do not wish to participate in this questionnaire - Please hit continue and then submit to let me know.

Continue »

Further Information Page

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Further Information

How do I participate?	Complete the attached questionnaire and return in the pre-paid envelope. Or alternatively it can be completed on-line at https://sites.google.com/site/grmbamangproject/home/ There is a consent form as part of the questionnaire.
Do you have to take part?	No - Taking part in this questionnaire is entirely voluntary and you can withdraw at any time. If you don't participate there will be no negative consequences.
What are the possible benefits of taking part?	There are no individual benefits to you or your organisation, but we hope that an increase in awareness and knowledge in this area will help organisations and local communities in the future.
What are the possible risks of taking part?	Apart from the time taken to complete the questionnaire it's difficult to imagine any risks.
What if there is a	If you have any questions or concerns, you can raise these at any time

Participant Information Sheet Page


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Participant Info Sheet

The Contact Details and Further Information can be download as pdf below called Participant Information.

 [Participant Information.pdf](#) v.1

(215k)

Glenn Robinsor [Report Abuse](#) | [Print Page](#) | [Remove Access](#) | Powered By [Google Sites](#)

Contact Details Page

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Contact Details

My Details

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Mobile: 07930 274147

Project Supervisor

Christopher Barnatt

Associate Professor of Computing & Future Studies

The University of
Nottingham

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List of Organisations

Type	Organisation	Email
Education	Infant School	
Education	Junior School	
Education	Kangaroos Jump Ahead Learning	
Education	Melbourne Adult Community Education Centre	
Education	Puddleducks	Not Known
Education	Scallywags	
Education	Tiddlers	Not Known
Education	Tiddlewinks	Not Known
Health	Lomas Opticians	Not Known
Health	Melbourne Dental Laboratory	Not Known
Health	Melbourne Dental Practice	Not Known
Health	Melbourne Surgery	
Religious	Baptist Church	
Religious	Catholic Church	
Religious	Melbourne Methodist Church	
Religious	Parish Church	
Religious	URC	
Pubs, Restaurants, Fast Food	Alma	Not Known

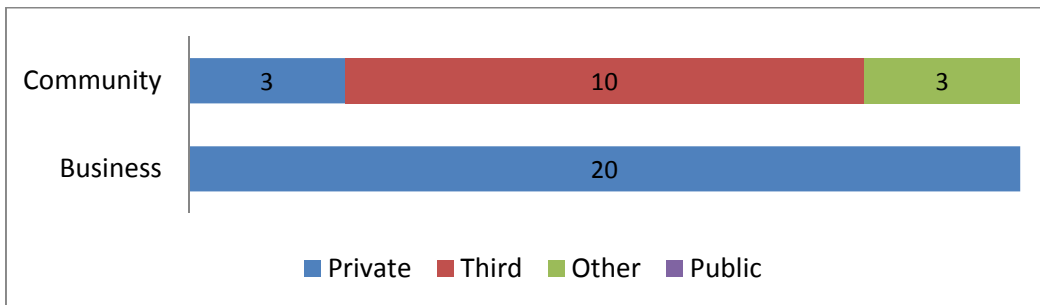
Appendix 5

Questionnaire Analysis

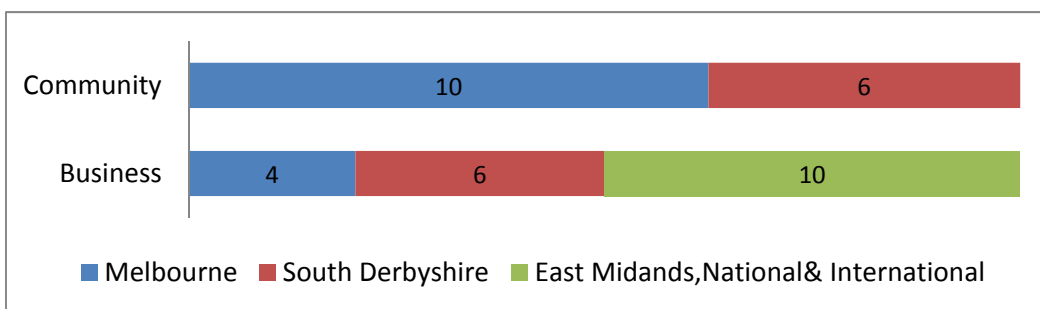
Supporting Graphs by Business/Community

Section 1 - About the Organisations

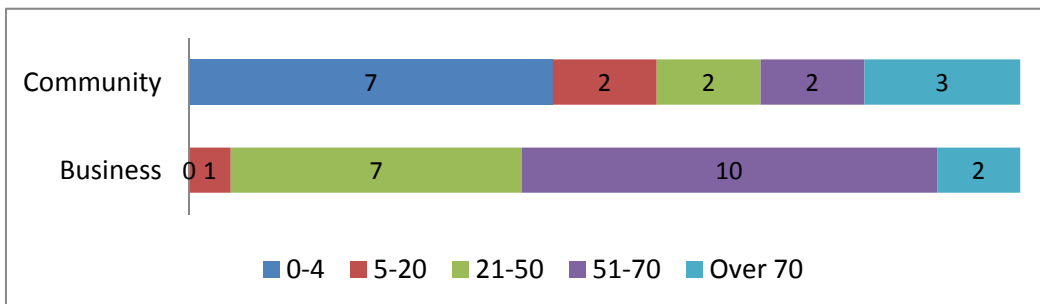
Types



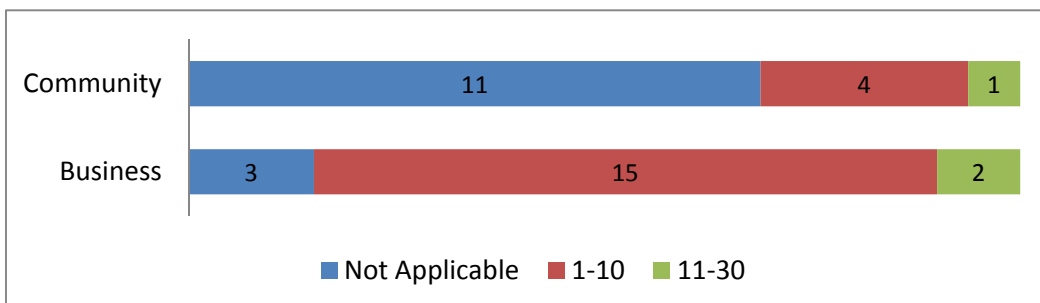
Operational Areas



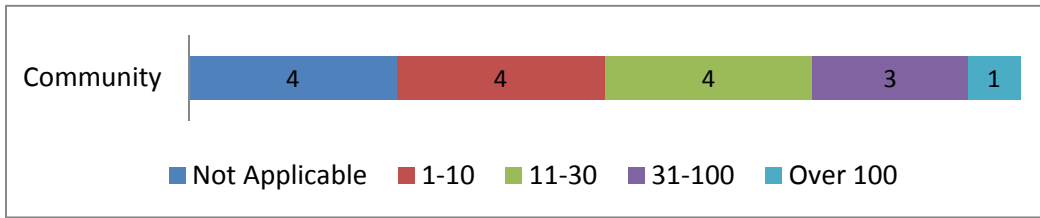
Hours of Operation



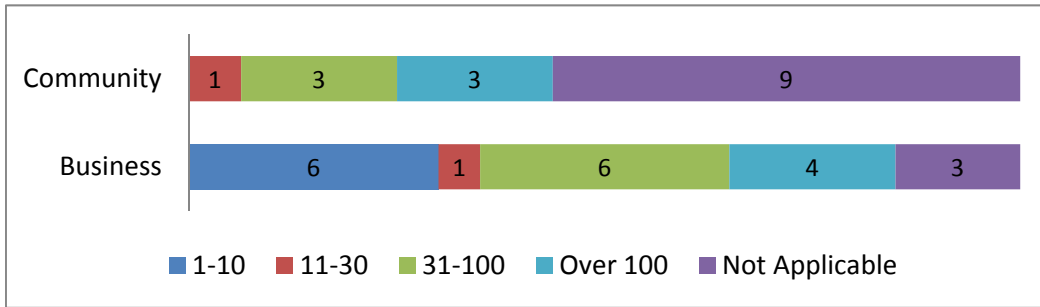
Number of Employees



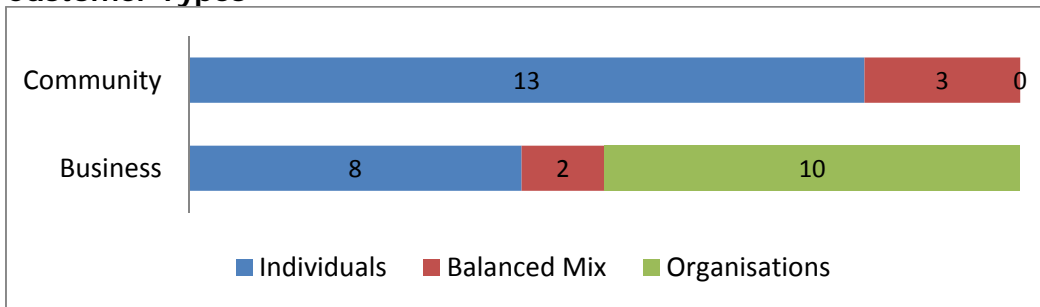
Number of Volunteers in Community Organisations



Weekly Customer Numbers

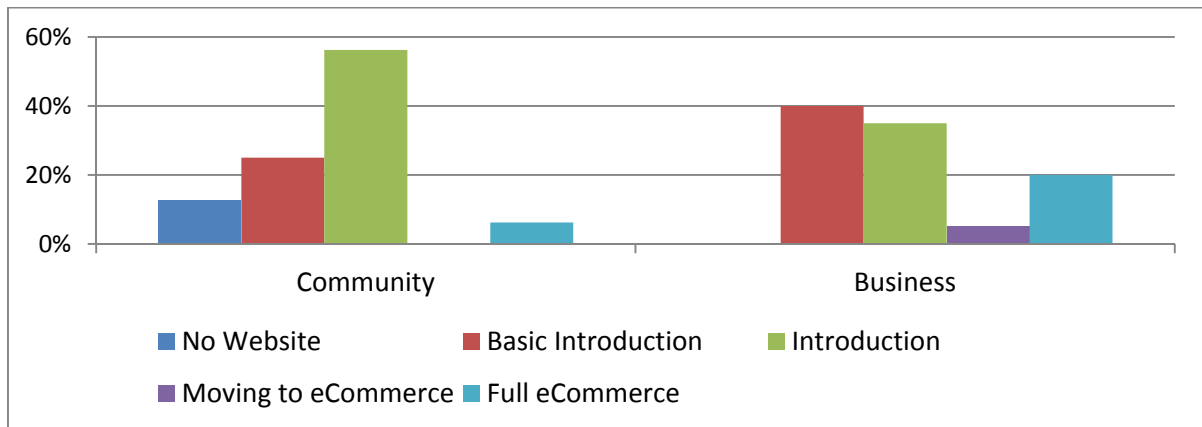


Customer Types

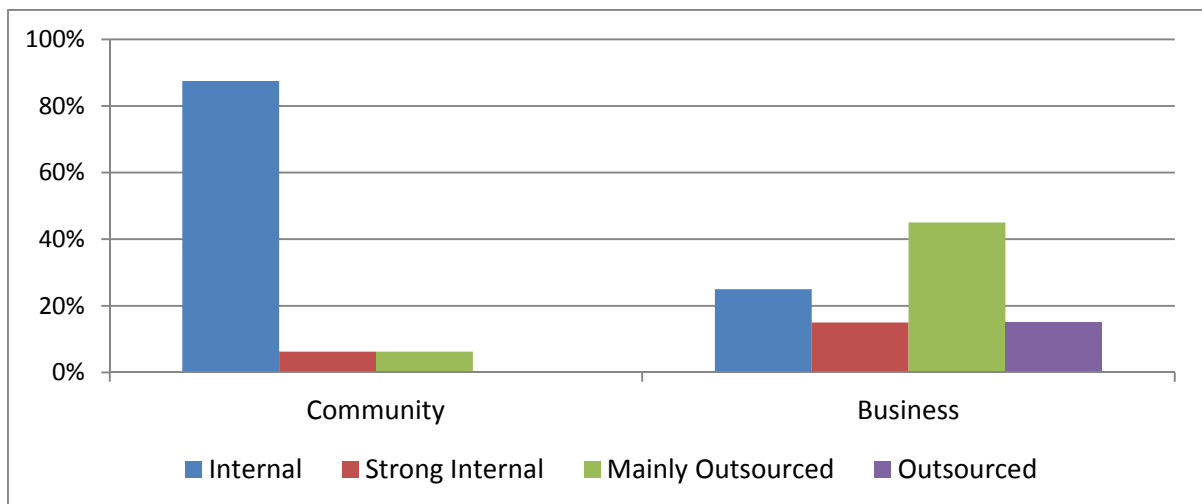


Section 2 – Current Internet Use by Organisations

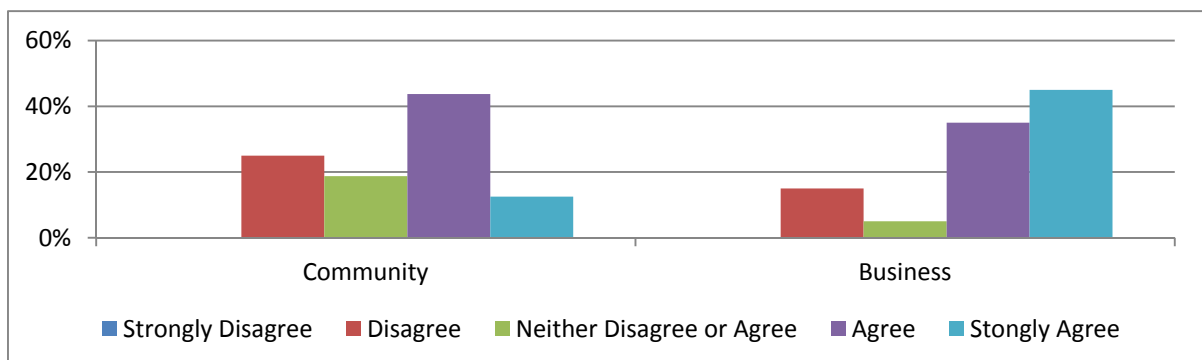
Types of Website



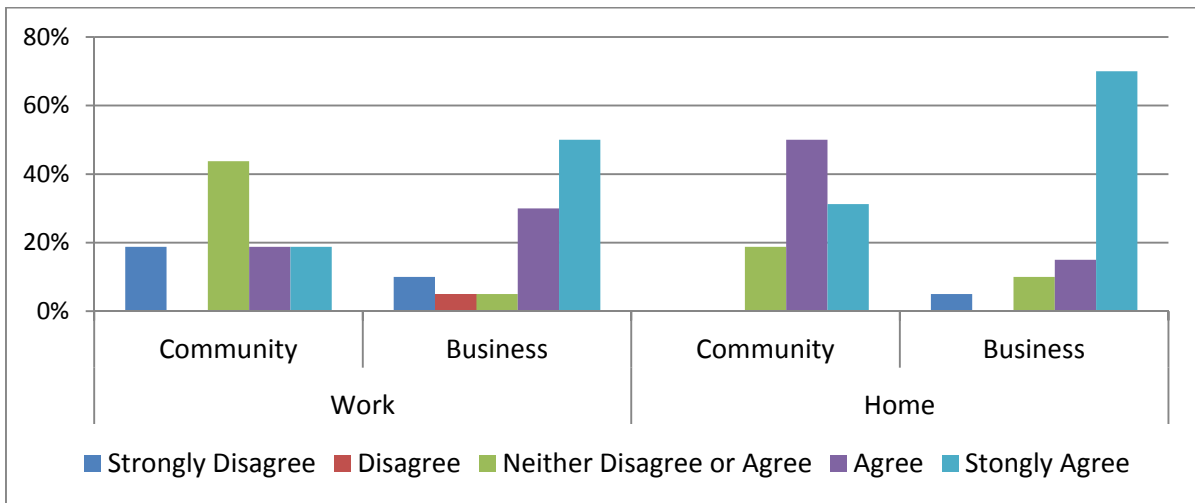
IT Resources



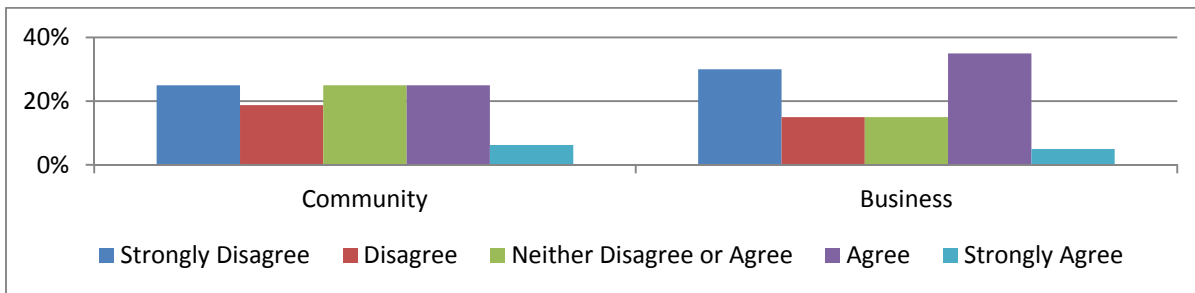
Customer Internet Access



Employee/Volunteer Internet Access at Work and Home



Current use of On-line Feedback



Appendix 6

Questionnaire Analysis

Identifying Major Factors

Method:

Each of the responses to questions in sections 2 & 3 of the questionnaire are cross-tabbed with the data collected in Section 1, which were considered as possible explanatory variables. The data is shown in columns for each question with the section 1 variables being the rows. Interesting results are highlighted.

Web 1.0 - Analysis by Sect 1 Variables

Category	Gen. Email		Pers. Email		Domain		Website		
	Yes	No	Yes	No	Yes	No	Yes	No	Total
Community	13	3	10	6	13	3	14	2	16
Business	18	2	16	4	19	1	20		20
Grand Total	31	5	26	10	32	4	34	2	36

Type	Yes		No		Yes		No		Yes			No		Total
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Total	Yes	No	Total
Other	2	1	2	1	2	1	2	1	2	1	3	2	1	3
Private	20	3	19	4	21	2	22	1	23	22	1	23	1	23
Third Sector	9	1	5	5	9	1	10		10		10			10
Grand Total	31	5	26	10	32	4	34	2	36	34	2	36	2	36

Area of Operation	Yes		No		Yes		No		Yes		No		Total	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Total	Yes	No	Total
Mellbourne	10	4	9	5	11	3	12	2	14	12	2	14	2	14
South Derbyshire	12		9	3	12		12		12		12			12
East Midlands	2		1	1	1	1	2		2		2			2
National	4	1	4	1	5		5		5		5			5
International	3		3		3		3		3		3			3
Grand Total	31	5	26	10	32	4	34	2	36	34	2	36	2	36

Member of Larger Organisation	Yes		No		Yes		No		Yes		No		Total	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Total	Yes	No	Total
No	25	5	22	8	26	4	28	2	30	28	2	30	2	30
Yes	6		4	2	6		6		6		6			6
Grand Total	31	5	26	10	32	4	34	2	36	34	2	36	2	36

Scale - No. of Employees	Yes		No		Yes		No		Yes		No		Yes			No		Total
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Total	Yes	No	Total	Yes	No	Total	
Not applicable	12	2	7	7	12	2	13	1	14	13	1	14	1	14				14
1 - 10	16	3	16	3	17	2	18	1	19	18	1	19	1	19				19
11 - 30	3		3		3		3		3		3			3				3
Grand Total	31	5	26	10	32	4	34	2	36	34	2	36	2	36				36

Scale - No. of Volunteers	Yes		No		Yes		No		Yes		No		Yes			No		Total
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Total	Yes	No	Total	Yes	No	Total	
Not applicable	19	4	19	4	20	3	22	1	23	22	1	23	1	23				23
1 - 10	5		2	3	5		5		5		5			5				5
11 - 30	3	1	3	1	3	1	3	1	4	3	1	4	1	4				4
31 - 100	3		1	2	3		3		3		3			3				3
Over 100	1		1		1		1		1		1			1				1
Grand Total	31	5	26	10	32	4	34	2	36	34	2	36	2	36				36

Scale - No. of Customers per Week	Yes		No		Yes		No		Yes		No		Yes			No		Total
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Total	Yes	No	Total	Yes	No	Total	
Not applicable	10	2	7	5	10	2	11	1	12	11	1	12	1	12				12
1 - 10	6		6		6		6		6		6			6				6
11 - 30	2			2	2		2		2		2			2				2
31 - 100	6	3	7	2	7	2	8	1	9	8	1	9	1	9				9
Over 100	7		6	1	7		7		7		7			7				7
Grand Total	31	5	26	10	32	4	34	2	36	34	2	36	2	36				36

	Gen. Email		Pers. Email		Domain		Website		
Hours of Operation	Yes	No	Yes	No	Yes	No	Yes	No	Total
4	6	1	2	5	6	1	6	1	7
20	2	1	3		2	1	2	1	3
50	8	1	7	2	8	1	9		9
70	11	1	11	1	12		12		12
99	4	1	3	2	4	1	5		5
Grand Total	31	5	26	10	32	4	34	2	36

Customer Types	Yes	No	Yes	No	Yes	No	Yes	No	Total
Individuals	18	3	15	6	18	3	19	2	21
Balanced Mix	4	1	3	2	5		5		5
Organisations	9	1	8	2	9	1	10		10
Grand Total	31	5	26	10	32	4	34	2	36

Customer Ages	Yes	No	Yes	No	Yes	No	Yes	No	Total
<15	1	1	1	1	1	1	1	1	2
<45	1		1		1		1		1
>25	4		3	1	4		4		4
15-64	3	2	5		5		5		5
25+	1	1	1	1	1	1	1	1	2
25-44	4		3	1	4		4		4
45+	4		2	2	4		4		4
All Adults	3		2	1	2	1	3		3
All Ages	7	1	5	3	7	1	8		8
Unanswered	3		3		3		3		3
Grand Total	31	5	26	10	32	4	34	2	36

Web 2.0 - Analysis by Sect 1 Variables

Category	Facebook		Twitter		Reg User*		RSS Feed*		
	Yes	No	Yes	No	Yes	No	Yes	No	Total
Community	5	11	1	15	6	10	2	11	16
Business	12	8	9	11	6	13	2	17	20
Grand Total	17	19	10	26	12	23	4	28	36

Type	Facebook		Twitter		Reg User*		RSS Feed*		
	Yes	No	Yes	No	Yes	No	Yes	No	Total
Other	1	2		3	2	1		3	3
Private	14	9	9	14	7	15	3	19	23
Third Sector	2	8	1	9	3	7	1	6	10
Grand Total	17	19	10	26	12	23	4	28	36

Area of Operation	Facebook		Twitter		Reg User*		RSS Feed*		
	Yes	No	Yes	No	Yes	No	Yes	No	Total
Mellbourne	5	9	4	10	4	10	2	10	14
South Derbyshire	8	4	1	11	4	7	1	9	12
East Midlands	1	1	1	1		2		2	2
National	2	3	3	2	1	4	1	4	5
International	1	2	1	2	3			3	3
Grand Total	17	19	10	26	12	23	4	28	36

Member of Larger Organisation	Facebook		Twitter		Reg User*		RSS Feed*		
	Yes	No	Yes	No	Yes	No	Yes	No	Total
No	15	15	10	20	8	21	3	25	30
Yes	2	4		6	4	2	1	3	6
Grand Total	17	19	10	26	12	23	4	28	36

Scale - No. of Employees	Facebook		Twitter		Reg User*		RSS Feed*		
	Yes	No	Yes	No	No	Yes	No	Yes	Total
Not applicable	5	9	3	11	10	4	12	1	14
1 - 10	10	9	6	13	13	5	14	2	19
11 - 30	2	1	1	2		3	2	1	3
Grand Total	17	19	10	26	23	12	28	4	36

Scale - No. of Volunteers	Facebook		Twitter		Reg User*		RSS Feed*		
	Yes	No	Yes	No	Yes	No	Yes	No	Total
Not applicable	12	11	9	14	8	15	3	20	23
1 - 10	4	1	1	4	1	3		4	5
11 - 30	1	3		4	1	3		2	4
31 - 100		3		3	1	2	1	1	3
Over 100		1		1	1			1	1
Grand Total	17	19	10	26	12	23	4	28	36

Scale - No. of Customers per Week	Facebook		Twitter		Reg User*		RSS Feed*		
	Yes	No	Yes	No	Yes	No	Yes	No	Total
Not applicable	4	8	2	10	4	8	2	8	12
1 - 10	3	3	3	3		6		6	6
11 - 30	1	1		2	1	1		2	2
31 - 100	6	3	3	6	3	5	2	6	9
Over 100	3	4	2	5	4	3		6	7
Grand Total	17	19	10	26	12	23	4	28	36

	Facebook		Twitter		Reg User*		RSS Feed*		
Hours of Operation	Yes	No	Yes	No	Yes	No	Yes	No	Total
4	2	5	1	6	2	5	1	6	7
20	1	2		3	1	2		3	3
50	6	3	3	6	3	6	2	6	9
70	7	5	6	6	4	7		10	12
99	1	4		5	2	3	1	3	5
Grand Total	17	19	10	26	12	23	4	28	36

Customer Types	Yes	No	Yes	No	Yes	No	Yes	No	Total
Individuals	10	11	4	17	5	15		17	21
Balanced Mix	3	2	2	3	2	3	2	3	5
Organisations	4	6	4	6	5	5	2	8	10
Grand Total	17	19	10	26	12	23	4	28	36

Customer Ages	Yes	No	Yes	No	Yes	No	Yes	No	Total
<15	1	1		2	1	1		2	2
<45	1			1	1		1		1
>25	2	2	2	2		4		4	4
15-64	4	1	3	2	3	2	1	4	5
25+		2		2		2		2	2
25-44	3	1	1	3	1	2	1	2	4
45+	1	3	1	3	1	3		2	4
All Adults	1	2		3	1	2		3	3
All Ages	4	4	2	6	3	5	1	6	8
Unanswered		3	1	2	1	2		3	3
Grand Total	17	19	10	26	12	23	4	28	36

* Data excludes don't know answers 1 for Reg Users and 4 for RSS feed

Further Section 2 - Analysis by Sect 1 Variables

Type of Website
Static or changing content on Intro sites

Web Revenue

Category

	None	Static	Changing	To eCo	eComm	Total
Community	2	4	9		1	16
Business		8	7	1	4	20
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Total
16			16
13	6	1	20
29	6	1	36

Type

	None	Static	Changing	To eCo	eComm	Grand
Other	1		2			3
Private	1	8	9	1	4	23
Third Sector		4	5		1	10
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Grand
3			3
16	6	1	23
10			10
29	6	1	36

Area of Operation

	None	Static	Changing	To eCo	eComm	Total
Mellbourne	2	5	7			14
South Derbyshire		2	6	1	3	12
East Midlands		2				2
National		3	1		1	5
International			2		1	3
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Total
14			14
8	3	1	12
2			2
3	2		5
2	1		3
29	6	1	36

Member of Larger Organisation

	None	Static	Changing	To eCo	eComm	Total
No	2	12	11	1	4	30
Yes			5		1	6
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Total
24	5	1	30
5	1		6
29	6	1	36

Scale - No. of Employees

	None	Static	Changing	To eCo	eComm	Total
Not applicable	1	6	6		1	14
1 - 10	1	6	7	1	4	19
11 - 30			3			3
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Total
13	1		14
13	5	1	19
3			3
29	6	1	36

Scale - No. of Volunteers

	None	Static	Changing	To eCo	eComm	Total
Not applicable	1	9	8	1	4	23
1 - 10		1	4			5
11 - 30	1	1	2			4
31 - 100		1	2			3
Over 100					1	1
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Total
16	6	1	23
5			5
4			4
3			3
1			1
29	6	1	36

Scale - No. of Customers per Week

	None	Static	Changing	To eCo	eComm	Total
Not applicable	1	4	5		2	12
1 - 10		4	2			6
11 - 30		1	1			2
31 - 100	1	2	3	1	2	9
Over 100		1	5		1	7
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Total
10	2		12
5		1	6
1	1		2
7	2		9
6	1		7
29	6	1	36

Type of Website						
Hours of Operation						
	None	Static	Changing	To eCo	eComm	Total
4	1	3	3			7
20	1	1			1	3
50		3	5		1	9
70		3	6	1	2	12
99		2	2		1	5
Grand Total	2	12	16	1	5	36

Web Revenue			
No	eComm	Adv.	Total
7			7
3			3
8	1		9
8	3	1	12
3	2		5
29	6	1	36

Customer Types						
	None	Static	Changing	To eCo	eComm	Total
Individuals	2	6	10	1	2	21
Balanced Mix		2	2		1	5
Organisations		4	4		2	10
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Total
18	2	1	21
4	1		5
7	3		10
29	6	1	36

Customer Ages						
	None	Static	Changing	To eCo	eComm	Total
<15	1		1			2
<45			1			1
>25		3	1			4
15-64		2	2		1	5
25+	1	1				2
25-44			4			4
45+		2	2			4
All Adults		1		1	1	3
All Ages		1	5		2	8
Unanswered		2			1	3
Grand Total	2	12	16	1	5	36

No	eComm	Adv.	Total
2			2
1			1
3	1		4
4	1		5
2			2
3		1	4
4			4
1	2		3
7	1		8
2	1		3
29	6	1	36

Appropriate Presence

Budget

Category

	Disagree	Neither	Agree	Strongly
Community	1	2	6	7
Business		1	9	10
Grand Total	1	3	15	17

<£500	£500+	Grand
15		16
11	5	20
26	5	36

Type

Type	Disagree	Neither	Agree	Strongly
Other		1	1	1
Private	1	1	9	12
Third Sector		1	5	4
Grand Total	1	3	15	17

<£500	£500+	Grand
2		3
14	5	23
10		10
26	5	36

Area of Operation

Area of Operation	Disagree	Neither	Agree	Strongly
Mellbourne	1	3	4	6
South Derbyshire			8	4
East Midlands				2
National			2	3
International			1	2
Grand Total	1	3	15	17

<£500	£500+	Grand
13		14
8	2	12
1	1	2
4	1	5
	1	3
26	5	36

Member of Larger Organisation

Member of Larger Organisation	Disagree	Neither	Agree	Strongly
No	1	3	11	15
Yes			4	2
Grand Total	1	3	15	17

<£500	£500+	Grand
21	5	30
5		6
26	5	36

Scale - No. of Employees

Scale - No. of Employees	Disagree	Neither	Agree	Strongly
Not applicable		2	6	6
1 - 10	1	1	9	8
11 - 30				3
Grand Total	1	3	15	17

<£500	£500+	Grand
13		14
12	4	19
1	1	3
26	5	36

Scale - No. of Volunteers

Scale - No. of Volunteers	Disagree	Neither	Agree	Strongly
Not applicable	1	2	8	12
1 - 10			3	2
11 - 30		1	2	1
31 - 100			2	1
Over 100				1
Grand Total	1	3	15	17

<£500	£500+	Grand
15	5	23
3		5
4		4
3		3
1		1
26	5	36

Scale - No. of Customers per Week

Scale - No. of Customers per Week	Disagree	Neither	Agree	Strongly
Not applicable		2	6	4
1 - 10			2	4
11 - 30			2	2
31 - 100	1	1	2	5
Over 100			3	4
Grand Total	1	3	15	17

<£500	£500+	Grand
9	1	12
4	2	6
1		2
7	1	9
5	1	7
26	5	36

Appropriate Presence

Hours of Operation

	Disagree	Neither	Agree	Strongly
4		1	4	2
20	1		1	1
50			4	5
70		1	5	6
99		1	1	3
Grand Total	1	3	15	17

Budget

<£500	£500+	Grand
6		7
2	1	3
6	1	9
8	3	12
4		5
26	5	36

Customer Types

	Disagree	Neither	Agree	Strongly
Individuals	1	2	10	8
Balanced Mix		1	2	2
Organisations			3	7
Grand Total	1	3	15	17

<£500	£500+	Grand
18	1	21
4	1	5
4	3	10
26	5	36

Customer Ages

	Disagree	Neither	Agree	Strongly
<15	1		1	
<45				1
>25			2	2
15-64		1	2	2
25+		1		1
25-44			1	3
45+			3	1
All Adults			2	1
All Ages		1	3	4
Unanswered			1	2
Grand Total	1	3	15	17

<£500	£500+	Grand
1		2
1		1
4		4
2	2	5
2		2
2		4
4		4
2	1	3
7	1	8
1	1	3
26	5	36

Section 3 - Analysis by Sect 1 Variables

1 = Not Important
2 = Somewhat Important

3 = Important
4 = Very Important
5 = Extremely Important

Online Community

Category

	1	2	3	4	5
Community	5	6		3	2
Business	4	4	6	4	2
Grand Total	9	10	6	7	4

Type

	1	2	3	4	5
Other	2			1	
Private	4	6	6	5	2
Third Sector	3	4		1	2
Grand Total	9	10	6	7	4

Area of Operation

	1	2	3	4	5
Mellbourne	3	7	2	2	
South Derbyshire	2	2	3	2	3
East Midlands	1			1	
National	1	1	1	1	1
International	2			1	
Grand Total	9	10	6	7	4

Member of Larger Organisation

	1	2	3	4	5
No	7	9	5	5	4
Yes	2	1	1	2	
Grand Total	9	10	6	7	4

Scale - No. of Employees

	1	2	3	4	5
Not applicable	5	4		4	1
1 - 10	4	6	5	1	3
11 - 30			1	2	
Grand Total	9	10	6	7	4

Social Networking

	1	2	3	4	5	Total
Community	10	3	1	2		16
Business	2	4	10	2	2	20
Grand Total	12	7	11	4	2	36

	1	2	3	4	5	Grand
Other	2	1				3
Private	4	4	10	3	2	23
Third Sector	6	2	1	1		10
Grand Total	12	7	11	4	2	36

	1	2	3	4	5	Total
Mellbourne	7	2	5			14
South Derbyshire	3	4	2	2	1	12
East Midlands	1			1		2
National		1	3		1	5
International	1		1	1		3
Grand Total	12	7	11	4	2	36

	1	2	3	4	5	Total
No	9	5	11	3	2	30
Yes	3	2		1		6
Grand Total	12	7	11	4	2	36

	1	2	3	4	5	Total
Not applicable	6	4	2	2		14
1 - 10	5	3	8	1	2	19
11 - 30	1		1	1		3
Grand Total	12	7	11	4	2	36

Online Community

Scale - No. of Volunteers

	1	2	3	4	5
Not applicable	4	7	6	4	2
1 - 10	2	1		2	
11 - 30	1	2			1
31 - 100	2			1	
Over 100					1
Grand Total	9	10	6	7	4

Social Networking

	1	2	3	4	5	Total
Not applicable	6	3	10	2	2	23
1 - 10	2	1	1	1		5
11 - 30	2	1		1		4
31 - 100	2	1				3
Over 100		1				1
Grand Total	12	7	11	4	2	36

Scale - No. of Customers per Week

	1	2	3	4	5
Not applicable	4	4	1	1	2
1 - 10		2	1	2	1
11 - 30	2				
31 - 100	1	3	3	1	1
Over 100	2	1	1	3	
Grand Total	9	10	6	7	4

	1	2	3	4	5	Total
Not applicable	6	2	2	1	1	12
1 - 10		1	3	1	1	6
11 - 30	1	1				2
31 - 100	3	2	4			9
Over 100	2	1	2	2		7
Grand Total	12	7	11	4	2	36

Hours of Operation

	1	2	3	4	5
4	4	2		1	
20		2			1
50	2	1	3	1	2
70		3	3	5	1
99	3	2			
Grand Total	9	10	6	7	4

	1	2	3	4	5	Total
4	4	2	1			7
20	1	1	1			3
50	1		5	2	1	9
70	2	3	4	2	1	12
99	4	1				5
Grand Total	12	7	11	4	2	36

Customer Types

	1	2	3	4	5
Individuals	5	6	4	4	2
Balanced Mix		3		1	1
Organisations	4	1	2	2	1
Grand Total	9	10	6	7	4

	1	2	3	4	5	Total
Individuals	8	5	5	3		21
Balanced Mix	2	1	1		1	5
Organisations	2	1	5	1	1	10
Grand Total	12	7	11	4	2	36

Customer Ages

	1	2	3	4	5
<15	1	1			
<45		1			
>25	1		1	1	1
15-64	1	2	1	1	
25+	1	1			
25-44			2	2	
45+	2	2			
All Adults	1		2		
All Ages		2		3	3
Unanswered	2	1			
Grand Total	9	10	6	7	4

	1	2	3	4	5	Total
<15	2					2
<45	1					1
>25		1	1	1	1	4
15-64			4	1		5
25+	1	1				2
25-44		2	2			4
45+	3		1			4
All Adults	1	1	1			3
All Ages	2	2	1	2	1	8
Unanswered	2		1			3
Grand Total	12	7	11	4	2	36

1 = Not Important
2 = Somewhat Important

3 = Important
4 = Very Important
5 = Extremely Important

Crowdsourcing

Voting

Category

	1	2	3	4
Community	13		2	1
Business	9	6	3	2
Grand Total	22	6	5	3

	1	2	3	4	Total
	10	4	2		16
	7	3	8	2	20
Grand Total	17	7	10	2	36

Type

	1	2	3	4
Other	3			
Private	10	6	5	2
Third Sector	9			1
Grand Total	22	6	5	3

	1	2	3	4	Grand
	2		1		3
	8	5	8	2	23
	7	2	1		10
Grand Total	17	7	10	2	36

Area of Operation

	1	2	3	4
Mellbourne	12	1	1	
South Derbyshire	5	3	3	1
East Midlands	1	1		
National	2	1		2
International	2		1	
Grand Total	22	6	5	3

	1	2	3	4	Total
	7	3	3	1	14
	6	2	4		12
	1		1		2
	1	1	2	1	5
	2	1			3
Grand Total	17	7	10	2	36

Member of Larger Organisation

	1	2	3	4
No	18	6	3	3
Yes	4		2	
Grand Total	22	6	5	3

	1	2	3	4	Total
	15	4	9	2	30
	2	3	1		6
Grand Total	17	7	10	2	36

Scale - No. of Employees

	1	2	3	4
Not applicable	11	1	1	1
1 - 10	10	4	3	2
11 - 30	1	1	1	
Grand Total	22	6	5	3

	1	2	3	4	Total
	8	3	2	1	14
	9	3	6	1	19
		1	2		3
Grand Total	17	7	10	2	36

Crowdsourcing

Scale - No. of Volunteers				
	1	2	3	4
Not applicable	12	5	4	2
1 - 10	3	1	1	
11 - 30	3			1
31 - 100	3			
Over 100	1			
Grand Total	22	6	5	3

Voting

	1	2	3	4	Total
	9	3	9	2	23
	3	2			5
	2	1	1		4
	2	1			3
	1				1
Grand Total	17	7	10	2	36

Scale - No. of Customers per Week

	1	2	3	4
Not applicable	10	1		1
1 - 10		4		2
11 - 30	2			
31 - 100	6	1	2	
Over 100	4		3	
Grand Total	22	6	5	3

	1	2	3	4	Total
	8	2	2		12
	2		3	1	6
	1		1		2
	4	3	2		9
	2	2	2	1	7
Grand Total	17	7	10	2	36

Hours of Operation

	1	2	3	4
4	7			
20	2	1		
50	5	1	1	2
70	4	4	3	1
99	4		1	
Grand Total	22	6	5	3

	1	2	3	4	Total
	6	1			7
	2	1			3
	3	2	3	1	9
	2	3	6	1	12
	4		1		5
Grand Total	17	7	10	2	36

Customer Types

	1	2	3	4
Individuals	14	4	2	1
Balanced Mix	3		2	
Organisations	5	2	1	2
Grand Total	22	6	5	3

	1	2	3	4	Total
	10	4	6	1	21
	3	1	1		5
	4	2	3	1	10
Grand Total	17	7	10	2	36

Customer Ages

	1	2	3	4
<15	2			
<45			1	
>25	2	1		1
15-64	2	1	2	
25+	2			
25-44		3		1
45+	4			
All Adults	2		1	
All Ages	6		1	1
Unanswered	2	1		
Grand Total	22	6	5	3

	1	2	3	4	Total
	1	1			2
	1				1
	1		3		4
	2	2	1		5
	2				2
		1	2	1	4
	2	1		1	4
	1		2		3
	4	2	2		8
	3				3
Grand Total	17	7	10	2	36

Appendix 7

Desk-top Review of Individual Websites

**Review of 19 Randomly
Selected Melbourne Websites**

15/09/2012

Organisation	Type of Org	Website	Web 1.0	Type of Site	Links to other LC
Melbourne Senior Citizens Centre	Community	No			
George W. Heath & Sons (Builders)	Business	Yes	Yes	Basic Intro	No
Zeerah	Business	Yes	Yes	Basic Intro	No
Fleet Services Online Ltd	Business	Yes	Yes	Basic Intro	No
Melbourne Dental Practice	Business	Yes	Yes	Basic Intro	3
Abc Assist Ltd.	Business	No			
Rococo	Business	Yes	Yes	Basic Intro	No
Rekoh	Business	No			
Melbourne Operatic Society	Community	Yes	Yes	Basic Intro	3
Kit & Caboodle	Business	No			
Harpurs of Melbourne	Business	Yes	Yes	eCommerce	No
Melbourne Arms, Cuisine India Restaurant, B& B	Business	Yes	Yes	Basic Intro	3
South Derbyshire Karate Academy	Community	Yes	Yes	Intro	No
Box Construction Ltd.	Business	Yes	Yes	Basic Intro	No
Martin Underwood	Business	No			
Melbourne Garage	Business	Yes	Yes	Basic Intro	No
The Fair Trading Place Melbourne	Business	Yes	Yes	Basic Intro	No
Chaffeurline Connections Ltd	Business	No			
Diana Sims	Business	No			
	Yes	12	12		
	No	7	0		
		<u>19</u>	<u>12</u>		

**Review of 19 Randomly
Selected Melbourne Websites**

15/09/2012

Organisation	Web 2.0	User generated Content	Social Networking	Appropriate
Melbourne Senior Citizens Centre	No	No	No	Yes
George W. Heath & Sons (Builders) Zeerah	No	No	No	Yes
Fleet Services Online Ltd	No	No	No	Yes
Melbourne Dental Practice	No	No	No	Yes
Abc Assist Ltd.				
Rococo	No	No	Yes	Yes
Rekoh				
Melbourne Operatic Society	No	No	No	Yes
Kit & Caboodle				
Harpurs of Melbourne	No	No	Yes	Yes
Melbourne Arms, Cuisine India Restaurant, B& B	No	No	No	Yes
South Derbyshire Karate Academy	No	No	Yes	Yes
Box Construction Ltd.	No	No	No	Yes
Martin Underwood				
Melbourne Garage	No	No	No	Yes
The Fair Trading Place Melbourne	No	No	No	Yes
Chaffeurline Connections Ltd				
Diana Sims				
	0	0	3	12
	12	12	9	0
	12	12	12	12

**Review of 19 Randomly
Selected Melbourne Websites**

15/09/2012

Organisation

Address

Melbourne Senior Citizens Centre	
George W. Heath & Sons (Builders)	http://gwheath.com
Zeerah	http://www.zeerah.co.uk/
Fleet Services Online Ltd	http://www.fleetservicesonline.co.uk/
Melbourne Dental Practice	http://www.melbournedentalpractice.co.uk
Abc Assist Ltd.	
Rococo	http://www.rocococouture.co.uk/
Rekoh	
Melbourne Operatic Society	http://www.melbourneoperaticsociety.com/
Kit & Caboodle	
Harpurs of Melbourne	http://www.harpursofmelbourne.co.uk/
Melbourne Arms, Cuisine India	
Restaurant, B& B	http://www.melbournearms.com/index.php
South Derbyshire Karate Academy	http://www.sdka.co.uk/
Box Construction Ltd.	http://boxconstruction.co.uk/
Martin Underwood	
Melbourne Garage	http://www.dovesusedcarsderby.co.uk/
The Fair Trading Place Melbourne	http://www.fairtrade-melbourne.co.uk/
Chaffeurline Connections Ltd	
Diana Sims	