

Citizen-Led Engagement in Democratic Systems Through the Effective Use of Information and Communication Technologies

Participation in the democratic process has declined substantially since the 1960s. Mirroring this decline is a trend towards technocracy in government. As debate gives way to rationalist government based on scientific and managerial decision-making, citizens are increasingly excluded from involvement in deciding their own futures. Information and Communications Technologies (ICT) offer a relatively low-cost way for citizens to express their own views and sustain democratic discourses. However, ICT access is not ubiquitous and many still lack the skills to be effective users. This article presents a five-stage model for increasing community engagement through the effective use of ICT, and in particular the Internet, with implications for both policy makers and practitioners. Underpinning this model is the assumption that ICT has significant potential to be harnessed by communities and citizens in order to counter prevailing hegemonic discourses of technocracy, returning citizens to the centre of democratic debate.

INTRODUCTION

There is a documented decline in democratic participation which, according to Coleman and Gøtze,¹ stems from apathy brought about by the increasing technocracy and perceived distance of governments. Whilst agencies of government in New Zealand promote a discourse of increased participation, the reality here as elsewhere is that participation in the democratic life of the nation is falling.² News media has long provided an outlet for public opinion to influence government, yet today it offers “an uneasy compromise between quality and popular news discourses”.³ Paralleling this reduction in quality has been a dramatic increase in the management of news.⁴ This leaves citizens with little opportunity to exercise their democratic franchise beyond ‘Letters to the Editor’ and the chance to vote every three years.

Everyday life can be judged as 'democratic' only when debate takes place in an atmosphere of shared understanding and in order to resolve common problems.⁵ It is suggested that Information and Communications Technologies (ICT) offer the potential to dramatically change the processes of government and the interactions between government and citizens,⁶ yet the trend towards a systemic technocracy sees ICT underpinning a managerial drive towards efficiency. This is at odds with the desires of citizen-led democratic processes⁷ and stands in the way of authentic discourse by systemically distorting communication and alienating individuals from the processes of democracy.

Whilst the emergence of networked technologies and online communities offers the potential to arrest or reverse the decline in participation and representation, the use of ICT is not ubiquitous; many citizens are yet to acquire the skills needed to become effective users of ICT. Gurstein defines 'effective use' as "the capacity and opportunity to successfully integrate ICT into the accomplishment of self or collaboratively identified goals,"⁸ implying in this context that citizens must become producers of their own information, news and knowledge if they are to influence the systems of government. This potential for citizen-led agencies to successfully harness new and emerging technologies in order to subvert hegemonic discourses can be seen in the role that text-messaging played during the 2001 Presidential Elections in the Philippines. The actions of over a million citizens were coordinated and street demonstrations organised in what became known as the Manila 'People Power II' demonstrations. These events led directly to the downfall of the regime of incumbent President Estrada.⁹ The recent terrorist attacks on Madrid's rail system occurred days before a general election. Whilst Spain prohibits demonstrations during the 24 hour period before the election, Spanish citizens used text-messaging to self-organise spontaneous demonstrations. Texting traffic was 20% higher than normal on the day before the election, and 40% higher on election day.¹⁰

This paper will describe a model for citizen-led ICT uptake within community settings with a focus on its ability to empower citizens to counter hegemonic discourses perpetuated by an increasingly technocratic system of government. It will highlight the opportunities and constraints created by the implementation of ICT in order to contextualise the issues that communities face in becoming ICT-enabled. It will proceed to describe a five-stage model that can be used to support the development of policy relating to connected communities, to measure the level of ICT maturity within a community and to act as a development framework for practitioners.

SITUATING DEMOCRATIC DISCOURSE

Discourse must be situated in the context of a public sphere in which it occurs. Habermas describes the complex and dynamic relationship between private and public, locating the public sphere as that part of the private world where the individual engages with others. He observes that the public sphere is no longer at the centre of a rational-critical debate but that a transformation has occurred through changes in political, economic and social structures, for example the increasing technocracy of governments. Habermas is critical of the political

realm, observing that whilst suffrage is now much more universal, politics itself is conducted in a public sphere constructed through the involvement of political parties and manipulative management rather than through critical publicity. The primary role of the public sphere, Habermas argues, is to act as a check on the power of the state. He sees the public sphere as the place where debate occurs within the democratic process and defines the role of public opinion and critical publicity as central within this.¹¹ However, critics argue that Habermas' concept is too idealised and some, such as Luhmann, see public opinion as a sphere of communication becoming "increasingly differentiated, specialised, institutionalised and professionalised," as demonstrated by the technocracy of government.¹² This differentiation leads Cunningham to describe minoritarian public spheres, which are "specific spaces of self- and community-making and identity."¹³ There is no longer, he suggests, an ideal public sphere, since our communication spaces are now more complex and saturated. Rather it is more appropriate to consider the existence of fragmented sphericules of public space and opinion.¹⁴ The Internet is a rich communication media that could lead to increased diversity, where many sphericules can be created or sustained. Indeed, Poster cautioned us not to accept the Internet as a simple addition to the public sphere since its network culture is new and as likely to lead to challenge of the status quo as to acceptance of it.¹⁵

Individual communities and the actors within them can be considered as sphericules, or minoritarian public spheres. They operate autonomously but also in relation to and through relations with other communities. This paper takes the position that community ICT projects can be both self-contained and influence and are influenced by the complex interactions and power imbalances of the actors within them. It becomes imperative to define the normative dimensions of a community in addition to attempting to understand what occurs within the community. This can include the cognitive mapping of community boundaries and the assumption that actors must map multiple boundaries in order to negotiate their world. Negotiation of such boundaries will by necessity involve such questions as those posed by Friedland:¹⁶

Who belongs within our community?

Who belongs to other communities?

What set of mutual obligations of recognition, respect and trust regulate relations both within and between communities?

Drawing on Habermas' theory of communicative action, a model describing the normative conditions of engagement for defining and sustaining an online community can be developed as a key ontological underpinning. Inherent in such a model is the acceptance of models of 'lifeworld' and 'systemworld', defining the world of the individual and the system of society that surrounds it.¹⁷ Where lifeworld is focused on the individual and on communicative action, the systemworld is anonymous, organised and complex, functioning through an instrumentalist form of rationality, yet existing in parallel with the lifeworld, the two operating simultaneously.

MOVING COMMUNITIES ONLINE

Communities can be supported to become effective users of ICT in ways that are appropriate to the community and such that they can reclaim their voice. As Day observes, defining community can be complex and problematic in an emerging and cross-sectoral field of study.¹⁸ For the purposes of this paper, a simplistic definition is used whereby a community is considered to be a group of individuals with a shared interest (whether topical or geographical). Extending this definition, a 'virtual community' enabled through ICT, is:

A social aggregation that emerges from the [Internet] when enough people carry on public discussions, with sufficient human feeling, to form webs of personal relationships in cyberspace.¹⁹

As already discussed, engagement in traditional community activities has been declining since the 1960s and with it, social capital – the resources that communities have available for support, trust, obligation and reciprocity – has fallen as well.²⁰

Information and communication are at the core of human understanding of social and political action and the rapid development of new technology-based tools of knowledge generation and information processing have major implications. Where society is exposed to new technology it is being fundamentally changed.²¹ Whilst technology does not of itself determine social process it can be seen as “a mediating factor in the complex matrix of interaction between social structures, social actors and their socially constructed tools.”²² The relatively un-regulated and anarchic nature of the Internet creates a virtual space that offers the potential to develop social movements and to be developed in ways that are appropriate to the needs of such movements. As Bollier observes, the Internet is an effective tool for the establishment of public commons, citing examples such as the ‘Open Source’ movement to demonstrate the potential for citizens to establish themselves online relatively easily and cheaply.²³

In order to develop an Internet-based environment that supports grass-roots change, it is necessary to encompass the development of localised solutions, where the experiences and aspirations of the community can be harnessed to create an environment of empowerment and learning. Literacy, language and culture are key elements in individual and community empowerment²⁴ and the online environment is immersed in the culture of the community that it serves.²⁵ The Internet has the potential to build bonds that transcend the virtual and develop in the physical world. Castells argues that sociability on the Internet is both weak and strong, depending on the people, content and relationships. He argues that the electronic world does not exist in a vacuum and that it requires some reference to the physical and social worlds of its participants. Although Glogoff,²⁶ Rheingold²⁷ and Castells observe that the Internet can enhance community by removing boundaries of space and time, Glogoff cautions that communication richness is directly related to the richness of the medium. Online communication is not as rich as face-to-face communication, nor is it as personal, trusting or friendly.

Despite the liberating potential of ICT, dominant hegemonies persist and traditional sources of exclusion are being duplicated online. Such disconnection is itself a form of marginalisation.²⁸ The Internet “is in danger of becoming yet another instrument of cultural and political hegemony”²⁹ and despite, or perhaps because it is already the largest public commons, serious attempts are being made to manage, control and own both the networks

and the flow of information.³⁰ The elevation of both the individual and of the free-market have left in their wake an underclass that does not have the opportunities, knowledge or access to resources.³¹ Deprivation of access to ICT results in a failure to become technologically literate and to increased marginalisation.³² Those who are already marginalised are becoming even more so because they are unable to access the new technologies available to wealthier communities.³³

In New Zealand, there is a strong correlation between income and access to ICT. The urban poor, those living in rural locations or the elderly are more likely to lack Internet access at home.³⁴ For example, 50% of those owning their own home have Internet access as opposed to only 11% of those living in state or local authority rental housing.³⁵

ELECTRONIC DEMOCRACY

Democratic choice ultimately depends not on technical or economic efficiency but on a perceived fit with the interests and beliefs of the social groups that influence the design process and a relationship to the social environment.³⁶ Technology is allowing citizens to reclaim their voices at a time when there is ever-increasing decentralisation of decision-making away from elected representatives towards 'experts'. In this new technocracy, decisions are based on science and professional knowledge, not on public opinion.³⁷

The discussion so far has shown that the Internet is a powerful tool for connecting people with information. ICT is valuable when harnessed (like other media) for communicating a message, however, it also extends the traditional concepts of media into an interactive experience, where the views of many can be expressed and potentially disseminated widely. It is this potential that sets ICT apart from traditional print and electronic media and which offers great potential for citizens to become more involved in the political and democratic processes. As Schuler argues, ICT provides tools for strong democracy, such as email, forums and online access to documents.³⁸ Organisations such as Minnesota e-Democracy (www.e-democracy.org) and the Waitakere eDemocracy Group (www.wedg.org.nz) demonstrate the potential for citizen-led engagement. Examples of top-down, government led, initiatives include Brisbane City Council; Camden Council (UK) and Rutland County Council (UK) (online fora); the Queensland and Scottish Parliaments (e-Petitions); and the Estonia, Queensland and Camden Council (broadcasting of legislature and executive). In 2002 Ronneby (Sweden) created an eDemocracy website and discussion forum with the intent of increasing interest in the upcoming municipal election. Council candidates were able to present their views and the public could enter into online discussions. An evaluation of the project rated it as a successful pilot and well received by citizens, however, it was not successful in increasing voter turnout.³⁹

Whilst the rhetoric of government values engaged citizens and governments feel the need to solicit "feedback in order to develop good policy and services at all levels,"⁴⁰ citizen involvement should not be assumed. Ranerup observes that, whilst on-line fora can be initiated by governments, the community or other active stakeholders (such as researchers), her own experience of Swedish local government was that citizens, whilst seen as participants in a forum, were not necessarily consulted over its establishment and design.⁴¹ This highlights a gap between the systems of government and the desire of those citizens interested in democratisation and the revival of representative bodies.⁴²

Although most developed countries have an e-Government strategy, there is no clear articulation of the link between the oft-stated efficiencies gained in the delivery of government services and strong democracy.⁴³ There is a discourse within governments that sees e-Government as a tool for the management and delivery of services from the centre out. The New Zealand e-Government Unit observes that “new technologies will enable easier access to government information and processes. People will be better informed and better able to participate.”⁴⁴ Unfortunately, the strategy for achieving this identifies only three limited objectives:

- Make government information easier to find.
- Publish key government information online.
- Provide multiple channels for contact with government.

So far this article has established that ICT offers individuals and communities an opportunity to become more influential and involved in democratic processes. This provides the potential to counter the hegemony of mainstream media and government and serves as a direct counter to the increasing technocracy in government. However, for this to occur, policies and strategies are required to ensure that communities are able to access and effectively use ICT. The next section of this article describes a model for community ICT projects that is scalable, temporal and measurable.

FIVE-STAGE MODEL

For community technology initiatives to be successful, policy makers and practitioners must encourage active local participation in all stages of the project life cycle. Processes must be based on existing community assets that meet an identified need within that community.⁴⁵ The model presented below describes a simple evolutionary framework that can be used to identify issues, maturity and progress of ICT in a community or group of communities and to provide a means for input into the development of policy and localised models for community ICT. The initial model draws on literature which includes Patterson’s four interconnected nodes (design, access, critical mass and impact)⁴⁶ and O’Neil’s meta-analysis of community ICT studies, which reveals five key areas of research: strong democracy, social capital, individual empowerment, sense of community and economic development opportunities.⁴⁷ The model is also grounded in the author’s own experience of community ICT projects and strengthened by drawing on the evolving New Zealand National Information Strategy which describes three core levels:

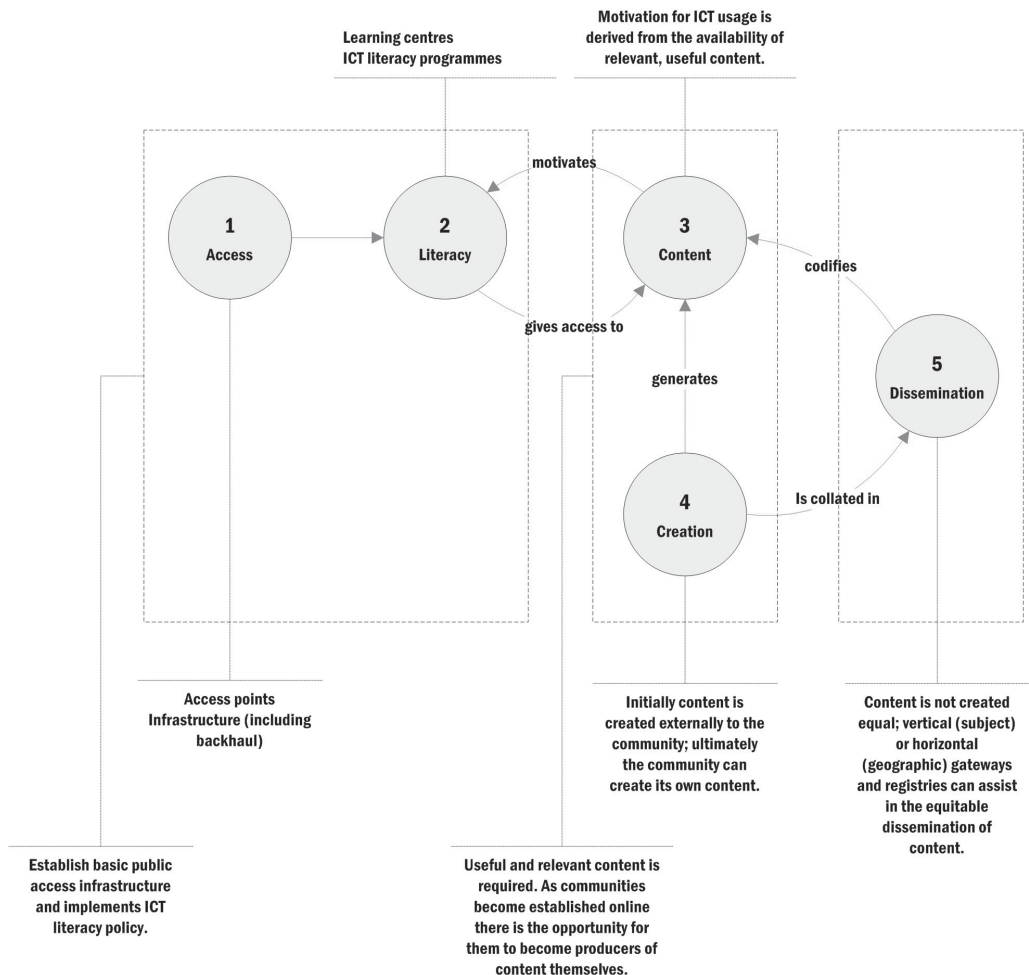
- Knowledge Access/Te kete tuātea (Infrastructure)
- Knowledge Resources/Te kete aronui (Content)
- Knowledge Equity/Te kete tuauri (Empowered access to information)⁴⁸

The effective use of ICT is strongly influenced by the nature and extent of the community in which it is situated. Day identifies three components of community informatics as policy, partnerships and practice (3Ps), to which the model proposed in this article can also be related.⁴⁹ Because access and literacy are societal issues, they must be addressed at a macro- or policy level. Partnership allows active communities to work together in either formal or informal ways. They can be used to realise economies of scale, bring on board funding or to provide specialist skills or training that would otherwise not be available to the community.

Within the community, projects require ICT visionaries to lead the practice-side of a project and skills development initiatives to ensure that, once projects become established and operationalised, localised resource exists to sustain them.⁵⁰

This temporal model identifies five stages of maturity for the use of ICT within communities and can be used as both an assessment tool (for current maturity) and as a planning or policy development tool. Each of the five stages recognises an increasing maturity and sophistication in ICT usage, however, the model should not be seen as linear; the target is not to reach stage five, rather that technology is being applied in a way that is seen as appropriate to the community in question at a point in time (either present or future).

Figure 1: Five-Stage Model



Stages one through four occur within communities. They are not necessarily formal and are not entirely dependent on each other. The requirements and relative importance (or even existence) of a stage is related to the maturity of ICT usage. In other words, each of the four stages, whilst to some degree reliant on its predecessor, does not require that prior stages are or were formalised or even articulated (there is likely to be a continuum between a *laissez-faire* approach and formal strategy or policy initiatives):

Stage 1 – Access

It is not lack of access which causes the digital divide but the consequences of that lack of connection⁵¹ and hence strategies are required to ensure equity of access and opportunity. Citizens must have basic access to ICT. This could be through private ownership, community ownership or privately owned access points. Stage 1 can be sub-classified in terms of the nature, cost and availability of access.

Stage 2 – Literacy

It is not enough that we simply provide community-based ICT resources. It is imperative that those in the community whom the technology is intended to benefit are able to make effective use of it. As the generation of knowledge supersedes physical production in the post-industrial age, literacy can be judged at two levels: that of basic literacy and literacy in ICT.

Stages 1 and 2 are not necessarily formal; if access and literacy are already present or if no policy or strategy addresses them they could be *ad hoc*, however, this requires individual motivation. Formal strategies are more likely to be needed where other socio-economic factors restrict opportunities for access.

Stage 3 – Content

For ICT to be useful and for communities to be motivated to use it, material and services must be available online that are of a perceived value to the community. Communities must be aware of such information and services.

Stage 4 – Creation

Communities have the knowledge, skills and facilities necessary to produce and publish information themselves and to re-package or highlight information that is directly pertinent to them. Logically, stage 4 must have occurred elsewhere to provide usable and useful material for communities entering stage 3.

Stage 5 – Dissemination

The final stage, stage five, is a meta-stage, occurring beyond individual community boundaries. As communities become publishers of new knowledge, society risks becoming overwhelmed with information. At present, some information is more readily available and accessible than others (because the producer is more widely known or because of search engine bias). In a truly participative model for Community ICT, processes need to exist to ensure the fair and

equitable dissemination of information (that is being received at stage 3 and created at stage 4). Examples of such models might be portals or more likely would involve meta-data, meta-indexes and registries.

Stage 5 becomes viable and appropriate once critical mass has been reached at Stage 4. Dissemination can then take place via fora that are geographical (by city, region, country etc.) or topical (democracy, environment, social services etc.). At this level, a clearly defined taxonomy is vital and the use of standards for meta-data becomes important.⁵²

STRATEGIC IMPLICATIONS

For the model to be successful, it is important to recognize that ICT is a tool that operates within a wider societal framework. It is important to connect the stages of this model to the wider socio-economic and democratic context of the community in which it is being developed. A simple way to do this is to link the operationalised five- stage model described here with Day's three component parts of community ICT: policy, partnerships and practice.⁵³ Viewed from the perspective of each stage within the five-stage model, the importance of the macro-view becomes obvious:

Access and literacy

Driven by policy and potentially funded as a result, however, access and literacy often require partnerships to acquire external expertise. Localised delivery is an important success factor, meaning that community-based practitioners are required to actualise the policy. As already suggested, access and literacy strategies are important for disadvantaged or marginalised communities.

Content and creation of content

Community-based hosting projects are the types of partnerships that can provide technology, skills and opportunity, while local practitioners are required to drive the creation of content. Partnership examples can range from formal (such as funding from central government agencies), through semi-formal (community-oriented hosting and web-publishing services, or a joint civic and community web portal) to informal (sharing of resources and skills between communities). Inherent in the concept of partnership is a power differential. Particularly where one partner is providing funding for a project, there are expectations of control, reporting and structure that are likely to be imposed.

Collation and dissemination of like resources

As communities reach maturity in terms of ICT usage, external funding partners become critical for success to ensure equitable distribution and recognition of local content. Projects such as geographic portals can be beyond the resource capability of a single community.

The five stages (access, literacy, content, creation and dissemination) are temporal and non-static. Community A can be a newcomer to ICT, getting up to speed with computers in a new learning centre. However, it requires content to make the technology useful which is potentially

delivered by others locally or elsewhere who are already creating content. At some point, some members of Community A become both literate and motivated enough to publish their own information: stories, histories and news. Once enough vertical or horizontal communities have become publishers, it becomes viable to offer a collated dissemination service, by way of a portal or gateway or through online registries.

CONCLUSION

ICT has the potential to transform citizens' engagement with government, providing a space to subvert the systemic discourse of technocracy and promote the voice of communities. This is assisted by the relative low-cost of ICT, however, barriers to ubiquity still exist and must be addressed at both a policy and practice level. A model that enables communities to gain access, become literate and publish their own stories and create citizen-led initiatives to influence and interface with governments is critical to this. As Chadwick suggests, e-Democracy is about scale, rendering convenient access to participation beyond traditional constraints of space and time.⁵⁴ Where local communities can become effective users of ICT and active producers of their own content, it is demonstrably possible to affect change and influence local political decision-making.⁵⁵

Technology does not of itself lead to truly democratic communities. For this to occur, policy must promote ICT literacy as a life skill and ensure that access is available to all. No two communities are alike and the model presented in this paper is designed to provide a road map, assisting communities to identify their own path to becoming effective users of ICT and a tool for measuring the effectiveness of community ICT projects. The model is designed to be useful to policy makers and practitioners, enabling them to recognise the critical phases of ICT maturity within a community, so that projects empower citizens to engage effectively in the democratic discourse in order to be able to effect real change.

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