A communications policy perspective on CTC sustainability in regional Australia: normative assumptions, commercial viability and social good

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Abstract
This paper investigates the influence of the normative assumptions that can be associated with the Community Technology Centers (CTCs) scheme in New South Wales, Australia during the period 2000-2005 (CTC@NSW). It does this by developing an analytical framework based on Australian communications policy to assess case study accounts of selected CTCs. In drawing conclusions about the normative assumptions that guided the implementation of the CTC@NSW scheme, the sufficiency of market based development strategies are questioned when challenging economic circumstances suggest the need for ongoing strategic assistance from government.

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A COMMUNICATIONS POLICY PERSPECTIVE ON CTC SUSTAINABILITY IN REGIONAL AUSTRALIA: NORMATIVE ASSUMPTIONS, COMMERCIAL VIABILITY AND SOCIAL GOOD

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This paper investigates the influence of the normative assumptions that can be associated with the Community Technology Centers (CTCs) scheme in New South Wales, Australia during the period 2000-2005 (CTC@NSW). It does this by developing an analytical framework based on Australian communications policy to assess case study accounts of selected CTCs. In drawing conclusions about the normative assumptions that guided the implementation of the CTC@NSW scheme, the sufficiency of market based development strategies are questioned when challenging economic circumstances suggest the need for ongoing strategic assistance from government.

Introduction

Community Technology Centers (CTCs) formed a significant part of the Australian Government’s strategy to deliver modern information and communication technologies (ICTs) to regional and remote areas in Australia in the period 2000-2005 (NSW Department Of Commerce 2004). The expectation that these CTCs were to attain commercial sustainability without long term government assistance beyond July 2005 raises questions about what Midgley (2003) describes as the ‘...normative assumptions...’ underpinning such a vision. As part of the nationwide initiative administered through the Department of Communications, Information Technology and the Arts (DCITA1) in partnership with State Government administrations, the scheme made no provision for further government assistance beyond July 2005. If one accepts that existing

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1 In December 2007 DICTA changed its name to the Department of Broadband, Communications and the Digital Economy (DBCDE).
communications policy would have suggested further government intervention, the paper explores the question of normative assumptions and the influence such assumptions have on the planning and delivery of such programs. The paper focuses on the program implementation as it occurred in New South Wales (NSW), called CTC@NSW.

In order to analyze the question of normative assumptions the paper develops an analytical framework that is drawn from current communications policy in Australia. Within communications policy the value propositions that give rise to sustainability across a spectrum of circumstances as they relate to established communication technologies (telecommunications and broadcasting) are broadly defined. It will be demonstrated that the choice by policy makers to adopt a framework that solely focused on economic criteria for sustainability represented a departure from the principles contained within current communications policy. The paper investigates the implications of this approach in relation to the experience of eighteen CTCs in the state of New South Wales.

The paper is organized in the following fashion. The paper begins by providing a summary of the CTC@NSW scheme. The paper then goes on to develop an understanding of commercial viability and social good within current Australian communications policy. The outcome of this analysis defines a matrix that describes four sustainability-related outcomes. This matrix is used to organize case study data from eighteen CTCs in regional New South Wales, Australia. The paper concludes with a discussion about normative assumptions underpinning these cases and suggestions for further investigation.

**CTCs in Regional Australia**

The establishment of Community Technology Centers in regional Australia in early 2000 represented a significant public policy initiative to overcome the affects of distance and isolation. Funded by the Networking the Nation program this government scheme aimed to provide selected regional and remote areas within Australia managed technology centers with broadband access (NSW Department Of Commerce 2004). The purpose was to enable social and economic development in regional areas challenged by changing economic circumstances. Funds were distributed to communities on the basis of an approved business plan that was formulated by a local committee of interested community members under

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2 New South Wales (NSW) is the most populous state in Australia.
the guidance of a regional coordinator (NSW Department Of Commerce 2004; De Weaver and Ellis 2006). A factor common to planning in all areas was a funding deadline of June 2005 after which CTCs were expected to be commercially sustainable. Given the limited funding agreement it is not surprising that the theme of sustainability figured prominently in discussion about these CTCs prior to June 2005 (Farr and Papandrea 2004; Geiselhart 2004; Simpson, Daws et al. 2004; De Weaver and Ellis 2006).

Since June 2005 the reality of the post-funding environment is becoming clearer. There has been a need to re-orientate activities to compensate for the withdrawal of funding while maintaining a focus on the local needs of communities. This has created an uncertain context in which these CTCs currently operate. Interestingly, membership of the umbrella organization, the Community Technology Association (CTCA) has remained relatively constant. The departure of members from the CTCA due to closures since 2005 has been compensated for with new memberships.

The research project that this paper is derived from sought to discover the strategies that have been employed by selected CTCs since July 2005. In order to assess this information against a broader theoretical context an analytical framework derived from communication policy was defined. The next section explains the relevance of this analytical framework.

**Normative Assumptions**

Midgley (2003 p. 840) observes that consideration of the normative assumptions that underpin development projects has been given insufficient attention. He ascribes this lack to the nature of development work which is eclectic and focused on the practical and pragmatic. Midgley (2003 p. 840) reasons that this has worked against a ‘…coherent practice approach…’ which in turn has weakened attempts to bring about change in the implementation of development programs. To that end, the paper explores the question of normative assumptions as they apply to the study of CTC@NSW program.

In terms of distilling normative assumptions in relation to the administration of the CTC@NSW program it is useful to begin with Australian communications policy. As DCITA was the lead agency responsible for the allocation of funds to the national CTC project in the period 2000-2005, it follows that one area from which normative assumptions could be drawn is from communications policy. As will be
argued, it can be seen that the implementation of the CTC@NSW program represented a significant departure from the norm as expressed in communications policy.

The policy propositions that give rise to sustainability in the areas of telecommunications and broadcasting are distinctive for the recognition that is given to both market forces and the social good. The default policy for the provision of communications services appears as a market based model. A market-based model can be understood in terms of a textbook explanation of the open market in which businesses succeed on the basis of consumer support. Those that do not garner sufficient revenue from consumers will fail. This approach is clearly evident in Australia’s *Telecommunications Act 1997* that states that ‘….efficiency and international competitiveness…’ is a primary object of the Act (TSA 1997, Sec 3). If one looks to broadcasting legislation the preference for market based models is apparent in two categories of services described under the *Broadcasting Service Act 1992* (BSA 1992, Part 2) named commercial broadcasting services and subscription services.

In addition to these commercial imperatives both sets of legislation are factored on delivering positive social outcomes. For example, the first object of Australia’s *Telecommunications Act 1997* is the promotion of the ‘…long term interests of consumers….’. The Act goes on to state that services of ‘…social importance…’ need to be ‘…reasonably accessible to all…’ (TSA, Sec 3). It is within this context that the Universal Service Obligation (USO) is defined in terms of a basic rate ISDN service (Coutts 2004). Broadcasting, by way of contrast, is able to use audience size as a measure of social acceptance. In concert with this is the need for media proprietors to demonstrate their ‘…trust and candour….’ in order to be eligible for a commercial broadcasting license (BSA, 1992, Sect 41).

‘Social good’ is a term that is increasingly gaining currency in communications discourse (for example see Clark 2003; Bales and Gilliam Jr. 2004). The term is used in this paper to give voice to the idea that communications technology delivers a dividend to society because individuals are better informed and better able to participate in the economic and social life of communities. Souter (2005, p. 13) outlines the underlying principles that give rise to such a dividend by stating that:

‘…[people] have a need to share information, experience or social solidarity (for example, in maintaining family relationships). Similarly people do not seek information for its own sake, but because they can use it to protect themselves against vulnerability or to seize opportunities for advantage…’
With reference to new ICTs Souter (2005) goes on to say that despite the many discontinuities in communications technologies development over the decades, people’s requirements for information have remained essentially constant.

In many instances the goals of commercial viability and social good coincide. However, commercial viability cannot be simplistically aligned with social good. One example of this is the distribution of pornographic material where there is sufficient demand for such material but governments are required to apply censorship controls over supply in order to limit exposure to children. Another scenario in which the two concepts of commercial viability and social good can come into contention is described by the term “market failure”. Market failure refers to the inefficiencies that arise when ‘…a gap between what “society” is prepared to pay for [a service] and the cost to the “economy” of supplying that [service]…’ (Albon and York 2006, p. 369). In summary, there are times when insufficient commercial incentive exists for the delivery of a service which is important, perhaps necessary, for a community to function properly.

In telecommunications policy the Universal Service Obligation (USO) gives recognition to situations of market failure and provision of resources to overcome such failure in the public interest. In the broadcasting arena one category of service, national broadcasting, addresses educational and cultural discontinuities resulting from the thinly spread Australian population over its large landmass. As consumers would be unable to support the high cost of this social need it makes economic sense for governments to fund national broadcasters as well as specialized distribution mechanisms such as satellite to remote areas. Community broadcasting, another category of broadcasting service, aims to provide not-for-profit community groups access to the radio spectrum on a non-commercial basis.

In order to consolidate this analysis of communications policy in Australia into an analytical framework for the assessment of CTCs a matrix has been developed (Figure 1).

The matrix reflects four scenarios that relate to commercial viability and social good. Sector 1 represents a situation in which both social good outcomes and commercial viability are achieved. Sector 2 deals with situations in which social outcomes are achieved but there is insufficient commercial incentive to support the communication related activities. This is the classic market failure scenario described above. Sector 3 represents situations in which commercial viability is achieved but social good
outcomes are diminished as a consequence. Government intervention is also required here to ensure potential negative social outcomes are appropriately managed. Sector 4 is included for the sake of completeness as the absence of viability in both the commercial and the social realm naturally works against the longevity of such activities.

![Figure 1. Sustainability Matrix](image)

If one was to apply the propositions laid out in Figure 1 to the CTC@NSW program attention would be limited to commercially viable activities (Sector 1 and Sector 3). The program planners stipulation for CTCs to be auspiced by a local institution such as Local Government indicates the attention given to avoiding negative social outcomes in relation to the establishment of CTCs. The primary intention was the attainment of commercial viability with consequent social good outcomes. Notably no consideration was given to Sector 2 outcomes where commercial viability could not be achieved. If one looks to Midgley’s (2003 pp. 838-840) analysis of social development programs it can be seen that such an approach was a deliberate one.

Midgley (2003 p. 840) has observed that evidence of a neo-liberal economics agenda within social development programs is laid bare by the emphasis given to ‘…local entrepreneurship…’ and a reliance on ‘…market integration…’. The opposition to government support beyond July 2005 in the CTC@NSW program is wholly consistent with Midgley’s (2003 p. 839) descriptions of neo-liberal development approaches in that
government interventions in the ongoing support of development initiatives is eschewed. Midgley goes on to reason that neo-liberal development strategies seek to reduce the size and intervention of civil bureaucracies in development in order to allow unfettered market processes to work.

**Application of the Sustainability Matrix to CTCs.**

Throughout 2007 the author undertook a series of case studies in order to document and analyze the development of CTCs in NSW two years after funding from the Networking the Nation scheme ceased in July 2005. Managers and volunteer staff from eighteen centers were interviewed to determine the nature of strategies aimed to achieve self sufficiency. As the question of commercial viability represents the primary point of contention identified in the previous section the following case study accounts have been organized to address this issue.

**Factors that worked towards commercial viability**

In seeking to attain commercial viability all of the CTCs studied provided public access to ICTs and the Internet on a user-pays basis. It can be observed that income generating potential of this initiative is to a large extent determined by the nature of the economies in which each of the CTCs reside. For example, some CTCs were located in popular tourist destinations which were able to generate income by offering Internet services to travelers keen to maintain contact with family and friends, download photos from digital cameras as well as conduct online business transactions such as banking and accommodation booking. Then there were CTCs who had difficulty in generating income because the surrounding community was isolated, small in number (less than 500 people) and off the main tourist routes. In all CTCs the user pay model of providing public computer access to the community was found insufficient to generate sufficient income. As a consequence CTCs were forced to look beyond this measure to generate revenue.

The variety of revenue raising initiatives stands testament to the creativity and commitment of CTC managers and volunteers. One example of this is training. In some places, CTCs represent a quasi-formal ICT training organization in their local communities. Many of the CTCs receive payment from employment agencies for training of unemployed people. Some of these CTCs also provide training courses to the general
public for a fee or for free if sponsored by a government department such as the NSW Department of Community Services. In larger communities training courses represent a worthwhile activity as there are a sufficient number of students to ensure that courses are run on a revenue positive basis. In smaller communities it is difficult to attract a sufficient number of people who can attend classes at the same time. Economic contexts can be seen to be influential. One CTC, which was located in an area that had a high proportion of retirees who had recently moved to the area, experienced a high demand for fee-based training courses. On the other hand, areas that were economically depressed due to dislocation of local industry (for example, drought in rural areas and government buy-out of fishing licenses on the South Coast) experienced a demand for training courses on the basis that such courses were free. The creativity of one CTC was apparent in its response to this by starting a computer club for seniors in which members paid a donation on attendance where they were able to have ICT-related questions answered by the manager or volunteers.

All of the CTCs with the exception of two provided office related services such as printing and laminating facilities for the general public. Three of the managers surveyed provided secretarial and managerial support to their local Chambers of Commerce. The creation and printing of the Orders for Services for funerals figured prominently in the case study accounts.

Some CTCs had developed revenue streams by publishing a community newspapers or newsletter. This has provided a viable model for revenue generation as there is a natural synergy between the ICT based facilities and the information-based nature of the product and local business who are willing to pay for advertising. This has worked particularly well when CTCs have formed a business partnership with a local printer. Other CTCs have devoted time and resources to the production of books, DVDs, CDs and websites. The nature of such information ranges from tourism and local historical information (such as published CD ROMS) to special interest needs including cookbooks, creative writing, music and video productions. The source of such creativity was sometimes the work of individuals and at other places the consequence of group interaction within the CTC. In the latter case, the CTC plays a role conducive to group innovation by providing a physical and social context for group formation, interactivity and creation. While occupying small sections of the case study data, the implications of such information products over the longer term appear significant. For example, the recording of oral histories from elderly locals appears as a valuable
Factor that worked against commercial viability

Despite the creative endeavors to earn revenue only three of the CTCs studied were fully independent. Fourteen relied to a significant degree on the assistance of local government agencies to keep their doors open. One CTC was fortunate enough to be auspiced by the local progress association which had ownership of a building which was provided rent-free to the CTC. In relation to the sustainability matrix (Figure 1) CTCs that are candidates for Sector 1 (commercially viable and delivering social good outcomes) are in the minority while the majority appear to be best situated within Sector 2 (commercially unviable though delivering social good outcomes). This presents a problem as Sector 2 cases are not given any consideration within the normative assumptions associated with the CTC@NSW program.

The economic conditions (markets) in which these CTCs operated appear to have constrained the commercial viability of CTCs on two accounts. The first related to the heavy hand of economic decline and smallness. In contexts where the obdurate forces of economic change in regional areas are closing down local banks, schools and supermarkets it does not follow that CTCs will be able to avoid this reality. Program planners themselves seriously miscalculated demand for video conferencing services in regional areas to the extent CTCs wasted valuable resources in maintaining expensive digital trunk lines when business had little use for such a service. As CTCs represented a sensible alternative for the delivery of some government services the opportunity to generously support CTCs in this function has been lost through poor coordination between tiers of government and miserly allocations to CTCs to perform these functions.

The second reason can be related to the economic qualities of information itself. While training courses provide an example where information is easily commoditized and sold, there are also many occasions in which information is not so easily commoditized. Such was the near universal quandary of CTC managers who complain that there are
Evidence of the Social Good

Some may argue that the burden of public support for CTCs should fall on Local Government as many of the social good benefits that are accrued are local. These are reflected in the examples previously given in relation to Internet access, training and the publication of information products such as community newspapers, oral histories tourist information, photographic exhibitions and the list continues. One poignant example was one young person’s reliance on email access at one rural CTC to maintain contact with her mother who was living hundreds of kilometers away.

While these social good examples have a clear benefit for the local context there were also instances in which the work of the CTC was creating benefits for administrations within the State and Federal Governments. One example is the role one CTC has played in engaging teenage boys in activities that have steered them away from criminal behavior. The expenses associated with policing the latter and the subsequent administration of justice by the State Government has been avoided. Some CTCs have facilitated the creation of new small businesses. During the study of one CTC, an IT repair business was in the process of being established after a period in which the new proprietor was able to test the concept within the CTC. In this case and others, the CTC also facilitated the necessary contacts with the relevant Federal Government Department responsible for dispensing grants for this purpose and reduced the burden of the Federal Government to unemployment benefits.

Not immediately evident are the steps CTCs take to prevent harmful experiences particularly to children. If one looks to the sustainability matrix (Figure 1) this is described by Sector 3. This represents a common requirement for all the members of the CTCA (Community Technology
Centre Association) to which all of the case study CTCs belonged. This included specific prohibitions against the viewing and downloading of pornographic material, the use of CTC facilities to intimidate or threaten others and the use of facilities for online gambling. One CTC manager had taken specific action to forbid young people from accessing online chat and social networking sites because of the specific vulnerability this group had to online liaisons. Other managers expressed some disquiet at the images some teenagers accessed but generally used on-the-spot supervision by volunteers or themselves to manage and limit exposure to such sites. None of the CTCs studies were actively engaged in deriving income from activities that were considered potentially harmful to vulnerable groups such as gambling.

**Discussion and Conclusion**

In making assessments about the normative assumptions that underpinned the CTC@NSW program it is appropriate to acknowledge the benefits that hindsight confers to the researcher and the difficulties in planning and implementing a comprehensive initiative such as the CTC@NSW program in a context of uncertainty. It can be concluded that the CTC@NSW program along with similar programs in other states engendered a high degree of community support and creativity (Geiselhart 2004; Simpson 2005). To the extent that individual entrepreneurship is a hallmark of the neo-liberal development agenda one may conclude that the program was effective in unleashing latent local human capital. Interestingly Midgley (2003 p. 837) also notes that individualism is also a hallmark of a parallel development paradigm associated with ‘…radical popularism, community participation and social action…’ (837). He reasons that both neo-liberal and radical development agendas were inspired by the failure of post World War II statism in development which in turn explains the popularity of ‘…bottom-up…’ development programs.

However, faith in the market to deliver optimal social outcomes is called into question by the case study accounts detailed in this paper. As one CTC manager quipped “They [program planners] expect a remedy for market-failure [CTCs] to be a market success!”. The presence of enthusiastic volunteers in all but three of the centers studied appear to be filling in the gaps that are legitimately associated with government in its role to prevent market failure. Policy makers are quick to point out that while market failure is a necessary condition for government to act it is not sufficient in itself if other methods are able to deliver a superior outcome
(Albon and York 2006 p. 371). In this context, the latent resource that volunteers represent is one such alternative that policy makers look to when backing away from a commitment to support CTCs. However, Simpson (2005 p. 104) warns of a situation where volunteers may get worn out by the burdens of supplying services without sufficient support from external sources such as government. This illogical reasoning of planners comes into stark view when one notes the necessity for local government support for CTCs. A cynical view may consider this as an exercise in cost-shifting between the different tiers of government inspiring commentators such as Geiselhart (2004) to call for a ‘…whole of Government approach…’ to the support of CTCs.

In outlining a way forward for social development theory Midgley (2003, p. 841) outlines four scenarios: first, the dominance of the neo-liberal agenda within development bodies such as the World Bank is enough for some to claim this as the most appropriate paradigm; second, the development of a new set of normative theories; thirdly, a synthesis of existing approaches which recognizes individual entrepreneurship but reserves a place for state direction; and fourth, the further synthesis of perspectives from non-European sources so as to incorporate ‘…indigenous ideas and beliefs…’ into the development paradigm.

The outcome of this paper’s analysis favors the third option outlined by Midgley. The research indicates a need for a synthesis of local entrepreneurialism but delineates a clear need for state support to compensate for market-failures. During the course of case study investigations CTC managers displayed considerable frustration that their considerable efforts were not recognized by way of modest assistance from government.

Finally, it needs to be noted that the significance of Midgley’s fourth option is not lost on the case studies investigated here. CTCs that served Aboriginal communities are challenged to incorporate specific traditions of these communities such as the need to consult and cooperate with respected elders. Space constraints prevent extended discussion on this option here. This remains a topic for discussion at a later time.

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References


