INTRODUCTION

Previous innovations, such as telephones allowed individuals to communicate on a one-to-one basis, or for powerful, central institutions to speak one-way to the masses (Burrows, 2000). New technologies such as the Internet are revolutionizing communications as a positive force, improving the efficiency and accountability of local government, and strengthening communities. This requires a vision in order to be able to actively use technology rather than passively reacting to change. Any advancement which is able to significantly empower people, also threatens to entrench the division between haves and have-nots—both as organizations and as individuals (Burrows, 2000). In the current climate, local government agencies are beginning to use these new technologies to open up the process of communication between governments and the citizens.

Essential to the technological challenges is the balance between three major elements—social capital, Quality of Life (QoL) and the technology itself. For instance, social capital is realized when the public perception that technological changes implemented in societies would enable advancements in daily routines of the public. These advancements, then, would contribute to better QoL. The link between the daily routines and the advancements is provided by technology. For example, using the Internet technology, public can order their groceries and this is seen as advancement as there may be considerable time savings, resulting in quality time spent with family. Therefore, local government agencies introduce technologies in their communities with the anticipation that the social fabric can be strengthened via these technologies.

Over the last five years social capital has become a main topic on the public agenda. Social capital is realized between people who establish networks, norms, social trust and facilitate co-ordination and co-operation for mutual benefit and there is increasing evidence to suggest that social capital is an essential ingredient in civil society, economic development, the health of people in communities and community development (Stone, 2001; UNCTD, 2002). Thus in communities where social capital is strongly rooted, people will feel that they are part of the community, useful and be able to make a real contribution to the community, will participate in local community networks and organizations, work together for the common good in times of distress, and valued for who they are (Chamber, 2002). This is shown in Figure 1, where the “ME” component is centered upon the family, work, friends and relatives, and the immediate neighborhood.

Quality of Life (QoL) is defined in various forms in the literature. For example, QoL is defined as subjective well-being by the Global Development Research Centre. QoL reflects the difference, the gap between the hopes and expectations of a person and their present experience. Earle and Fopp (1999) asserted that technology is a major social and occupational determinant in QoL and indicated that technology has reduced the need for direct interaction. As a consequence, communities are culturally experiencing a change. Others found that technology itself (e.g., Internet access) ultimately plays little role in determining individuals’ quality of life as maturity and life experience replace the need for any dependence on an artificial support system (e.g., Granzin & Haggard, 2000). Therefore, while technology plays a crucial role in the social determination, how it is implemented is essential in order to ascertain the reach of this technology on the public. If the technology is properly implemented, then it may be possible to realize a better social capital.

Figure 1. Social capital (Adopted from Bullen & Onyx, 1999)
Determining Whether ICT Improves Social Interactions

NETWORK NEIGHBORHOOD

Network Neighborhood (NN) is about using online technologies in order for people to communicate with each other when they want to, and develop strong communities of interest to keep them involved and interested in their neighborhood, so they have a sense of belonging (Gill, 2003). NN is a program designed to enhance the economic, cultural, social and environmental development and deliver better quality of life. Its main aim is to deliver a social dividend while increasing the reach and relevance of government and significantly cut the cost of government service delivery (Gill, 2003). Picton Waters Network Neighborhood project is one such NN project developed by an Internet-based software application in Western Australia to see if the Internet can help make stronger communities and better neighborhoods.

A growing body of literature has confirmed that social capital is correlated with positive individual and collective outcomes in areas such as better health, lower crime, better educational outcomes, economic development and good government (Carroll, 2002, p. 647). According to Bullen and Onyx (1999), it is possible to measure social capital in network neighborhood as there is a general social capital factor available in many forms such as participation in local community. In a neighborhood context, indicators help to evaluate whether local actions are having the effects desired.

Therefore, the main aim of this study is to test the claim that the NN would improve the QoL of the neighborhood community.

METHODOLOGY

This study used a mixed methodology. Initially, an interview method was employed in this study to identify indicators for measurement. This was then followed by a survey method. A QoL survey relies on the respondent’s subjective rating of perception about QoL. Typically the spheres measured are primarily based around finances, health, family, friends and work (Ventegodt, 1996). Zehner (1996) measured QoL in terms of economic security, physical environment, family life, contentment, well-being, personal relationships and values, job-satisfaction, social relationships (non-family), leisure activities, health, religious values, parenting and housing and found housing, community, physical environment, social environment, and work, transportation and living costs to be significant factors. Shookner (2000) suggested that indicators such as social, health, economic and environmental should also be included in the QoL Index. This study used those social indicators identified by Zehner (1996) with consideration to the concerns raised by Earle and Fopp (1999) who found that technology has reduced the need for direct interaction, and, as a consequence, communities are experiencing a change in the way their members interact with each other using online technologies.

The vital component of this project is to evaluate the effectiveness of NN in terms of whether the use of the online technologies improves the QoL of the community. It is hard to determine the most optimal or most suitable indicators to measure QoL in the context of ICT as the proposition that “the use of ICT in a community would improve (or worsen) the QoL” is quite new. It appears that there is limited research conducted to measure that impact of ICT on QoL (Keyes & Bancroft, 2002, p. iii).

Selection of Indicators

The QoL indicators have been selected following interviews with key personnel in the Department of Premier and the Cabinet in Western Australia. The interviews yielded specific characteristics appropriate to the indicators. They are timeliness of the indicators, reliability and stability, understandability, relevancy, usefulness, simplicity and honesty. Based on this, an initial theme for the indicators was developed from Kingsley (1999) and elaborated during informal, open interviews. The theme includes depression, stress, social isolation, safety, trust, opportunities, and equality. The themes were further studied resulting in a set of hypotheses.

Discussion of Hypotheses

Social support helps give people the emotional and practical resources they need. Belonging to a social network of communication and mutual obligation makes people feel cared for, loved, esteemed and valued. According to the World Health Organization Regional Office for Europe, this has a powerful protective effect on health. Through the use of NN, the members of the community can interact with each other through mail or being part of the various communities that are available through the network site. The NN helps in bringing the physical proximity of family and friends together, and one needs to measure the degree to which a person is socially integrated, or if there is any availability of social support networks being developed through the use of NN for the overall social well-being of the community member. Social well-being here is defined as including interactions among the members of the Picton Waters neighborhood community.

The hypotheses developed for this study covers areas such as depression, social isolation, safety, trust, opportunities and equality. These factors appear to have an impact on social isolation, and it is believed that by using ICT, it may be possible to alleviate the adverse