Community informatics – a challenge for university scholarship

Community informatics can be described as the discipline that underpins the social appropriation of ICT for local benefit.

So what does this really mean in terminology that most of us have been used to?

Firstly the term 'social appropriation' of ICT is one that contrasts with a concept of 'organizational appropriation' in which ICT hardware and software have emerged as aids to organizational efficiency. The focus of much of the development of ICT to date has almost unequivocally been on organizational benefits in a largely *homo economicus* doctrine. However, recently with the advent of the Internet and interest in the use of ICT for leisure and social pursuits, there has been an increasing interest in the social application of ICT. Further, as government moves more into concepts of e-service delivery, it is finding that taking a singular approach to electronically enabling existing services is expensive and neither meets the emerging needs of civil society nor makes best use of the capacity of ICT to provide services in ways that make sense to the community. In such environments there is a demand to develop the technology (software and hardware) in ways that recognize the social needs of the community.

As we know, ICT is currently posing fundamental questions for society, government and commerce in economic, social, educational, cultural and democratic processes within and across nation states in terms of access, equity and security. Community, business and social electronic networks, which can operate both inside and outside of nation states with hitherto unknown volume and velocity, are challenging and changing the architecture of governance, power and culture.

Many governments and global agencies have recognized the growing issues associated with inequitable ICT access and provided funded programmes aimed at addressing specific needs within nation states. However, many of these programmes have failed to deliver on their desired aims. As a result societal and community-based disadvantage, resulting from uneven societal adoption of ICT, is growing. There is now increased understanding that the provision of access to ICT (either high or low capacity), through government and private sector efforts by itself is insufficient to address the substantial concerns that face society as a direct result of ICT. The UN-sponsored World Summit on the Information Society (WSIS) with phases in Geneva (2003) and Tunis (2006) provides visible international recognition of this point.

Further, global experience in the use of ICT for government services (known as e-government), is showing that reporting against targets related to the provision of existing government information and services electronically no longer embodies the challenges governments must address to move forward in the information economy. Fundamental to these issues is the recognition of concepts of:

- *effective use* as opposed to *access*, whether this is based around physical, attitudinal,
educational, disability, cultural or integration concepts; and

- civil society and a new contract that binds civil society, public and private sectors into a value matrix.

There is now a growing view that successful policy development in modern societies recognizes that:

- citizens are key stakeholders in the making and consumption of public policy;
- the most pressing problems facing nation states do not respect organizational boundaries; and
- a concept of the information society as being foundational to economic, social and cultural well-being.

In shaping adequate responses to the new territory being shaped by an increasingly ubiquitous ICT, which has scant respect for hierarchies, boundaries, traditional allegiances or the disadvantaged, there is value in examining the emerging context for the social appropriation of ICT.

ICT is simultaneously both incrementally and fundamentally changing the working, social and personal lives of many people in developed countries and developing countries alike. As pointed out above, the technological deterministic view of ICT diffusion, particularly in the development of 'e-service delivery', is now being challenged. As many of the 'national e-readiness' studies are finding, the major current impediments to adoption of e-service delivery are in the demand and the aggregation of supply and demand domains. Many of the ICT applications developed for organizational application have not been successfully embedded into the demand and demand aggregation domains and are being found wanting in such domains. Hence, the social appropriation of ICT involves the duality of redefining application design and of embedding the technology in the social processes of civil society. In short, it is about customer-driven technology.

The term 'community informatics' has recently emerged to describe the use of ICT for local community benefit. Community informatics (CI) is an emerging area of practice, teaching and research that fits within an information society framework alongside the more traditional areas of business, technology, government service delivery and contemporary communication.

It is important to note several very distinct differences between CI and more traditional approaches. Firstly, CI focuses on distributed systems and not aggregated ones. Secondly, CI favours collaboration over competition and sharing over hoarding. Thirdly, CI is based on a premise of active interaction in the development, use and appropriation of the systems compared to traditional information systems that are predominantly based on a passive consumption of service offerings.

There is increasing evidence that if left unaided, ICT by its very nature tends to centralize both power and decision making into larger economies of scale which may or may not respect geographic culture, social processes or economic needs. While these tendencies operate within a paradigm of competition policy within nation states, the impacts could possibly be mediated through redistribution of resources to disadvantaged geographic and socio-economic locations. However, we are seeing online business and consumer behaviour moving outside of the control of nation states. The future impact of this is yet unknown but superficially, at least, it poses significant economic, social and cultural challenges for governments, smaller business and civil society alike. The global adoption of ICT is cause for many countries to reassess their competitive positions in relation to ICT-enabled economies of scale, resultant national alliances, electronically engaged citizenry and
concepts of civic intelligence.

In summary then, ICT and Internet technologies are increasingly moving into a civil societal domain which is multidimensional and requires new forms of research, management and learning. The provision of e-service delivery alternatives is expensive. E-service has not generally delivered expected cost savings, has not been generally adopted by citizens and has not generally improved social inclusion, innovation or participation. The Internet and ICT are profound developments affecting humankind not just the economics of business or service delivery.

These trends provide both challenges and opportunities for universities that operate within nation states. They provide serious questions for universities in terms of the appropriateness of their role, structures and societal responsibilities in an emerging information age where shared knowledge at the societal level is seen as pivotal to issues of equity, security and increasing self-reliance. Currently, few universities have responded to these challenges in ways that provide leadership in the use of ICT for civic engagement and responsibility in democratic processes, conflict resolution, self-reliance and social cohesion. In recognition of this need, the Cape Peninsula University of Technology (CPUT) has established The Information Society Institute (TISI) as a multi-stakeholder approach with government, business and civil society to apply academic effort in CI-based teaching, research and praxis.

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