e-Inclusion and Internet Access in Ireland
O'Donnell, Susan; McQuillan, H.; Malina, A.

National Research Council Canada   Conseil national de recherches Canada

Canada

National Research
Council Canada

Conseil national
de recherches Canada

Institute for
Information Technology

Institut de technologie
de l'information

NRC·CNRC

e-Inclusion and Internet Access in Ireland *

O'Donnell, S., McQuillan, H., and Malina, A.
July 2004

Canada

e-Inclusion and Internet Access in Ireland

Susan O'Donnell
National Research Council of Canada
Fredericton, Canada
Susan.O'Donnell@nrc-cnrc.gc.ca

Helen McQuillan
Improvement and Development Agency (IDEA)
London, England
helen.mcquillan@idea.gov.uk

Anna Malina
e-Society Research
Edinburgh, Scotland
anna@annamalina.co.uk

Abstract - *Ireland has a booming economy and one of the lowest unemployment rates in Europe. However many demographic groups are excluded from participating in, and benefiting from, an economy and society where ICT and the Internet in particular are becoming increasingly important. This paper presents the results of a study which for the first time identified the excluded demographic groups: late adopters with the lowest rates of Internet access and use in Ireland. The analysis draws on the results of interviews and consultations with 60 stakeholders active in social inclusion, e-government and information society development in Ireland which identified critical e-inclusion areas and actions and developed a 10-point action plan. The paper concludes with a reflection on the e-inclusion deficit in Ireland – the gap between policy and political commitment and action.*

Introduction

Since the release of the Bangemann Report (European Commission, 1994), Ireland and other EU member states have been liberalising their telecommunication regimes in the belief that this would lead to lower prices and more equitable telecommunications services for citizens. A parallel development in Ireland and across Europe has been the evolution of information society policies based on the assumption that lower prices for

telecommunications services would result in equitable access and use. This has clearly been the thinking at the heart of eEurope 2005, the core information society policy in the European Union.

A decade after the Bangemann Report, it is opportune to revisit this assumption and explore the diffusion of the Internet and the development of e-inclusion policy in Ireland. As one of Europe's smaller economies, Ireland faces many challenges ensuring equitable diffusion of telecommunications services (Preston, 1995 and 1997). However, during the 1990s, Ireland was an economic success story, with the largest increase in GDP per capita in the EU. Following the logic of Bangemann, it should have been expected that the diffusion of telecommunications services, including the Internet, would become widespread. Although the cost of telecommunications services has dropped in Ireland, the diffusion of the Internet remains stubbornly unequal among citizens from different demographic groups.

This paper makes the case that:

- Ireland has a hidden problem of social exclusion
- the groups experiencing social exclusion in Ireland have low levels of Internet use
- e-inclusion is important for equitable social and economic development
- Irish e-inclusion policy does not adequately address the problem of social exclusion
- a more comprehensive approach – a 10 point action plan - is needed to foster e-inclusion in Ireland

The discussion is based on the most comprehensive study undertaken of e-inclusion in Ireland. The research, an independent study commissioned by the Irish government, analysed the latest available statistics on Internet access and use, reviewed e-inclusion policies, and interviewed or consulted with 60 stakeholders involved in social inclusion and information society development in Ireland (O'Donnell, McQuillan and Malina, 2003).

Social exclusion: Ireland's hidden problem

Ireland and other European Union member states have jointly defined social exclusion as a process whereby certain citizens are pushed to the edge of society. These citizens are prevented from participating fully because of poverty, discrimination, or lack of basic competencies and lifelong learning opportunities. The outcome for these citizens is risk of exclusion from job, income and education opportunities and social and community networks and activities. Citizens who are socially excluded have restricted access to power and decision-making, leading to feelings of powerlessness and inability to take control over the decisions that affect their daily lives (European Council, 2004).

In contrast, the process of social inclusion ensures that citizens at risk of social exclusion gain the opportunities and resources necessary to participate fully in economic, social and cultural life and to enjoy a normal standard of living and well-being. Social inclusion ensures that they have greater participation in decision making and access to their fundamental rights.

Social exclusion is a hidden problem in Ireland. On the surface – looking at GDP per capita and employment rates – Ireland appears to be doing very well. Ireland is now the second wealthiest country in Europe, and Dublin has a higher GDP per capita than London. Ireland's structural economic transformation and incredible economic success during the 1990s led to its global reputation as the "Celtic Tiger."

Particularly impressive during that decade was the rapid decline of long-term unemployment – adults active in the labour force but unemployed for a year or more. Ireland's long-term unemployment rate in 1990 was 9.1 percent. Only 12 years later, the rate had dropped to 1.3 percent, far below the European average (European Commission, 2003). No other European country experienced such a rapid or dramatic decline.

Ireland's success in providing jobs for the unemployed was partially achieved by bringing in large multinational (primarily US) companies. The biggest draw for inward investors was the low corporate tax rate, the lowest in the European Union. By lowering

its corporate tax rate to attract multinational companies, the Irish government reduced not only its unemployment rate but also ability to collect taxes on corporate profits that could be spent on social protection.

During this same period, Ireland's spending on social protection per citizen dropped dramatically. Spending on social protection is a primary means by which European governments equalise gaps in income and wealth among citizens. Essentially it entails spending tax revenues on programs designed to reduce the risk of poverty and social exclusion faced by vulnerable citizens. Social protection policies and programs are typically labour market policies and programs, social insurance and social assistance, and child protection. By spending on social protection, governments hope to achieve more cohesive and equitable societies.

In 1992, Ireland spent less per citizen on social protection than the European Union average. During the next 10 years, its spending decreased further. By 2001, Ireland was spending less on social protection than any other EU country and far less than the EU average. In 1992, spending was 20.3 percent of GDP. In 2001, it had dropped to 14.6 percent of GDP (European Commission, 2003).

The result of this decreased spending on protecting the poor and increasing social inclusion can be seen most dramatically in the growing poverty rates. Ireland now has the highest poverty rate in Europe. In 2001, before social protection transfers, the poverty rate in Ireland was 36 percent, lower than the EU average. However after social protection transfers, the poverty rate of 21 percent was not only much higher than the EU average of 13 percent but also higher than any other EU country.

Poverty - linked to the fact that Ireland was spending less on social protection than any other EU country - was experienced most starkly by elderly citizens. In 2001, the poverty rate of elderly women in Ireland was twice the EU average and significantly higher than any other EU country (European Commission, 2003). In 1995, the risk of poverty in Ireland was 19 percent, slightly higher than the EU average. In 2001, it had climbed to 21

percent, much higher than the EU average of 15 and the highest of any EU country. In the same year, the persistent risk of poverty for elderly women in Ireland was 40 percent, almost triple the EU average of 14 percent, and much higher than in any other European country (European Commission, 2003).

Socially excluded groups have low levels of Internet use

In 2004, Ireland's Central Statistics Office announced it would begin collecting regular data on Internet access and use in Ireland. To date, the lack of consistent, ongoing data has been a challenge for information society policy development in Ireland – essentially, without reliable data it has been difficult if not impossible for the Irish government to identify the groups most at risk of e-inclusion and design evidence-based policies to address the problem.

In the absence of official data, the most comprehensive series of surveys of Internet access and use by the general public were commissioned by the Information Society Commission (ISC). These surveys were conducted by two commercial market survey companies in Ireland – Lansdowne Market Research in 1999 and the Market Research Bureau of Ireland (MRBI) in 2000 and 2002.

The data from the MRBI survey in October 2002 were analysed independently by O'Donnell, McQuillan and Malina (2003) as part of their study of e-inclusion in Ireland. This remains the most comprehensive analysis to date of Internet access and use by different demographic groups in Ireland.

The 2003 analysis of the Irish data defined the term "late adopters" as: "adults without Internet access or using it less than once a month." The analysis found that the national percentage of late adopters in 2002 was 55, meaning that 55 percent of Irish adults did not have Internet access or were using it less than once a month.

The analysis identified, for the first time, the demographic groups excluded from participating in, and benefiting from, an economy and society where ICT and the Internet in particular, are becoming increasingly important. Chart 1 lists all the demographic groups in Ireland with a percentage of late adopters above the national average. The percentages were calculated for all the demographic groups for which data exist.

Chart 1: Percentage of late adopters in different demographic groups (2002)

Demographic group	Percentage of late adopters in demographic group
Retired	89.6
Class F50 (small farmers)	89.1
Age 55+	87.3
Primary school but no qualifications	85.9
Workers in agriculture, forestry or fishing	85.2
Women with home duties (housewives)	78.4
Unemployed	72.7
Trade apprenticeship qualification	70.8
Class E (lowest level of subsistence)	70.0
Class D (unskilled workers)	69.9
Tradesmen/skilled workers (i.e. carpenter)	68.0
Age 50-54	67.6
Household income E20,001-E30,000	66.3
Household income E10,001-E20,000	64.6
Rural resident	64.0
Class F50+ (large farmers)	64.2
Class C2 (skilled workers)	63.7
Age 45-49	64.4
Group/Inter/Junior Certificate qualification	63.2
Self-employed at home	62.5
Part/full-time employment at home	60.8
Self-employed outside home	62.5
Non-office/non-manual	60.5
Shop assistant, trade apprentice	59.2
Women	57.5
National average	*55.1*

The reason why these demographic groups have a percentage of late adopters higher than the national average is related to the specific contexts in which they live. Barriers and

restraints to using the Internet and participating in information society activities are complex, accumulative and originate in a wide range of spheres – individual, social, geographic, community, cultural, economic, political and structural, and organisational.

What is notable about the results of the statistical analysis is that the some of the groups with the highest percentage of late adopters – retired, small farmers, age 55+, citizens with primary schooling but no qualifications, workers in agriculture, forestry or fishing, and the unemployed – had been previously identified in Irish social policy as those at risk of social exclusion. Others – notably women at home and tradesmen such as carpenters and electricians – had not previously been identified as at risk of exclusion from information society activities. The analysis raised the need to ground future e-inclusion policy to an evidence-based approach.

e-inclusion is vital for equitable social development

For almost a decade, researchers and policy-makers have used the term "digital divide" to describe the gap in computer and Internet use between different demographic groups, household types, and geographic areas, such as the disparities listed above. In Ireland and many other European countries, the preferred term is "e-inclusion," and the focus is to understand how to increase computer and Internet use by citizens considered to be at risk of social exclusion (European Commission, 2001).

In Ireland, the term "e-inclusion" has been defined as the process of ensuring that citizens from all demographic groups – such as the elderly and retired, the poor, women at home, citizens with disabilities, farmers, skilled tradesmen, the unemployed and others - have the opportunity for social and economic participation using ICT (O'Donnell, McQuillan and Malina, 2003). There are three core aspects:

- Citizens from all demographic groups should have the opportunity to use ICT - particularly the Internet - to improve the quality of their lives and their communities.

- Citizens from all demographic groups should have the opportunity to contribute to fostering a knowledge-based economy and society.

- Citizens from all demographic groups should have the opportunity to use the Internet to improve their access to government services and participate in democratic processes.

Provide opportunities for improving the quality of life

The first aspect of e-inclusion is that citizens from all demographic groups should have the opportunity to use ICT - particularly the Internet - to improve the quality of their lives and their communities.

A number of studies have explored the impact that ICT can have on citizens and communities. The most well-known example in Ireland is the Ennis Information Age Town, the largest community technology project in the world. An analysis highlighted the potential of a virtual community to enhance social cohesion within a community which has an existing, strong physical community and a collective pride in its history, culture and technology (McQuillan, 2001). Scotland is another example of a country taking a proactive approach to improving the quality of life through digital technology projects that focus on promoting inclusion in the information society (Malina and Macintosh, 2003).

However few studies have directly linked ICT use with improved quality of life. In particular little research has been conducted into the link between ICT and social inclusion. Many of the perceived social, economic and political benefits of ICT have been identified by Foley et al, 2002.

Social benefits include increasing the feeling of belonging of socially excluded citizens as they develop skills in communication and handling information through ICT. Citizens

can use email to connect with families and friends abroad. Community networking through the Internet can bring citizens together.

Citizens can use ICT to pursue leisure activities and purchase products and services online. The Internet provides access to learning materials that can be used by citizens who previously were unable to participate in education. The Internet also allows more flexible and individualised learning possibilities.

Delivery of health information and services is enhanced by the Internet. Citizens can use this health information and make better decisions about treatment and care. For citizens with disabilities, the Internet introduces a range of possibilities for improving quality of life and supplementing physical mobility. For those living in rural and remote areas, the Internet offers opportunities to engage in social interactions more frequently.

Economic benefits for citizens active in the labour force or returning to the labour force include building skills that can open up new employment opportunities and improve work processes. Internet skills also increase the chances of self-employment or success in starting a new business. There are also opportunities to protect the environment by working from home more often and decreasing the number of commuting trips in cars.

Political benefits include improved access to public services and information at all hours and from any location. For citizens with physical mobility problems and those with poor transportation facilities, the Internet allows better interaction with government. It also opens up potential opportunities for increasing political participation.

Foster a knowledge-based economy and society

The second aspect of e-inclusion is that citizens from all demographic groups should have the opportunity to contribute to fostering a knowledge-based economy and society. Ireland's National Economic and Social Council has developed a vision for Ireland in which citizens both contribute to and gain from a knowledge-based economy and society

(NESC, 2003). In this vision, a vibrant Irish society is capable of ongoing transformation by embracing diversity and initiating social and economic innovations. The NESC strategy includes raising the overall level of human capital in Ireland and providing opportunities for all demographic groups to freely participate in learning, education, and skill upgrading.

A 2002 study for the European Commission on human capital in a global and knowledge-based economy found that investment in people is both a crucial growth factor, particularly in the context of rapid technological change, and an important instrument for enhancing social cohesion. The study's five recommended priority objectives include three related to e-inclusion development: give technology-related skills to a broad segment of the population, support life-long learning in order to counteract the accelerated depreciation of skills in times of rapid technological change, and focus on improving the educational opportunities and skills of citizens from disadvantaged backgrounds (de la Fuente and Ciccone, 2002).

It is becoming increasingly clear that developing ICT learning and skills in disadvantaged citizens requires an increased focus on understanding the needs of learners and the barriers that inhibit a learning culture. For example, a recent Irish study highlights the difficulties facing women wanting to return to work and education who find that the key barriers include poor information, lack of childcare, low levels of formal qualifications, inadequate recognition of skills obtained outside the workplace, limited opportunities for flexible work and training, and loss of self-confidence (Russell, 2002). Similar barriers are experienced more widely by Irish citizens with literacy difficulties (Bailey and Coleman, 1999).

Improve engagement with online government services and democratic processes

Finally, the third aspect of e-inclusion is that citizens from all demographic groups should have the opportunity to use the Internet to improve their access to government services and participate in democratic processes. Online government services offer considerable

benefits to citizens. OECD reports on e-government, and information, consultation and public participation in policy-making, describe that all OECD countries regard ICT as a promising tool for strengthening government-citizen connections (OECD, 2001 and 2003). All governments are integrating ICT into the public administrations. All recognise the potential of ICT to provide better public services at lower cost, enhance the transparency and accountability of government, and promote greater citizen engagement in democratic processes.

There is a synergy between those who are heavy users of government services and those who are not using the Internet. Citizens most in need of government information and services are the ones with the lowest levels of Internet use. The biggest challenge to effective delivery of online government is ensuring that all citizens can avail of improved government services delivery through the Internet (O'Donnell, 2003).

e-inclusion policy in Ireland has been weak with no lasting impact

Ireland has been developing information society policy since 1995. At the end of that decade, e-inclusion was named as one of the core priority areas. However the ad-hoc nature of the e-inclusion policies and programs and the lack of any attempt to mainstream e-inclusion reveal the inherent weakness of the government approach.

The current information society policy, *New Connections*, was published in 2002, with progress reports in 2003 and 2004 (Government of Ireland, 2002, 2003a, 2004). e-inclusion was named in these three documents as a core policy priority. The Irish Government also made policy commitments related to e-inclusion in the national policy for social and economic development, the Social Partnership Agreement (Government of Ireland, 2003b), and the Joint Report on Social Inclusion developed in partnership with other EU member countries (European Council, 2004).

Ireland's main e-inclusion policy directions as outlined in these various documents can be summarised as follows:

- *Internet access in public libraries:* This has been the main thrust of government spending on e-inclusion in Ireland. In 1999, there were only 108 Internet access points in Irish public libraries. By 2002, there were more than 1,400. The Irish Library Council developed an Internet Users Guide for library users and library staff was trained to provide instruction in computers and the Internet to library users.

- *ICT skills training for late adopters*: In 2002, the Government's Back to Education initiative was expanded to incorporate a part-time Basic ICT Skills Training option for adults, at a low cost to the learner. Six thousand places were offered in 2002, and 10,800 in 2003. In 2001 and 2002, the Irish Government supported Equalskills, a pilot IT skills training program in the SouthWest and Shannon regions of the country. More than 50,000 people who had never used computers were given basic computer instruction under this program.

- *Engaging the community and voluntary sector*: From 2001 to 2003, the Irish Government delivered the CAIT Initiative (Community Application of Information Technology), which funded 121 community-led projects aimed at engaging late adopters of new technologies. Most of these projects involved community and voluntary organisations delivering ICT skills training to people in their communities. In 2004, the Government provided funding for an infrastructure that could be used by community and voluntary organisations to host websites and intranets.

- *Web page development for literacy and accessibility*: In 2001, the Irish Government supported the creation of a website to host the content of local member branches of a national community organisation. In 2002, the National Adult Literacy Agency was funded to develop a website that provides interactive worksheets in literacy, numeracy and personal development and a resource directory for tutors. Also that year, the Government supported the creation of a website with IT accessibility guidelines; however no funding was provided to ensure compliance with these guidelines by Government websites.

- *General awareness initiatives*: In 1999 and 2000, the Irish Government ran a series of awareness campaigns about the Internet. The most prominent was a TV series broadcast on national television.

In 2003, the authors interviewed or consulted with 60 stakeholders involved in social inclusion, e-government, and information society policy development. The research was by far the most comprehensive dialogue conducted with people working at the coalface of e-inclusion in Ireland. They included policy-makers in key government departments, government authorities and bodies, local and regional authorities, social partners, community and voluntary organisations, and educational and research organisations.

The government policy-makers interviewed worked with the departments that had direct responsibility for information society policy and delivery of programs and services related to social inclusion and equitable social development. These included the departments of: An Taoiseach (Prime Minister's Office); Enterprise, Trade and Employment; Social and Family Affairs; Education and Science; Environment and Local Government; Community, Rural and Gaeltacht Affairs; and REACH, the e-government agency. Interviews with staff of agencies and organisations working with citizens, particularly vulnerable citizens, included: Combat Poverty Agency, Comhairle, Forum for People with Disabilities, National Adult Literacy Agency, National Disability Agency, Equality Authority, Age Action, Community Workers Cooperative, Irish National Organisation for the Unemployed, Muintir na Tire, National Women's Council, and the St. Vincent de Paul Society. In addition, staff members from more than 30 other agencies or organisations were interviewed. Although all these departments, agencies and organisations are important stakeholders in e-inclusion development, for most it was the first time their perspectives had been sought on e-inclusion.

The broad consensus from the stakeholder interviews and consultations was that Ireland's e-inclusion policies were inadequate. The ad-hoc approach to e-inclusion policy and the fact that no attempt was made to mainstream e-inclusion – to integrate it with ongoing policies and programs – ensured that the overall impact was ineffective. The stakeholders

agreed that a more comprehensive approach was needed to ensure development of an inclusive information society in Ireland.

A 10-point plan to foster e-inclusion in Ireland

The outcome of the comprehensive review of e-inclusion policy in Ireland and the interviews and consultations with key stakeholders is a 10-point plan to foster e-inclusion in Ireland. The plan, described below, is rooted in the recognition that e-inclusion is a dynamic and ongoing process, shaped by opportunities, challenges and responses. The plan is a framework for reviewing progress and developing coherent strategies to ensure that the needs and involvement of Irish citizens are prioritised and that social, civic and economic benefits can be achieved.

1. Develop a policy framework that integrates social inclusion and e-inclusion policies

Irish e-inclusion policy has made a good start but is weak and fragmented. e-inclusion objectives have been well intentioned, but implementation has been hindered by a lack of symbiosis between information society policy and other policy areas, notably social inclusion policy and employment policy. To be successful, e-inclusion policy needs focus, strengthening and coordination. Much stronger linkages could be developed between national policies, local authority strategies, and EU-level policies.

The National Action Plan Against Poverty and Social Exclusion (NAPincl) is the core policy mechanism by which an inclusive information society could be developed in Ireland. NAPincl is a comprehensive document prepared at national level in response to agreed EU objectives. The NAPincl could be developed into a document that clearly articulates Irish policy for an inclusive information society, addressing EU social policy objectives.

Ireland's Employment Action Plan (EAP) is a second policy mechanism that could shape and drive inclusive information society development. The EAP is also a comprehensive

document prepared at national level but in this case in response to clear EU Employment Guidelines. Ireland's EAP focuses on life-long leaning and thus shares many of the same strategies as the NAPincl mechanism. The EAP could strengthen its focus on policies and measures to promote inclusion in the information society, in particular in the area of skills training for late adopters in the labour force and late adopters attempting to enter the labour force.

2. Systematically measure Internet use by different demographic groups

Before developing strategies and initiatives to foster e-inclusion, the extent of the challenge needs to be understood. There are no data available on Internet access and use by many demographic groups at risk of social exclusion, including: people with disabilities, lone parents, people with low levels of literacy, and minority ethnic groups and travellers. Employment classifications are not coordinated with Central Statistics Office classifications. Data on ICT skills levels are unclear, and data on use of e-government are also weak.

The core weakness of the Irish surveys to date is that the term "late adopter" is not clearly defined and has been used in a vague way. Clear data exist on Internet access and use but there have been no indicators proposed by which "inclusion" in the information society can be measured. New indicators will be needed to develop a more complex understanding of the extent to which Internet use makes a difference in peoples' lives and the ways in which citizens use and benefit from a variety of digital technologies. Systematically measuring levels of Internet use by different demographic groups will provide the evidence base necessary to develop targeted e-inclusion policies.

3. Identify target groups for pubic policy intervention

Ireland's Central Statistics Office publishes quarterly surveys that classify Irish adults by principal economic status and occupational category. The principal economic status

categories are: at work, unemployed, student, home duties, retired, and others. For those at work, there are further classifications by economic sector and occupation.

The analysis of the survey data found that the employment and occupational groups most at risk of exclusion from the information society were: the unemployed, women with home duties, retired people, workers in the agriculture, forestry and fishing sectors, and workers in the skilled trades.

Using economic status and occupational categories as target groups provides vital information about the focus of the policy interventions that will be needed. Late adopters not at work, or working in occupations with low engagement with ICT, may be targeted through interventions developed with public bodies and the community and voluntary sectors. Late adopters who are working or who want to be working may be targeted through workplace interventions developed with the social partners. Late adopters who are students may be targeted through interventions developed with training and educational institutions. Using employment and occupational categories as target groups also allows policy interventions to target adults experiencing multiple exclusions.

4. Consolidate knowledge about e-inclusion and the needs of late adopter groups

Understanding the needs of late adopter groups and their engagement with ICT is a major priority for e-inclusion development. However knowledge about late adopters in Ireland is very undeveloped. The stakeholder interview and consultations identified the main priorities as:

- Designing cost-effective and useful solutions by understanding user needs
- Raising the profile of research activities and strengthening research coordination
- Disseminating an promoting research
- Ensuring standardisation of indicators and audits
- Researching the capacity and needs of the community and voluntary sector
- Leveraging the community and voluntary sector's knowledge

- Evaluating ICT pilots and projects

The biggest barrier to developing policies and programs for late adopters is the lack of knowledge about why people are not engaging with ICT and what their needs are. Assessing the needs of late adopter groups should be the first step in developing any ICT program or project. Qualitative studies of needs and current patters of ICT use are needed to ensure that effective programs are developed. If ICT are not rooted in the everyday lives of citizens they may never be used.

Research collaboration needs to be strengthened. Considerable expertise exists in different aspects of information society development, but knowledge of e-inclusion is scarce and thinly spread around the country. It is important to consolidate the knowledge base, collate best practice, and develop a central, accessible source of information.

Stakeholders expressed a need for a regular forum for discussion, debate and public consultation on the challenges of developing an inclusive information society. Few opportunities for involvement currently exist for people who could contribute, particularly people actively involved in ICT projects and social inclusion initiatives.

Currently, information society surveys and EU benchmarking exercises use different indicators and statistics on ICT use and very considerable. Efforts should be made to streamline data collection. At local level, ICT audits should be standardised. Guidelines and conducting and coordinating county-based ICT audits should be developed.

Research needs to be conducted with community and voluntary organisation working with late adopters, to establish their ICT needs. Areas that should be assessed are how ICT might improve operational efficiency, reduce costs, and improve communication and networking opportunities.

The community and voluntary sector has a wealth of knowledge about late adopters. Research supports could be developed to help organisations assess their members and

clients' needs. A rigorous user needs analysis should make it easier to identify people and develop targeted supports which will encourage participation in ICT projects.

There have been many community ICT projects funded through diverse sources over the past five years in Ireland. It is important to analyse, consolidate and disseminate the key learning from these projects before developing new initiatives. The term "best practice" is used glibly, and many projects that claim to be models of best practice have been reviewed, rather than formally evaluated, often because no clear indicators or comparable measures exist.

5. *Motivate late adopter groups to engage with ICT*

Finding ways to motivate late adopters to use the Internet is a considerable challenge. Late adopters need to be encouraged to get over barriers such as: "The Internet is too complicated," 'and "I don't know enough about it." The stakeholder interviews and consultations identified the priorities for motivating late adopter groups as:

- Raising awareness of the benefits of ICT
- Focusing communication strategies on a simple message, delivered by peers
- Building in learning supports to all ICT "taster" programs
- Addressing confidence and trust issues
- Stimulating demand for ICT among late adopter groups

Awareness should not be created in a vacuum. It needs to be tied in with local ICT activity in education, community, local development, business and employment. The benefits of ICT should be demonstrated and portrayed realistically, not futuristically. Clear communication is needed, informing citizens what they can access and where they can access it.

"What's in it for me" is a more important message than why society as a whole should "embrace the information age and its technologies." The relevance of ICT to everyday

activities and interests needs to be apparent. A variety of media and dissemination methods should be explored to address the diverse information needs of late adopters.

Building personal learning capacity facilities IT adoption by late adopters. ICT development and pre-training programs should include personal development training and an examination of why and how late adopters might use ICT. The context of ICT should be considered. Courses should be personalised so people can first see the benefits of using ICT and then explore the skills and competencies they are learning.

Confidence and trust can encourage late adopters to engage in the information society. Safety, security and privacy in online activity need to be guaranteed. Awareness campaigns need to identify and address people's worries about real and perceived risks. For citizens and consumers, a safe online environment should be apriority.

Demand should be stimulated organically. This can take time, but will result in user-led initiatives. Organic growth can be built on by developing networks of people with similar interests. Local provision o information and services can stimulate demand. Local media are very important – i.e. local radio and newspaper – and partnerships should be developed with these media to promote planned activities.

6. Develop ICT capacity in community and voluntary organisations

The important role of the voluntary sector in fostering inclusive information society developed is well-recognised. The European Commission has called the voluntary sector "an essential stakeholder for e-inclusion" (European Commission, 1991). However, poor ICT capacity within the sector continues to be a barrier to inclusive information society development. The stakeholders identified the main priorities as:

- Providing ICT advice and supports
- Developing ICT training programs for staff and volunteers
- Raising the public profile of community ICT

- Developing funding mechanisms that community and voluntary organisations can gain access to directly
- Encouraging and brokering partnerships for large-scale projects

The need for technical support for the community and voluntary sector has been highlighted in a number of previous studies and reports in Ireland. Resourcing a national technical support service with freephone telephone support, and subsidised call-out and maintenance service is seen as priority.

A range of ICT training provision needs to be developed for management, staff and volunteers of community and voluntary organisations. Training resources should also be developed to help organisations to assess their users' ICT needs, develop specific ICT training tailored to the needs of late adopter groups, develop ICT use to further social inclusion goals, and use ICT for advocacy and lobbying.

Many community and voluntary organisations using ICT effectively have poor public relations capacity and resources. Efforts should be made to develop the public relations capacity of umbrella and networking organisations, to help highlight ICT successes and issues that should be addressed.

Funding for community and voluntary organisations should not be competitive. A short-term demand for funding is for development grants to allow organisations to research their ICT needs, develop an ICT plan and realistic timeframe for implementation and consider the most cost-effective solutions.

Partnering with community and voluntary organisations for large-scale projects presents opportunities for industry and research agencies to develop ICT projects which address real user needs. Partnerships among organisations with different values, goals and organisational capacity allow a transfer of knowledge and development of organisational capacity.

7: Support local and community content development online

A good way to stimulate Internet use is to increase the availability of relevant local content online. The Internet can provide a means of access to diverse social, cultural, civic and commercial information. The demand is increasing for relevant local information. The stakeholder interviews and consultations identified the main priorities as:

- Ensuring quality and promoting good practice in online content development
- Leveraging the knowledge base
- Engaging users and addressing their needs through local consultations
- Developing joined-up approaches to community publishing
- Funding groups to develop content
- Expanding awareness of local government

In Ireland, community and local authority websites have developed in an ad hoc manner and there is very little consistency in design, navigation and usability. Some sites are exemplars and many could benefit from advice on design, functionality and usability. Many websites do not follow usability guidelines, and bad design discourages many people from accessing or revisiting the Internet. The development of guidelines and standards should be supported and incentives to incorporate guidelines into design of websites should be encouraged.

Many Irish projects are developing local content. There could be a lot of duplication and wasted resources if efforts are not made at a county level to coordinate web publishing activities. The opportunity exists to develop partnerships in this area, between local authorities, government departments and community organisations, between industry, third level institutions and social partners. Each has a unique knowledge base and can contribute to the development of knowledge networks.

Researching information and communication needs at the local level is essential. Delivering essential services and providing local, relevant content are key to ensuring that the information and services developed at local level are both useful and used. Literacy problems persist among late adopters. Involving them in the development of content can highlight barriers and allow suitable formatting of information.

Audits of community ICT activities should include measurement of local web content development among schools, community and voluntary groups, libraries and local authorities. County strategies should not be developed unless good baseline information is available on facilities, activities and gaps. Strategies at local level should address ways to create partnerships among these groups and organisations.

Resources are needed to support building capacity for local content production. Web development and multimedia training facilities should be available locally. Skilled staff should be available to advise local groups on web design, content production and formatting, usability, accessibility and Internet technologies.

Promoting exiting information and services locally can stimulate demand for local authority services. The URL of local authority websites should be displayed on all internal documents, stationery and local advertisements. Local government services being piloted need to be rigorously evaluated by users, who should be involved throughout the development process. Services online should be audited for usability, accessibility and social inclusion.

8. Ensure that online government services and information consider the needs of late adopter groups

The analysis of the survey data found that large numbers of late adopters are interested in gaining access to government services and information through the Internet, suggesting that if delivered with late adopter groups in mind, online government could be a good

way to motivate late adopters to use the Internet. The stakeholder groups identified the main priorities as:

- Consulting users about their information and service needs
- Raising awareness of e-inclusion in the public sector and government
- Transforming the process of delivering government services
- Engaging citizens in the vision for e-government
- Developing standardised, user-friendly interfaces
- Providing mediated access and information services to late adopter groups

Government websites should address user needs. Governments need to investigate ways to make services more relevant and easier to use. This can only happen when users are consulted about their needs and effort is made to meet real needs in the online (and offline) delivery of services.

Public sector management and staff need to understand information society and social inclusion concepts. Awareness programs can provide opportunities to develop internal processes to integrate e-inclusion policy with practice. Citizens' information needs should be central to the provision of all online government services.

Citizens need to have a clear idea how their personal information and online communication with government are considered and processed. Government departments need to be willing and able to support transparency and ensure data integrity and protection. The democratic potential of –government should not be overlooked. The challenge of using ICT to improve democratic processes and encourage citizens to participate in decision-making needs to be articulated and addressed.

Quality assurance and compliance with usability and accessibility guidelines needs to be prioritised by government departments. Standardised interfaces for government websites should be developed. The "public face" of online government services needs to be

instantly recognisable and branded to attract users and encourage frequent visits and transactions with government websites.

The trend toward the development of one-stop-shops for government information and offers the opportunity to explore and document late adopter groups' needs for information and services. Increasingly, community and voluntary organisations will become intermediaries in online service delivery, mediating government information for their members and clients. They need to be funded and supported in this role.

9. Ensure ICT access, infrastructure and broadband

ICT and broadband are enabling tools and infrastructures for accessing, developing, using and sharing information and knowledge. For most late adopters, Internet access initially refers to free, public Internet access points. A large number of late adopters are library users and could be motivated to gain access to and use the Internet in libraries. However most late adopters never visit a library and other kinds of access are needed for them. The stakeholder interviews and consultations identified the main priorities as:

- Ensuring affordable, flat rate home Internet access
- Making public Internet access more widely available to late adopters
- Strengthening the Internet access capacity of libraries
- Considering schools as centres for community access and learning
- Ensuring broadband connections for late adopters
- Articulating the needs of users to service developers

Home Internet access is seen as the ideal and long-term objective for e-inclusion. There is a serious lack of choice and affordability for citizens. The cost of domestic and community Internet access remains prohibitive for many late adopters.

Free public Internet access needs to be available in all low-income communities. A condition of funding a public access centre should be to have tutors available to

demonstrate, help and mediate information. There is no need to create new purpose-built centres. Existing community-based buildings should be used, where people can meet socially, with informal networks for encouragement.

Schools should be encouraged to consider their potential role as centres for community learning and Internet access. Those that provide public Internet access should have guaranteed broadband connections.

Libraries have a key role in providing public Internet access. They could be given funds to do outreach to attract new users among late adopter groups. Libraries could also work with local community centres and community organisations to develop stronger links with late adopter groups.

Equitable provision of broadband will ensure broadband provision in rural areas. Development of regional broadband infrastructure is currently uneven. Broadband networks can support regional economic, educational and social development. However, infrastructure development needs to be accompanied by developing services and building the capacity of schools, communities and business to exploit broadband's potential.

Currently, the development of telecommunications infrastructure and services is significantly demand-driven by business and industry. Much needs to be done at local level to articulate the needs of domestic users, non-profit organisations, and late adopter groups.

10. Ensure access to ICT learning and skills

Large numbers of late adopters are interested in ICT training. Many have literacy difficulties. Providing adequate learning and training opportunities and supports is a considerable challenge. The stakeholder consultations identified the main priorities as:

• Prioritising ICT learning capacity over ICT skills acquisition

- Recognising community education's important role in informal ICT learning
- Supporting formal education settings in delivering ICT training
- Focusing on workplace apprenticeship programs for ICT training
- Considering certification and accreditation

Using ICT effectively builds on traditional learning competencies and extends beyond traditional literacy and numeracy skills. Digital literacy involves the ability to filter information, communicate effectively and build our knowledge base. A flexible, learner-centred approach is necessary to engage late adopters in a learning process.

Many late adopters have a fear and distrust of formal education institutions and avoid formal education settings. Community education offers a more holistic approach to ICT training, encouraging the development of lifelong learning skills, allowing people to develop at their own pace in a more informal setting.

Many adult education centres do not have technical support available. ICT capacity will need to be increased in these centres. Trainers in non-ICT courses can find it difficult to find the time for ICT training for them and need to be supported in their efforts to do so.

Ireland has a poor record of employer investment in worker training programs. Employer programs aimed at upskilling employees, particularly workers in the 50-plus age category, are necessary. Many of this age group have highly-skilled and responsible jobs, but with few future career options unless they embrace ICT training.

The goal of acquiring a recognised ICT skills certification can be a positive incentive for a late adopter to take a training course. Accredited ICT training can encourage late adopters to pursue progressive training routes. A progression path for late adopters should include increasing skills to use the Internet for a range of practical purposes.

Conclusion: the e-inclusion deficit in Ireland

At the time of writing, the Irish economy has a growth rate of 6.1 percent, making it one of the best-performing economies in Europe. The unemployment rate of 4.3 percent is one of the lowest in Europe. This economic situation offers great potential for developing policies and programs that would encourage all demographic groups in Ireland to participate in and benefit from an economy and society where ICT and the Internet in particular are important.

However the latest policy directions for e-inclusion just announced by the Irish government (Government of Ireland, 2004) continue the pattern of weak and ad hoc approaches, described earlier in this paper, that have characterised Irish e-inclusion policy since its introduction at the end of the 1990s.

Clearly there is an e-inclusion deficit in Ireland – a huge gap between the stated policy priority on e-inclusion and the lack of political commitment and action. The 10 critical e-inclusion policy areas discussed earlier have not been integrated into national strategic policy frameworks for tackling social exclusion and poverty. Nor has any effort been made to consolidate the learning and knowledge from e-inclusion activities in Ireland, or to learn from the considerable international experience and expertise.

Researchers of e-inclusion in Ireland who would like to see some policy impact resulting from their work are now facing a challenge: to conduct research that results in persuasive evidence for improved e-inclusion policies. Should the focus be on opportunities for progressing e-inclusion in Ireland? A clearer articulation of the social, civic and economic imperatives of e-inclusion? The barriers to improving e-inclusion policy such as lack of political leadership and commitment, accountability and responsibility, and political apathy?

One missing element from the e-inclusion work in Ireland to date is the lack of a business case or economic model that would show policy-makers how they can add value by

investing in e-inclusion policies and programs. A way forward in this direction would be further analysis of the social protection programs outlined earlier, showing how investment in e-inclusion policies could lead to a more cohesive and equitable Irish society.

e-inclusion is clearly not a political priority in Ireland but this could change if the massive investment in e-government and online delivery of local services does not bear fruit: if the citizens most in need of public information and services continue to stay away from online services. At that point, there would be political pressure to find new ways to increase the use of the Internet by citizens currently not using it.

The biggest opportunity for policy-makers is to consolidate the diverse knowledge base that was demonstrated in this study – the perspectives, ideas and visions of the many people working in key government departments, government authorities and bodies, local and regional authorities, social partners, community and voluntary organisations, and educational and research organisations who are willing to work toward a more inclusive information society in Ireland. In order for this to happen, policy-makers must be open to developing new models of communication, new partnerships and collaborations, new business models and new learning processes that place the needs of citizens at the centre.

The outcomes of future e-inclusion policies and programs could provide the greatest learning. Funding mechanisms should allow a certain element of risk and exploration of innovative projects, particularly to encourage the "e-participation" of the most excluded groups in society. Everyone participating in e-inclusion development must be open to sharing their "failures" as well as successes, to indicate their capacity to learn and to build on real strengths. This will create an environment that will make it more possible for Ireland to become an inclusive information, learning and knowledge society.

References

Bailey, I., & Coleman, U. (1999). *Access and Participation in Adult Literacy*. Dublin: National Adult Literacy Agency.

de la Fuenta, A., & Ciccone, A. (2002). *Human capital in a global and knowledge-based economy*. Brussels: European Commission. DG Employment and Social Affairs.

European Commission. (1994). *Europe and the global information society: Recommendations to the European Council (Bangemann Report)*. Brussels: European Commission.

European Commission. (2001). *e-Inclusion - The Information Society's potential for social inclusion in Europe SEC(2001)1428*. Brussels: European Commission.

European Commission. (2003). *Draft Joint Inclusion Report - Statistical Annex SEC(2003)1425*. Brussels: European Commission.

European Council. (2004). *Joint report by the Commission and the Council on social inclusion 6507/04 SOC*. Brussels: European Commission.

Foley, P., Ximena, A., & Ghani, S. (2002). *The digital divide in a world city: A literature review and recommendations for research and strategy development to address the digital divide in London*. London: Greater London Authority.

Government of Ireland. (2002). *New Connections: A strategy to realise the potential of the Information Society*. Dublin: Department of the Taoiseach.

Government of Ireland. (2003a). *New Connections: Progress Report 1*. Dublin: Department of the Taoiseach.

Government of Ireland. (2003b). *Sustaining Progress - Draft Social Partnership Agreement 2003-2005*. Dublin: Department of the Taoiseach.

Government of Ireland. (2004). *New Connections: Progress Report 2*. Dublin: Department of the Taoiseach.

Malina, A., & Macintosh, A. (2003). Bridging the Digital Divide - Development in Scotland. In A. Anttiroike, M. Malkia & R. Savolainen (Eds.), *eTransformation in Governance: New Directions in Government and Politics*. USA: Idea Group Publishing.

McQuillan, H. (2001). Ennis Information Age Town: Virtuality Rooted in Reality. *Springer Lecture Notes in Computer Science, 2362*.

NESC. (2003). *An Investment in Quality: Services, Inclusion and Enterprise*. Dublin: NESC.

O'Donnell, S. (2003). Tunnel Vision: Who benefits from online government? (Book Review). *Information, Communication, Society, 6* (3), 279-281.

O'Donnell, S., McQuillan, H., & Malina, A. (2003). *eInclusion: Expanding the Information Society in Ireland*. Dublin: Information Society Commission, Government of Ireland.

OECD. (2003). *The e-Government Imperative*. Paris: OECD.

OECD. (2001). *Citizens as Partners: Information, Consultation and Public Participation in Policy-Making*. Paris: OECD.

Preston, P. (1997). Beyond the "information society": Selected atoms and bits of a national strategy in Ireland. *Economic and Social Review, 28*(3), 185-211.

Preston, P. (1995). Competition in the Telecommunications Infrastructure - Implications for the Peripheral Regions and Small Countries in Europe. *Telecommunications Policy, 19*(4), 253-271.

Russell, H. (2002). *Getting out of the House: Women returning to employment, education and training*. Dublin: Economic and Social Research Council and the Liffey Press.