

DIFFERENT SOLUTIONS TO DIGITAL EXCLUSION: Local Nets versus Internet Cafés¹

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1. Introduction

There is a growing interest in the social impacts of information and communication technologies (ICTs), especially in relation to social inclusion or exclusion. With the rapid growth of new technologies and the development of an Information Society, it has almost become necessary to have access to ICTs and the skills to use them in order to be able to participate fully in contemporary society. Digital inclusion has almost become a prerequisite for social inclusion (Ferlander, 2003).

In the literature there is disagreement between writers who see technology as a new basis for social inclusion (e.g. Wellman, 1997; Ferlander, 2003) and others who see it as a threat, leading to new forms of exclusion (e.g. Stoll, 1995, Nie, 2001): digital exclusion. There is also a geographical element, with some writers suggesting that people in marginalised areas may be subject to what Reddick (2000) terms a 'dual digital divide'. Fong and his colleagues (2001) found that not only do poorer people have less access to ICTs, poorer people in poorer areas also lack training and informal mentors to provide them with ICT skills.

This paper concerns two specific uses of ICT, Local Nets and Internet Cafés, and their impacts upon social and digital inclusion. A Local Net is a computer network located in physically based communities, dealing with local issues (Ferlander & Timms, 2001). Whereas Local Nets provide home access; Internet Cafes provide subsidised *public* access to the Internet. Both forms provide a way of combining the local with the global, physical community with virtual community, and are often aimed at encouraging digital inclusion.

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The aim with this paper is investigate whether the use of Local Nets and/or Internet Cafés can increase digital and social inclusion in disadvantaged areas. Will the use of Local Nets and Internet Cafés lead to new forms of social inclusion or to the creation of a digital divide? What factors are important for the creation of an inclusive information society? What impact does the nature of access points have upon digital inclusion in marginalised urban areas?

2. A Swedish Case Study

The research question was investigated through a case study of two computer initiatives - a Local Net and an Internet Café - in a relatively disadvantaged suburban area of Stockholm.

2.1. The Local Community

The study is based in a housing area with a population of around 8600. The area contains many disadvantaged groups, such as single parents, residents with low educational level and residents with a foreign background – groups at risk of both social and digital exclusion. The great majority of houses are rented from public housing companies. The local community has been stigmatised in the media, where it has been described as having high levels of social problems and criminality. According to data from the Swedish Research and Statistics Office, many residents share the negative perception of the area, expressing dissatisfaction with local safety and civil order, complaining about features like graffiti, vandalism, theft, burglary and violence (Ivarsson, 1990; 1993; 1997). Research also shows that there is a low level of social capital in the area (Ferlander, 2003).

2.2. The Local Net

The Local Net was introduced in 1998 by the main housing association in the area as a means of tackling problems of social and digital exclusion in the area through the provision of the home access to everyone in the area. The stated goal of the project was to increase social and digital inclusion in the area with special reference to disadvantaged groups, such as immigrants, the unemployed and single-parent families. It was one of the first Local Nets in Sweden and received considerable attention in the media.

The Local Net was mainly run by a single enthusiast – an IT-manager from the housing company. A number of volunteers living in the area were to be appointed as ‘ambassadors’ to

demonstrate the Local Net system and provide general help to users. They were expected to create an interest in technology and recruit new users to the Local Net and in that way try to include all residents, increasing digital inclusion in the area. The idea was to appoint one in each apartment block: as far as can be ascertained, however, no more than two ambassadors were ever appointed.

The initiative aimed to provide subsidized connection at home for all residents in the area, providing access to local (and global) services, such as information about local events and chatting with local politicians. The Local Net was based on a high-speed Internet cable network, which already existed in the area. Download speeds of 2Mbits per second were achievable. Another advantage was that the telephone was not engaged when surfing. These features were unusual in 1998. Despite these advantages, however, the Local Net failed to achieve critical mass and was abandoned two years after its inauguration. In its place an Internet Café was established.

2.3. The Internet Café

The Internet Café opened in 2000, managed by a young and previously unemployed local resident. Visitors to the Café are offered subsidized access to computers and the Internet, with, if needed, informal IT-support and help from the manager. The Café also offers computer courses for its visitors, including one specially designed for elderly users. In addition, there is a coffee area in the Internet Café where users can chat face-to-face.

The goal of the Café is essentially the same as that of the Local Net: to increase social and digital inclusion and create interest and knowledge of ICT in the area. The Café also aimed to increase social integration in the area through the provision of a meeting place. The Café is making a determined effort to attract groups that might otherwise be excluded from the Information Society, such as disabled, elderly people and people with a foreign background.

Both computer initiatives were introduced as possible solutions to the social problems that exist in the area. Each of the initiatives was aimed at combating digital exclusion and social segregation and improving the reputation of the area. Both projects goals involved the encouragement of digital and social inclusion and the enhancement of social contacts and sense of community. The aim of this paper is to evaluate the success of each project in reaching its goal in terms of digital and social inclusion.

3. Methodology

The evaluation of the two projects was conducted through a combination of quantitative and qualitative methods. The data collection methods included a variety of methods: documentary research, participant observation, in-depth interviews, questionnaires and focus groups. The questions to investigate were the following:

- *Who are the users of the Local Net/Internet Café?*
- *What is the Local Net/Internet Café used for?*
- *What are the perceptions of the Local Net/Internet Café?*

Data from the Local Net was obtained from questionnaire surveys of 87 residents who were connected to the Local Net and 90 residents, randomly chosen, who were not connected to it. The questionnaire included both fixed-choice and open questions. The survey data was enhanced by information obtained with eleven in-depth interviews with connected and non-connected residents and key people in the project.

Data from the Internet Café was also obtained from both a questionnaire survey and interviews. The survey sample consisted of 94 respondents who are or were visitors to the IT-Café. In order to further explore issues of digital inclusion, the Café sample was also compared with the sample of 87 respondents connected to the Local Net and 90 non-users of the Café. The statistical data was enhanced by information obtained in seven interviews with non-visitors, visitors and the Café-manager and four focus groups conducted with twelve current or previous visitors to the Café (for more detailed information see Ferlander, 2004).

4. Results

Despite its good intentions and the support of the housing company, the Local Net, with its provision of home access, largely failed to achieve its goals in terms of increased digital and social inclusion. In contrast to the Local Net, the Internet Café, with its public access, appears to be being much more successful in attaining its goals in combating the digital divide. The Café has directly increased digital and social inclusion of those residents who make use of it.

4.1. The Local Net

The findings show that those who were connected to the Local Net were younger, more likely to be in employment and had more computer experience than those not connected to it².

Groups at risk of digital exclusion, the computer-illiterate, elderly people and the unemployed, were hence under-represented. In addition to inequality in terms of connection, there was inequality in usage within the households, with a general over-representation of young males. Moreover, older people, woman, residents with an immigrant background and residents with low educational levels made significantly less use of the more popular computer activities³ compared to young Swedish males with higher education. However, there was a general lack of use of the Local Net. Hence, it had little effect upon social inclusion.

Despite the relative lack of use, though, residents were enthusiastic about the potential of the Local Net. Almost three quarters of the respondents (73%) were positive towards the project. It was seen as a vehicle for increasing general computer skills in the area and encouraging digital inclusion, through providing subsidized access. The vast majority of the connected sample (80%) believed it would lead to an increase in interest in and knowledge of computers in the area. It was also argued that the Local Net had the potential to enhance social inclusion, providing access to excluded groups, such as single parents, and through its ability to provide links between different groups in the population.

4.2. The Internet Café

Many of the visitors to the Internet Café are members of disadvantaged groups, such as elderly people, single parents, residents with immigrant background and the unemployed. Moreover, the Café visitors include significantly more elderly people, more unemployed, more residents with lower education and more computer-illiterate residents than the Local Net. Hence, the Café sample contains more groups at risk of digital exclusion than the Local Net sample. As put by two of the visitors, one pensioner and one unemployed young woman:

² Although the difference is not statistically significant, the connected sample also contained more well educated residents, more single parents and fewer residents with foreign background than the non-connected sample.

³ Web-surfing, word-processing and email.

The Café approached us pensioners because we are a group that doesn't work and who need to learn about computers. And there was a great interest from the whole community and beyond. I took part in two courses and I learnt a lot.

Those who are pensioners, on early retirement or unemployed, like myself, it is good for them that this exists because it is a lot of fun to be here. And we learn new important skills.

Initially the Café users demonstrated considerably less computing experience than those who had been connected to the Local Net, but they have acquired useful computer skills as a result of their visits. Two of the visitors talk about the increase of computer skills:

That [the senior course] is when I learnt everything I know. I was so curious about computers, but I knew nothing. It was mysterious... but the manager thinks that I have learnt a lot. I think so too.

It has absolutely increased IT interest here! If there is an IT-Café of course you go there, if you live in the area.

Many visitors say that they feel safe about using the technology in the environment provided by the Internet Café. Most visitors are very positive about the informal and friendly support they received from the manager, arguing that it has increased their computer-skills considerably and given them confidence. However, the most common reason given for visiting the Internet Café was that the residents could not afford to buy a computer or get Internet access at home. As put by one of the visitors:

We cannot afford a telephone at home or a mobile, so for me it is very good to come here. People can reach me through the computer. It is good to come here because it is cheap.

The results also indicate that the increased digital inclusion also has led to increased social inclusion among the visitors. Many unemployed residents use the Internet, accessed through the Café, to look for jobs; single parents use it to facilitate everyday life through email; residents with immigrant background use it to keep in touch with their home countries;

pensioners use the facilities of the Café to produce reports for voluntary associations and to keep in touch with their children and some residents in the area use the Internet to take part in higher education. As put a young unemployed visitor:

I'm unemployed and I come here to check the work agency out, so I don't have to go there every day. This is much closer.

The perceptions of the Café very high – significantly higher even than those of the Local Net. Almost everyone is positive towards the Café (98%) and expects it to increase computer-skills in the area (95%). More than two-thirds (69%) also think the Internet Café will increase social participation in the community.

It is generally believed that the Internet Café, with its provision of subsidised public access, IT-support and computer courses, will and has increased both digital and social inclusion. In other words, the Internet Café appears to have reached several of its goals: enhancing the social inclusion of disadvantaged groups, encouraging a general increase in IT-skills in the area and facilitating social participation for the residents.

5. Discussion

The contrasting history and impact of the Local Net and the Internet Café require explanation. We argue that there are five main reasons for the difference in success between the two projects: 1) timing, 2) management, 3) cost, 4) support, and 5) access.

Timing: The Local Net may simply have been too early to succeed. By no means all pioneers or pilots projects survive. People were less interested and used to computers in 1998, when the Local Net was promoted, and the technology on which it was based was less robust and less user-friendly than required today. This made it difficult to attract users as well as sponsors. When opening the Internet Café, two years later, the interest and knowledge about computers was much greater, facilitating the inclusion of participants in the project, and the technology was both more robust and simpler to use.

Management: Both computer projects were presented as relying on a “bottom-up” approach, relying on local residents to provide content and services. To be successful both projects needed to be able to show that they were “owned” by local residents. The Local Net largely failed in this aim, failing to involve members of the community in the management structure. Instead it was run by a manager from the housing company. The Internet Café, by contrast, is managed by a local resident, well known in the area and with a range of local connections. The Local Net seems to have been perceived as belonging to the housing company; the Internet Café is perceived as belonging to the community.

Cost: The fact that the local community is relatively deprived is probably a further contributing factor to the relative lack of success of the Local Net. Both projects provided subsidised access, but with different cost implications for the end user. Despite the subsidy, subscriptions to the Local Net still represented a considerable charge to those of limited means and demanded an up-front commitment. In comparison use of the Internet Café is on a casual use basis, with even a monthly card being considerably less expensive than the equivalent charge for access to the Local Net.

Support: There tends to be a general fear and scepticism about ICT among many digitally excluded groups, especially elderly people. In order for them to overcome these feelings it is essential to provide support. The Local Net recognized this need, but the appointment of only two 'ambassadors' to support up to 200 users in the Local Net, as well as attracting the other residents, was not enough. Subscribers could access the help line run by the telecommunications supplier, but this demanded some expertise and confidence. Considerable time and effort is needed to provide relevant skills and to imbue confidence in the use of ICT. In contrast to the Local Net, this is something which the Café seems to have managed well.

Access: The most obvious difference between the Local Net and the Internet Café is in the location of the access: the former depended on access in residents' homes, while the latter provides public access in a communal space, enabling face-to-face interaction. E-learning involves the same learning processes as other forms of adult learning. Social factors are particularly important. The Local Net suffered from the lack of social reinforcement available to users of the Internet Café. Some respondents who were familiar with both the Local Net and the Café said that they preferred public access since they feared home access would lead to them losing face-to-face contact and community involvement.

Users of the Café form a community of practice, enabled by the informality of the setting, the role of the manager and the extent of informal face-to-face interaction. The importance of informality for building confidence in the use of ICT was constantly stressed by visitors. The Café provides an arena in which people can chat and work together, with help being provided by other users as well as by the manager in a non-threatening environment. In view of this, it may be doubted whether attempts to host Internet Cafés in more formal environments, such as public libraries will be as successful, especially if rules of silence are enforced.

6. Conclusion

There are a number of factors which underlie the success of the Internet Café: the provision of subsidised public access, the informal IT-support and training provided by a local resident working in the Café, and the ease with which the Café can support both virtual and physical meetings. The Café functions as an informal “third place” in both physical and virtual space.

For the success of a local computer project, it is very important that local residents feel a part of it – successful community building demands a bottom up approach in which all residents are able to participate. For those unable to afford to purchase or rent the necessary equipment, some form of public access is required. The evidence from the Stockholm study suggests that the public access point should provide informal computer training and support for its visitors and encouraging informal interaction. The provision of opportunities for informal learning is important when introducing new technologies, especially to those who are or feel excluded. Hence, to be included in the Information Society people must be able to combine online and offline forms of interaction. An Internet Café can provide an ideal forum for this to occur.

It seems probable that the provision of Internet Cafés is likely to be more effective way of enhancing social inclusion in disadvantaged areas than schemes depending on people having access only at home. Internet Cafés provide a unique combination of a physical meeting-place encouraging online as well as offline interactions. The subsidised public access to the Internet and the informal face-to-face training are important factors in overcoming barriers to digital inclusion, such as income and fear. The provision of physical access, but itself, however cheap it may be, is only the first step in overcoming digital exclusion. To take part in the Information Society it is necessary to have the skills and the confidence to go online and a reason and motivation to make the effort.

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