

Cafematics ©: the cybercafe and the community

James Stewart
Research Centre for Social Sciences.
University of Edinburgh,
High School Yards,
Edinburgh EH1 1LZ
J.K.Stewart@ed.ac.uk
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Introduction

While mainstream industry and government focuses on individual, home and business ownership and use of new ICTs there is a quiet revolution in going on as computers and all their applications from games to the Internet move into public spaces. There are commercial kiosk systems in the streets and malls, and many government projects to empower communities and stimulate the local economy and, but perhaps the most important, overlooked and oft-derided development is the cybercafe.

The cybercafe is a cafe or shop open to the public, where a computer can be hired for periods of 1/2hour to access the Internet, write a CV or play a game. With the explosion in the use and profile of the Internet and personal use of new information and communications technology - 'multimedia', cybercafes have are part of contemporary culture, established among the public places of modern cities and towns and villages around the world. In December 1999 an on-line cybercafe guide listed 4397 cafes around the world¹.

There is very little research on what these cybercafes are used for, who uses them and why². This study, conducted in 1998 (Stewart 1998), addressed the use and users of 3 cybercafes in the same city, the reasons and manner they were set up and developed, and the role cybercafes play in the general development of use and knowledge about

multimedia. What emerged was that cybercafes are not only sites for technical access, and for consumption and use of multimedia content and services, but public, physical, community and cultural spaces. In this context I challenge the view that computers either undermine the community, or are only relevant to the formation and activities of 'virtual' communities.

The cybercafe is not a transitory phenomena, but the evolution and extension of a very old and traditional institution, the cafe. Cybercafes may service and reflect the communication and information needs of people living in a global society, but they place this in a local context, providing a social space and a convenient and hospitable location for technology access: the 'human face' of the information society. The cybercafe can act as a gateway or portal between a local community, represented by individuals and formal and informal groups, and on-line communities and individuals. If the city is our home, then the cybercafe is becoming an important part of our domestic life. Cybercafes bring IT into real communities, allowing people to use and learn about them in there own way. The managers and customers of the cafes are finding new ways to incorporate this global phenomena into the everyday life of the city.

The study looked at 3 different 'cybercafes' in the same city: how and why they have developed and are being used, the business, the technology, the customers, and the staff. In this paper I look at who uses the cafes, and why, highlighting the triggers that brought them in the first place, and the reasons why they come back. The convenience, sociability, learning opportunities and games stand out as principal factors. It finishes with a discussion of the role of the café as a focus point and gateway for local, virtual and distant communities.

Cybercafes, cafes and ICTs in city life

1.1 Multimedia in the City

There is a growing body of work which examines the way that the use of network technology affects or might affect contemporary city life. They include ideas such as electronic commerce and government, exclusion and inclusion, virtual communities, and city life moving into virtual spaces, with the 'digital city' (Graham and Aurigi 1997) . Much of the literature focuses on on-line communities that are no longer geographically bound, (Reingold 1994). It conceives of individual users locked away in their own rooms or offices or homes accessing these communities. However there is little interest in the points where IT use becomes public. This is reinforced by a dominant paradigm, supported by industry, of individual ownership, and individual use of multimedia and the Internet. However recent surveys show that many people access the Internet in public spaces (16% in US, Spring 1998, 24% in UK survey, The Guardian, Summer 1998. The huge uptake of free web based e-mail accounts also indicates that many people do not have their own Internet access, or frequently access their e-mail away from their own computer.

New media and communications technologies tend to go through a sequence of public and then personal ownership as they are simplified and become cheaper, and uses and knowledge develop among users). This has occurred for the television and telephone, photography, video games, and increasingly for the computer . It occurs in organisations as well, e.g. reprographics and computers. There are some technologies where the skills and costs do not make them viable for people to actually own and maintain the technology, but it is cheap enough to install in a very convenient local community location. In these cases we have seen the development of local, convenient provision of video hire, photocopying, DTP and film processing. Even

with technologies that moved into the home or office, a commercial or public provision often develops locally to service the local market and provide a professional level of provision. In the case of the telephone and the television these technologies have become as common in public spaces as in private ones. One common thread though all of these development is convenience - local, on demand, and pay as you go services. Cybercafes fit into these trends of renting equipment, convenience, and need for expertise in maintenance and training.

1.2 Origins of Cybercafes

Cybercafes appear to have been developed in the USA in the early 1990s, often as an extension of existing attempts to democratise access to computers and to media in general. A trendy cafe with computers to surf the Net was a bizarre novelty, computers and the Internet being associated with a solitary occupation of 'anoraks' or with work. They did not seem to fit with the conviviality of a cafe atmosphere, where face to face contact, escape from work etc. is central to the experience. However the relaxed, informal atmosphere of the café was precisely the aim: the cafes were promoted as a 'human' place to learn about computers and find information. However, as the Internet and computers suddenly became a widely diffused part of mainstream culture why should cybercafes or public Internet points continue to exist? This paper shows that they have a very good reason to become an even more common and permanent part of our world.

Cybercafes are not the only public access points in the city. There are range of 'cyber' centres. There are schools with IT centres for local business (Micro-borough, FT 25/3/98), Libraries with Internet and CD-ROM facilities, business centres offering Internet access and computer facilities, 'telecottages' providing technology for business and cultural projects, video stores with computer terminals, and computer

training centres. Even banks offer a chance to surf the Net. There are also initiatives to open government one-stop shops to provide on-line access to national and local government services through local telecentres.

1.3 Cafes

Computers and the Internet in cafes are a natural extension of existing facilities and uses of cafes and other public, or semi-public venues. People have always met to eat drink, talk and play games in places such as inns and taverns. The first 18th century 'cafes' were centres of community for informal discussion of politics, local affairs, and culture, frequented by particular social groups. Perhaps more than traditional drinking establishments, information was central to early coffee shops (Sennett 1977, p.81), some even publishing their own newspapers, others becoming financial institutions (e.g. Lloyds of London). Cafes are sites for learning, socialising, and playing. They are a place for travellers to find some home comforts, to write letters and find out about the area or meet others. They are places to do business or have a celebration. All these activities are characteristic of cybercafes. Many of the activities that people come to the cafe for they could do at home, but we prefer to do them outside: cafes are a home from home. Home is not always convenient, or even pleasant, and we like to be in the company of others. It is not only a home, cafes are also a public venue that is not a formal work or office space.

While most cafes have to operate in the market, they are also social centres: they often offer a focus for a particular social group, or geographical community. The cafe is more than the physical space or the products it serves, it is the people who use it and work in it: a cafe is successful when it attracts customers back. Not that the physical aspect are not important - the decor, the drinks the games etc., but they are there to mediate, facilitate and lubricate the experience and activities of people.

Social games appear to have a special place in cafes. Pubs, cafes, clubs, and of course amusement arcades and casinos all feature games as part of the activities. In many countries games are the central activity in cafe life. Electronic games made their way into cafes and pubs as soon as they were invented. Although some games attract a limited clientele, others such as the pub quiz have a broad appeal.

The 1990s has seen a change in pubs and cafes in the UK. Many new cafes have been opened, attracting a different clientele who are looking for more modern design and ambience to the traditional pub, including an interest in the 'continental' style café that is not primarily a drinking space, but also for socialising, relaxing, working, shopping etc. This often includes linking the cafe with another specific function - a bookshop for example, or making it part of a Gallery or Museum³. The design of the new cafes is also a breaking with more traditional styles. This global style can be traced to ground breaking cafes such as Philip Starck's 1984 design in Paris (Boyer 1994). It is a modern, young and futuristic design, a model many of the cybercafes follow.

Survey of Cybercafes

1.4 Method

Research was done by questionnaire to the cybercafe customers, observation and interviews with managers during repeated visits to each cafe over 4 months. Some information was gained from newspaper articles, but little previous academic work was found on cybercafes, except for some articles on telecottages and social experiments with computer and media equipment access centres in Denmark (Cronberg, Duelund et al. 1991). However, since then a number of people have started to do work on cybercafes.⁴

1.5 Case Studies: 3 Cybercafes

The study looked at 3 very different cybercafes⁵. Cafe X is an upmarket city centre cybercafe, on a franchise from a London firm. It attracts tourists, people travelling on work or working in the area. The main uses are e-mail and the World wide web, and the café facilities. The café has a high profile in the city, and the users are 50/50 male and female. Cafe Y is a small private Internet and computer access centre in a middle class residential/high street area (It is not actually a café, although it offers free coffee). Users are all people living locally, especially teenage boys, and short and long term immigrants. Main uses are networked games, office facilities and e-mail. Cafe Z is a local government funded cafe and Internet access centre in an area of 'social deprivation' on the outskirts of the city. It is a modern building and operates as a 'healthy eating' café. It has the broadest use of the facilities, from under 10s upwards. They also use a broad range of services: WWW, chat, e-mail, Web page design, Web-camera and word processing. A key feature is the free access introduced during the study period which encouraged many more people to come in, especially children.

Similarities

The cybercafes have much in common, as well as the provision of computer access. They all have a regular customer base, with over 50% of customers coming in at least once a month and many more regularly. Users are very mixed, male and female, young and old, although there is a marked bias toward younger people using the cafes. The cafes, even Café Y, are social meeting points, and many of the customers considered the atmosphere and the chance to be with friends an important reason for coming in. The managers of the café are not 'technology' people, even though there is

an important role for a technical manager. Two cafes (X and Y) are run on a day to day basis by young women with a background in hospitality for who did not have a technical focus or approach. The manager of Café Z is not from a computer background, and sees himself as a 'people' person, and stresses the importance of the personal relationships in making his business run. The managers and staff advise and train customers, but also learn from them. They have developed the café facilities over its lifetime, responding to demands of users and technical change from outside, acting as *intermediaries*, facilitating new uses and shaping the services offered. All of the cafes, but especially those outside the city centre struggled to bring in customers, but the managers feel optimistic of a growing trade. Technical expertise is essential to expanding the café activities, which in itself has obvious limits to growth. They were all developing business outside the café, based on the expertise and public profile built though the café. This activities include developing Web sites, setting up computers and networks, and teaching and servicing the business and home computers of customers, and generally expanding in to the local public and business community.

Differences

There are also key differences between the cafés, shaped by their location, the aims of the managers and owners, and the type of clientele. Café X, based in the city centre has many visitors, who come in predominantly to use e-mail, but also the Web. The customers use these mainstream applications because their interests are information and communication with family, friends and colleagues. The staff help the customers, and they run some training courses, but there is little effort to develop new uses, because the customers generally know what they want, or are satisfied with what they were shown. There is not a great deal of interaction between customers either, except

for groups who come into to drink coffee. Café Y, on the other hand was almost completely dependent on locals who come at the recommendation of friends and family, and live within 10 minutes walk. The Internet connection in the café is not very fast, and e-mail and the web are not the dominant uses. Games are very important, and encouraged, the staff being experts on them all. The games are the main interest of a key user group, teenage boys, who come from the local school. This is in contrast to Café X where they have few games, partly because of restriction on children by the licensing laws, partly because they rather contradict the ‘trendy’ image of the café.

Café Z is also largely supported by local residents, and has many children using it, especially since access was made free (after the survey). The use of services is broad, as the managers have to work hard to find relevant uses for local people many of whom have no wide social network which they would need e-mail for, and no general interest in ‘information’. Games are discouraged, at least the wilder killing games, however a Scottish league football game is popular. Chat is encouraged, especially on a monitored site, and is very popular. There is much more interaction between users of the cafes Y and Z who often go in groups, or meet friends there than in Cafe X. Café Z stood out for developing Web pages related to the local community and the users, and for encouraging customers to represent their interests in the Web site. Tables in the appendix summarise the answers to some of the questions posed in the questionnaire.

Findings: The Human Face of Multimedia

The development and popularisation of personal multimedia services, together with the research on particular cybercafes suggests a number of key theses (Stewart 1998).

- 1) Cybercafes are convenient on-demand multimedia access centres. Cybercafes exist because they provide technical services to customers which are not readily available to them elsewhere, or when they are away from their own facilities. However it is generally not basic access to computers that is central to cybercafes - it is facilities such as networked games, the Internet, printers and scanners and the latest software and hardware. They are not necessarily for novices; even competent and regular customers do not have the resources, or do not see the need to own expensive new technology, but still want to use it occasionally.
- 2) Cybercafes are traditional cafes. Cybercafes are more than technology access centres, they are also cafes in the traditional sense - they are public spaces where many age-old activities can be conducted, but mediated by modern technology. These can be social and personal uses, but they are not new activities. In contrast to the dominant trend, computers do not have to be kept in private or in formal premises; they can be public and informal.
- 3) Informal learning and appropriation space. Cybercafes are also points of individual learning, the informal atmosphere makes it easier to learn, and to experiment. They are the 'human face' of computers and the Internet, technologies and services that are frightening to many people. Local, cheap, community access, seeing other people using multimedia, and non-expert help can act as a trigger to bring someone across the 'use threshold'. The technology itself, fast changing and new, needs this informal space in order to be appropriated and domesticated into city and community life.
- 4) Diverse styles reflect different environments and goals. Cybercafes, like normal cafes or other public spaces come in different flavours, and appeal to different tastes. They are part of a developing cultural and media landscape that we exist in

and use. The computers and the computer-mediated services are inserted into physical environments that reflect existing patterns of leisure, home and work activity, existing aesthetic and social tastes. Just as public leisure space have diversified into ones reflecting particular tastes, cultural or social milieu, geographical and market position or use, then cybercafes will as well. However at the moment the cybercafes appear to bridge many of the gaps with a common theme of multimedia use.

5) Cafe managers are ‘reflexive intermediaries’⁶. The Cafes, the technology and the use are mediated, but not dictated by the owner and managers. These people *facilitate* access to technology and content, but also shape use through *configuring* the computers, Internet connections, relations with customers, choice of the space, opening hours, food, prices, music, user clubs and marketing. Whatever their aims, commercial or otherwise, the managers are able to have very direct experience of what people are using and how. They also have time to look for new technology, talk to suppliers directly, find new content: web-sites and games, and help create that content themselves.

6) The cybercafe takes computers and Internet outside the mainstream paradigm of individual use and ownership. The dominant industry paradigm is for individual ownership and or use of computers, communicating in a ‘virtual space’ or community over a network. Use of the cybercafe undermines this , as it is based on people buying time to use the computer, not owning technology, and sharing them in a public space, not in a private space. They also favour the ‘network-centric’ model of information technology development: a virtual presence on the network, though a Web page or e-mail account, is more important than a physical presence, e.g. owning a computer.

7) Cybercafes could be 21st century public spaces. More speculatively, cybercafes are more than an extension of existing cafes, but they are community centres that bring together a wider range of people doing a wider range of activities than most cafes or other public venues. Local communities are fragmented and divided; cybercafes, by appealing to a broad range of users, and being more than casual centres of consumption, such as shops, create contact between customers that can form social, learning and sharing relationships around use of the technology and consumption of different. They also allow communities to project themselves in 'cyberspace', and allow people to interact on global networks as part of a local community, rather than as isolated individuals. Cybercafes are community centres for the 21st century.

These theses will now be illustrated within the context of more detailed examples from the empirical material

Multimedia, Customers and the Cybercafe in the 1990s

A cybercafe or any other local ICT access centre, privately or publicly run must attract customers. What services can a cybercafe offer that will entice people to come in and spend time and/or money using the services? There are three main groups of potential users - those people who may not otherwise be interested in computers, the Internet, or perceive the services and information available through them as being irrelevant to them, those that are interested but do not have technical access, and people who already have access to computers and networks elsewhere? What sort of environment, services and promotion will attract these different groups. In the study the users of the cafes came from all three groups, and the research attempted to find

why they used the cafes. The research gives some fairly clear answers, from the statistics, but these can be enriched by the verbal responses. Table 1 gives the aggregate figures for the main reasons given by customers at all the cafes for using the cafe. Other answers such as for training, or the cost, or just 'good' were also given.

Provides a technical service	68.75%
Atmosphere and helpful or friendly staff	37.5%
Convenience of location	17.5%
Place to be with friends	17.5%

Total number of respondents = 80.

Table 1 Main reasons for using cybercafe

The main reason for going to the cafe was predictably the computers or Internet services, whatever the application used. However many people wrote that the main motive was for the atmosphere, staff, or to see friends, and the technical service was a secondary factor. Table (5) shows the diversity of use and motivations.

How and why do people use cybercafes?

The reasons for using cybercafes are very varied:

A friend had gone away - need to contact them.
 Have friends who live abroad
 Travelling the world, want to keep in touch
 Living abroad - read home newspaper and keep in touch with developments in home country
 Need to write a CV or letter
 Need to send documents by e-mail
 Want to download an application form
 Want to find out about a particular subject for leisure interest
 Want to do work related research
 Find out about possibilities of using the Internet
 Want to 'improve' oneself
 Want to have fun with friends
 Own computer does not have facility, e.g. modem
 Need two computers to play a game
 Not allowed to use Internet at work/college
 Cannot afford a computer and/or Internet
 Do not want to buy a computer or Internet - rational calculation re. Use/cost
 Something to do to fill time.
 No longer a student with access at the University
 Equipment broken down at work/home
 Don't have a printer/scanner
 Don't own a particular game
 Enjoy using chat systems

Table 2 Detailed reasons for using cybercafes

1.6 Triggers to Use

As intermediaries, the cafe managers and cybercafes act as agents in the diffusion process, facilitating voluntary uptake of their services by customers. People encounter and engage with new technologies in many different ways subject to personal and local contingencies. In trying to make sense of this I introduce the concept of *triggers to use* to examine what makes people start to use the facilities of the cafe, and continue to use them. 4 main categories are suggested: 1) life events; 2) Social Push; 3) Multimedia Pull or Instrumental need; 4) Curiosity and Interest in technology or content. They are all reversible.

These triggers are useful categories to understand not only why an individual might start using a service such as a cybercafé, but also to understand the market that the intermediary is addressing, and the tools they deploy to try to engage new customers.

Life events:: These are changes in occupation or circumstance, or in that of friends and family and other personal social network members, that creates a 'need' or forces a need on someone. The technology may be a solution to a new problem or barrier, or a new obligation. Among life events one of the principal changes are those related to travel, which reflects the increasing global mobility of many people. More people travel today, and longer distances, and technology now allows us to keep in touch with personal and professional social networks across the globe. There is undoubtedly a large number of people whose participation in the 'global society' and 'global culture' is not just as consumers of goods and media from around the world, but as active members of global social network. Several of the customers who previously did not use e-mail, or even computers, and have no other use for them, found the cybercafé the only way to keep in touch. Many tourists and visiting business people came to Café X; all the cafes had long term immigrants visiting to mail home or read home newspaper. Several people started to use e-mail and computers for the first time because they had made friends abroad, or a girlfriend or boyfriend had moved away. Other life events include changing jobs or leaving college, and being deprived of an Internet connection or computer access

Social Push: The adoption and use of this technology is as a result of being introduced to the technology through other members of a social network, and using it with or

because of them. Many people come to cybercafes on recommendation from friends, or with friends to pass the time. Cafe Y had most of its customers through recommendation, and many of them came to play games with friends. Parents came in because of their children, and grandmothers had heard about their grandchildren using the Internet. The owner of Cafe Y knows that almost all of his clients came in because of personal recommendation. In Cafe Z many of the customers only come with friends, to spend the afternoon on-line.

Multimedia pull - instrumental need: In these cases technology that a customer owns or has access to is no longer sufficient for the purposes they want it for, or they are restricted from using certain functions due to economic or external social constraints (e.g. restrictions at work). The trigger is primarily instrumental need. Many people using cybercafes have their own computers, but do not have Internet connections: either they can't afford them, or do not wish to spend money on something they use only occasionally. The gamers especially need more power than their home computer can offer, and get the network connection to play the games against friends. Cafe Z customers in nearby offices had computers, but did not have Internet connections, so came next door to search for information. The cybercafe can provide a opportunity for people to explore uses of the Internet and computers that they might be restricted from using at school, college or work.

Curiosity: and engagement: Some people develop an intrinsic interest in new technology or multimedia, a curiosity which they wish to satisfy, with no particular goal apart from developing knowledge about the system or particular content or application. Even without using it, multimedia has become part of most people

lives today: the cybercafe offers a convenient way to convert that background presence in to a more practical and informed experience.

1.7 Other key aspects of cybercafes

Learning and Teaching

Multimedia is still evolving as a phenomena, it has not yet been packed into a ‘black box’; it has bits hanging out all over the place. Computers and Internet are complicated tools that we need training and learning to use. Personal help is needed for many people to get to grips with and use computers and the Internet at home or in an office. They also need help in learning how to use multimedia interfaces and content, how to search the Web and play the latest computer games. For many people help is not needed once, but over and over again, as new functions are needed, upgrades installed and software and hardware faults emerge. Sometimes people will know in advance how to use the facilities, but almost by definition, many will have to learn. The cybercafe is one place where this help can be and is given - it offers a local, high profile, informal space for learning and receiving advice. All the cybercafes have a learning /teaching element, informal and formal. These relate to formal business activities of the cafe business, and to informal social activities between customers and customers and staff. Some companies turn teaching into a formal activity, everywhere the staff offer informal advice, sometimes customers become informal members of staff (Cafe Z), or even get jobs there (Cafe Z).

The demand for convenience

Multimedia is fast changing, there is new technology available that many individuals and business cannot keep up with even if they own computers, but may have occasional need for: currently Internet, colour printing , scanning etc. The cybercafe

can provide these. Many people have very little need for the facilities of the computer or Internet, so are not interested in spending a great deal of money on the technology. However there are increasing number of instances when one of the services could be useful, for example word processing, downloading a job application, so sending an e-mail. Some other applications may not be desired out of necessity, but are for entertainment or casual. Cybercafes are useful and attractive places to do these things. Communications media and technologies proliferate today: public phones, mobile phones, answering machines and faxes all provide the solutions to communications in increasingly mobile and unpredictable lifestyles. Even with facilities at home or at work, there are times that we need access to electronic communications and information when away from home and the office. Just as cafes provided phones in the early days of telephony, for people who did not own them, they now provide phones as convenience. Cybercafes provide access to communications in the same way, both for those who do not have the technology, and those for whom it is a convenience.

The sociability of games

Just as games are important in many cafes and pubs, they are so in the cybercafes, only now using new technology. Games can be played alone, or in a group: taking turns, watching and interacting around the game playing. Network games extend this. In the cybercafes that had games, group activity appeared to be very important. Groups of children and student played games together, or watched each other. The games become centres of social activity, just as other non-electronic games always have, with people inviting strangers to join in, and more experienced players offering advice to newcomers.

The Internet Chat is another social ‘game’. In Cafe the members knew each other, and friends would be in the same room talking to each other on the chat system and to their other ‘cyberfriends’. The chat is a favourite of the teenage girls and women in their 20s: social and escapist like the boys' video games, calling on particular skills, providing excitement and a continuing week in week out experience of taking part in another world. Like the video games, the participants play in silence, then call out to each other, laugh, and make suggestions.

1.8 Lessons for café managers

The strength of the cybercafe is its visibility on the local street, and its flexibility in catering for a diverse range of customers. However cybercafes do not always succeed, many have closed, or struggle to exist. The cafes in this study survived because they concentrated on the customers, and satisfying them, rather than implementing the latest technology. This means experimentation with access conditions and costs, the café facilities and ambience, changing services, and expanding outside the café business. It is not enough to assume that the mainstream technologies and content will appeal to all potential customers, or that the people who walk past are interested in communicating across the globe or looking up difficult to find information. Most people are not interested. These sensible uses are not enough – cafes survive when they let people socialise, play, experiment and learn. Although customers can be encouraged to use things that they ‘should’ use, the café encourages people to follow their interests, whether it be chatting or looking up the pages of their favourite pop star.

Managers must provide a service that responds to needs of potential customers as their need or interest is triggered. They must also reach out to bring customers in through engagement with outside groups, and to continue to provide services to

individuals, firms or community groups even if they adopt technology themselves. Like any business, a network of satisfied customers is key to continued success. This includes providing technical support, training, network services, Web page design etc. Managers have to exploit social networks, personal and professional recommendations to bring people in. They have a radical new product, and therefore must make sure the message gets out that there is something relevant in the café for different customers, be it a good atmosphere, helpful staff or a fast Internet connection. One of the benefits of the cybercafe is that there are no set uses, and nothing to sign up to, the . This is also a drawback, and some sort of structured or semi-structured help should be provided that quickly gets them working by themselves. The experience from the cafes in the study shows that this does not take very long.

The main group of users of the cafes are those who already have technology knowledge and access somewhere. These people will form an important core group of users who can bring in new ideas and new customers. However, unless they satisfy the manager's goal (e.g. commercial success, serving the community) their uses and community should not be allowed to dominate the café.

Community and the cybercafe: the local and the global.

The Cafe is a meeting point for community and neighbourhood, or members of subcultures. It enables members to meet and share a space on a 'real' scale, but also to extend links outside. An individual 'meets' their own social network in the cybercafe through e-mail or chat. Chat lines also open out the community, by bringing outsiders into the local space. The cybercafe is a social portal, whether it be face-to face or in

cyberspace. This link can be on different levels, and each level serves a different community. The cafe reaches outside its limits in different ways, according to the configuration of the technology, the customers, both internal and external, the community and geographical location, and the manager's efforts in configuring the customers and the technology. These levels go from the individual to the World, as illustrated in the table below.

<i>Cafe service User</i>	<i>Use</i>
Individual	Individual customers coming into the cafe
Cafe groups	Subgroups of customers, e.g. game players
Cafe community	The general cafe clientele
Local community	Providing a service at community level rather than individual level: part of domesticating multimedia into the community
The City	Increasing awareness of multimedia, part of the city's multimedia facilities for locals and visitors. Domestication of multimedia into the City
The Region	Serving the hinterland of the city, opening up a cyberspace gateway as well as physical use by individuals or groups
The World	Bringing in visitors and customers primarily in the 'virtual' from around the world, linking them to the individuals, the cafe, groups, the community and the city. Links the global to the local.

Table 3 Service domains of the cybercafe: individual to the World

The dominant paradigm of multimedia is individual use, at home or at work, which is linked closely to individual ownership: technology suppliers want everyone have their own terminal. However, while this may be very convenient for some individual users, it restricts possible uses, that the cybercafe, being a social space, is able to exploit.

These case studies illustrate some collective and social ways in which computers and the Internet can be used. To understand the different types of IT use, the table below divides them into uses of ICTs that are essentially individual, and those that are

collective. It also distinguishes between those that involve access to global communications networks (Internet), and those that are purely within a local space.

	INDIVIDUAL	COLLECTIVE
CAFE BOUND USE	A An individual using multimedia within the cafe (or other location). e.g. using CD-ROM, office software	B Group using multimedia within the cafe. e.g. Network Games, local chat
'CYBERSPACE' USE	C Individual using multimedia to reach beyond cafe. e.g. sending e-mail to broad social network, surfing the www, publishing own www pages. Virtual groups. Can link the individual to the 'global'.	D Groups using multimedia to reach beyond cafe. Establishing group identity on-line. Using chat or games on-line as a group, or a distinct community in the cafe. Producing group pages. Links the local to the Global

- A. is the conventional use of computers, alone, without a network
 B. Requires (networked) machines in one place : cybercafe, office, terminal room. face to face group interactions run in parallel to computer-based interactions
 C. is a conventional individual use of networks or Internet. Can lead to the formation of virtual communities and groups
 D. Groups interacting on-line. Need the conditions of B, but an application and incentive to project that group out of the cafe, and into a more global space

Table 4 Dimensions of cybercafe use

As the case studies show, not all cybercafes do exploit all these possibilities. Cafe X is solidly in the Individual use column, although they do occasionally try to include group use, such as in training, the kids club or in corporate events. Cafe Y is much more in the group use, but confined within the cafe walls. Cafe Z exploits all 4 types. The local context , the needs and interests of the customers and the motivation of the managers, rather than the technology is what makes the difference. These group uses are an example of appropriation and reinvention of the technology, outside the

dominant industry paradigm, and also illustrate the development of a new use through a process of social learning between intermediaries - the managers and their customers.

1.9 Why do people use cybercafes?

A purely instrumental look at cybercafes, informed by a vision of eventual technological saturation, would see them as a temporary phenomena. Cybercafes provide access to computers and associated services such as the Internet, that people can't afford at home. Eventually there will be no need for these as everyone will have personal access. They provide informal teaching and learning centres for a population getting to grips with this technology for the first time. They provide services to people away from the office and home until such time as mobile or personal terminals become commonplace.

These reasons for their existence now are certainly true, but that they are transitory is not at all certain. The previously stated findings would suggest there is a future for cybercafes. They also suggest there are more complex reasons why cybercafes exist today, and the part they are playing in the process of the development and diffusion of multimedia.

Conclusions

There are many dimensions to Community Informatics, but there is a tendency to concentrate on the serious aspects of community- education, health, democracy etc, rather than on the everyday, activities of individual citizens, families and friendship group, let alone entertainment and leisure. The cybercafe falls at the softer end of CI,

and also stands apart as many cybercafes are commercial, and cater for those with existing expertise, looking for convenience and conviviality, rather than primarily for training and information. Many customers did not regard the technical services as the main or single reason why they visited the cafes. The atmosphere, the friendly staff, the chance to meet and spend time with friends, the music and decor. All these are social or aesthetic factors that would influence the choice of a spending time in any venue, be it public or private. The locality of the cafes were also important. The cybercafes are convenient local centres, either for residents or for travellers: most customers did not travel more than 1 mile to visit, so they really serve a local community. Like other media services they are 'on demand', just turn up, and plug in. The cybercafes today are slowly becoming specialised, catering for different groups and interests (e.g. surf and smoke in the Amsterdam cyber 'coffee shop', work in a business cafe), but most of them cater of a wide range of intersecting members of the community. Like some other semi-public spaces (shops, leisure facilities), cybercafes bring together people from different backgrounds, and of different ages, engaged in different leisure, work and learning activities. A good cybercafe creates a ambience where they can all feel comfortable, and some can stimulate interchange between customers.

Cybercafes are also about learning, opportunity and access. They are important training and advice centres, for new and experienced users alike. In these cases, the majority of users access to computers outside, and the cafe made up for the lack access to the latest technology. The informal nature of cybercafes is very important as a way of providing a gentle introduction to the world of new ICTs for people may not like a classroom atmosphere, just want to find out a little, are not initially interested in using the technology for any particular reason. For community projects that want to

give opportunities to people previously marginalised from computer use, the cybercafe is probably the best way to bringing technology and expertise into a neighbourhood and lower barrier to learning and experience.

There are important differences between cafes, even within the same, relatively affluent city: the city centre cafe is mainly for people with global social networks and interest in global information and cultural resources. The other cafes were much more based around local uses, and collective and social uses of the cafe and the technology and content. All the cafes are expanding their clientele and developing new areas of business, particularly those that are not resting on established communication and information uses, but are searching to expand the uses and relevance of new technology to new groups.

The role of cybercafes must not be overestimated. Many people learn about IT, have access to services, and encounter multimedia in private spaces and through private networks. However, as the manager of Cafe Y pointed out, only about 20% of the population are on-line, even though the Internet and computer services appear to be becoming an integral part of our culture, economic and public life. The cafes have played an important role in raising the profile of the Internet in the city, through direct contacts or through the media. If the city is our home, then the cybercafe is becoming an important part of our 'domestic' life, and the managers and customers of the cafes are residents finding original and appropriate ways to incorporate this global phenomena into the everyday life of their communities.

In a final message to policy makers, I would encourage local and national government to include cybercafes in their ICT policy, as our local authority finally did after initial rejection. I hope this paper shows the diversity of the concept, and why commercial and community entrepreneurs should be encouraged to develop projects as a resource for local citizens and as an essential service to visitors.

Age	12-18	18-24	25-30	31-35	36-44	45-50	Over 50
	8.6	31.4	25.7	20.0	2.9	5.7	5.7
Gender	Male	Female					
	48.6	51.4					
Distance from Home (Miles)	<1	1-5	5-10	>10			
	37.1	48.6	2.9	11.4			
Education	Secondary	Vocational	Further	Higher			
	11.4	2.9	20.0	65.7			
Occupation	School	Student	Unemployed	Trade/skilled	Unskilled	Professional	Self-employed
	2.9	22.9	0	34.5	5.7	25.7	5.7
Income (£UK'000)	<5	5-10	11-15	16-20	21-24	25-30	>30
	25.7	20.0	28.6	2.9	5.7	2.9	8.6
Number of services used	0	1	2	3	4		
	3	54.3	22.9	17.1	3		
Café Visits	Daily	<3x/wk	<3x/mth	Few times Year		First Time	
	14.3	25.7	22.9	2.9		34.3	
Reasons for using café	Services	Convenience	Friends	Atmosphere/Staff			
	71	17.1	8.6	40.0			

Table 5 Café X (all values in percentage) Total cases = 35

Age	12-18	18-24	25-30	31-35	36-44	45-50	Over 50
	3.7	51.9	14.8	14.8	7.4	3.7	3.7
Gender	Male	Female					
	81.5	18.5					
Distance from Home (Miles)	<1	1-5	5-10	>10			
	63.0	22.2	3.7	11.1			
Education (achieved /current)	Secondary	Vocational	Further	Higher			
	55.6	0	3.7	40.7			
Occupation	School	Student	Unemployed	Trade/skilled	Unskilled	Professional	Self-employed
	44.4	22.2	7.4	14.8	7.4	3.7	3.7
Income (£UK'000)	<5	5-10	11-15	16-20	21-24	25-30	>30
	59.3	7.4	7.4	11.1	3.7	3.7	3.7
Number of services used	0	1	2	3	4		
	59.3	25.9	7.4	3.7	3.7		
Café Visits	Daily	<3x/wk	<3x/mth	Few times Year		First Time	
	18.5	48.1	22.2	3.7		7.4	
Reasons for using café	Services	Convenience	Friends	Atmosphere/Staff			
	63.0	22.2	29.6	37.0			

Table 6 Café Y Cases=27

Age	12-18	18-24	25-30	31-35	36-44	45-50	Over 50
	11.1	38.9	16.7	5.6	16.7	5.6	5.6
Gender %	Male	Female					
	66.7	33.3					
Distance from Home (Miles)	<1	1-5	5-10	>10			
	72.2	11.1	5.6	11.1			
Education (achieved /current)	Secondary	Vocational	Further	Higher			
	50.0	0	11.1	22.2	16.7		
Occupation	School	Student	Unemployed	Trade/skilled	Unskilled	Professional	Self-employed
	44.4	5.6	22.2	16.7	5.6	5.6	5.6
Income (£UK'000)	<5	5-10	11-15	16-20	21-24	25-30	>30
	61.1	11.1	16.7	5.6	5.6	0	0
Number of services used	0	1	2	3	4		
	0	27.8	27.8	27.8	11.1	5.6	
Café Visits	Daily	<3x/wk	<3x/mth	Few times Year		First Time	
	27.8	44.4	16.7	5.6		5.6	
Reasons for using café	Services	Convenience	Friends	Atmosphere/Staff			
	72.2	11	16.7	33.0			

Table 7 Café Z Cases=18

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James Stewart is a Research Fellow and Doctoral student in the Research Centre for Social Sciences at the University of Edinburgh. His doctoral work is on the appropriation of new media technologies in everyday life. He has also researched and published on the innovation and development of new ICT systems, and on interactive television and the convergence of TV and Internet. Acknowledgements for this

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END NOTES

¹ <http://cybercaptive.com/>

² One report is that by Frederico Casalegno “Les Cybercafés “ a study of cybercafes in Paris in 1995 where he develops the idea of the cybercafe as an ‘outside living room’, where the ‘real’ groups can link to ‘virtual’ groups.

³ The Victoria and Albert Museum in London caused controversy in the early 1990s when they opened a new cafe, and advertised with the slogan along the lines of - ‘Nice Cafe with museum attached’

⁴ e.g. Wakeford, N. (1999). Gender and the landscapes of computing in an Internet cafe. Virtual geographies: bodies, space and relations. M. Crang, P. Crang and L. May. London, Routledge., research at the University of Sussex, and University of Teeside in 1999.

⁵ A full account of the cases, including Irish cyberpubs, can be found in James Stewart, McBride et al. 2000 forthcoming.

⁶ The role of the managers as intermediaries, and the process of the development and management of the cafes is covered elsewhere (Stewart 1998)