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Delivering Job Search Services for Unemployed People in Rural Areas: the Role of ICT

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**DELIVERING JOB SEARCH SERVICES FOR UNEMPLOYED PEOPLE IN
RURAL AREAS: THE ROLE OF ICT**

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ABSTRACT

The geographical remoteness of many rural communities affects the accessibility of public services. As a result, policy makers are increasingly turning to Internet and other Information and Communications Technologies (ICT)-based approaches to delivering services in these areas. This paper discusses the potential uses of ICT as a tool for delivering information services for unemployed people, comparing the experiences and attitudes of job seekers in peri-urban and remote rural labour markets. The analysis is based upon research carried out in two areas of Scotland: the first combining a remote rural town with a much larger, more sparsely populated, rural 'travel-to-work-area'; the second, a centrally-located peri-urban labour market. Survey research undertaken in the study areas gathered responses from 490 unemployed job seekers. Emerging issues were then followed up during twelve focus groups. The study found that the use of ICT for job seeking remained a marginal activity for most unemployed people, but was much more important in remote rural communities where there were no public employment service (PES) 'Jobcentre' facilities. In these areas job seekers were more likely to use the Internet as a search tool and were particularly dependent on telephone helplines provided by the PES. However, the study also found that a 'digital divide' operated within the unemployed client group, in terms of both access and use of ICT for job seeking. Those with low educational attainment, the long-term unemployed, young people and those perceiving their ICT skills to be 'poor' were less likely to use ICT. Furthermore, although respondents in rural areas were more likely to use ICT to look for work, they also pointed to the over-riding importance of informal, social networks as a means of sharing job information in remote communities. We conclude that ICT may have a future role in the delivery of services for job seekers, especially in rural areas. However, policies are required to ensure that information provided through ICT-based services is locally relevant, and disadvantaged groups have access to the facilities and training they require.

Keywords: ICT; job seeking; unemployment; rural; digital divide

DELIVERING JOB SEARCH SERVICES FOR UNEMPLOYED PEOPLE IN RURAL AREAS: THE ROLE OF ICT

INTRODUCTION

Public agencies have increasingly come to view information and communication technologies (ICT), and particularly the Internet, as an important tool in providing disadvantaged groups and areas with access to information, services and markets that would otherwise be inaccessible. Such an approach is particularly relevant in remote rural areas, which often suffer from weak service infrastructures 'on the ground', reflecting their geographical peripherality and scattered and sparsely populated communities (Hudson 2001; Lindsay et al. 2003). It has been suggested that in these, and similarly disadvantaged areas, unemployed people and other excluded and vulnerable groups may be assisted to access services and develop social contacts through ICT.

This paper discusses the potential impact of ICT as a tool for delivering services for unemployed people, comparing the experiences and attitudes of job seekers in peri-urban and remote rural areas. (ICT is defined as computing and telecommunications hardware, applications software and services in the relevant policy area, specifically telephone, Internet or other computer-mediated tools or services.) The analysis is based upon research carried out in two areas in northern and central Scotland. The first study area, 'Wick and Sutherland' combined a small, remote rural town (Wick) with a much larger, more sparsely populated, rural 'travel-to-work-area' (Sutherland); the second study area, 'West Lothian' is a peri-urban, industrialised labour market located in central Scotland, near major economic and population centres. The first phase of the research involved survey work undertaken with 490 unemployed job seekers across the study areas. Emerging issues were then followed up during a series of twelve focus groups.

Following this introduction, Part 2 discusses the context for the research - the potential benefits offered by ICT in providing information services for excluded groups, especially in remote and disadvantaged communities. Part 3 provides a brief description of the study areas and methodology for the research. Part 4 presents a comparative analysis of survey findings, and Part 5 discusses the results of the focus group research. Finally, conclusions and implications for policy are considered.

ICT, SOCIAL INCLUSION AND THE DIGITAL DIVIDE

ICT, social inclusion and the rural context

Rural areas are, by definition, affected by their relative peripherality from industrial and population centres, and their dispersed patterns of economic and social activity (Bryden and Bollman 2000; Grimes 2000). The geographical remoteness of many rural communities from major centres of economic activity clearly affects the availability of public services, which tend to be concentrated in highly populated areas of industrial development (Hudson 1995, 2001; Ramirez 2001; McQuaid 2002). The potential benefits accruing from the use of remote, ICT-based services are therefore particularly apparent in isolated, rural communities, which are often characterised by weak physical service infrastructures, and where other forms of personal interaction can be infrequent and time-consuming (Huggins and Izushi 2002; Bradley and Barratt 2003).

As a result, policy makers are increasingly turning to Internet and other ICT-based approaches to delivering services in these areas. The Scottish Executive's definitive 'Rural Scotland' policy document reflects a strong belief in the capacity of ICT to contribute to a 'high quality of life through access to services', although healthcare and education, rather than employment and social services, provide its main focal points (Scottish Executive 2000). The British government's White Paper on rural England demonstrates a similar optimism

regarding the capacity of ICT to reduce problems of distance, improve the responsiveness of services and deliver best value in isolated rural communities (DEFRA 2000).

To some extent, this shift in policy reflects a more general belief in the potential for new technologies to promote social inclusion, based on the idea that: "ICT can have a far-reaching impact on the quality of life of marginalised segments of the population, by providing more responsive and transparent governance as well as improving the reach and delivery of health, education and other social services" (ILO 2001). Certainly, the current British government (and devolved administration in Scotland) remain convinced of the merits of using ICT as a tool for social inclusion policy (DTI 2000; Scottish Executive 2001). The New Opportunities Fund has recently invested over £250 million to develop a national 'electronic library network' providing web-based facilities and resources through existing public libraries (Liff and Steward 2001). Having accepted that local libraries and library staff are not always best placed to engage in the more challenging aspects of social inclusion work, the government has now also prioritised the establishment of approximately 700 dedicated 'ICT learning centres' in disadvantaged areas, as part of its 'IT for all' initiative (Silcock 2001). The equivalent programme in Scotland has already seen the establishment of 300 'Learn-Direct' centres.

Beyond the provision of basic learning and information services, it has also been suggested that the Internet's capacity to facilitate information sharing and individual participation can lead to the growth of more demand-responsive services from the 'bottom up', and so facilitate a more democratic and dynamic relationship between public service professionals and their clients (Burrows et al. 2000; Carter and Grieco 2000; Loader et al. 2002). Finally, it has been argued that the Internet, and even telephone communications, have the potential to supplement social capital by assisting individuals to extend their personal networks (Haddon 2000; Wellman et al. 2001). Given the importance granted to social capital building as a means of responding to exclusion in rural areas (Nel and McQuaid 2002) it is unsurprising that the Internet and other ICT innovations have been welcomed and promoted by policy makers.

However, despite a wave of 'techno-optimism' in the early 1990s, more recent analyses of ICT access and use suggest that claims that the Internet will inevitably result in the 'death of distance' as a barrier to employment and social inclusion are at best premature (Van Winden 2001; Graham 2002; Malecki 2003). The introduction of new technologies has generally tended to benefit the least disadvantaged, while large numbers of individuals continue to be excluded as a result of their educational or financial status (Servaes and Heinderyckx 2002). More affluent and skilled workers are much more likely to possess the skills, knowledge and resources to fully exploit the opportunities offered by the Internet and other technological advances (US Department of Commerce 1999; Russell and Drew 2001). It has been suggested that the digital divide affecting the unskilled and those on lower incomes can reinforce existing disadvantage, by further widening the *relative* differences in access to information and social networking opportunities (Phipps 2000; Devins 2002). Ensuring 'digital inclusion' therefore remains a priority for policy makers and service providers alike.

ICT and services for unemployed job seekers

In the specific area of job search support for the unemployed, the national public employment service (PES), Jobcentre Plus, has promoted its 'Internet job bank' and 'Jobseeker Direct' national telephone helpline as important supplementary services throughout the country, and as its primary means of contact with job seekers in remote rural areas. The Jobcentre Plus website has provided job search services since November 2000. The website's database has also become familiar to job seekers using the national network of Jobcentres, due to the recent introduction of ICT-based systems into local PES offices in the form of computerised 'jobpoints' (touch-screen kiosks which were installed in over 1000 Jobcentres between April 2001 and February 2002).

The 'Jobseeker Direct' national telephone helpline was launched as a pilot programme in January 1999, and following the pilot's extension became a permanent component of the

agency's provision in March 2000. The helpline, which charges at local call rates, offers job search advice to unemployed people and other members of the public. During 2001-02, the service received 4.5 million calls, resulting in almost 4.4 million referrals and 115,000 job entries (DWP 2002). However, telephone-based services play an even more important role in one of our remote rural study areas. Given the absence of local, community-based PES offices, unemployed people in many areas of rural Sutherland are not required to attend Jobcentres to carry out job search activities or 'sign on' at PES offices to show that they are actively seeking work. Instead, these job seekers telephone their nearest 'local' Jobcentre in Wick (using a free-phone number) in order to confirm their availability for work and receive job search advice. This service, although supplemented by the Jobseeker Direct national helpline and the Jobcentre Plus website, amounts to the PES's only regular contact with job seekers in these areas.

Relatively little research has been carried out into the impact of new technologies on services for the unemployed, although there is some evidence that the effective use of ICT by *service providers* can have a positive impact on the take-up of benefits (Davies 2002). Early evaluations suggest that the Internet services offered by Jobcentre Plus tend to be viewed as user-friendly and helpful, but have not been associated with greater job search efficiency or success (GHK 2002a). Similarly, although the introduction of the Jobseeker Direct telephone helpline has apparently proved popular with job seekers, there is evidence that it has had relatively little impact on the regularity with which most unemployed people use Jobcentres, and that the vast majority of users live within 30 minutes travelling distance to their local Jobcentre office (GHK 2002b). For these people, the Jobseeker Direct service would appear to offer a useful addition to - *but not a replacement for* - local services. Furthermore, research carried out for the Department for Work and Pensions has noted that unemployed people are far less likely to take advantage of the PES's ICT-based services than other members of the labour force, and that the unqualified, the long-term unemployed and those with poor work records tend to be particularly reluctant to use new technologies when job seeking (Coleman et al. 2002).

ICT-based provision plays an important and growing role in the services offered by Jobcentre Plus. ICT clearly offers benefits in terms of delivering services in remote rural communities, where the scattered and isolated nature of settlements and their low population densities generate specific practical and financial problems for public agencies, resulting in weak formal service infrastructures 'on the ground'. However, there remain concerns that those without access to the appropriate hardware, or with insufficient skills and awareness of ICT, may struggle to reap the benefits of these new services.

The research reported in this paper seeks to contribute to the continuing debate surrounding the delivery of services for disadvantaged groups through the Internet and other forms of ICT. By comparing the attitudes and experiences of unemployed job seekers across a range of client groups and different labour markets, the analysis below offers an insight into the nature and extent of the digital divide affecting particularly disadvantaged groups, and identifies potential benefits and barriers associated with the use of ICT in delivering services (in this case information and advice services for unemployed job seekers).

METHODOLOGY AND CONTEXT FOR THE RESEARCH

Research methodology

This paper is based upon the findings of two distinct phases of research – first, a broad survey of unemployed people and then a series of in-depth focus groups – with both phases comparing the experiences and attitudes of unemployed job seekers in the same Scottish study areas. The first phase involved the comparative analysis of two pre-existing datasets. These datasets were developed as a result of commissioned survey research undertaken between November 2000 and May 2001 in the two study areas: the West Lothian local authority area; and the contiguous Wick and Sutherland travel-to-work-areas (TTWAs). In total, 300 responses were gathered in West Lothian (approximately 10% of the unemployed claimant count), and 190 in Wick and Sutherland (22% of all the claimant unemployed across

the two TTWAs). Although the vast majority of responses in both study areas were gathered through semi-structured, face-to-face interviews (424), these were supplemented by limited postal and telephone survey exercises (66).

The second phase was designed to follow up the issues raised by the quantitative data analysis. Retaining the original study areas, the second phase involved a series of focus groups with vulnerable job seekers who had experienced, or were at risk of, long-term unemployment. Twelve focus groups were convened (six in West Lothian, and three each in Wick and Sutherland) between July and November 2002. Focus groups were mainly held at community centres and other public facilities in the two study areas - participants were often users of community-based facilities offering services for job seekers at these locations, which in some cases included Internet-based provision. One focus group, with job seekers scattered across the remote Sutherland TTWA, was conducted via a telephone 'conference call'. Each focus group involved 3-10 participants, who were selected on the basis that they were unemployed and looking for work. Focus group discussions centred on participants' attitudes towards the Internet and other forms of ICT, their experiences of using ICT-based provision and other current services for the unemployed, and methods of looking for work.

The study areas in context

Although initially based on an analysis of two broad study areas, the research in fact provides a framework for comparing three types of geographical area: Sutherland (population 13,000) is a large, remote and sparsely populated rural TTWA in the northern Scottish Highlands; the neighbouring Wick TTWA is a small, remote rural town (population 13,000); and West Lothian (population 157,000) is a well-connected peri-urban area located near Edinburgh in the heart of Scotland's 'central belt' (see Map 1). Caithness (the area in which Wick is located) and Sutherland are the most northerly counties of mainland Britain, and are therefore particularly remote from major centres of economic investment and industrial activity. The areas are also among the most sparsely populated in Europe (14.8 persons per

km² in Caithness and only 2.2 persons per km² in Sutherland). Both areas have been affected by persistently high rates of unemployment and long-term unemployment.

INSERT MAP I ABOUT HERE

As noted above, the services available to job seekers in these two 'sub-areas' differ markedly. The Wick TTWA is dominated by the town of Wick, which has its own Jobcentre Plus office. The vast Sutherland TTWA (covering an area of 5,865km²) hosts a number of very remote settlements, but has no physical Jobcentre facilities. As a result, unlike their counterparts in the Wick TTWA, many of Sutherland's job seekers are excused from the fortnightly routine of appearing in person at Jobcentres to 'sign on' as actively seeking work. This distinction is important. In most parts of the UK 'signing on' forms the basis for regular, compulsory attendance at Jobcentres by claimants. Although often seen as an expression of the public employment service's 'benefit policing' role, the routine of regular meetings with Jobcentre staff also provides unemployed people with an important focal point for job seeking activities and an opportunity to access information and advice. The absence of formal services provided by Jobcentres is likely to impact on the job search strategies deployed by unemployed people, and may result in their readiness to adopt alternative methods, ranging from the use of ICT to a reliance on informal, social networks.

The second study area provides a strong contrast. The West Lothian local authority area (population approximately 157,000) is a peri-urban area situated in the 'central belt' of Scotland, between the country's two largest cities, Glasgow and Edinburgh. Its largest town, Livingston, is only 15 km from Edinburgh, Scotland's rapidly expanding capital. The area is a major centre of manufacturing activity, and has recently experienced job losses as a result of adverse sectoral conditions. Nevertheless, unemployment has remained at or below the national average in recent years.

SURVEY FINDINGS: JOB SEEKING AND THE ROLE OF ICT

Profile of the sample groups

Substantial minorities in both sample groups were 'long-term unemployed' (using the 'ILO definition' of unemployed and available for work for twelve months or more). As Table I illustrates, more than one-third of respondents in the West Lothian sample, and two-fifths (in total) of those from Wick and Sutherland were long-term unemployed, and the majority of both sample groups had been unemployed for at least six months. The West Lothian sample group featured a higher proportion of young people (defined here as the 18-24 age group) than the Wick and Sutherland sample (28%, compared to 20% in both Wick and Sutherland). Respondents interviewed in Wick and Sutherland were, conversely, much more likely to be aged '50 plus' (an age group which, like 18-24 year olds, is specifically targeted by welfare to work initiatives). However, the majority of all job seekers fell into the middle category ('25-49 years'). The average age of respondents in this category was relatively similar across the sample groups (at 35.5 years in West Lothian, 37.0 years in Wick and 38.6 years in Sutherland).

INSERT TABLE I HERE

The educational attainment of the sample groups was rather similar, despite the presence of a higher proportion of long-term unemployed people in the Wick and Sutherland cohorts. The vast majority of respondents in all areas had fairly limited qualifications – 79% of West Lothian job seekers, 77% of those from Wick and 71% of those from Sutherland were not qualified to Scottish Higher Grade level (the equivalent of National Vocational Qualification Level 3), the level of qualification generally required for admittance to higher education in Scotland. Only around 45% of the general Scottish labour

force is similarly unqualified. Clearly, those with few qualifications will be less mobile in terms of their interaction with the labour market, and will be limited in the range and type of employment that they can pursue.

Job search methods used by respondents

The job search methods currently used by unemployed people in these two very different labour markets should offer some indication as to the relative importance of ICT, informal social networking and more traditional, 'formal' services, and the potential for an expansion in the role of Internet or other ICT-based provision. As noted above, we might hypothesise that those residing in remote rural communities are more likely to rely on alternative methods of job seeking, and less on the formal services that are provided by public agencies. Indeed, our initial findings highlight the different approaches adopted in the more remote Wick and Sutherland labour markets, where Jobcentre facilities are few or non-existent, and the more centrally-located West Lothian. In remote rural areas such as Wick and Sutherland, it would appear that informal methods (ranging from direct approaches to employers to social networking through personal contacts) are a crucial part of day-to-day job seeking activities. In West Lothian, on the other hand, the highly formalised services offered by the Jobcentre Plus agency were more important.

Table 2 illustrates this point. When asked about the job search methods that they used on a weekly basis, West Lothian respondents were far more likely to mention the information facilities and advice of staff in Jobcentres. Almost 70% of West Lothian respondents had received advice from Jobcentre staff on a weekly basis, compared to only 43% of those from Wick and 47% of Sutherland respondents (who had mostly received advice from Jobcentre staff over the telephone). Clearly, the remoteness of some settlements in the northern Highlands makes it impossible for job seekers to travel to the area's 'local' Jobcentre on a regular basis. However, the freephone telephone helplines offered by Jobcentre Plus appear to be unable to replicate the relationship established

between job seekers and staff within 'real' Jobcentre settings, at least in terms of numbers of contacts. Conversely, Wick and Sutherland sample members were much more likely to use personal contacts and direct approaches on a regular basis to look for work. Only 42% of West Lothian job seekers had used their contacts to look for work on a weekly basis, compared to 73% of those in Wick and 74% of Sutherland respondents - figures which were constant even when the sample was analysed by unemployment duration.

INSERT TABLE 2 ABOUT HERE

In both study areas, the Internet appears to be an important job search tool for a small - but still significant - group of job seekers, with 16% of Wick and Sutherland respondents and 18% of those in West Lothian using web-based services on a weekly basis. However, the figure of 16% using the Internet on a weekly basis masks a wide variation between the town-based Wick TTWA, where Jobcentre facilities are available (9%), and the more remote settlements of Sutherland (28%). Although Sutherland job seekers were generally slightly more highly qualified than their Wick counterparts, a characteristic that may have some impact on Internet access, it would appear that 'location matters' in determining ICT use in remote rural areas.

Job seekers and ICT: access, skills and awareness

If facilities delivered via the Internet are to enable job seekers to identify appropriate vacancies, and provide opportunities to extend social networks, access to ICT is an issue of central importance. Comparing domestic access to ICT across our study areas, members of the Sutherland sample emerged as more likely to have a home or mobile telephone, at 85%, compared with 83% in West Lothian, and only 68% in Wick. As Table 3 shows, Sutherland job seekers were also much more likely to have a PC with private Internet connection than

their Wick counterparts (27%, compared to 12%). Internet access in West Lothian was comparable with that in Sutherland, at 26%.

INSERT TABLE 3 ABOUT HERE

It is perhaps more worrying that a significant minority (15%) of those from rural Sutherland reported that they did not have a home or mobile telephone. (Among the long-term unemployed this rose to 21%.) Although research with unemployed job seekers elsewhere has shown up to 25% not having access to a telephone (Ashworth and Youngs 2001), the above findings are particularly important given the geographical and policy context. The telephone-based services provided by Jobcentre Plus to clients in very remote areas of Sutherland supposedly deliver high quality advice and information to those unable to attend Jobcentre offices in person. Yet there remains a minority of Sutherland clients without ready access to a telephone, who are required to 'phone in' from others' residences or public telephone kiosks, in order to access the agency's services.

While area-based factors may account for some of the differences in ICT access and usage, it is likely that other, personal barriers will have limited the ability of some job seekers to take up ICT-based services. Long-term unemployed people in *all* areas were rather less likely to have Internet or telephone access at home. It would appear that this in turn reflects a combination of financial and skills barriers faced by the more disadvantaged. Whereas only 15% of those job seekers reporting a total household income of less than £150 per week (then approximately €236) had access to the Internet at home, the figure for all other respondents was 43%. Similarly, only 15% of those in the lower income bracket used the Internet to look for work on a weekly basis, compared to 27% of those with a weekly income above £150.

Those with limited skills were similarly disadvantaged in terms of accessing the Internet. As Table 4 shows, those qualified to the general level of 'SCE Higher Grade or equivalent' were more than three times more likely to have home Internet access than those

with no qualifications (37%, compared to 12%). Higher qualified job seekers were also much more likely to use the Internet to look for work on a weekly basis (34%, compared to 8% of those not similarly qualified).

INSERT TABLE 4 ABOUT HERE

Another considerable concern for policy makers must lie in the admission of many job seekers, across *all* income and skill groups, that they lack confidence in using even basic forms of ICT. When asked to rate their own attainment across a range of areas, the vast majority of respondents described their skills as 'good or adequate'. Yet it is notable that while less than 10% of all respondents considered their occupational skills, literacy, numeracy or communication skills to be 'poor', 58% held similarly negative views about their ICT skills. Clearly, self-reporting of skill levels may not reflect an objective analysis of the individual's actual attainment. However, given that it is common for job seekers to demonstrate a degree of over-confidence in evaluating their skills attainment - perhaps reflecting the rhetoric used by many on a day-to-day basis when attempting to 'sell' themselves to employers - the fact that job seekers were so clear about their *lack of skills* with regards to ICT may reflect particularly severe problems in this area.

Age, attitudes towards ICT, perceived and real gaps in technical skills, and perhaps most importantly educational attainment and income status, may all impact on the ability and willingness of job seekers to use new forms of technology as a means of looking for work. However, there is a clear need to 'unpack' these variables, and the relationships between them. For example, those with lower household incomes are both more likely to be long-term unemployed and less likely to have access to the Internet at home. Yet thus far it is unclear as to whether the digital divide experienced by many of these individuals is a symptom of their long-term unemployment (in itself linked to lower educational attainment), their income status, or a combination of these and other factors.

In order to test the association between individual and labour market characteristics and ICT access and use, a binary logistic regression model was used. The model examined the association between two dependent variables (home Internet access; weekly use of the Internet for job seeking) and selected job seeker and area characteristics that emerged as potentially relevant from the above analysis. Dummy variables for the 'West Lothian' and 'Sutherland' areas (as opposed to the broader 'Wick and Sutherland' area) were used. Before the regression model was developed, a correlation matrix of all potential variables was applied and variables that exhibited statistically significant correlations were removed.

As Table 5 illustrates, the strong association between job seekers' skills and ICT access is confirmed. Both formal qualifications and job seekers' perceived ICT skills appear to be significantly associated with Internet access (with those perceiving their skills to be 'good or adequate' more likely to have on-line facilities at home). Home Internet access was also associated with income status, reflecting the manner in which those with higher household incomes (often reflecting the presence of a working partner) are better able to cope with the costs of hardware purchase and connection charges. Although there was a positive association between Internet access and residence in both West Lothian and Sutherland, the degree of significance was a stronger for the latter.

INSERT TABLE 5 ABOUT HERE

The statistically significant association between factors such as gender and income status and Internet access was not replicated when Internet job seeking was analysed. There was, however, a strong association between measures of respondents' skills (formal qualifications and perceptions of ICT skills) and their use of the Internet as a job search tool. While residence in West Lothian was not strongly associated with web-based job seeking, there was a significant positive relationship between Sutherland residence and the use of the Internet.

Internet access and use therefore appears to be associated with a combination of factors related to skills and qualifications, income and gender. Perhaps more importantly, these findings confirm that those in more remote areas (such as the isolated settlements of Sutherland) are more likely to invest in domestic ICT facilities and use the Internet to look for work. In these areas, more so than peri-urban labour markets, there may be an awareness that the weakness of formal service infrastructures necessitates the adoption of 'alternative' job search strategies and approaches to social networking, with web-based activities offering one potential source of information and communication. However, it should be noted that ICT-based job seeking remains the activity of a minority. For most unemployed people, across a range of skill groups and social classes, technology-based forms of job seeking and social interaction remain a somewhat obscure concept.

FOCUS GROUP FINDINGS: ATTITUDES TOWARDS JOB SEEKING AND ICT

Profile of the focus groups

Twelve focus groups were conducted (six in West Lothian and three each in Wick and Sutherland). The focus groups involved a total of 72 participants across the study areas. Focus group participants were contacted via community-based service providers or through direct approaches made by members of the research team at Jobcentres. The objective of the focus group research was to follow up issues of interest and importance emerging from the survey findings. Accordingly, our focus group discussions sought to clarify why Internet job seeking was not more important amongst the unemployed, with reference to the issues of access, skills and awareness. The discussion within groups also focused on the impact of the availability of local services and labour market conditions on perceptions of both the Internet and other ICT-based solutions (such as computer-mediated services in Jobcentres and telephone helplines).

Focus group participants and ICT: access, skills and awareness

Before discussing job seekers' views of ICT-based job seeking in detail, it is perhaps worth examining the context upon which individuals based their comments - i.e. their experience of and access to ICT and the Internet. Of the 72 job seekers who participated in focus groups, 70 completed short questionnaires which gathered details about their knowledge of ICT and the Internet, their perceived level of ICT skills and their use of new technologies in job seeking. Although not necessarily statistically representative of the full client population, these in-depth discussions provide many useful insights. As Table 6 illustrates, members of our Sutherland focus groups were clearly more likely to have access to the Internet at home. Whereas four-fifths of these job seekers were on-line at home, the figure was less than one-third for West Lothian participants, and just over one-fifth for those in Wick.

INSERT TABLE 6 ABOUT HERE

Fairly high proportions amongst our focus group participants in both Sutherland and West Lothian had used the Internet *at some time*, although this was much less the case for Wick job seekers. However, perhaps the clearest finding emerging from Table 6 is that even amongst those with access to the Internet at home, this form of ICT was considered somewhat marginal to their job search activities (a similar conclusion to that reached following our quantitative analysis of survey responses). Of the 70 participants across all three study areas who provided questionnaire responses, 27 had access to the Internet at home and 24 used it on a regular (i.e. weekly) basis. Yet only 12 used the Internet on a regular basis to look for work. Over half of those attending Sutherland and West Lothian focus groups had used the Internet at some time for job seeking, although in the latter study area this figure almost certainly reflects the limited job search training provided as an element of New Deal options.

Attitudes towards new technology at Jobcentres and Internet services

Despite their lack of previous experience of ICT-based job seeking, many unemployed people demonstrated an encouraging degree of adaptability when faced with the introduction of new technologies in Jobcentres. The recent introduction of jobpoints (which use web-based technology to link Jobcentre clients with a national jobs database) met with a mostly positive response, with many Jobcentre users welcoming the enhanced sense of privacy and autonomy provided by the terminals. This was contrasted with the lack of privacy afforded by the old 'cards and boards' approach, which saw lists of jobs quite literally 'pinned to the wall' in Jobcentres. As one West Lothian job seeker noted:

The jobpoints are actually better, because with the cards it was too crowded and people would get in your way. The old way, I used to get really claustrophobic and it never gave you any privacy.

Laura, 18, unemployed six months, West Lothian

Few focus group participants reported major problems in using the new technology, and many commended Jobcentre Plus staff for the support and advice provided during the transition period.

They [jobpoint terminals] can make a big difference if you know how to work them. It took me a couple of hours to get an idea of how to use them, but I can do it now and they [Jobcentre staff] gave me help...

Patrick, 37, unemployed five weeks, Wick

Where there was criticism, it tended to be constructive, with some job seekers arguing for changes to software to enable easier browsing across occupations and local areas. The current software design of jobpoints (and the Jobcentre Plus website) requires job seekers to identify a geographical area, industrial sector and occupation in order to focus

their search. Lower skilled job seekers, seeking entry-level work across a range of potential sectors, argued that this highly specific and targeted approach risked unnecessarily over-complicating the job search process.

Since they've computerised the Jobcentre...you go in and you have to press a button for local jobs, press a button for the type of job you're looking for, press a button for the area. Me personally, I preferred the old card system, because I haven't got a clue what I'm looking for, and I used to walk in and look at things and think, 'I'll try that'. Now, you've got to have a specific idea. I mean, I'm a manual labourer; I don't have a specific idea.

Peter, 53, unemployed two years, Wick

Such views were common amongst manual workers. Although these individuals were comfortable using the jobpoint technology, many recalled that one benefit of the old 'cards and boards' approach was that job seekers could skim across a large number of broadly similar opportunities very quickly, comparing pay and conditions between vacancies. This convenience was lost with the introduction of jobpoints, which had in fact slowed the search process for these job seekers. Job seekers also noted that user profiles cannot be saved by the jobpoint system, so that those undertaking multiple searches are required to repeatedly re-enter selected areas, occupations and sectors. The same criticisms were applied to the Jobcentre Plus website.

Similar concerns were raised about the Jobcentre Plus website by job seekers in remote rural communities in Sutherland, albeit for different reasons. Focus group participants living in these remote areas suggested that there was insufficient local labour demand to justify the use of highly detailed searchable databases. These job seekers argued for the introduction of an accessible 'local list' of *all* available vacancies, to operate alongside the service's more sophisticated national database.

When you search by job what you seem to get is every clerical job in the Highlands or every construction job in the Highlands. What I really want to know is jobs in Lochinver [respondent's place of residence, a village in north-west Sutherland] - I'm interested in any jobs that come up.

George, 54, unemployed two years, Lochinver, Sutherland

They've got it set up for big urban areas, where you need categories of jobs, but up here there's no need for it [in small rural labour markets]. You could fit a list of local jobs on half a page.

John, 34, unemployed one year, Lairg, Sutherland

However, even those in remote areas of Sutherland who used the Internet regularly to look for work were sceptical about its potential for improving their job prospects. For these job seekers, the main benefits of the Internet were related to convenience or cost - for example, accessing on-line versions of local newspapers was considered cheaper than buying hard copies. Members of our Wick-based focus groups who used the Internet to look for work were similarly sceptical about its value, and job seekers in this area (which has its own Jobcentre) were generally less likely to have used the Internet as a job search tool in the first place. There was a common perception that Internet job seeking could add little to the more easily accessible services provided by the local Jobcentre.

Indeed, the general consensus among job seekers in areas served by local Jobcentre facilities was that there was little need for additional Internet services. Awareness and use was generally rather limited in West Lothian, while in the remote rural town of Wick, focus group participants viewed web-based job seeking as offering a useful alternative for those seeking to leave the area, but providing little added value to the services already available for those looking for work locally. As noted above, Sutherland-based focus group participants were more likely to use the Internet as a regular job search tool, reflecting the absence of formal services in the area's remote rural communities. Yet even for these job seekers, Internet services were useful only as a means of identifying opportunities outwith the local area, or as a cheaper and more convenient way of accessing already-available newspaper advertisements. As noted above, there is some evidence that a more targeted website,

designed to provide easily accessible 'local jobs lists', may attract more rural job seekers. Nevertheless, in more basic terms, job seekers in remote rural areas largely continued to take the view that new technology could do little to address the more fundamental problems of limited job opportunities within the local economy.

Attitudes towards telephone-based job seeking

Awareness and use of the Jobcentre Plus agency's Jobseeker Direct helpline was low in West Lothian. It would appear that, given their ready access to Jobcentre facilities, focus group participants in West Lothian felt that they had little need for this alternative information source. Levels of awareness were higher in the Wick TTWA, but again there was a general consensus that Jobseeker Direct was unlikely to offer added value beyond the services available the town's Jobcentre. In the more remote Sutherland TTWA, however, job seekers had considerable experience of using the Jobseeker Direct national helpline. As noted above, the lack of Jobcentre facilities in the area means that job seekers are required to confirm their availability for work during telephone calls to staff at the nearest Jobcentre (at Wick) and are advised to use the Jobseeker Direct service as an alternative to making regular Jobcentre visits (as job seekers in less remote areas would be expected to do).

Although the concept of a telephone-based information service met with general approval, Sutherland job seekers raised concerns about the 'remoteness' of Jobseeker Direct. There was a widely held perception that, whereas job seekers were once encouraged to regularly telephone their nearest Jobcentre at Wick to inquire about new vacancies, Jobcentre staff were increasingly re-directing such inquiries to the national helpline. This had implications for the quality of services - whereas Wick-based Jobcentre staff were perceived as possessing useful local knowledge, Jobseeker Direct operators were viewed as demonstrating little understanding of the peculiar problems of distance and remoteness faced by rural job seekers.

A while ago, you used to phone up the Jobcentre at Wick to do a job search and they would do it there. Now they put you through to Jobseeker Direct, and they have no idea about where you live. I told the operator that I was sixty miles from my nearest Jobcentre and she didn't believe me. They were offering me jobs in Fort William [a journey of over 220 km by road]. It's the same every week, they just don't know where you are.

Eric, 26, unemployed five months, Brora, Sutherland

These findings highlight a fundamental dilemma concerning the increased use of ICT-based services at the national level. ICT has the potential to reduce administrative and other costs, expand personal choice in accessing information (e.g. in terms of time, privacy and location), and provide information that is both broader in scope and more targeted in addressing the needs of specific client groups. However, the experiences of job seekers in Sutherland illustrate how an over-reliance on ICT-based services has the potential to lead to the gradual erosion of direct contact between key public agencies and their clients, adding to the sense of isolation amongst vulnerable groups in remote areas. Many focus group participants had valued the opportunity to speak to advisers who, although not 'local', were based in the northern Highlands and were aware of the problems of distance and geography faced by rural job seekers. The increasing reliance on the Jobseeker Direct national helpline to deliver information services to these job seekers raises the danger of severing the link between unemployed people and PES professionals whose local knowledge can be valuable, or at the very least reassuring.

Barriers to the expansion of ICT-based services for job seekers

Finally, it should be noted that the geography of local labour markets can play a crucial role in determining the overall utility of formal services, delivered through ICT or other means. In our rural study areas, Wick and Sutherland, the importance of informal, social networks to recruitment and job search processes was a recurring theme in focus group discussions.

West Lothian focus group members also acknowledged that informal contacts could be a useful source of information about jobs, but did not consider social networking to be a crucial element in job seeking. In contrast, job seekers in Wick, and especially Sutherland, were convinced that informal social networks, rather than interventions by public agencies, governed the allocation of jobs in their local communities.

It's about getting yourself established and getting to know people, to know where the jobs are. There are jobs, but word of mouth goes a long way. If you know people, you can get a job. It's not what you know, it's who you know. It's as simple as that.

Andrew, 63, unemployed seven months, Lairg, Sutherland

It was suggested that as a result of the strength of informal social network relations in these communities and the tradition of recruitment by word of mouth, many job vacancies were not communicated to the Jobcentre or advertised by any other formal means. Yet although many long-term unemployed people who participated in focus groups acknowledged that they faced particular problems in accessing informal networks, there was a general acceptance that these traditions were part of rural life, and could be effectively exploited given a combination of good luck and sound judgement.

In smaller communities, if there's anything going people know about them. Some jobs are just sort of arranged beforehand - the person who is going to get the job has already been decided before the vacancy even occurs. These things don't get advertised.

George, 54, unemployed two years, Lochinver, Sutherland

The operation of informal social networks, combined with a more general scepticism regarding the availability of job opportunities within rural areas in which unemployment remains a major problem, left many job seekers in Wick and Sutherland questioning whether ICT-based provision, or any other advances in public services, could improve their position

in the labour market. Overall, it would appear that, if ICT is to play an important role in delivering services for job seekers in rural areas, the design and content of Internet provision must be such that the new technology can be used to foster social networking as well as merely providing formal vacancy information. The development of web-based services that provide official job search facilities *and* opportunities for informal interaction may be one way of using ICT to bridge the gap between formal services and social networking in rural areas. Job seekers' frustration at the basic lack of opportunities in their local communities will be a more difficult issue to address.

CONCLUSIONS

Policy makers remain convinced of the value of ICT in providing accessible rural services. In particular, ICT plays an increasingly important role in the delivery of services for unemployed job seekers, especially in rural areas. The above findings partially support such an approach. Job seekers residing in remote rural areas (in this case, the Sutherland TTWA) were more likely to use Internet and telephone-based services, reflecting the need for 'alternative' search methods in labour markets not served by Jobcentre facilities. Job seekers in all areas had also adapted well to the introduction of ICT into Jobcentres, with the support of PES staff. However, there is evidence to suggest that, where ICT is introduced, services for job seekers must suitably designed and retain a 'local dimension' if they are to be effective. Rural job seekers noted how the web-based jobs database provided by Jobcentre Plus offered highly sophisticated search mechanisms - ideal for urban areas with large numbers of vacancies, but over-complicated and poorly suited to small, isolated labour markets where a simple listing of all local opportunities may be more appropriate. Our focus group research also highlighted how the PES's deployment of a national telephone helpline in rural areas (in place of a more localised telephone inquiry service) had left some job seekers with a heightened sense of isolation and frustration.

Furthermore, the findings of this study suggest that there remain important barriers to the expansion of the role of ICT-based services. First, and most importantly, there is a need for further measures to tackle the digital divide experienced by many unemployed job seekers. Those unemployed people with higher household incomes and who reported having good ICT skills were significantly more likely to have home access to ICT (in this case the Internet). Conversely, young people (i.e. those in the 18-24 age group) and the long-term unemployed were significantly less likely to report home Internet access. There was also a statistically significant association between higher levels of educational attainment and ICT skills and the use of the Internet as a job search tool. Again, the young and the long-term unemployed were significantly less likely to use the Internet to look for work. In summary, those already disadvantaged in terms of skills, educational attainment and income are clearly less likely to have the access and skills required to benefit from using ICT (and particularly the Internet) as a job search tool. The shift towards ICT-based services risks leaving these individuals behind, unless they receive adequate training and support through accessible local services.

Second, where ICT (and especially the Internet) is used as a means of providing job search services in rural areas, there must be an acknowledgement of the need for hardware resources 'on the ground' (ensuring maximum access and support for disadvantaged users), and a commitment to the development of on-line services that reflect the dynamics of local labour markets. Community-based technology centres, offering access to ICT and training and advice for users, alongside an emphasis on peer support and social interaction, may be able to combine the best elements of informal networking and formal job placement provision. Similarly, locally-focused, web-based job search sites may be one way of encouraging the development of more open methods of job seeking and recruitment in rural labour markets. An opening out of these processes, long dominated by word of mouth and informal contacts, is important if the sense of exclusion experienced by young people, the long-term unemployed and others with limited access to social networks is to be addressed, and interventions by key public agencies seeking to assist job seekers are to be effective. There

may therefore be a role for local websites which provide opportunities for community networking and 'virtual spaces' where job seekers and recruiters can share information, *alongside* local vacancy information. In the more immediate term changes to the software design of the Internet and jobpoint resources operated by the PES, to allow for a more flexible approach to browsing across vacancies, may result in a more efficient service for job seekers (especially in rural areas characterised by relatively low levels of demand).

ICT-based services clearly have the capacity to enable recipients to develop new skills, access information on employment and training, extend their social networks and communicate their needs to service providers and policy makers more effectively. Given the particular importance of social networking in rural labour markets, and the Internet's potential value in extending network relations, *as well as providing 'official' information*, an expansion and further development of services delivered through ICT may well offer considerable benefits. However, if ICT is to be effectively deployed to connect the unemployed with job search services and 're-connect' disadvantaged groups with the labour market, a renewed commitment is required to the development of measures aimed at bridging the digital divide, and further investment is required in community-focussed resources, both on-line and 'on the ground' in rural areas.

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Maps and tables

Map 1 Location of Wick and Sutherland and West Lothian study areas

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Table 1 Percentage of sample in study areas unemployed for six/twelve months

Duration	Sutherland	Wick	West Lothian	Combined study areas
6 months +	58	67	55	58
12 months +	37	45	34	37

Table 2 Respondents using selected job search methods on a weekly basis (%)

Job search method	Sutherland	Wick	West Lothian	Combined study areas
Newspaper advertisements	94	96	92	94
Jobcentre notice boards	31	59	77	66
Advice from Jobcentre staff	47	43	69	60
Personal contacts	73	74	42	54
Direct approach	51	68	25	39
Internet	28	9	18	18

Table 3 Home access to ICT, by study area (%)

Form of access	Sutherland	Wick	West Lothian	Combined study areas
Internet	27	12	26	23
Telephone	85	68	83	80

Table 4 Respondents with home Internet access and using the Internet to look for work on a weekly basis, by educational attainment (%)

Respondents' general educational attainment	% with Internet access	% using Internet weekly
None	12	8
SVQ1-2/SCE O Grade or equivalent	25	16
At least SVQ3/SCE H Grade or equivalent	37	34
All respondents	23	18

Table 5 Respondents with home Internet access and using the Internet to look for work on a weekly basis, by selected individual characteristics

Respondents' characteristics	Home Internet access		Weekly Internet use	
	Beta	Significance	Beta	Significance
Level of qualification	0.270	0.054*	0.438	0.002***
Perception of ICT skills	1.340	0.000***	1.167	0.000***
Income group	0.484	0.000***	0.148	0.126
Resident in West Lothian †	1.257	0.006***	0.517	0.281
Resident in Sutherland †	1.925	0.000***	1.389	0.011**
Unemployment duration	-0.607	0.074*	-0.731	0.049**
Age 18-24	-1.193	0.004***	-0.897	0.039**
Male	-0.943	0.012**	-0.149	0.689
Have children under 18	-0.570	0.108	-0.281	0.455
Constant	-4.170	0.000***	-3.919	0.000***

Beta co-efficients estimated from binary logistic regression

*** $p < 0.01$ (1% level); ** $p < 0.05$ (5% level); * $p < 0.1$ (10% level)

† Base area is Wick TTWA

Table 6 Focus group participants' access to/use of ICT (number of responses)

Characteristics of participants	No. of focus group participants by area		
	Sutherland	Wick	West Lothian
<i>Total no. of focus group participants</i>	15	14	41
Internet access at home	12	3	12
Telephone access at home	15	9	36
Used Internet weekly	9	3	12
Used Internet at some time	2	2	16
Never used Internet	4	9	13
Used Internet for job search weekly	6	0	6
Used Internet for job search at some time	2	4	15
Never used Internet for job search	7	10	20
Considered ICT skills 'good'	6	4	4
Considered ICT skills 'adequate'	4	4	25
Considered ICT skills 'poor'	5	6	12