

Section 2: Methodology

A mixture of research methods was used. Questionnaires were used to collect quantitative data on, for example, the profile of each company, internet connectivity, and information sources used. The initial questionnaire and initial personal interactions enabled the project team to highlight research questions that needed further probing in the focus groups and later interviews. The focus groups and later interviews were used to explore more complicated qualitative issues and allow the project participants to exchange and develop opinions on key issues, such as the barriers to internet use.

It had been hoped that the discussion list would also enable exchange of opinion and information between project participants. However, as is explained in section 6, the project participants did not use the discussion list.

An Internet Business Club was used as a means of encouraging participants' loyalty to the project, so as to minimise dropout between the start and finish of the project. There was not a high dropout rate: the majority of companies (24) did at least complete both the first and last questionnaires. Although it is impossible to tell the extent to which the Business Club concept aided loyalty to the project, a number of the project participants said that they had benefited from the project, some of them emphasising the networking aspect (see section eight).

There was an action research aspect to the project, in that the project team was not just recording and observing a static situation, but was reacting to the situation, providing advice and support, and (in some cases) observing the outcomes of the advice. Changes were observed in the information and internet usage of the participants between the start and finish of the project (see, e.g., section 10), but it is impossible to say the extent to which change was a result of the project.

It was decided to attempt neither to log the individual web usage of participants, nor to ask them to keep their own manual search log. In the latter case, our own experience and findings from others' research had emphasised the time pressures on those running small businesses, and we did not wish to deter people from participation by adding to their workload.

We could not at the time identify an unobtrusive method for automatically logging search activity over a sample period that would work quickly in a large variety of hardware/software environments and would cause minimal technical problems. Recent versions of browsers do keep a track of activity, but very few participants had recent browsers, and this would in any case have involved frequent visits by project team members, or action on the part of the participants (for which technical support would have been needed). The project budget did not allow for systems work in developing and supporting tracking software. Although more solutions are now available (e.g. reported by Choo, Detlor and Turnbull (1998)) the problems of diverse platforms and lack of technical expertise and back-up would still be concerns.

2.1 Selection of companies

This proved more problematic than anticipated, and more detail is given in section four of this report. The conditions for participation in the project were that a company should have fewer than 100 employees, be in the Glasgow or London area, and already have an internet connection.

In the original proposal it had been intended to recruit 50 participants at each site, giving a total of 100 companies to observe. However as is explained in section four, a number of problems were encountered in the recruitment of companies: the most notable being the paucity of companies meeting the criteria for participation. Numbers finally reached 16 in Scotland and 15 in London.

It had always been the intention that the results of this project would be qualitative rather than quantitative. However, with the sample of participating companies totalling 31 the methodology was amended. It was decided at the interim stage of the project that there would be more emphasis on action research and case studies.

2.2 Questionnaires

Questionnaires were administered to project participants at the start and finish of the project. The aim was to identify any general trends, to compare results with previous studies, and to see whether there was any significant change in information-use habits by the end of the project. More detail about the questionnaires is given in sections 8 and 9.

The first questionnaire was administered to the participating companies when they decided to take part. They were given the option of completing it in hard copy format or on the web. There were two slightly different versions to reflect the differences in location between Scotland and London. A second questionnaire was circulated at the end of the project. Most questions were exactly the same as for the first questionnaire, to enable comparisons to be made.

A short interim questionnaire was also administered at the time of the focus group (see section 11).

2.3 Company interviews and case studies

See sections 7.2 for more detail. Company interviews were carried out to aid the data gathering process, to further explore internet usage habits and investigate each company's particular information requirements. This was supplementary to the questionnaire and led to some interesting discrepancies in findings, which are noted later in this report. The discussions at the project launch, during visits and during telephone conversations were not tape recorded, but project team members wrote up a report immediately after the discussion/visit had taken place, based on notes taken during the discussion.

In some cases the interviews were carried out during the launch of the project. In the case of companies that joined after the launch, visits to the company were arranged. This took place earlier in Glasgow than in London, because of the delay in recruiting London companies (see section four).

Company visits proved to be more successful as it was then possible to see the reality of SMEs accessing the internet. These realities included terminals in remote locations from the user, problems with connections and in many cases a low level of competence in a user when accessing and in particular searching the web.

The case studies, which are given in Appendix 1, were compiled using:

- information (observation and records of conversation) gathered during visits, indepth discussions at the project launch, communication via telephone and email, and individual training sessions provided by members of the project team;
- key data gathered during the focus groups;
- key data from the questionnaires.

There is a note at the start of each case study, indicating the extent to which the company participated in the project and the type of interaction that there had been with that company.

2.4 Internet Business Club

The aim of the internet business club was to enable initial testing of a model of a virtual information service for small businesses. It was hoped that it might act as an incentive to some business people who might be reluctant to participate in a study in which they can perceive no direct benefit to themselves. The 'club' and 'virtual information service' element was created through:

- Launch reception to introduce companies to the web site and the staff involved in the project.
- The creation of a web site, a Frequently Asked Questions facility, news on useful web sites.
- A discussion list for the participants.
- An email and telephone help-line, offering advice on choice of internet sources and on searching.

2.5 Focus Groups

See section 13 for more detail on methodology, and results. Focus groups were held in order to extract some qualitative data from the companies taking part and to investigate whether participants felt that they shared similar problems and experiences. Additionally it was hoped to get a better feel for the problems that they were facing and to investigate whether their situations had changed during the life of the project.

Four separate groups, two in Glasgow and two in London, were held, each having between three and six participants, a moderator and an assistant. They were informal sessions with refreshments, held either at lunchtime or early evening, lasting approximately two hours. Each session followed a similar structure with six identical questions being put to the group. All conversation was recorded, and a full transcript was typed up from the tape recording. The person taking on the 'Assistant' role (who participated as little as possible in the focus group) also took notes on key points and observed the dynamics of the discussion.

The transcripts were analysed and the discussion grouped by topic (since, inevitably, the discussion did not all keep neatly to one question at a time).

2.6 Web questionnaire

In order to gain a wider perspective on what businesspeople were searching for on the web, and which business web sites they were finding most useful, it was decided at the interim advisory meeting that a questionnaire should be mounted on the project web site. The questionnaire was a web-based form, which was emailed to the project team on completion. The results were analysed manually. See section 12 for the findings of the questionnaire.

2.7 Analysis of web site usage

A monthly log of usage of the project web site was produced using a modification of Analog 2.0 for Unix. This listed use per day, use by hour of the day, use per page, and use by user's domain name. Some aspects (e.g. use per hour) were not deemed of key importance to the project, and so attention was concentrated on overall use of the site and usage by domain of user (see section 5.2), use of specific business information pages (see sections 5.2 and 15), and use of those pages reporting interim results of the project (see section 19). It would not have been possible to track the usage of the site by project participants without asking them to keep a manual log (since many of them used Internet Service Providers that assigned random temporary domain names to their users for internet searching purposes), and this was not felt to be sufficiently important, considering the inconvenience to the participants and amount of extra work for the project team.