SCOTTISH MUSEUMS COUNCIL

Survey of Information and Communications Technology in Scottish museums

Final report

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September 2004

INTRODUCTION

This report is based on the results of the largest and most detailed ever survey of information and communications technology (ICT) in Scottish museums. It provides some background to the project, describes the methodology used, and highlights the major findings.

This description and analysis of the results is structured using the same layout as the survey questionnaire, with sections focusing on computers for staff use, computers for public use, internet connectivity, and finally training, skills and support. The full questionnaire is also included in an appendix at the end of the report for reference.

BACKGROUND TO THE SURVEY

In June 2004 the Scottish Museums Council (SMC) published *A national ICT strategy for Scotland's museums*. One of the most urgent points to arise from this strategy was the need to accurately map and understand the levels of ICT infrastructure and skills in Scottish museums.

Scotland's National Audit, the last major survey of Scottish museums was published by SMC in 2002. This contained a limited number of ICT related questions, but did reveal some interesting statistics. For example, it showed that 67% of organisations used a web site for publicity purposes, and 65% used a computerised collections management database.

The main aim of the 2004 survey was to build the most accurate ever picture of areas of strength and weakness in ICT infrastructure and skills in Scottish museums. This will enable us to target investment more effectively, and will inform many of the subsequent actions arising from the ICT strategy. It will also provide a means by which we can measure the success of elements of the ICT strategy over its three year life time.

METHODOLOGY

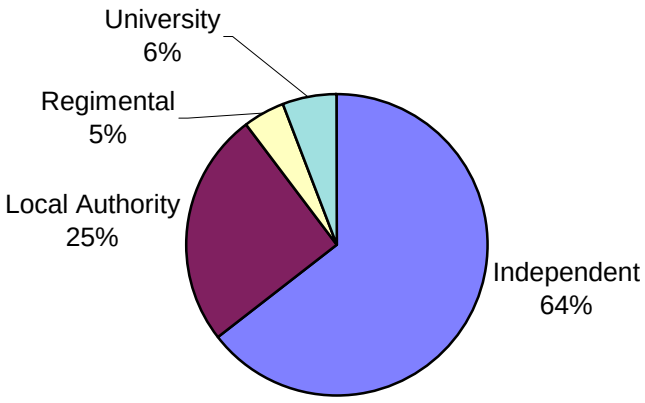
The Museums, Libraries and Archives Council (MLA), in partnership with the Regional Agencies in England, have been carrying out a survey of ICT in English museums and galleries. We felt that it was important for any survey of ICT in Scottish museums to be designed to be compatible with MLA's approach, as this would eventually enable us to put Scottish data into a UK-wide context.

Consequently, the MLA questionnaire was used as a basis for the Scottish survey, with some alterations to make it more relevant to Scottish museums (see appendix for the Scottish questionnaire in full).

During July 2004, all of the SMC member organisations were sent paper questionnaires. The response rate was very impressive, with 155 questionnaires retuned in total. This represents around 45% of the total number of SMC member museums, and provides a very good sample on which to build further analysis.

If the responses are broken down by museum type, we see that independent museums are represented in much higher numbers in the survey than Local Authority museums (Fig 1). If a similar breakdown is carried out on the overall SMC membership figures, we find that the proportions of independent and Local Authority museums are more even, at 48% and 41% of the total membership respectively.

Fig 1. Breakdown of survey responses by museum type



This difference may be explained by the fact that the questionnaire was designed to be filled out on a per-museum basis. Local Authority museum services are more likely to have several different individual museums, and may therefore have been dissuaded from filling out and returning questionnaires for each one.

MAJOR FINDINGS & ANALYSIS

1. Computers for staff use

- The numbers of computers that museums have for staff use varied enormously, ranging from more than 50 in larger museums, to none in some smaller independent museums.

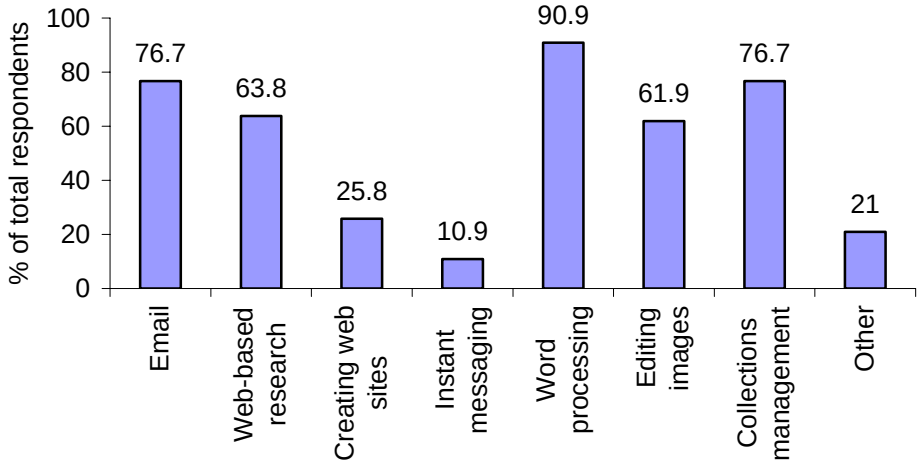
- Nearly 92% of respondents have at least one computer for staff use.

- However, almost half of these computers are over three years old.

- Overall, there is a staff-to-computer ratio of roughly 2:1

- Staff computers are used for a range of purposes. Word processing, email, collections management, web access and image editing all scored highly as uses in museums (Fig 2).

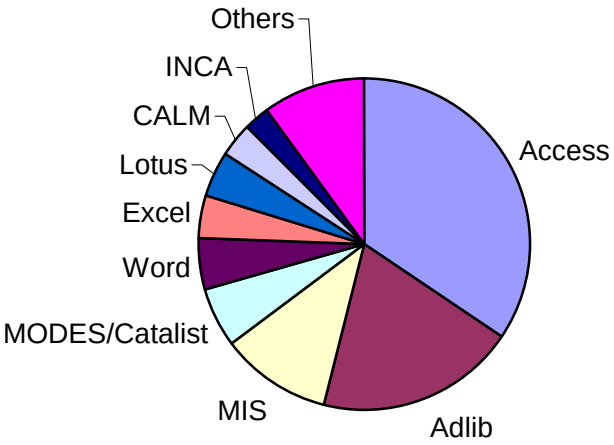
Fig 2. Uses for staff computers



- More than 76% of respondents use a computer for cataloguing / collections management. This is a marked increase from the National Audit results.

- The most popular database system used for collections management by respondents is Microsoft Access. Adlib and MIS are also widely used, with numerous other systems being used by museums in smaller numbers (Fig 3).

Fig 3. Software used for collections management



The penetration of ICT into museums appears to be high, with an overall staff-to-computer ratio of slightly more than 2:1. Only just over a dozen respondents reported that they have no computers at all for staff use.

Almost half the computers in use are over three years old. This may be indicative of the fact that much of the ICT hardware in museums is purchased as part of short-term projects.

85% of respondents supplied an email address on the questionnaire, although interestingly only around 76% responded that their staff computers are actually used for email. This discrepancy may be explained by the fact that many museum staff will undoubtedly also have access to computers and the internet at home. However, this was not something that this survey was designed to measure.

77% provided a web site URL. These figures suggest that ICT is being used effectively for communication in museums, and shows the extent to which use of the internet has increased since the National Audit.

The use of computers for collections management has apparently also increased in recent years. However, specialist museum documentation systems only account for around 40% of the total number of different software packages being used for collections management.

The dominance of Microsoft Access as the most popular database system in the Scottish museums market can no doubt be attributed to the fact that it is often more cost effective than specialist museum packages, and training and support is widely available.

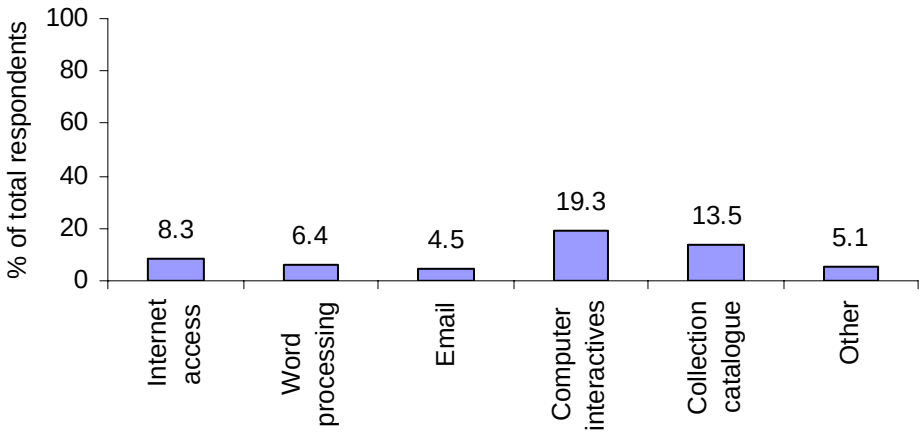
This may present potential problems as more museums show a desire to put collections information online and share data with other organisations. There

is no easy way of knowing how many of these different Access database designs are compliant with documentation standards such as SPECTRUM, and the popularity of “home-made” databases will undoubtedly have implications for technical interoperability in the future.

2. Computers for public use

- 34% of respondents have at least one computer available for public use.
- Nearly two thirds of these computers are over three years old.
- Public computers are put to various uses, with computer interactives and collection catalogues proving most popular (Fig 4).

Fig 4. Uses for public computers

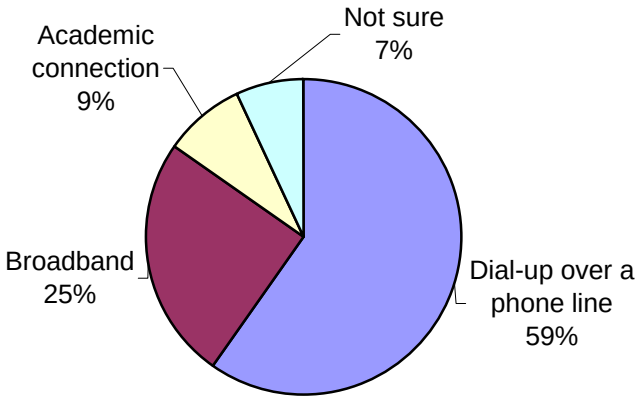


Encouragingly, more than a third of respondents make computers available for public use. The proportion of older machines for public use is significantly higher than those for staff use. This perhaps suggests that older computers are being re-used as public terminals for use as interactive displays or to provide collection information to visitors. It may also be indicative of the fact that public terminals are often single-use (slideshows, interpretive panels etc), which require upgrading less frequently than general purpose machines.

3. Internet connectivity

- 75% of museums have internet access.
- The majority of museums with internet access use a dial-up connection over a phone line, although a quarter now have broadband (Fig 5).

Fig 5. Breakdown of internet connection types among museums that have internet acces



This means that overall, 18% of the museums that responded to the survey have broadband internet access. Broadband connectivity is lowest among independent museums, with a 12% connectivity rate, while Local Authority museums are better served with over 38% having access to broadband.

This compares with an overall broadband availability level in Scotland of more than 81%[1]. Scottish Executive data from 2002 revealed that the overall share of businesses in Scotland with broadband access was 41%[2].

It is likely that this figure has risen since then, and although it is perhaps unfair to make direct comparisons with other more commercially-driven sectors, it does give an indication of the extent to which museums are lagging behind the rest of the country in connectivity.

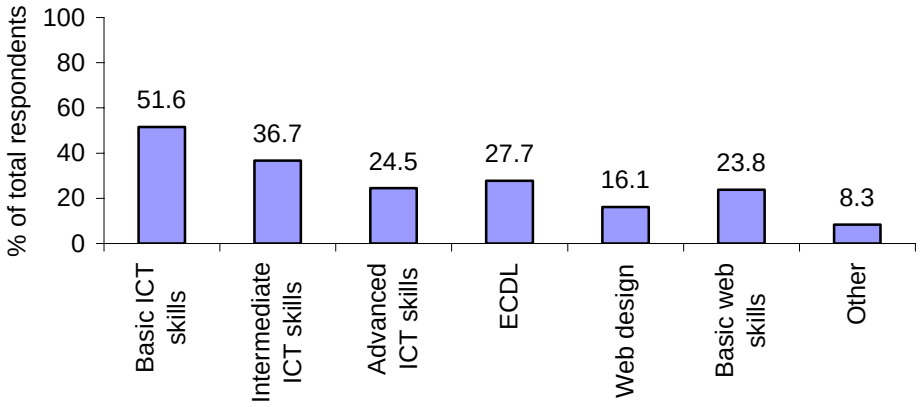
Although the cost of broadband access continues to fall, it still remains low on a long list of priorities for many museums. The apparently low take-up of broadband may also in part be explained by the geographical distribution of museums in Scotland, with many lying outside the central belt in rural areas of lower population where broadband is still not available.

4. Training, skills and support

- 54% of respondents said that full-time staff at their museum have access to ICT training.
- However, this figure is less (23%) when applied to volunteers.
- The types of training available to museum staff are shown in Fig 6:

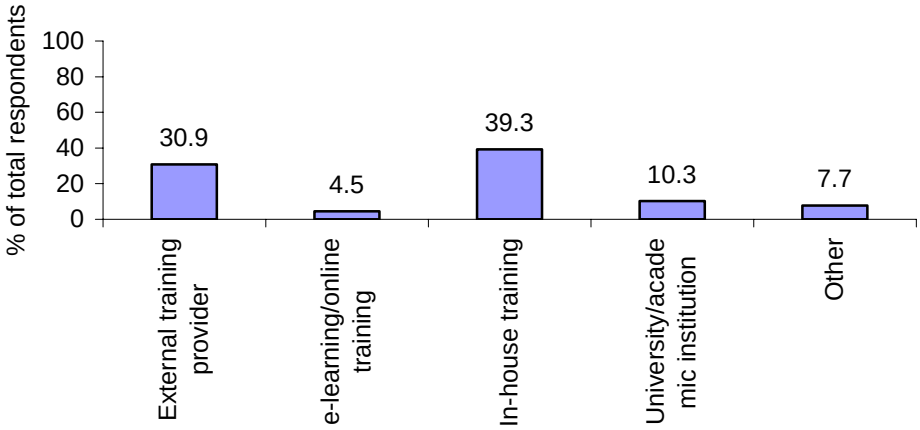
[1] ADSL broadband is available at 81.1% of exchanges serving Scottish households and businesses. See: www.bt.com/broadband
[2] http://www.scotland.gov.uk/library5/government/sss03-05.asp

Fig 6. Types of ICT training avaiable



- Only 12 respondents have a dedicated ICT training budget.
- Most ICT training is provided in-house by museums (Fig 7).

Fig 7. ICT training providers



- 38% of respondents consider themselves to have adequate ICT skills in-house.
- Nearly 30% of respondents either rely on a volunteer for technical support, or have no support available to them (Fig 8).

Just over half full-time staff and under a quarter of volunteers have access to basic ICT training. This reinforces the assertion made in the ICT strategy that in order to make best use of technology, museums need greater access to basic ICT skills training.

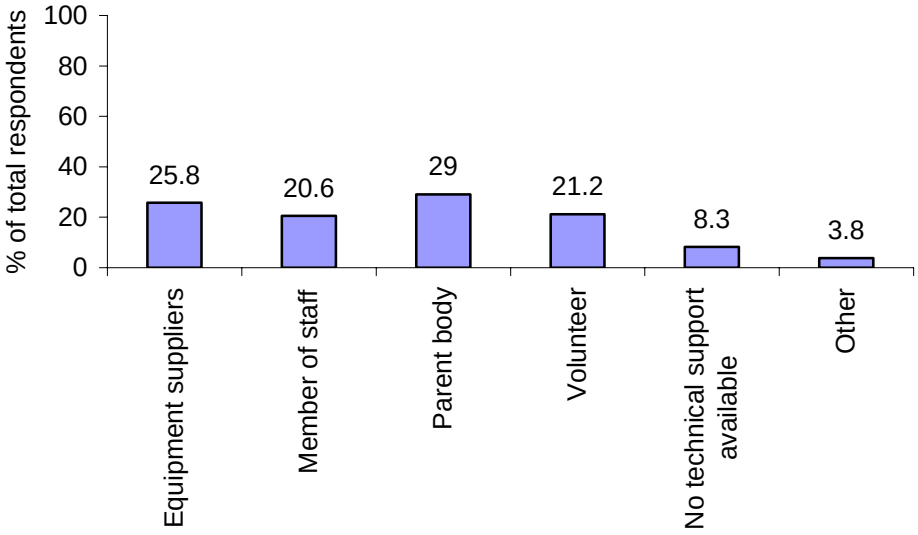
The barriers to accessing training are mainly financial, with only a handful of museums having a dedicated ICT training budget. More geographically remote museums also cite the location of training as a problem. Travel to

attend courses can significantly increase costs, and on-site training is generally more expensive.

Just over a third of respondents consider themselves to have adequate ICT skills in-house, while the majority contract in skills as and when they are needed.

Perhaps more worrying is the apparent lack of ongoing technical support available to museums. With so many museums either having no access to support, or relying on volunteers to fulfil this role, basic ICT skills training for museum staff remains a priority.

Fig 8. Providers of technical support for ICT equipment



APPENDIX - QUESTIONNAIRE

Scottish Museums Council

Survey of Information and Communications Technology in Scottish museums

July 2004

Section one – museum details

1. Your name

2. Museum name

3. Email address

4. Web site address

5. How many people work at your museum?

Section two – computers for staff use

6. How many computers do you have available for staff use?

7. How many of these are more than 3 years old?

8. Which internet browsers are used by your staff? *(Tick as many as appropriate)*

Internet Explorer ☐
Opera ☐
Netscape ☐
Mozilla ☐

Other (please specify):

9. Are your staff computers networked?
(Are your computers connected to each other for sharing files, printers or other resources like internet connections?)

Yes ☐
No ☐
Some ☐

10. What are your staff computers used for? *(Tick as many as appropriate)*

Email ☐
Web-based research ☐
Creating web sites ☐
Instant messaging ☐
Word processing ☐
Editing images ☐
Cataloguing / collections management ☐

Other (please specify):

11. If you use a computer for cataloguing, indexing or managing your collections, what is the main software that you use?

Access ☐
MIS ☐
Adlib ☐
Gallery systems ☐
Multi-MIMSY ☐
MODES ☐
CALM ☐
MicroMusee ☐
Vernon ☐
Catalist ☐

Other (please specify):

Section three – computers for public use

12. How many computers do you have available for public use?
(Including computers used for interpretive displays)

(If you do not have any computers for public use, please skip the following questions and go to section four – internet connectivity)

13. How many of these are more than 3 years old?

14. Which of the following do you provide for public use? *(Tick as many as appropriate)*

Internet access	☐	Computer interactive displays	☐
Word processing	☐	Collection catalogue	☐
Email	☐		

Other (please specify):

15. How many computers for public use are connected to the internet?

All	☐
Over 50%	☐
Under 50%	☐
None	☐

16. Which internet browsers do you have for public use? *(Tick as many as appropriate)*

Internet Explorer	☐	Netscape	☐
Opera	☐	Mozilla	☐

Other (please specify):

Section four – internet connectivity

17. Is your museum connected to the internet?

Yes	☐
No	☐
Not sure	☐

(If you have answered 'No', please skip the following questions and go to section five – training, skills and support)

18. Which of the following best describes your internet connection?

Dial-up over a phone line	☐	Broadband	☐
Academic connection	☐	Not sure	☐

Other (please specify):

19. Do you have policies covering any of the following? *(Tick as many as appropriate)*

Staff internet use	☐	Staff email use	☐
Public internet use	☐	Booking computers for public use	☐

20. What is the approximate annual cost of your internet connection?

Under £100	☐	£100 - £499	☐
£500 - £999	☐	More than £1000	☐
		Not sure	☐

21. Who pays for your internet connection?

Your organisation	☐	Provided as part of an academic network	☐
Sponsorship	☐		

Other (please specify):

Section five – training, skills and support

22. Have you conducted a training and skills audit?

Ongoing	☐
In the last 6 months	☐
6-12 months ago	☐
No	☐

23. Do full-time staff have access to ICT skills training?

Yes	☐
No	☐
Not sure	☐

24. Do volunteer staff have access to ICT skills training?

Yes	☐
No	☐
Not sure	☐

25. Which of the following types of training are available? *(Tick as many as appropriate)*

Basic ICT Skills	☐	ECDL (European Computer Driving Licence)	☐
Intermediate ICT Skills	☐	Web design	☐
Advanced ICT Skills	☐	Basic web skills	☐

Other (please specify):

26. Does your organisation have a dedicated ICT training budget?

Yes ☐
No ☐
Not sure ☐

27. Who provides your ICT training? *(Tick as many as appropriate)*

External training provider ☐
e-learning / online training ☐
In-house training ☐
University / academic institution ☐

Other (please specify):

28. Are most of the ICT skills you need available in-house or do you need to contract external skills?

Adequate skills in-house ☐
All skills contracted ☐
Some in-house, some contracted ☐

29. Who provides ongoing technical support for your ICT hardware and software?
(Tick as many as appropriate)

Equipment suppliers ☐
Member of staff ☐
Parent body (Local Authority, University etc) ☐
Volunteer ☐
No technical support available ☐

Other (please specify):