New Technology is for life . . .

David Dawson
Museums New Technology
Adviser
Museums & Galleries
Commission

New Technology is currently a major growth area - with adverts for websites appearing widely on the broadcast media and the launch of new digital TV channels promising to deliver the internet to the armchair. Already some 20% of UK homes have internet access, with 25% of children aged between 7 and 16 using the internet regularly, and 79% of those are using it for researching their homework.

On the wider stage the UK Government is aiming to modernise the way in which citizens are able to interact with a wide range of services. By 2002 there is an aspiration that 25% of dealings with Government should be capable of being completed electronically, and 100% by 2008. In the 1996/7 general election campaign, Tony Blair announced that the 3 priorities for Government policy were 'education, education, education'. Against this background 'Our Learning Age' set out a vision of three linked learning networks - the National Grid for Learning, the People's Network and the University for Industry. These initiatives include detailed programmes such as the creation of IT Learning Centres, the connection of all schools and libraries to the National Grid for Learning and a scheme to recycle computers for low cost rental by those at risk of social exclusion.

Until recently, the place of museums in this picture has not been clear, but the publication of 'A Netful of Jewels: New Museums in the Learning Age' has clearly established the potential that museums can demonstrate. This report, prepared by the National Museum Directors' Conference in association with MGC and **mda**, has created a focus for the museum sector and for those seeking to work with museums.

Until this point there has been little large-scale investment in ICT in museums. There have, however, been some remarkable achievements on extremely limited budgets and the success of the 24 Hour Museum is demonstrating the progress that has been made. The headlong rush to ICT is already having an impact on the way that our museums are being used - a recent MGC funded study by MORI established that 11% of visitors research their visit on the internet, and 2% visit as a direct result of a virtual visit to the museum's website.

For the first time, however, museums are beginning to see significant investment to enable them to take part in the vision. The funding opportunities that have that have been open to museums during 1999 include:-

- DCMS/MGC IT Challenge Fund.
- Designation Challenge Fund.
- DfEE Schools and Museums Partnership Fund.
- Carnegie UK Trust.
- Joint Information Systems Committee.
- New Opportunities Fund - nof-digitise Programme.

In total these might deliver an investment in ICT for museums totalling as much as £10m in the period 1999-2002.

Welcome though these funding initiatives are, they are beginning to create their own problems in the way that museums are able to react to the initiatives. It is interesting to consider some of the choices that are facing museums. Some museums are acting as pathfinders - generating innovation, developing new techniques and often using the 'respectability' of museums to gain support in kind from commercial partners. Museums are often seen by the new media industry as being an excellent showcase for their products and services. Museums are educational institutions with a positive public profile and ready access to high quality unique visual materials. This type of collaboration is exemplified by the website created for the Hermitage Museum in St Petersburg by IBM and. In many of these pathfinder museums, the use of technology is raising the profile of the museum within its local context. An example can be seen in Somerset, where museum staff are playing key management roles in the Somerset Grid for Learning - a DfEE funded Pathfinder project. As a direct result, the Museum Service has an enhanced profile within the local authority.

Other museums are able to follow these best practice examples. These other museums are able to benefit particularly from the ability to develop solid and predictable budgets, identify realistic timescales and plan the human resource implications. Funders are able to encourage museums to develop collaborative projects to enable the risks associated with technology-based projects to be minimised, and working collaboratively enables sound bids to be prepared for further funding initiatives.

However, these funding initiatives can create significant problems for museums. Developing a bid requires a substantial investment in staff time that may well bring no reward. Museums need to seriously evaluate the relevance of funding initiatives to their Forward Plan objectives to ensure that the projects will help

deliver on the commitments that the museum has made, rather than simply developing projects because there is funding available. Museums may apply for several funding initiatives without success, diverting scarce human resources away from more fundamental museum priorities. Here the ability of museums to work together to identify in advance the areas in which they might collaborate will minimize the effort expended in preparing bids.

Project funding also can lead to a number of problems. Below are a number of real-life examples that illustrate some of the real dangers.

- A museum is running a major building refurbishment project, a digitisation project, an education project and is a partner in an EU project. The collections manager, who is also the IT specialist, leaves for another post.
- A museum is running a large IT project. A funder providing 20% of the budget for the project requires elements of the project to be identifiable as being enabled through their funding.
- A museum re-uses the idea for a project that has already been submitted three times and fails to ensure that it met the most elementary criteria for a new funding initiative.
- An application to a funder has been successful in raising 50% of the funding for a new post, but the matching funding identified by the museum has been lost through local authority cuts. The museum is in danger of losing the funding for the post.
- A museum service is undertaking three projects funded by different bodies. The projects are all being delivered by different staff and using different technical solutions, making the task of integrating the projects at a later date time-consuming.

As well as these project-related problems, there are more general issues of the tasks that these museums are not undertaking whilst they are

managing complex projects. As yet there is no evidence for this, but museums could be neglecting opportunities to develop collections, undertake collections care or access projects.

From a wider perspective, the ability of museums to implement major projects will be dependent upon the staff that they are able to recruit. During the evaluation of projects being submitted to the Designation Challenge Fund, a survey of the proposals established that if all projects were to be funded then the over 100 staff would be required. Many of the staff needed to have experience of using museum collections management systems, have a range of technical skills, and an additional 20 experienced project managers were required. In addition, as many as 18 museums were seeking to implement new collections management systems. As museums are a small market there are only a small number of vendors, and the suppliers themselves are often facing skills shortages and would have problems managing the installation of a number of systems at the same time.

The skills shortage in museums is one that will only be exacerbated by the increasing recognition of the potential of museums to make a significant contribution to the learning networks. There is an urgent need for a similar approach to re-skilling the museum profession that is currently being undertaken for librarians and teachers through funding from the New Opportunities Fund. At the same time, a number of museum training courses are beginning to recognise the importance of ICT, and the employment opportunities that it offers to graduates from the training courses.

As a result of the skills shortage, museums will need to adopt a range of strategies. They may decide to attempt to recruit skilled staff through placing an emphasis on the interesting nature of the project, rather than the salary being offered. They may recruit staff that they believe have the potential to develop a range of new skills, or they may contract out aspects of project development. The approach of

contracting out may work successfully whilst projects are in development, but has the danger that, if skills are not transferred back to the museum staff, that the project is impossible to support once the funding has ended.

The end of project funding opens up a wide range of potential problems. The staff who remain at the museum need to retain either the skills to continue to maintain and develop the project, or the costs of maintenance must be built into core budgets. Some projects have assumed that a charging mechanism would be available at the end of the project that would enable funding to be re-invested in project development. However, even with projects operating over a fairly short timescale, the business model anticipated as the project is applying for funding, and the completion of the project may be very different.

A number of projects have anticipated developing ICT projects for deployment in exhibition galleries, and for retail sale as CD-ROMs. Fewer than 5% of commercially produced content-rich CDs are thought to have produced a profit, and museums often have little access to the marketing and distribution required to make electronic publications profitable. Museums have also identified CDs as a means to distribute learning resources to schools, anticipating that many schools have out-of-date equipment. Current Government initiatives to connect schools to the National Grid for Learning will ensure that electronic publishing on the internet will ensure that a learning resource is far more widely available than through using a media that requires distribution.

In the future, there are a number of technical developments that will change the ways in which museums can interact with their users. The launch of the next generation of games consoles will put internet-enabled appliances in the hands of millions of children worldwide. Digital television promises seamless access to the internet from the armchair, enabling viewers to become life-long learners Digital television offers armchair

viewers the opportunity to explore
websites to develop the interest fired
by watching television programmes.
Next generation mobile phones will
enable us to surf the internet while we
travel to work, at speeds nearing those
of the network we currently use in our
offices - a new perspective on the
words of David Blunkett, Education
Secretary when he welcomed "the
university on the street corner"