Deciding on Digital Tools for Collection Management

Are you planning to change how you manage information about your collection? Do you want to transfer it to a computer system? Or change your current software set-up?

This resource guide outlines a process to help you decide what will work best for you.

The digital solution

As people become familiar with how computers can help manage information, even very small museums are thinking about how they can use this technology with their collections. However, no matter what the size of your organisation, getting software to suit your requirements and putting the system into action is a big commitment - and an ongoing one. Whether you are ‘going digital’ for the first time or planning to reorganise or upgrade your current set-up, you should regard it as a major project.

Don’t underestimate the impact of such a project on your resources of time, money, and expertise. This guide aims to introduce you to the issues and to help you with the process of decision making.

Online help

If you are going to get involved in a project of this kind, we recommend you consider exploring online resources available for support.

The Canadian Heritage Information Network (CHIN) offers a comprehensive online course on planning and implementing such a project, including selecting software. CHIN also offers up-to-date assessments, based on collection management criteria, of various software packages developed for collection management. Australian Museums and Galleries Online (AMOL), in conjunction with CHIN, offers Capture Your Collection, a course on recording your collection through digital images.

See the section Useful Online Resources on page 12 for website details.
Who needs to be involved?
As with any project, at the outset of the process, identify the people who will be involved:

- budget decision-makers
- project team leader
- people with key expertise or managerial roles
- people whose work will be affected by new systems.

In a small organisation, the project team itself may comprise just one or two people. But it is important that all those with a stake in collection management or the use of collection information:

- are consulted about their requirements
- are kept up to date with the progress of the project
- have the opportunity to try out new systems before commitments are made
- are informed about options and limitations
- are encouraged to give feedback.

Information - your collection’s lifeblood

However you organise it, the information that you have about your collection is a vital part of how you operate as a museum. The system you have for storing, accessing, and producing that information can be as important as the arrangements you make for managing the storage, care, and interpretation of the collection itself. So it is worth planning for such a system with as much attention to detail as possible.
**Reviewing** your current situation

Initially you need to review your capacities - human, technological, and organisational - in your present situation. It is most important to do this thoroughly. The quality of any decisions on digital tools for collection management depend in the first place on a detailed and frank assessment of what you currently do, and how you do it.

**Your methods for managing information**

Identify and evaluate your current methods of storing, accessing, and retrieving collection information. This will apply whether you currently have a computer system or not.

The format suggested in the table below gets you to look at the three main ways in which you ‘act on’ information:

- **recording** it (data entry)
- **accessing** what has been recorded to view, amend, update, etc
- **reporting** it - bringing together and producing information on individual items, groups of items, or the whole collection, or on various activities or functions.

<table>
<thead>
<tr>
<th>Activity or function</th>
<th>Recording</th>
<th>Access</th>
<th>Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>List here the activity or function that information is associated with, e.g., acquisition, cataloguing, conservation management (see the list in the box on page 4)</td>
<td><em>Existing</em> (You’ll add another set of responses for your requirements later.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who enters what information, where, how? (Rate how well you do this.)</td>
<td>Who has access to information, where, how, what search facilities? (Rate how well you do this.)</td>
<td>How is information retrieved, by whom, in what formats? (Rate how well you do this.)</td>
<td></td>
</tr>
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</table>

Draw up your own version for this exercise. Note what you do well and what needs improvement. If there are problems with the ways you currently handle information (for example, with its reliability, standardisation, comprehensiveness, or communicability), this is a great opportunity to identify them. New software is not in itself a panacea for fixing problems of this kind. However, later on, when you have your new system in place, the process of transferring your documentation onto it can also be an opportunity to audit your information in detail.

The box on page 4, ‘Typical collection management activities or functions’, gives examples of items for the left-hand column of the table.
Typical collection management activities or functions

<table>
<thead>
<tr>
<th>Database/item entry</th>
<th>item name, description, ownership, provenance, history, research details, image, etc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition</td>
<td>date acquired, acquisition method, report, source, cost, transfer of title, accession details, etc</td>
</tr>
<tr>
<td>Location and movement</td>
<td>collection locations, item’s current location, item’s previous location, movement history, items in specified location, etc</td>
</tr>
<tr>
<td>Conservation management</td>
<td>examinations, condition report, treatment, conservation history, cost, etc</td>
</tr>
<tr>
<td>Licences and rights</td>
<td>copyright ownership, permission requests, licences granted, etc</td>
</tr>
<tr>
<td>Insurance and valuation</td>
<td>valuations, insurance details, risk management</td>
</tr>
<tr>
<td>Loans</td>
<td>loans in, loans out, loan number, location, date, period, agreements, overdue, etc</td>
</tr>
<tr>
<td>Deaccession and disposal</td>
<td>reason for deaccessioning, method of disposal, approval, date</td>
</tr>
<tr>
<td>Multimedia capabilities</td>
<td>imaging, video, audio</td>
</tr>
<tr>
<td>Public access</td>
<td>physically on site, through website</td>
</tr>
<tr>
<td>Data management</td>
<td>data entry standards, vocabulary control, searching, indexing, thesaurus, bilingual capacity (including Māori language and classification systems)</td>
</tr>
</tbody>
</table>
Your current computing system

Do you have a computing system? If so, what do you use it for? Identify the various kinds of software you use, for example:

- word processing
- spreadsheets and databases
- multimedia uses
- email and internet access
- image scanning and processing
- desktop publishing
- specialist collection management.

Assess the capacity of your computer hardware for your current purposes - how well does it perform what you want it to do at present? New collection management software may affect your current system’s capacity for handling existing software or for incorporating other types of software. Recording your collection through digital images can require very large amounts of memory.

Your people resources

Identify the skills and knowledge within your organisation in relation to your current system. This will help you pick out people’s strengths and weaknesses in handling the demands of new products and processes.

Who has what level of skill with the various kinds of software? For example, W has training-level expertise, X is a confident everyday user, Y is a reluctant user, Z is an interested learner. Be specific: some people may be competent with word-processing, but have never handled databases.

Are there any gaps between people’s museum-type expertise and their computing skills (for example, a technophobe collection manager)?
Your capacities and requirements

Having identified your current capacities, look at them with an eye to your future requirements, for example:

• the capacity of your current hardware for your future purposes:
  - catering for additional users
  - speed, memory, and storage capacity required to support additional uses and/or users
  - flow-ons from installing a new collection management system (for example, requiring you to change other software you use or the ways in which you use it)

• the capacity of the people who will be involved in dealing with your future requirements (for example, recruitment needs, levels of support and training required)

• the capacity of your budget to afford the ongoing costs of maintaining and expanding any new system (licences, upgrades, networking, etc).
Managing collection information - now and in the future

Use the table for reviewing how you currently manage collection information and add on a category that identifies your requirements. Include collection management activities or functions that you may not be performing at the moment but that you regard as essential for your future operations.

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<td></td>
</tr>
<tr>
<td>Requirements</td>
<td>Features to retain, problems to fix, additional requirements</td>
<td>Features to retain, problems to fix, additional requirements</td>
<td></td>
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Prioritising requirements

Identify priorities in your requirements. Sort your requirements into categories (for example, ‘essential’, ‘important’, and ‘nice, but not yet’) and rank your priorities within those categories.

This will help you when you have to match what your project might cost against what you can afford - in money and/or time. Your budget might allow only so much to be accomplished within a certain time. What approach could allow for, say, larger needs to be taken into account further down the track?
Exploring the options

What kind of software?
There are three main approaches to selecting software:

• Off-the-shelf solutions
  There is a large number of collection management system programs available on the market. Their major drawback is that none of them is likely to match your requirements exactly. But they often offer affordable compromises and scope for further development.

• Customised programs
  These involve software suppliers in coming up with customised solutions to your specific requirements. The major drawback is that any customisation of existing software involves additional costs, as well as a high level of knowledge - for both customising the system and maintaining it.

• Develop-your-own systems
  These involve either programming special software from scratch or developing your own database on a program such as Microsoft Access or FileMaker Pro. The drawbacks are the amount of time and expertise it can take to develop and maintain these solutions, which are not always cost effective. Also, beware of depending on a single skilled individual with such a system - it is vulnerable to failure if the expert leaves or is not available for back-up support.

In this guide, we assume that most museums, faced with limitations on money, time, and expertise, will choose the first of these three options.

THE NEEDS OF YOUR SOFTWARE SHOULD DETERMINE WHAT HARDWARE YOU NEED
- NEVER THE OTHER WAY AROUND.
Checking out the programs

**Software review**

There are various software packages for helping museums manage their collections. The following are examples of the ones commonly available in New Zealand. Inclusion or exclusion of any package does not imply that National Services endorses or does not endorse that particular package.

- ADLib Information Systems
- Collection (Vernon Systems)
- KE Software - KE Emu
- Willoughby - MultiMYMSY
- PastPerfect.

Match your priority listing of requirements against the features offered by the various packages, and line everything up with your budget. Ensure your essential requirements are catered for. You may have to compromise on some of the ‘important’ ones, while anything from the ‘nice to have’ category will probably be a bonus.

The CHIN Software Review (see Useful Online Resources on page 12) can help greatly in your selection of a shortlist. It reviews various software packages, giving a detailed breakdown of their functions and ranking how well the packages perform these functions.
Making a decision

The shortlist
Narrow your selection to two or three packages. Find out as much as possible about them and about the people who supply them. The latter is particularly important - you will depend on the quality of the supplier’s service and support. Identify what the suppliers provide with their sale: initial set-up, training, trouble-shooting, and support. Identify what training and support they offer beyond the installation and running-in period, and how local, accessible, and responsive this is.

Visiting other users
Arrange to visit museum colleagues who are currently using the packages you are interested in. See the systems in operation, but be aware that your needs and theirs may differ in both priority and kind.

Arranging demonstrations
Once you have done as much homework as possible, arrange to have shortlisted suppliers demonstrate the packages to you. Provide them with samples of your data to use in their demonstration.

The demonstration should be with as many of the potential users of the system as practicable. Ample time should be allowed for trying-out and questions. Encourage follow-up questions when people have a chance to think over what they have seen and experienced and what the implications for their work might be.
**Contract for supply**

When you have identified the products and the suppliers you wish to deal with, have them make their own complete assessment of your current system and quote a price for:

- the installation of the product
- any additional hardware they consider necessary
- converting your existing data to the new system
- training users
- trouble-shooting
- providing ongoing support
- providing ongoing maintenance and updates for the system.

Before you commit to any contract for supply, be sure that the users in your organisation are aware of what is being offered, are happy with it, and are fully prepared for the impact of its introduction on their routines and other time requirements. Never underestimate the demands of a project like this on your organisation’s resources of time, money, and expertise — and on the users’ goodwill.

**Glossary**

- **Database** A grouping of information organised so it can be accessed and updated
- **Desktop publishing** Producing printed material on a printer linked to a computer
- **Email** Messages sent electronically from one computer user to one or more receivers via a network or the internet
- **Hardware** The machines, wiring, and other physical parts of a computer
- **Image scanning** Converting an image into digital form for storage or processing on a computer
- **Internet** An international information network accessible to computer users via the telephone system
- **Memory** A computer’s equipment or capacity for storing data or program instructions
- **Multimedia** A combination of audio, video, or other medium of expression or communication
- **Online** Controlled by or connected to a computer
- **Software** Programs and other operating information used by a computer
- **Spreadsheet** A program in which figures can be arranged in a grid and used in calculations
- **Storage capacity** See memory
- **Website** A location connected to the internet
- **Word processing** A program for inputting, manipulating, formatting, storing, and producing text in printed form
Some useful online resources

Digital imaging
For many organisations, making digital images of their collections - both objects and visual media - is their entrée to digital collection management. Australian Museums and Galleries Online (AMOL), in conjunction with CHIN, offer a comprehensive, well-designed, and practical course on this topic.

Capture Your Collection (www.amol.org.au/capture/) takes you through the process of digitising your collection: from planning and budgeting through to implementing your digital project. It is highly recommended for any organisation looking for guidance and training in this area.

Collections Management Software Selection and Review
For anyone considering getting involved in a major digital project for collection management, the following Canadian Heritage Information Network (CHIN) resources are highly recommended:

- Collections Management Software Selection online course
- Collections Management Software Review (various software packages assessed against CHIN’s comprehensive criteria checklist)
- various related references.

Website: www.chin.gc.ca/English/Collections_Management/index.html

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For further information or to discuss training opportunities related to this topic please contact:

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