

# Publishing Your Collection Online

*New options for creating a virtual museum  
- for small museums and galleries*

The purpose of this **Evaluation Guide** is to highlight new opportunities for publishing collections online, and a jargon-free list of ten criteria to help smaller museums and galleries evaluate these new Cataloguing Systems

Presented by:



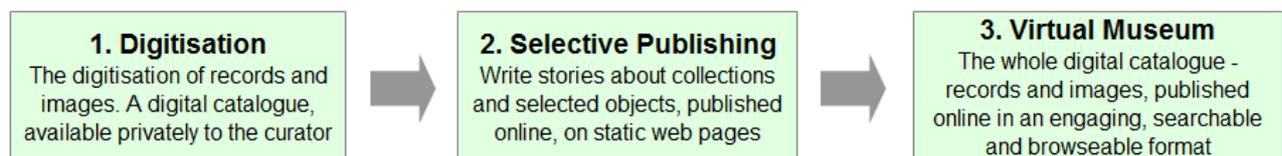
# Introduction

This paper is not about the “What”, “Why” or “How” of digitisation, but rather, the next link in the chain: once digitised, how can you publish your collection online within the typical time, budget and technical constraints of a smaller institution?

Major institutions have worked extensively on this challenge in recent decades, with large budgets and sophisticated IT skills. However, the last few years have seen the emergence of a new generation of native **web-based Cataloguing Systems** that, for the first time, offer small museums and galleries the ability to take their collection online in wide-ranging new ways.

To put it another way, many small institutions already have a digital catalogue of their holdings. What next? Even if they have a website, it is usually limited to a few “show and tell” pages about the collection, and not much breadth. The website, and the digital catalogue, are quite separate - if you want to publish something on your website, you need to copy and paste photos, and write an article to appear on a static web page.

How can that digital catalogue be leveraged from picking out a few individual items into publishing whole collections in a visually appealing manner, searchable and browseable, publicly on the internet – your own virtual museum?



Publishing your collection online is significantly more than an illustrated catalogue, it makes it easier to preserve, access, and discover the collection. It opens up potential for:

- New ways to engage and connect
- New worldwide audiences
- Telling stories by linking related items and adding narrative
- Images to become integral visual tools
- Easier ways to search and browse
- Allowing researchers access to new primary sources

A good catalogue is no longer the end in itself, but the first step in telling the story. Publishing is a broader way of thinking about your collection, and ultimately, caring for it.

This new generation of Cataloguing Systems offer great potential. But they vary greatly in power, functionality and purpose. To make the most of these new opportunities, it is important to understand this new territory, and the new possibilities it offers. Successful evaluation is two-sided:

- Determining your organisation’s needs, what functionality is required, and defining a clear scope
- Determining what the cataloguing system offers, as they vary greatly

As much as possible, we have eliminated jargon, but just for clarity:

- An online cataloguing system, software as a service (SaaS) and web-based mean the same thing – the software application and data are hosted on the internet, rather than a PC or your local server.
- Digitisation - the process of converting information about an object or data into digital format
- Cataloguing System – refer “#8 Collection Management system (CMS) or cataloguing System?”

Here is a partial list of guidelines to use when evaluating an online Cataloguing System.

# #1 Do you need an online Cataloguing System?

There are many ways of getting on the web, and small museums have tried most!

Do you need an online Cataloguing System? It depends. If you just want a web presence, then a basic website, a blog, Facebook, or a section on a council website will enable you to tell a few stories about selected items, and promote upcoming events. Your catalogue, and your website, are two separate things. As required, you can copy and paste photos, and write articles to appear on a web page. You do **not** need a web-based Cataloguing System.

But a few “show and tell” static web pages are a world away from an online collection. If you ever want to write “*Explore our collections online*”, on your website, open up access to your collections to a wider audience, or make them publicly searchable for researchers and visitors alike, then you **do** need a web-based Cataloguing System.

## #2 What extra resources are required?

The beauty of an online, web-based Cataloguing System is that it re-uses and leverages what you are already doing, and what you already have. Even so, it requires some extra work, but probably less than you expect.

### First question: what do you already have?

- **Data** - Most small museums and galleries will already be using a computerised program to catalogue and manage their holdings. It may range from an Excel spreadsheet, to a database, to a fully-fledged Collection Management System (CMS). If you use a computer, your data is digital.
- **Images** - Many organisations have an extensive collection of associated photographs. Good images are central to a good digital archive.
- **Other Records** - Thirdly, there may be other digital data, such as documents, audio and oral records.

### Second question: what extra resources will online publishing require?

The answer is, surprisingly little. You are **not** creating extra data; you are simply making existing data readily available to others. For most organisations, the hard work and time is spent in the initial cataloguing. If you already have a digitised catalogue, now you can start to **leverage** it.

Digitisation experts use the term **OHIO** – **O**nly **H**andle **I**t **O**nce. If you catalogue an object, or write a history, it should be done once. Digital data should be easy to re-use, export and import across platforms and between programs. Depending on the system, you may do this manually, or it may be automatic.

Of course, if you wish, you can choose to develop special online exhibitions and far more, but this paper is focussed principally on the initial steps required in getting your collection online, rather than the strategies you can then begin to implement following that first step.

So what extra resources will you need?

- **Data creation** no extra resources, it uses existing data
- **Images** start with existing images, and add more as required (*Refer #8 Image Handling*)
- **Equipment** possibly a camera or scanner, if you don't have access to one
- **Technical skills** on a day to day basis, nothing extra, just basic computer skills (*Refer #5 Ease of Use*)
- **Extra money** only free, freemium and budget systems are analysed in this paper (*Refer #4 Cost*)
- **Extra time** that depends whether you select a manual or automatic update system.  
There may also be extra time scanning and photographing, if you don't already do that as part of your cataloguing procedures.

There is also initial setting up time and costs and a (usually short) learning curve, and usually, some one-off technical advice if you want to integrate the web-based cataloguing system into your website.

# #3 Different Publishing Models

At the most basic level, there are 2 models for publishing your collection online:

Model 1. Continue to use your existing catalogue, and add a web cataloguing front end

Model 2. Migrate (convert) to a “web native” web-based online cataloguing system

A “web native” Cataloguing System is designed from the ground up for the web: making full use of web design principles for UI and UX (user interface and user experience), search, database design, graphics and integrated image handling. They offer either a separate website option, or an integration option into your existing website, and some offer both.

For most small institutions, their set up is something like this:

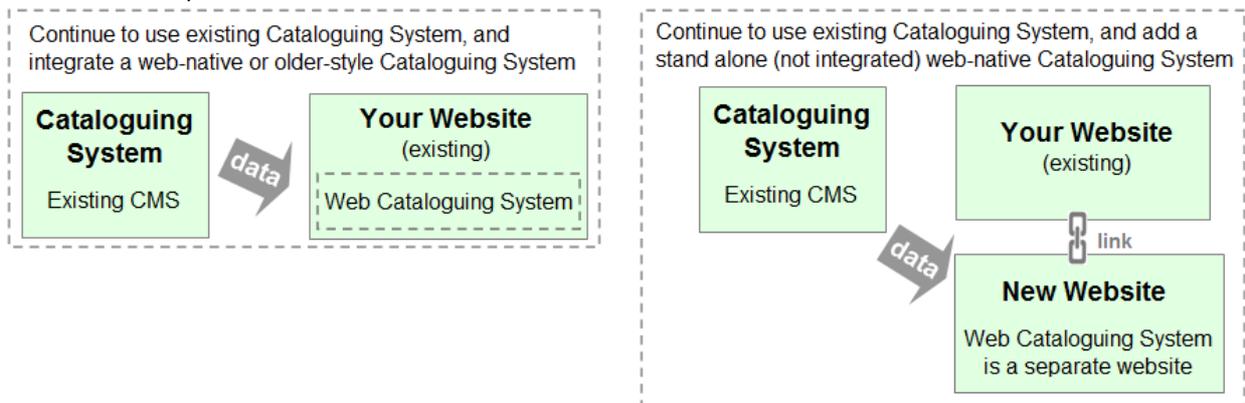


## Model 1. Continue to use your existing catalogue, and add a web cataloguing front end

There are several possibilities:

- a basic text-only “search our catalogue online” utility you add as a page to your own website
- some CMS offer an optional extra module that adds a basic front end (push-forward model)
- A web native Cataloguing System that draws upon your existing catalogue. You would switch off any redundant functionality during the initial set up. (options: integrated or not integrated)

Here’s two examples of this model:

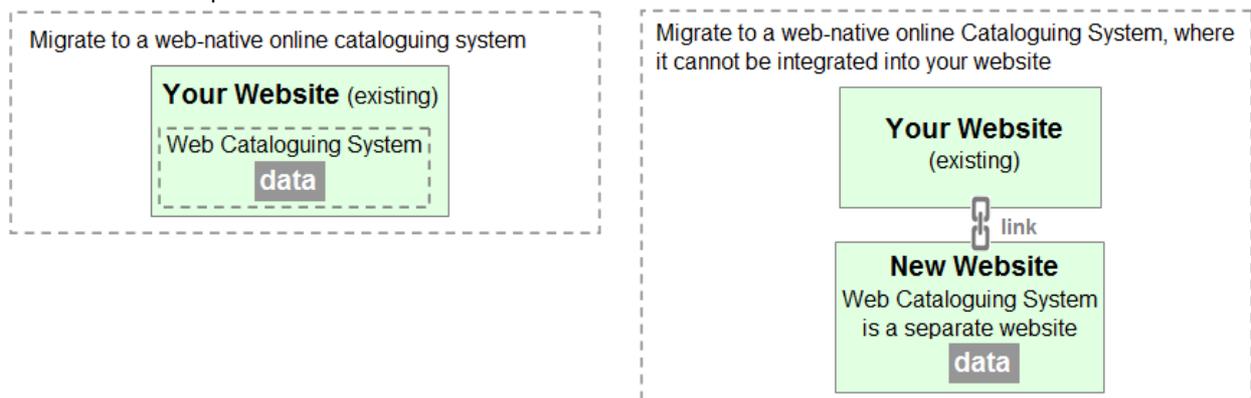


## 2. Migrate to a “web native” web-based online catalogue system

Again, there are several possibilities:

- integrate into your website, or as a separate website in its own right that your website links to (or both)
- enabled to integrate backwards to import another database
- offer different web hosting options (you host it, or the software provider hosts)

Here are two examples of this model:



As well as these two, a third model used by some museums and galleries is: separately select their desired CMS as a backend, then design a custom front end to create their website, then link the two via APIs. This is unlikely to be an optimum solution for those seeking a simple and cheap solution.

### **Think Strategically**

Try and think long term strategically. More and more software is moving “to the cloud” or SaaS (software as a service). Versions and upgrades become irrelevant, data is available 24/7 anywhere you have internet access. Volunteers can work remotely, at times that suit them.

You may not be able to get there in one step, but try and develop your strategy so you are headed in the right direction. For example, you could decide on a staged implementation from a Model 1 to Model 2 over a couple of years.

A web-native Cataloguing System is likely to be **data-neutral** – it doesn’t care where data and images are coming from, as long as it can read it (usually meaning CSV format). In contrast, an extra module from an existing CMS will only work with that CMS.

The ability to integrate into your existing website is another strategic consideration. Most curators and webmasters would dream of a seamless user experience all on the one website. This may or may not be possible, depending on your existing website, and how much time and money you are willing to devote to integration. Some web-native Cataloguing Systems will integrate into your website, others will not.

Depending on the model you choose, data may be moving from one area to another. This may be one-off, occasional, on request, or automatically in real time. This is a **critical** evaluation point: if there is not smooth and easy data and image transfer, it will be unsustainable in the long run.

When you are looking at different models for publishing your collection online, there is simply not a “one size fits all” solution. There are pros and cons of all models – it depends on your individual requirements.

## **#4 Cost**

Like many areas of software, functionality has grown exponentially and costs have plummeted over the last few years. (Note: expensive systems have been excluded from this analysis - if you read about possible options in this paper, that means they are available in a free, freemium or low cost system.)

Like all software, the cost of the package is only one component. You need to include training, maintenance, set up and other costs.

### **1. Basic**

At the most basic level, you can use a database package (Excel, Access, Filemaker pro etc). These are PC -based cataloguing tools never intended for web usage. However, it is likely that a web-based Cataloguing System can import the data to create a website, so if you use one of these, you may be able to continue using it.

### **2. Existing package, customised to your requirements**

This is likely to be the “sweet spot” for most small museums and galleries. This is an existing “off the shelf” package – that is, you can see other examples of it in use – but customised to your requirements. You may not get every single thing on your wishlist, but you are likely to get a high proportion. And as the software already exists, you can quickly determine if it is appropriate for you or not.

### **3. Bespoke code**

This scenario may occur when one person in the group is highly skilled writing software. Questions to consider are: can anyone use it? Who is going to support, maintain and update it? The “hidden” costs of time and money are usually vastly underestimated, and you can almost guarantee it will take longer and cost more than first anticipated. Then you need to add in concealed costs such as training, upgrades, server and website hosting. The software world is littered with half-completed projects.

## #5 Ease of Use

At the end of the day, if an online Cataloguing System is not easy to use, it is unlikely to do well. Staff and volunteers will be hesitant, or worse, avoid using it. Visitors are unlikely to revisit your website. To be successful, it must be easy to create, maintain, and find content.

Useability is key – simple to learn, and intuitive to use. The three user groups are:

1. administrators / webmaster / curators
2. volunteers / staff
3. website visitors / users.

Good visual design should mean the UI and UX - the use of fonts, colours, form design, placement of controls, menu navigation, icons and mouse usage are carefully designed to improve usability, but so unobtrusive they seem to guide the user intuitively.

Responsive Design - simplicity does not necessarily mean simplistic – a well designed web-native system will use responsive design web technologies to hide or contextualise functionality, so what the user sees will vary according to the context, or only appear as required.

The useability, functionality and flexibility vary greatly, so it is important to do comparisons between systems.

## #6 Search and Discovery functionality

You will generally see a **large** difference in style between web-native and older-style systems.

### Search

Almost all Cataloguing Systems (both web-native and older-style) are good with keyword search and advanced search. Some packages are more elegant in the way they provide results, but most do a good job. Search works with the assumption you already know what you are looking for, in terms of object or category. But what if you get a “nil results” answer – does that mean there is nothing there, or that other terms are being used?

### Discovery

This is where you will see the biggest difference between web-native and older-style systems, as web-native software starts from a different perspective. It places stronger emphasis on **discovery and browsing**. Most of the time, the user does not know exactly what they are looking for, they want to easily browse all the content, then start to home in on areas of interest.

### Relational Data

Relational data can easily be searched by different attributes, and then re-assembled – it’s like looking at the same data from many points of view. A good relational database will do this so intuitively you don’t even realise it is happening. Look for faceted browsing functionality (eg “Refine Search By” filters, or think eBay). Older style systems will tend to be more hierarchical.

### Navigation

Intuitive navigation will create a mind map so the user can picture exactly where they are in the collection, and how to move up and down and between. Visual design and graphics can facilitate this. In an older style design, you are more likely to feel you are lost, or have reached a dead-end.

### Hyperlinks

There should also be the ability to use hyperlinks so a user can jump to other areas of related interest.

### Other

There may also be features such as tags, sort orders, gallery and list views, folders and sub-folders etc.

Overall, this is an area where it is hard for older systems to compete, because they are fundamentally different in the way they were originally designed and the data is stored.

## #7 Collection Management System (CMS) or Cataloguing System?

This is another area where you will see a big difference between packages.

Some web-based Cataloguing Systems are basic online catalogues; others have significantly more functionality, and are designed as a full Collection Management System (CMS) in their own right.

Traditional PC-based CMS were designed in the time when you bought a copy on a disc, so every possible function needed to be built in, as it could not be customised. This makes the CMS theoretically very powerful. In reality, many screens, fields and options are never needed for smaller institutions, making it more complex than required, and frequently resulting in inconsistent cataloguing. On the other hand, an Excel spreadsheet is easy to customise and understand, but allows too much inconsistency.

Is bigger better? Absolutely not! The best approach is software “right-sized” for the organisation. An unnecessarily complex product is likely to be more difficult to learn, more difficult to maintain, more time-consuming, more expensive and with most of the features never even needed.

To give a simple example, professional photographers and designers may need Adobe Photoshop. Adobe discovered this was too expensive and complex for most users, so they released “Photoshop Elements”, containing the key features, but with fewer and simpler options, so it is far easier to learn and use.

Most web-native Cataloguing Systems are **intentionally** simpler:

- software design these days is more like Lego blocks that clip together, rather than a one piece moulding. Each piece should do its part superbly, and able to be replaced if needed
- experience has shown the demand is for easier to use CMS, not more complex
- software often stumbles by trying to do too much – and ends up doing nothing very well
- customisation allows for additional flexibility

A good Cataloguing System should be able to be customised to closely fit the organisation requirements. Typically this is a liaison between the software company and the collection curator in the initial setup stages, and would involve configuring collections, folders, custom fields and the general structure of the website, based on museum procedures and workflow.

But the needs of different collecting organisations vary greatly, so:

- some small museums may be delighted to convert to a simpler web-based Cataloguing System
- other small museums may prefer to continue using their original CMS, and use an integration model to display their collection online.

### **Footnote: Is there “accredited software”?**

Australia has *National Standards for Australian Museums and Galleries*, and although a museum can become MAP accredited (Museum Accreditation Program), there is no such thing as “accredited software”. In the UK, there is “Spectrum Compliant” software based on the 21 Spectrum collection management procedures, designed for larger institutions and requiring specialist IT staff to operate.

## #8 Image Handling and visual design

This is another area where you will see a big difference between packages.

In a web-native system, the image handling and viewing are an integrated part of the object record. *“A picture is worth 1,000 words”* goes the old adage. Multiple photos, image zoom and image captions are a seamless part of the complete record. This enables visitors to view close ups and multiple angles without physically handling the object.

Visual appeal of the collection itself is greatly enhanced - as you would hope if a professional web designer was allowed to work with your collection. *“I never knew the collection could look this good”* is a common sentiment!

In contrast, older cataloguing systems started life as text-based, with images of objects a secondary attachment to the record. You may be able to see a thumbnail or click to view a larger image. This approach is not optimal for a public website.

The back-end functionality should include bulk uploading facility for images.

### **Footnote: Digital Photography and Scanning**

These days, excellent quality, and virtually free images are available to almost every organisation by using digital photography. With a well-designed workflow, it can also be quick. Scans are another effective way of digitising documents and photographs. There are hundreds of tutorials and videos about how to achieve professional results with basic equipment on the internet.

## #9 Help & Support & Training

Usually with a web-native Cataloguing System, the learning curve is vastly reduced with responsive design, customised screens, intuitive layout, contextual prompts, online tutorials, “how to’s” and wizards all helping the user achieve what they want to do.

Like all software, it is advisable that more than one person understands and uses it.

There are three particular areas to look at:

- Initial set up – who does this? A good structure is critical: get it wrong and it can be difficult to change; get it right and you won’t even think about it any more.
- Help and technical issues – what options do you have when you need help, or have a technical problem? Is it mostly online self-help, or can you speak to a real person?
- Training – how do you train new members of the team, and how do you learn about using more options in the software?

## #10 Privacy & Security

A web-based catalogue system should offer public and private capabilities:

- different access levels with appropriate permissions – eg administrator/contributor/public
- public and private fields for every object
- public and private records in the collection

Whilst there can be no such thing as a 100% guarantee of absolute security, realistically, a remote server with automatic backups and encrypted data is likely to be more secure than a single hard drive on a PC that could fail at anytime, or a USB with 6 months worth of photos that could get lost. Backups, uptime and data storage responsibilities are done automatically by the web host.

However, it is good practice, of course, to also maintain your own image and data master backups.

## APPENDIX 1 – About “The Collecting Bug”

The Collecting Bug is a Collection Management System for small museums and collections.

Being cloud-based software, it is designed from the ground up to be easy to use, customisable, with powerful data handling and visually pleasing. All options and features described in this paper are available, including:

- Include stories, articles and special exhibitions on your website
- Facetted Search (Filtered searches)
- Simple and intuitive workflow
- Visitor interaction allows comments and sharing of knowledge
- Easy data import and export
- Powerful image handling and display
- Intuitive navigation
- Collections can be organised into folder and sub-folder categories
- Browse and discover functionality
- Keyword search
- Customisable fields and appearance
- Responsive design
- Two hosting options – seamless integration into your website, or as a standalone website
- Open Standards - data can be freely migrated between different software packages, and not limited by technological change

You can see some of the current collections at:

<http://www.thecollectingbug.com/idarentoulouthwaite/>

<http://www.thecollectingbug.com/prattwarepottery/>

<http://www.thecollectingbug.com/essendonfctest/>

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