

The *Make it Digital* Scorecard:

A tool for selecting and prioritising content for digitisation

1st Edition, June 2009



The *Make it Digital* Scorecard: A tool for selecting and prioritising content for digitisation has been developed by Digital New Zealand, a government digital content initiative supported by the National Library of New Zealand.

More information about Digital New Zealand can be found at www.digitalnz.org

Resources and online help and advice can be found at makeit.digitalnz.org

Revision version 16.06.09



This document is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 New Zealand licence. For more information about the uses of the licence visit <http://creativecommons.org/licenses/by-nc-sa/3.0/nz/>

Guidance for use

Overview

The *Make it Digital* scorecard is a decision making aid for organisations wanting to select and prioritise content for digitisation to improve access.

Based on a good practice digitisation framework, it is focused on assisting with diverse material that cannot easily be compared. The goal is to improve consistency and transparency in decision-making over time.

While the scorecard is designed to be flexible, its intended focus is on making content digitally available to the public. This may mean that for digitisation of privately held material or content for office-oriented information retrieval systems, some criteria are not relevant. Other important considerations such as legal record-keeping requirements are also not covered. We would however be interested in feedback from those who are interested in the possibility of such applications, and invite such users to adapt this tool's methods for their own purposes.

Who is the scorecard for?

The scorecard may be particularly useful for those on limited budgets starting out on a digitisation programme for the first time, or those building a new digital collection that draws on a number of non-digital sources. It is also designed to be useful for funders and budget holders wanting to prioritise resources.

By design, a team, group or committee with decision-making ability is expected to use the tool and agree on final scores through discussion.

In circumstances where a decision has already been made to digitise particular material, the scorecard will be less useful. However it may still act as a checklist to verify the soundness of those decisions.

Government agencies and businesses with specific record-keeping obligations but with an interest in public access, should in the first instance refer to their own information management practices and policies. These are likely to address core requirements for digitisation of records and care or disposal of originals.

What the scorecard isn't

Use of the scorecard cannot substitute for having good information and organisation of the materials you plan to digitise. Nor can it substitute for appropriate policies for acquisition, retention and disposal of materials your organisation holds. The scorecard relies on the judgement of users to evaluate the scores in reference to those policies.

We have developed a pre-selection checklist that can be used as part of the tool to help you determine whether you have the basics in place to manage a digitisation programme. If you have not undertaken digitisation before on any significant scale, we recommend that you undertake this self-assessment before getting started.

The *Make it Digital* scorecard is not designed to be a cost-saving tool, although some of the criteria may involve assessment of costs. While digitisation is in our view a desirable strategy for increasing both short and long-term access to content, it is rare that the cost of managing digital content over the long term is cheaper than the cost of managing non-digital content. Format obsolescence and storage hardware failure, for instance, are two factors that can contribute to higher costs.

Technical guidelines and information on digitisation standards are not provided with this tool. You will need to seek advice on these if your organisation does not already have access to expertise. You can access some of this advice and expertise through our website at <http://makeit.digitalnz.org>.

What is digitisation?

Digitisation is a popular term that can convey a wide range of meanings and activities. There is no agreed technical definition that can be used across all situations, as there are many types of digitisation activities that have little in common with each other. Caution is needed in using the term for anything other than a very broad category of activity.

Our approach for *Make it Digital* is to define digitisation as

digital content creation by making a digital copy or digital recording of analogue information, where that information can reside in a document, artefact, sound, performance, geographical feature or natural phenomena.

Digital content creation includes data-entry and transcription, digital imaging, photography, sound and video recording and transfer – in fact any analogue-to-digital transfer. It excludes transcoding or migration of digital information into a different digital format or media (digital-to-digital transfer), software manipulation or programmed machine creation of new digital information (born-digital information), and analogue output of digital information such as printing or audiovisual playback (digital-to-analogue transfer).

Good practice digitisation framework

As a precursor to this scorecard, we developed a high level framework for good practice digitisation aimed at policy makers. The framework has five principles to inform decision-making and planning, and draws on the notion of good digital collection development formulated by NISO, the American National Information Standards Organization¹.

¹ *Framework of Guidance for Building Good Digital Collections 3rd Edition*, NISO, 2007

Even if your organisation is not accustomed to managing material as collections or record groups, acquiring a basic knowledge and practice of collection management or record-keeping is a pre-requisite for maintaining any significant volume of digitised content over time. The basics include appraising materials for acquisition or retention, describing what they are and how they are organised, and being able to retrieve or select materials for publication, exhibition or other purposes. Digital content is particularly dependent on this practice, as without it there are no visible or descriptive cues to enable it to be usable.

NISO argues that digital collection development has to move beyond the proof of concept and collection-building projects that have dominated the last decade. Digital objects, metadata and collections, in order to be “good”, must be capable of being building blocks for others to reuse, repackage, repurpose and build services upon.

With this in mind, the good practice digitisation framework aims to encourage the selection of material for digitisation that will make good use of available resources while producing digitised content that can be effective building blocks for future use. The five principles are:

- **Selection** – not all content can or should be digitised
- **Purpose** – digitisation should be for an identified purpose
- **Access** – digitisation will affect access to the original
- **Technique** – the digitisation technique will determine usability
- **Value** – the digital copy should have intrinsic value

The current version of the framework can be viewed at <http://makeit.digitalnz.org>.

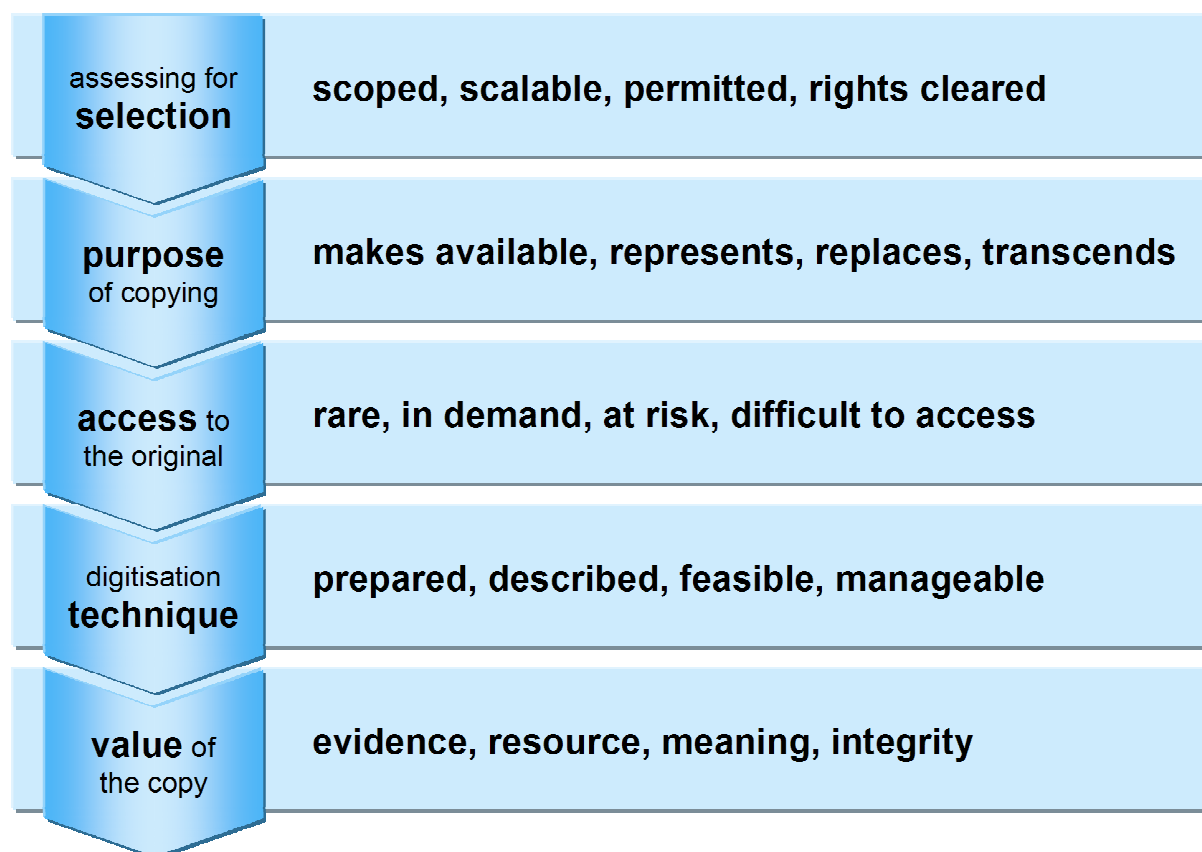
How the Scorecard works

Adapting the Scorecard to your needs

The Scorecard derives its criteria from the good practice digitisation framework, and assesses each according to the weighting you give it. Where a criterion is not important or is of little importance, it is removed or discounted. This means you are only scoring criteria that are relevant to you, your organisation, or your digitisation programme.

This approach also allows you to tailor the Scorecard to each specific digitisation programme you intend to run. For instance, you might run one programme based on preservation work and another based on developing searchable digital resources. Each programme can be given its own weighted scorecard according to the purpose and outcome you expect to be met.

The Scorecard criteria



Alternatively, you may want to assess quite diverse content and purposes with one consistent set of criteria. The Scorecard allows you to set that criteria in line with your priorities and then apply it to multiple items in one process.

There are three steps involved in using the Scorecard:

- a. Pre-selection work
- b. Weighting criteria according to your priorities
- c. Assessing and scoring

The pre-selection work is aimed at organisations that have had little experience at undertaking a digitisation programme or a selection process for digitisation. It includes a capability checklist as well as the first set of Scorecard criteria focused on practicalities like scoping candidates and ensuring copyright clearances. These first criteria are not weighted, as they are essential steps to every good digitisation effort.

The second step involves weighting the remaining criteria according to whether they are important, not important or may be important. This weighting will determine the number of criteria that are relevant to you, and should provide clarity on what you want to achieve. The criteria have been designed so that it is possible, but unlikely, for all of them to receive the highest weighting. Weighting should be solely relative to the other criteria you are scoring – the importance measure is not a judgement or reflection on the importance of your organisation's activities in general.

The final step involves making the assessment of how well a candidate fits against your weighted criteria. In making this assessment, it is important to assess what will actually be delivered at the end of the digitisation process, not what can potentially be delivered.

The more criteria that are met or exceeded, the higher the priority of the candidate is. Where different candidates meet or exceed the same number of criteria, those with the highest scores are a better overall fit. If need be, criteria that are only partially met can also be reviewed to determine if the fit can be improved by amending the proposal.

Guide to Assessment

Step 1 – Getting started

There are three elements to getting started, which are confirming that you need to undertake selection, checking your organisation's capability to manage the output of a digitisation programme, and gathering information about potential candidates for digitisation.

Is selection needed?

If you are coming to the *Make it Digital* scorecard as a new tool to assist your existing digitisation programme, no doubt up to now you have been selecting content with your own criteria. Even without formal criteria, informal ones are common, such as digitising:

- to meet user requests for material in digital format
- for special events, exhibitions or projects wanting specific material
- to deliver material by email or the web
- easy items to demonstrate technique, workflow or feasibility

Demand and available technology, rather than your organisation's needs and drivers, often drive selection decisions. If you have a backlog of content requiring digitisation due to existing expectations or commitments, there may be little value in re-selecting this material. Selection will work best with new opportunities or funding, and where digitisation can be planned and completed on top of demand driven requirements.

How ready is your organisation?

Building good resources or archives of digital content from scratch is a little like becoming a new parent. In the beginning there is a big focus on creating content, but once that is done, a lot more work is still required. Digital content needs to be organised, have descriptive information added to it, and be managed over time. That means your organisation needs more than just access to a scanner and some willing volunteers.

Our *Make it Digital* checklist identifies four areas of readiness for undertaking a digitisation:

- having policies in place for collection or records management and digitisation
- ensuring staff are in place and trained to manage the digitised content
- verifying that the digitisation solution is fit for purpose and will produce a good result
- having the software and back up systems to organise digital content

If you have any doubts about any of these areas, we recommend that you complete the checklist and address any areas that you have said 'no' to before starting your digitisation activity.

What do you know about your candidates?

Before selecting material for digitisation, enough information about each collection or item should have been assembled to allow decision-making across the criteria areas, as well as addressing practicalities such as scope, size, and any rights issues.

If your digitisation policy does not have a nomination process, then you may want to complete the final section of the *Make it Digital* checklist, which is aimed at ensuring all the candidates you plan to assess are viable before they go through prioritising and selecting. In order to make an informed decision, you should be able to consider information such as:

- whether the candidates been organised, itemised and described beforehand, or if this preparation work will be required as part of the process
- if the candidates are specific enough to quantify e.g. the amount of material involved, what technology will be used, how long it will take and how much it will cost
- whether the candidate can be scaled down or usefully broken into parts to digitise if digitising everything is not possible
- if all the necessary permissions and rights clearances will be received before starting

Once you have this information, you are ready to begin the selection process.

Step 2 – Weighting the criteria

The Scorecard has four sets of criteria that need to be weighted for importance to your process and outcome before undertaking the scoring.

The criteria will need to be given a score according to the following scale:

0	1	2
Not Important	May be Important	Important

Criteria given a '0' weighting will effectively be eliminated from your final score, even if a candidate fits that criteria completely. Criteria given a '1' weighting will be considered only if a candidate is at least a partial fit. Criteria given a '2' weighting will be important for every candidate you consider.

The criteria and important points to consider for your weighting decisions are below.

Criteria: Purpose of Copying

This set of criteria is designed for you to consider what the main focus of your digitisation programme is. Having a clear focus on why you are digitising is critical to getting good outcomes.

a. digitisation will improve availability of the content such as by increasing the opportunities for access, the potential audience, or the number of uses

If your programme is focused primarily on increasing access to content that does not exist in digital form, then this criterion will be important to you. For instance, this might be relevant to digitising material to be accessed on the web or on digital media, digitising finding aids or descriptive metadata so that it can be searched digitally, or exposing samples of non-digital materials to promote use of your non-digital holdings or evaluate demand for future digitisation.

b. digitisation will produce a faithful representation of the material sufficient to be accessed as an alternative to the original

If your aim is to produce access copies of material to reduce the need to view an original, whether to reduce costs, improve distribution or preserve and protect the original, this criterion will be important to you. Unlike the availability criterion above, the quality of the content reproduction is important to this criterion – if there is detail or information missing or altered, it is unlikely to be a useful alternative to the original.

c. digitisation will create a complete replacement of the material sufficient to be permanently accessed instead of the original

This criterion is only likely to be important to you if you are undertaking a digital preservation programme for material at the end of its life and that has to be migrated. You will be looking for the highest standards and best available technologies to undertake this work, as it may not be repeatable with the original. This may be highly relevant for anyone dealing with sound or moving image material stored on magnetic tape.

d. digitisation will create a copy that transcends the original enabling new ways of use, access or representation

If you have invested, or plan to invest in, software or hardware technologies to deliver digital content in new ways, this criterion may be important to you. Using OCR or transcription to make text searchable and machine readable, creating zoomable high-resolution imagery, geo-tagging items, developing content-driven digital exhibitions, or making editable digital video files are all examples of transcending analogue uses. Unlike some other purposes, almost all of these uses require attention to delivery requirements and formats as well as actual digitisation.

Criteria: Access to the Original

This set of criteria is designed to consider the original material that you are planning to copy. Digitisation will change the way the original is accessed, used, and preserved.

a. the original is rare, unique or has few viewable or usable copies (regardless of form) that limits access

The number of copies or duplicates of an item or set of items directly affects how accessible it is. Generally items that have only one copy, such as much archival material, is much less accessible than an item with dozens of copies, such as printed books, even if those copies are not digital. Material that has been previously digitised, but into an inaccessible format, may still meet this criterion. If improving access is a key driver for your organisation, then the rarity of the original will be an important criterion.

b. there is significant existing demand to access the original

Demand can be a 'chicken or egg' issue. Experience has shown that digitising material, by improving access, can increase the demand for the content, and for access to the original. But there has also been plenty of material digitised that few want to use. Demand on the original is an important criterion if your organisation or service is measured on the number of current users, or wants to make the most popular content easily available.

c. the original is being put at unacceptable risk of damage or loss due to the current level of access

A common driver for digitisation is to provide copies that can stand in, or be surrogates, for the original. This is particularly so where the original is valuable or fragile, and where the risk of damage or loss is too high or is continuing to grow over time. This criterion will be important to you if preservation of access and conservation of the original are important.

d. the original is difficult or costly to access due to factors such as its location, conditions placed on access, or preparation required for access

It is not uncommon for non-digital material to be readily available to the public, but only if they travel to your locality and arrange to visit during weekday opening hours. While this may not cost your organisation anything additional, it does cost your customers. Other material may require access arranged with specialist staff or special conditions for viewing. All of these add to the difficulty of access, and would make this criterion an important one.

Criteria: Digitisation technique

A lot of digitisation activity until recently has been driven by technical criteria, often at the expense of other considerations. These criteria however remain important, as they strongly impact on the outcome of your digitisation activity.

a. the material can be readily prepared for copying

If the material you are considering digitising requires a lot of preparation such as repairs, conditioning or organising, it can greatly affect the delivery of your digitisation programme. It could be weeks or months before any actual copying is able to take place. If readiness to start copying and minimising preparation costs are issues, then this criterion will be important to you.

b. the digitisation technology is specifically designed for the purpose

The choice of technology for copying is a vital consideration for any digitisation programme. The requirements will vary depending on your purpose and the nature of the original. If the aim is to simply capture the information without regard to the shape or condition of the original carrier, then your requirements will be lower than for a programme aimed at produced high quality representations or replacement copies. This criterion is likely to be important for all but the most basic of digitisation activities.

c. the digitised copy can be accurately described to make it usable

Usability is often one of the key outcomes desired from digitisation programmes. In many cases, how well digitised material is described will directly affect future usability, particularly if the content needs to be retrieved from among many other items. In cases where the digitised copy is only intended to be a stepping stone towards other works, beyond the basics of filenaming and storage conventions, accurate descriptions may be of less importance.

d. the digital format and carrier chosen can be managed over time

The legacy of many project-oriented digitisation activities has been digital content that has become obsolete and unreadable, or lost on CD-ROMS in filing cabinets or in dark recesses of websites. The cost of digitisation does not end with copying the original. Digital content needs to be managed, migrated and reformatted over timeframes often much shorter than for non-digital content. Unless content is being digitised for one-time use or for a limited time period (less than 2-3 years) this criterion is likely to be an important consideration.

Criteria: Value of the copy

Non-digital content is usually kept or retained because it has some value, but not all of this value will necessarily carry over to a digital copy.

a. the digitised copy will have evidential value that enables it to be referenced with confidence

Documents and other materials often exist as accounts or records of an event, transaction or person, or contain information that is the basis for new knowledge through research. If

accountability, research or reference abilities are key to your organisation or services, this criterion will be important to you.

b. the digitised copy will have value as a resource, able to be utilised to create new works or opportunities

If your main purpose for digitisation is to improve access or transcend the original, you may want to create content that is primarily a resource for other purposes, such as stock images, video or sounds, raw material for incorporation into other content, or resources that can be sold or applied commercially. If this is the case, realising this value will be important to you.

c. the digitised copy will be able to convey the intrinsic meaning or qualities of the original

As non-digital items age, the value and significance of the physical form may increase, while the informational or evidential value may decrease. If digitisation only captures the informational content without regard for the intrinsic qualities, there may be a significant loss of value compared to the original. If it is important to retain this value, this criterion will also be important.

d. the digitised copy will have integrity through mechanisms such as quality controls, administrative metadata, authenticated access, or continued ownership

Because it is not fixed to a single physical carrier, digital content is more prone to alteration or information loss, whether accidentally or deliberately. The integrity can also be affected if the content is placed out of context or used in ways the creators did not want. If the value of the digitised content is directly related to knowing the origins and integrity of the digital form, or to ensuring appropriate usage, this criterion will be important.

Step 3 – Assessing the material

Each of the weighted criteria has a corresponding question that needs to be answered by assessing the material being proposed for digitisation.

The questions will need to be given a score according to the following simple scale:

0	1	2
Does not meet	Partially meets	Meets

The scoring is designed to assess how well the candidates you are considering fit with the criteria. As with the weighting, the scoring is relative to the other candidates you are assessing.

In making your assessment, you should focus on what will actually be delivered at the end of the digitisation process, not what can potentially be delivered. For instance, a digitised item that transcends the original will almost certainly require a software delivery mechanism to enable this – if implementation of the mechanism has not been factored in, then the candidate is unlikely to be a good fit. You need to consider how well all the stages and costs of delivery have been thought out, from preparation right through to ongoing management of the digitised output.

Candidates given a '0' score on a criterion will not count towards your final score. Candidates given a score of '1' or '2' will be count only if the weighting for a criterion is at least a '1'.

Scoring is calculated by multiplying the Fit by the Weight e.g.

A Fit of '1' times a Weight of '2' creates a score of '2'

A Fit of '2' times a Weight of '0' creates a score of '0'

A score of '2' or '4' means the material **meets or exceeds** the criteria that are important or may be important to you. A score of '0' or '1' means the material **fails to meet** the criteria or that those criteria are not important to you.

The more criteria met or exceeded, the higher the priority of the material.

Where different material meets or exceeds the same number of criteria, those with the greater number of '4's are a better overall fit.

Criteria that score '1' for Fit can also be reviewed to determine if the fit can be improved by amending the proposal.

Make it Digital Checklist for Digitisation

Before weighting and assessing candidates or proposals for digitisation, this checklist is useful for assessing the readiness of your organisation to digitise content.

Question	Y	N
1. Policies		
a. Does your organisation have a collections or records management policy?		
b. Does your organisation have a digitisation policy or digitisation selection policy?		
c. Has your organisation investigated other examples of digitisation activity to learn successful ways to undertake the digitisation of your content?		
2. Staff and training		
a. Is someone with relevant training responsible for managing your digital records and content?		
b. If you intend to digitise content in-house, have staff or volunteers received training in digitisation processes, standards, and equipment?		
3. Digitisation solution		
a. If you intend to digitise content in-house, do independent experts recommend the equipment you will use for this purpose?		
b. If you intend to digitise content in-house, will you use a documented workflow?		
c. If you intend to outsource your digitisation, have you investigated more than one potential digitisation solution?		
d. If you intend to outsource your digitisation, have you received assurance that there are quality controls for the processes, standards and equipment being used?		
4. Digital content management		
a. Does your organisation have the licensed software applications needed to organise and manage content once it has been digitised?		
b. Does your organisation have IT equipment (such as an external hard drive or server) and procedures for storage and back-up of your digital records and content, including content you intend to digitise?		

Question	Y	N
5. Nomination for Selection (if no nomination process)		
a. Will the content you propose to digitise be organised, itemised and described somewhere in writing beforehand?		
b. Do the specific candidates or proposals provide enough information to assess them in the selection process?		
c. Can specific candidates or proposals be scaled down if not all material can be digitised in the proposed way?		
d. Has permission been received from the content owner to access the material for digitisation?		
e. Has the material been checked to ensure digitisation will not breach legal rights (copyright, trademark, privacy or other rights)?		

Make it Digital Criteria Weighting Sheet

Each of the five principles used for the scorecard has four criteria that need to be weighted for importance to your process and outcome before undertaking the scoring.

The criteria will need to be given a score according to the following simple scale:

0	1	2
Not important	May be important	Important

Criteria	Weighting
1. Purpose of Copying	
How important is it that:	
a. digitisation will improve availability of the content, such as by increasing the opportunities for access, the potential audience, or the number of uses	
b. digitisation will produce a faithful representation of the material sufficient to be accessed as an alternative to the original	
c. digitisation will create a complete replacement of the material sufficient to be permanently accessed instead of the original	
d. digitisation will create a copy that transcends the original enabling new ways of use, access or representation	
2. Access to the original	
How important is it that:	
a. the original is rare, unique or has few viewable or usable copies (regardless of form) that limits access	
b. there is significant existing demand to access the original	
c. the original is being put at unacceptable risk of damage or loss due to the current level of access	
d. the original is difficult or costly to access due to factors such as its location, conditions placed on access, or preparation required for access	
3. Digitisation technique	
How important is it that:	
a. the material can be readily prepared for copying	
b. the digitisation technology is specifically designed for the purpose	
c. the digitised copy can be accurately described to make it usable	
d. the digital format and carrier chosen can be managed over time	

Criteria	Weighting
4. Value of the copy	
How important is it that:	
a. the digitised copy will have evidential value that enables it to be referenced with confidence	
b. the digitised copy will have value as a resource , able to be utilised to create new works or opportunities	
c. the digitised copy will be able to convey the intrinsic meaning or qualities of the original	
d. the digitised copy will have integrity through mechanisms such as quality controls, administrative metadata, authenticated access, or continued ownership	

Make it Digital Scorecard

Each of the weighted criteria has a corresponding question that needs to be answered by assessing the material being proposed for digitisation. Each criterion has a guide to the kinds of things to consider in making the assessment.

Before scoring, the second column should be populated with the weightings as filled out in the *Make it Digital* Criteria Weighting Sheet.

The questions will need to be given a score in the 'Fit' column according to the following simple scale:

0	1	2
Does not meet	Partially meets	Meets

Question	Fit	Weight	Score	Meets or exceeds (✓)	Fails (✓)
1. Purpose of Copying					
The proposal demonstrates that digitisation will:					
a. improve availability of the content					
b. produce a faithful representation of the material					
c. create a complete replacement of the material					
d. create a copy that transcends the original					
2. Access to the original					
a. The original is rare, unique or has few viewable or usable copies					
b. There is a significant existing demand to access the original					
c. The original is being put at unacceptable risk of damage or loss					
d. The original is difficult or costly to access					
3. Digitisation technique					
a. The material can be readily prepared for copying					
b. The digitisation technology being proposed is specifically designed for the purpose					

Question	Fit	Weight	Score	Meets or exceeds (✓)	Fails (✓)
c. The digitised copy will be accurately described					
d. The digital format and carrier proposed can be managed over time					
4. Value of the copy					
a. The digitised copy will have evidential value					
b. the digitised copy will have value as a resource					
c. The digitised copy will convey the intrinsic meaning or qualities of the original					
d. The digitised copy will have integrity					
Overall tally					