

# Technology Strategy Report

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*Technology Strategy investigation for U3A Network*

## Client

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## Document Control

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# 1 INTRODUCTION

Leadership in Network have recognised that a Technology Strategy is required, and funding for this has been obtained through a "Building Capacity" grant. LogicalTech were invited by Network to provide a proposal to build a Technology Strategy document that will serve the organisation and its members.

Network has already done some work on their Technology Strategy, and the goal is to:

*"Use technology to continuously improve the efficiency, reach and professionalism of the U3A movement's service to seniors"*

LogicalTech were contracted to assist Network by building and delivering a Technology Strategy appropriate to the organisation.

## 1.1 Scope

- The brief was to include the following:
- Review current technology strategy and systems
- Conduct stakeholder meetings to review technology opportunities:
  - For supporting a U3As members
  - To strengthen a U3As operations and management
  - For collaboration between U3As
  - For collaboration with stakeholders
  - Within U3A Network itself.
- Documentation of Tech strategy options

## 1.2 Approach

The steps involved in building the strategy were as follows

- 1) Review of current strategy documentation
- 2) Review Network current systems and architecture including IT Inventory, IT Network Plan, Current Systems and Process and Issues with these systems/process.
- 3) Information gathering via engagement with stakeholders in focus groups to flush out their systems, needs and outcomes from a technical strategy perspective.  
Composition to be determined with Network, but from initial discussions the following is suggested:
  - a) Education – in particular tech support for Distance Education and Cross U3A Tutor bank
  - b) Technology Systems –
    - in particular UMAS (perhaps leveraging Admins meeting in Oct) + discussions with developer on their roadmap
    - Website builder – discussions with provider & user(s)?
    - Office 365 – procedures and templates for use in a U3A - perhaps leveraging ACFE funded exercise from Whittlesea U3A.
- 4) Documentation and Synthesis of Tech Strategy paying particular attention to:
  - a) Technology to support professionalism in Network and Member U3As
    - To provide confidence to Partners and Funders
    - Better value to Member U3As
    - Better value to U3A members
    - Build Sustainability of the organisation
  - b) Capacity Building in U3A

- To support membership growth
  - Support entry of new U3As via templates and standard offerings
  - Allow for customisation for larger U3As (cost recovery)
  - Support collaboration between U3As & within U3As
  - Support engagement models with other entities (e.g. as per Whittlesea)
- c) Engaging Volunteers in the strategy delivery
- Skills Transfer Opportunities
  - Member inclusion and relevance
  - User Groups
  - Implementation and Support groups
  - Engagement with external specialist suppliers
- 5) Produce Draft Strategy Document
- 6) Review Process with Stakeholders
- 7) Finalise Document
- 8) Presentation to stakeholders:

## 2 CURRENT STRATEGY DOCUMENTATION

The Technology Strategy for U3A Network needs to be informed by, and support the Strategic Plans for the organisation.

U3A Network has a robust strategy planning process, that produces a Strategic Plan document every 4 years, and provides rolling updates on an annual basis.

The current Strategic Plan is for 2014-2018, updated in February 2017.

Sections related to the role of Technology were inputs into the focus group meeting.

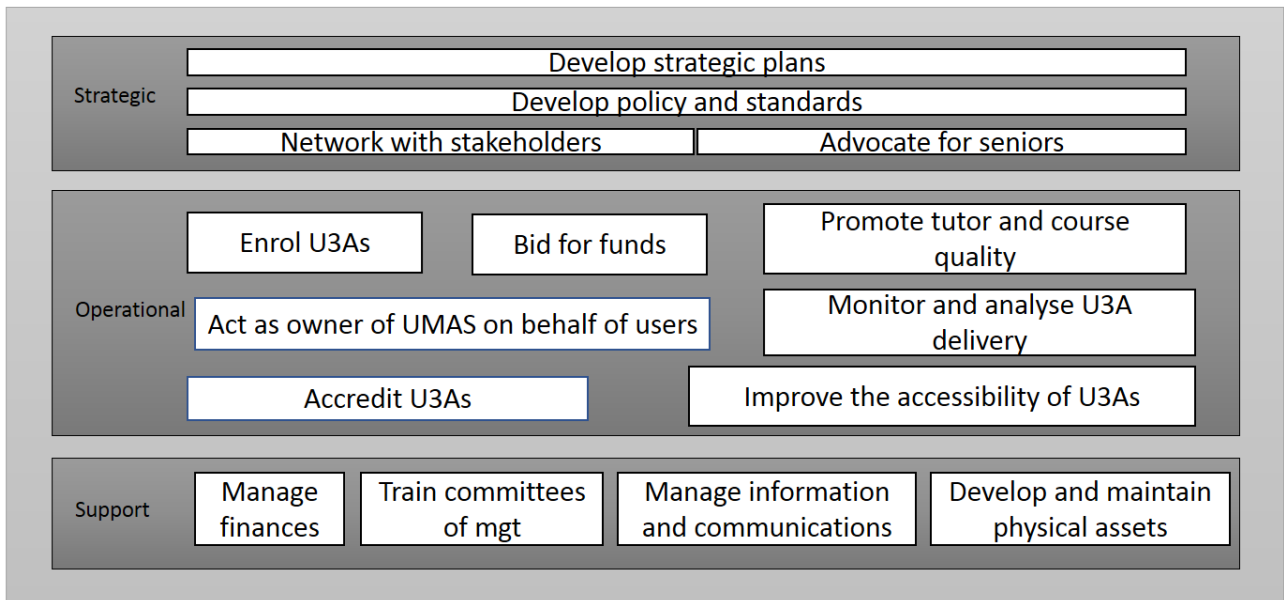
In addition, the Technology Steering Committee of U3A Network have produced various documents including a Technology Strategy V3 dated April 2017.

*It is recommended that a review of the Network Technology Strategy (this document) be part of the Strategic Planning review process.*

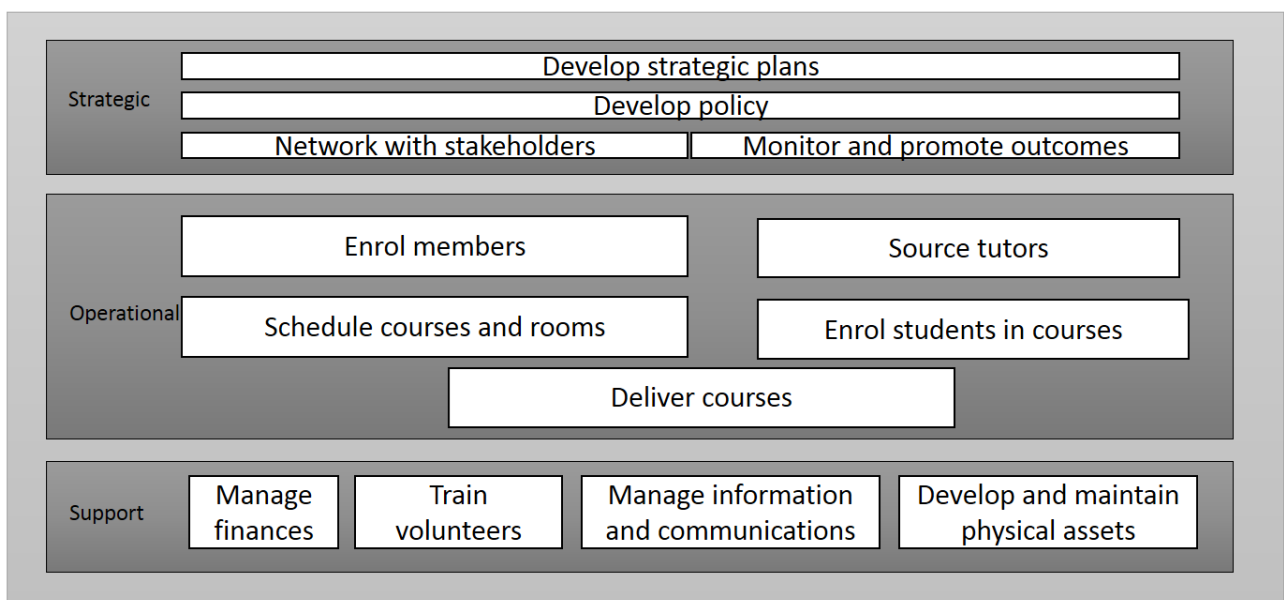
# 3 BUSINESS PROCESSES <>

From discussion and feedback from Focus Group participants, it was agreed that the following graphic summarises the Business Processes for a 'typical' U3A, and for U3A Network.

## 3.1 Business Processes for U3A Network



## 3.2 Business Processes for typical U3As





# 4 INFORMATION TO SUPPORT BUSINESS PROCESSES

The following high-level information types have been identified to support Network and a U3As business processes from the perspective of different parties.

Further information including Technology Opportunities for each of these is included in the Appendices document.

## 4.1 U3A Network Information Types:

Party/Process/Scenario	Information Type
<b>A New/Small U3A</b>	Best Practices
	Website Presence
	Member Details
	Discussion groups
<b>An Existing U3A</b>	Best Practices - contribute and consume
	Membership - tips and tricks, enhancements
	Membership details
<b>A Member of the Public</b>	Details on U3A Movement
	Find a U3A
	Find a course
<b>A Funder or Partner</b>	Details on U3A Movement
	Participation - Demographic Details
	Engagement - Delivery
	Funding agreements
	Outcomes from Funding agreement initiatives
<b>Network Management</b>	Storage of Key Organisational documentation
	Quality
	Delivery
	Storage of Key documents for each U3A
	Manage Communications
	Manage Finances
	Asset Management
	Training Records

## 4.2 Information Types for a Member U3A:

The following high-level information types have been identified to support a U3As business processes.

Party/Process/Scenario	Information Type	
<b>A New/Small U3A</b>	Best Practices	
	Website Presence	
	Member Details	
	Discussion groups	
<b>An Existing U3A</b>	Best Practices - contribute and consume	
	Membership - tips and tricks, enhancements	
	Membership details	
<b>A Member of the Public</b>	Details on the U3A	
	Details on courses offered	
	Sign up to the U3A	
<b>A Funder or Partner</b>	Details on the U3A	
	Participation - Demographic Details	
	Engagement - Delivery	
	Funding agreements	
	Outcomes from Funding agreement initiatives	
<b>U3A Management</b>	Storage of Key Organisational documentation	
	Monitor Outcomes	
	Members Details Tutor Details - and courses offered Courses and Rooms - Schedule Enrolments - Students In Courses Classes - courses delivered	
	Manage Communications	
	Manage Finances	
	Asset Management	
	Training Records	
	<b>A U3A member</b>	Details on the U3A
		Sign up to a U3A
Enrol in Courses		
<b>A U3A Tutor</b>	Course Outline	
	Class Lists	
	Course Materials	
	Course Surveys	
	Course Attendance	

## 5 CURRENT SYSTEMS AND ARCHITECTURE

### 5.1 Technology Usage within U3A Network (Current state)

- Funders and partners look to U3A Network to represents all Victorian U3As.
- To provide this representation, Network needs to collect, collate, present and store demographic and course delivery information from all U3As.
- In addition, contact information for all U3As is held by Network

#### 5.1.1 NMDB

NMDB is a customised version of Soft Sys application MASS that was designed to allow all U3As to enter core demographic information about their U3A membership such as:

- Male/Female members by age range
- Total no of course, course hours

It also stores information on officeholders, contact numbers, etc.

Feedback on NMDB from Focus Group and U3A Network Office staff:

- It is difficult to set up for a new U3A – needs help from the UMAS support group for this
- It is not perceived as being user friendly.
- Is missing certain demographic information
- Does not provide any information back to U3As
- Does not allow contact details for office bearers to be shared between U3As – so a President of one U3A can contact a neighbouring one.
- Is difficult for U3A Network admin staff to get a consolidated list of Office bearers – have to cut and paste from each U3A.
- Can it be replaced – e.g. by an off the shelf product.
- Difficult to perform data analyses on data in NMDB
- A replacement for NMDB should be investigated.

#### 5.1.2 Spreadsheets

Spreadsheets are used as a means to capture and collate information from U3As.

Because multiple member management systems are in use, the spreadsheet has become a useful tool that can be populated with data by U3As that use membership management systems such as U-MAS or MyU3A; or can have data directly entered by U3As that do not use member management systems.

The Course hours spreadsheets are an example of this usage pattern.

#### 5.1.3 Website

Network uses the U3A Network Website [www.u3avictoria.com.au](http://www.u3avictoria.com.au) to provide information about the U3A movement; to allow the public to find a U3A, to provide access to the NMDB and to provide information on news and events.

The website has recently been re developed and works well on Mobile devices.

A separate project to further update the Network Website is getting under way early in 2018. This project includes functionality update and design elements.

## 5.1.4 Other Systems in Use

### 5.1.4.1 Digital Channels:

- Facebook – “U3A Network Victoria” – is kept up to date with regular feeds.
- U3A Network Victoria Website <https://www.u3avictoria.com.au/> (see above)
- Periodic General Newsletter (*U3A Matters*)
- Periodic Course Communicator Newsletter (*U3A Education Matters*)
- Monthly Administration newsletter – (*eBulletin*)

### 5.1.4.2 Document Management

- Box.com – Used for File Sharing by U3A Network Office, Network Executive & some volunteers (e.g. UMAS Implementation Team, Book Keeper, Editor)

### 5.1.4.3 Email

- U3A Network Email system is on U3A Network Servers in Queen Street.

*Is there a case for moving from an on-premise email solution to a cloud based system (e.g. Office 365?)*

### 5.1.4.4 Finance

- MYOB – running on U3A Network Servers in Queen Street.

*Are there issues in book keeper, treasure and Network Executive accessing Financial information? If so, consider moving to a cloud-based Finance System rather than on-premise.*

## 5.2 Technology Usage within U3As (Current State)

### 5.2.1 U3As Member Management Systems

A number of Member Management Systems are in use across the U3As in Victoria including:

#### 5.2.1.1 U-MAS

UMAS is the endorsed membership management system for U3As that wish to adopt it. UMAS is a customised version of the MASS Membership Management Software, provided by Soft Sys (Peter Brooks). This is provided at a low cost to around 30 U3As – ranging from small, emerging U3As to large groups with over 1000 members.

- A volunteer technical support group provide implementation help and first line support to U3As.
- The software code base is managed by Soft Sys
- Enhancements for U3A are managed through the technical support group.
- There are typically 2 updates per year.
- The system is web based, written in PHP and stores data in the MySQL database.
- A separate install is required for each U3A using the system.
- Network provides help for smaller and emerging U3As by providing hosting space on their shared Siteground server.
- Larger U3As organise dedicated hosting on a provider of their choice (some use Siteground too).
- The system's user interface is designed to work on PC browsers and does not scale to support smaller mobile browsers (non-responsive user interface).
- There are no API's to allow secure access to data from other systems.
- Some U3As have accessed and exposed data on their websites (e.g. Emerald U3A) via direct database read only access.

#### 5.2.1.2 MyU3A

MyU3A was developed by a member of Geelong U3A, based on a system he built for other clients. It is being used by a number of Victorian and Interstate U3As.

- The system is run on a single server out of a Sydney data centre. There is one code base, with multiple databases - one for each user U3A.
- The system uses a proprietary non-relational database. Data is stored in indexed files with linked text files for the course details.
- There has been a proposal to move it to MySQL, but this has not happened, and is not a high priority.
- Backups of each site are via csv exports + text files once per day, sent to each U3A.
- U3As displaying course data on their websites use file extracts rather than direct read data access from database.
- Support is via a team of volunteers, managed out of Manningham U3A, which has recently evolved into an incorporated association.
- Aim is to 'evolve' the system over time.
- More details are on the [www.myu3a.net](http://www.myu3a.net) website

#### 5.2.1.3 Other Membership Admin Systems

- We are not aware of any other systems in use at more than one U3A.

## 5.2.2 U3As' Website Presence

- Virtually all U3As have some sort of website presence.
- A review of the websites for participants in the Focus Group outlined a broad range of functionality and support for modern devices
- Many websites appear to have been built a number of years ago, and utilise older web technologies and techniques that do not scale well on smaller devices.
- Refer to the Appendices document for examples of current website practice across different U3As.
- Websites may be the first contact that a (prospective) member has with the U3A, so the look and feel of the site, particularly for younger U3A members is important.

## 5.2.3 Website Template Project

In 2017 a new volunteer technical group, budded off from that group supporting U-MAS began offering a software template to help small U3As and those with failing or obsolete or no websites to create a basic website. The U3A personalises the template with its own data, logos, and other materials. It can be installed in three ways :

- Installed as a stand-alone system.
- Installed in conjunction with installation of Network's member administration system product, U-MAS.
- Installed to be linked with an existing U-MAS instance.

By the end of 2017, nine U3As had created or updated their own websites, vastly increasing their publicity and visibility to the general public and offering additional services to existing members.

Support from the volunteer team includes guidance in registering a domain name, finding a host service, and other logistical aspects of running a website. This support structure is modelled on the U-MAS support team.

## 5.2.4 U3As Compliance and Storage Technology Usage

### 5.2.4.1 Record keeping and Compliance

- Many U3As are using online storage for some of their records – be it via email attachments, file sharing sites such as box, drop Box, OneDrive etc, or more sophisticated online tools such as Airtable.
- For many U3As, the governance behind this usage is ad hoc – and depends on the tech savvy and predilections of the current executive team in the U3A.
- Because some of these technologies are linked to personal identities, there may be issues with loss of documents and message trails when new members transition into an executive role at a U3A.
- There are also tales from some U3As of 'garages full of documents' that have accumulated over time.

### 5.2.4.2 Email Usage

- Emails are universally used in the management of all U3As.
- The penetration of (active) email usage in the membership of U3As is still an issue for many U3As
- The mapping of U3A management and volunteer roles to emails is an issue in many U3As.
  - People being left off distribution lists
  - People on too many distribution lists
  - Having to monitor and manage multiple email addresses

- What happens to emails when an office bearer leaves or is appointed to a position
- Compliance issues relating to use of personal versus U3A sanctioned emails
- Need email strategies that support One person filling multiple roles (small U3As) – or wanting a team to fulfil a single role (eg. Membership for a large U3A)

## 6 INFORMATION GATHERING FEEDBACK – ISSUES AND CONCERNS

As an important part of the Technology Strategy exercise, meetings were organised with the following stakeholders:

### 6.1 Stakeholder Meetings

#### 6.1.1 U3A Focus Group meeting – November 2017.

The focus group comprised members from Suburban and Regional U3As, Technical Group members, and U3A Network executive members.

This meeting broadly considered the experience of the participants relating to technology use and opportunities

- Within their U3As,
- With their Members,
- Between U3As,
- With External Stakeholders and
- Within U3A Network

Details of the feedback from this meeting are summarised in the appendices document.

One of the major aspects of the Member U3A feedback was an emphasis on the unfriendly and inefficient nature of some parts of U-MAS; the system was characterised as written for administrators, not for general members of a U3A trying to become members or enrol in courses.

*Recommendation from the Focus group was that U-MAS membership system direction should be focussed on addressing these perceived usability issues.*

#### 6.1.2 MIS Meeting – December 2017

This meeting with Susan Webster, Hans Eisen and the new U3A Network Administration Manager was to confirm the requirements for U3A admin and management.

It focussed on the reporting requirements by funders such as DHHS and on the demographic information stored in the NMDB system.

#### 6.1.3 Technical User Group meetings – Nov & Dec 2017

Meetings to principally discuss U-MAS, it's support and future directions.

#### 6.1.4 Meeting with Website Template developer – Dec 2017

Meeting to discuss the Website Template generator offered by Network to U3As.



- Purpose of the Template generator is to give a quick start to U3As that want to create/replace their web presence with a contemporary responsive website that is mobile and tablet friendly.
- Also discussed additional work done by the developer in extracting the U-MAS course data for publishing in a responsive manner (see for example work done at Emerald on *Today's and Upcoming Events* <https://u3aemerald.org.au/courses/> )

### 6.1.5 Meeting with U-MAS developer – Dec 2017

This meeting was mainly to review integration and data extraction capabilities of U-MAS to support Network's desire for offering an aggregated course offering search on their web site.

- A capability to map a (locked) set of U3A Network Course Categories to the U-MAS Course Categories used in a U3A has been developed (but has not been rolled out).
- The developer has prototyped web service calls in U-MAS and NMDB that would allow course information **from U3As running U-MAS** to be aggregated on the central NMDB database.
  - This is a start, but it ignores U3As that are not running U-MAS.
  - It pre-supposes that the NMDB is an appropriate place to store this aggregated course data.
  - The developer suggested that perhaps a file upload capability could be provided for U3As not using U-MAS.

### 6.1.6 Meeting with MyU3A maintainer (Jan 2018)

This meeting with the MyU3A support manager was held in Jan 2018 at Manningham U3A.

Purpose was to confirm MyU3A architecture, support arrangement and integration possibilities (as course aggregation was on the table at that time).

### 6.1.7 Meeting with U3A Network office manager Jan 2018

#### To discuss Wild Apricot as a potential option for NMDB replacement

In feedback for review meeting it was mentioned that a commercial product, such as Wild Apricot may be able to be used to replace NMDB. A meeting was held with U3A Network Office Manager on 26/1/18 to review this option.

- Wild Apricot does not provide fields with Numeric validation suitable for recording demographic information. It is likely that this would allow invalid or inconsistent data to be entered.
- Difficulty in storing demographic fields against an organisation (e.g. U3A Moreland) and not against the individual contacts for that organisation.
- Based on initial evaluation, Wild Apricot would not be a good fit for replacing NMDB

An indicative set of high level technical requirements for an NMDB replacement have been produced and are presented in the Appendices.

## 7 FROM AND TO STATES AND TRANSITION ACTIONS

This section summarises the Current and (Potential) future States for Network and the U3As, and the Transition Actions that could be implemented, over time to move towards the future states.

Note that particularly for U3As, the Current and Future State's will vary depending on the U3As location, size, maturity and future strategy.

The Transition approach leads onto recommendations, the Future states provide guidance in decision making.

Current State	Transition	Future State	Network	U3As
Best Practices - Governance are largely held within U3As	<ul style="list-style-type: none"> <li>Network documents shared folder &amp; storage guidelines</li> <li>Network identifies key U3A individuals to populate best practices</li> <li>Network recruits moderators for each discussion board/area</li> <li>Network Implements Portal to support discussion boards &amp; doc storage (Office 365?)</li> </ul>	<ul style="list-style-type: none"> <li>Portal is setup with areas to record best practices</li> <li>Each U3A management team has access to Best Practices area</li> <li>Discussion boards with moderators are active</li> <li>U3As are using and refining best practice content</li> </ul>	✓	✓
Member Management (UMAS) Concerns over transparency and governance	<ul style="list-style-type: none"> <li>Network sets up discussion board to canvas UMAS feedback and to encourage user to user support.</li> <li>Process for capture of enhancement requests documented</li> <li>Network implements Portal to support doc storage and tips and work arounds.</li> </ul>	<ul style="list-style-type: none"> <li>Clarity in UMAS support and enhancement process for all UMAS user U3As</li> <li>Portal is setup with areas to record UMAS documentation, best practices, U3A specific work arounds etc.</li> <li>Discussion boards with moderators are active as a peer to peer support tool.</li> </ul>	✓	✓

Current State	Transition	Future State	Network	U3As
Demographic Details (NMDB) Concerns over ease of use - from user and admin perspective. Difficulty in changing demographic items Difficulty in extracting analytic information	Network reviews demographic requirements with U3As, Network Management team, Funders and Partners Produce requirements documentation (see Appendices for a draft) Review off the shelf products for fit (Wild Apricot appears non-suitable) Produce a prototype in Custom Dev/Excel/PowerApps or ?? Review with test U3As and Network Build production version and roll out	NMDB replacement being used by U3As Network able to obtain statistics more readily Contact details allow U3A Exec Committee members to network	✓	✓
Find a course - public cannot find a course and a U3A to contact from U3A Network website.	Near real time view of courses across all U3As investigated and deemed to be a low priority. Alternative may be to use the course delivery statistical returns from U3As as an historic view of courses that were delivered - and pass this on to satisfy course enquiries. Network to record the number of enquiries (by phone) to determine if/when this could be implemented	Query function for Network Admin staff is available to search on courses that were delivered e.g. in prior 6 months to satisfy a public query. Initially based on the consolidated course delivery spreadsheets	✓	✗
Course Delivery - hours collection is not careful or consistent across U3As	Review Course delivery statistics that need to be captured by Network e.g. for funders. Review the mechanism for U3As to capture course delivery hours. Review ways to reduce manual handling and aggregation by U3A Network See Appendices for some feedback on a Spreadsheet based approach	More Clarity in statistics that need to be captured with U3As and Network Improved mechanism to capture course hours Potential linkage to provide historic course/U3A search function for U3A admin staff	✓	✓

Current State	Transition	Future State	Network	U3As
Outcomes not communicated to U3As or tracked consistently	Network works with Funders to identify the types of outcomes that need to be tracked. Network undertakes dialogues with U3As to advise on Outcomes that need to be tracked to access funding. Systems modified to allow U3As to capture required Outcome measures (e.g. before/after surveys, hours delivered etc) and linked to the outcome.	Outcomes have been communicated to U3As Systems are in place to allow outcomes to be captured by U3As Network can consolidate outcomes and provide these to Funders. Outcomes stored on Portal against Funders.	✓	✓
Quality of course delivery is not regularly measured	Network work with U3As to identify quality metrics. Network provide template quality capture tools - such as feedback surveys.	U3As regularly monitor quality and satisfaction Network provided with aggregate satisfaction statistics by U3As Statistics stored on Portal	✓	✓
Organisational documentation - currently in box.com	Investigate then Implement a portal solution for Network. Setup portal and document management structure Migrate docs from box to portal	Organisational documentation is consistently stored in Portal file storage	✓	✗
Document Storage for interactions with each U3A - is not provided by Network for the U3A	Setup areas in portal for each U3A - using templates Provide Access to each U3As executive to their area	Network and the U3A executive can store and access documentation specific to that U3A - MoU's , annual reports etc.	✓	✓
U3A Websites are of variable quality	U3As encouraged to review web presence. Network website template tools made available U3As share Website improvement experiences on discussion boards	U3A Websites are more current & work better on smaller devices.	✗	✓
U3As don't typically have portal access.	Network implement portal for their use and document learnings. Network & U3As Review Portal offerings for small and large U3As and document. User/Support groups setup for nominated portal solutions	One or more portal solutions are in use at a number of U3As. U3As are supporting each other via Network Portal spaces & discussion boards.	✗	✓

Current State	Transition	Future State	Network	U3As
Network have on-premise email	Investigate move to cloud-based email in conjunction with Portal implementation.	Network is using a cloud-based email system (Office 365?)	✓	✗
Network have on-premise MYOB finance system	Investigate need to move to cloud based financials to better support remote usage by book keeper/treasurer/network exec team.	Network (maybe) on a cloud version of MYOB or another financial package. Finance system users have full access from home and office.	✓	✗
U3As want to implement technology solutions but don't know how or what to choose.	Configure Network Portal to store a register of candidate technologies that can satisfy a U3As business requirements. Encourage U3As to share experiences and tips as to what works and what doesn't	A pre-packaged set of recommended technologies, templates and processes are available on the Network technology register for New and Emerging U3As. Larger and more established U3As share technologies and processes that work for them.	✓	✓
Distance Education – Individual U3As have piloted various initiatives.	Network has begun investigation of how distance education could be used within the State, using the support model developed for U-MAS of a team of volunteer experts	A suite of distance education models is available for Member U3As to choose those appropriate for their own circumstances – eg, skill levels of U3A members and tutors, internet quality and availability in the area, types of courses or activities to be included.	✓	✓

# 8 TECH STRATEGY OPTIONS AND RECOMMENDATIONS

From the technology review and focus sessions, a number of technology options and recommendations are presented here for the consideration of Network and U3As.

## 8.1 U3A Network – Technology Strategy Options.

### 8.1.1 U3A Network to provide aggregated Courses search across U3As

There is an expectation that U3A Network should be able to provide an aggregated and searchable portal for seniors looking to engage in U3A learning opportunities within Victoria. The pre-requisites are

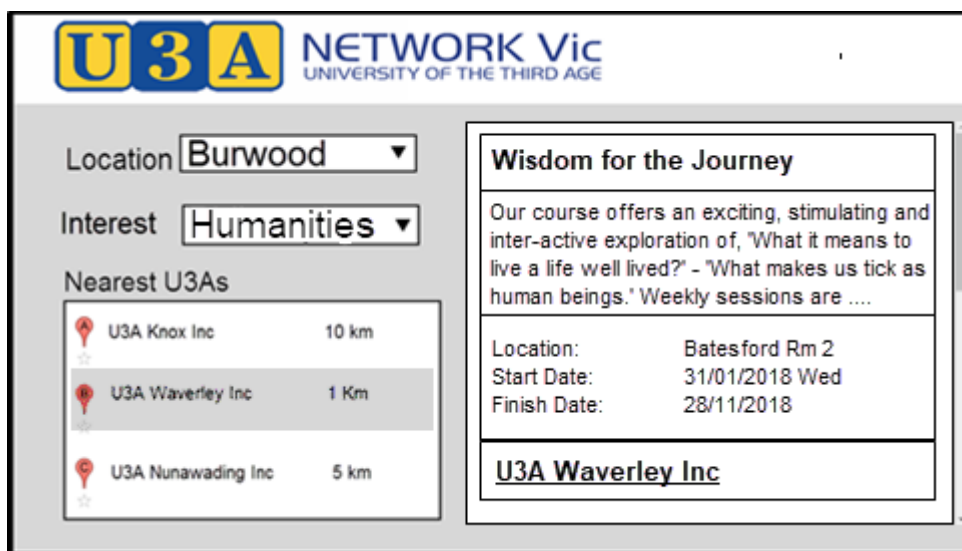
- Providing ways to accept or poll for course offering changes from all U3As. *There are technical considerations to enable this that are discussed in a later section of this document.*
- Implement a standard taxonomy for (at least) course category/parent codes in all received courses.
  - o This could be done at the source, in the Member Management System by adding a locked down set of standard category codes (as proposed by U-MAS developer) which would be associated with each course (in addition to the U3A specific parent codes)
  - o via a set of category mapping pairs setup for each U3A – which would be applied to course data prior to aggregation in the Network course repository.
    - For example:

U3A Category/Parent Code	U3A Category or Parent Code	Network Search Code
Volunteer	AAVOL	VOL
Event	AE	EVENT
Art	ART	ART
Art Restricted	ARTR	ART
Computers	COMPUTER	COM
Craft	CRAFT	CRAFT
Dance	DANCE	DANCE
Dance Restricted	DANCER	DANCE
Exercise Movement and Meditation	EXEM	EXER
Exercise Meditation and Movement Restricted	EXEMR	EXER
Exercise Restricted	EXER	EXER
Exercise	EXERCISE	EXER
Exercise Sport	EXES	EXER
...	...	...

- o Mandating that just the U3A parent/category codes are used when setting up courses
- Because not all sites are using U-MAS, all of these approaches may need to be implemented.

#### Course Search example

In concept, this aggregated course data would allow a web page such as below to be built and hosted on the Network website:



Clicking on any of the links or Icons could take the enquirer to the relevant U3A provider.

Note that this is not a recommended user interface, just a conceptual example of what would be possible if the course aggregation infrastructure is put in place.

It is predicated on solving the technical issue of transferring up to date course information to Network from all (participating) U3As. Further investigations (see appendices) have identified that this is a non trivial exercise, and may tie up significant Network resources to resolve.

*This has been classified as a Low Priority by Network:  
 "The general view on Network Committee and at DHHS is that the amount of work to create an interactive search facility and to keep the data up to date is not justified by the benefits. Creating and maintaining such a system would absorb money and human resources that could give higher benefit in other areas such as website creation, administration systems, distance education and sharing/interaction."*

### 8.1.2 Streamline Course delivery hours capture process

U3A Network is asked to collate estimates of delivered contact hours for all U3As as part of some Government and NGO funding requirements.

Currently this is a manual process which requires considerable time from Network admin office to consolidate and update a large master spreadsheet with one worksheet from each U3A. The formats of the sheets from each U3A are different, which complicates the consolidation process.

A way to reduce the load on Network may be to share a separate web-based spreadsheet for each U3A with a standard collection summary sheet and a second sheet which mirrors the data capture format for that U3A.

A simple master spreadsheet for U3A Network could then link to the summary collection sheet for each U3A – one row per U3A.

A proof of concept has been created using Google Sheets with sample data from Nunawading and Moreland U3As. An overview of the exercise is included in the Appendices and further details of this can be made available to the U3A Network administration team.

*Recommendation is to review and develop the business process for course delivery collection.  
In the short term, Network is planning to aggregate a spreadsheet via manual contact and compilation using a Contractor.*

### 8.1.3 Implement a Portal to provide a central repository for best practices and learnings

One of the recurring themes from the Focus group discussions, and discussion with Network staff and executive members was the need for U3A Network to provide an accessible central repository for best practices and learnings across the U3A sector.

As such, it is recommended that Network investigate provision of a portal to provide at least the following:

- A secure folder structure for storing Network internal documents
- Security model to allow appropriate access to U3As executive & operational teams
- A standard filing and folder structure for U3As to store and download documents
  - Best Practices
  - Document Templates
  - Standard Documents (e.g. Privacy, Dispute resolution etc.)
  - Network Publications
  - Project Related documentation (e.g. Distance Education, Tutor Bank etc)
- Ability for Network to manage Portal (with training)
- Potential Partner access to selected areas
- Project or Team based areas allowing collaboration
- Discussion Boards – to allow moderated collaboration between interest groups - e.g. UMAS users, Web Template users etc.
- Surveys
- Other requirements (TBA)

If Network implements such a Portal, there may be learnings that can be leveraged for larger U3As to do likewise.

*Given the generous terms offered by Microsoft to Not for Profits, it is recommended that implementation of an Office 365 portal be explored to support U3A Network.*

### 8.1.4 Distance Education - Technology and Support.

From Focus Group discussions it seems premature to recommend specific technology options to support Distance Education prior to the completion of the Bendigo and Gippsland pilots.

It seems clear though that in addition to the basic technology components required to support Distance Education, the face to face engagement, training and support of content producers and the participating U3A members is critical.



This would be in addition to one off funding to seed the technical components – cameras, editing software etc. for participating U3As.

*Feedback from the Focus Group is that the Technology Strategy should be cautious about recommending or allocating resources until there are clearer signs that tutors and members are willing to support various forms of Distance Education.*

### 8.1.5 UMAS Member Management System Recommendations

*It was confirmed that Network acts as the 'owner' of the UMAS application.*

*It was also confirmed that Network does not mandate UMAS or any other system that U3As must use.*

*It was suggested that Member U3As be surveyed on usability and customer experience with UMAS*

*In addition to the Strategic objectives stated below it was recommended that:*

*Governance, transparency and collaboration for UMAS be improved via the following:*

- *Message boards to allow UMAS users to document issues, work arounds, request help etc – to foster an ethos of self-help and sharing amongst the user base.*
- *Areas on the Network portal to allow best practices, help guides etc to be uploaded, shared and refined*
- *UMAS enhancement proposals to be shared for comment and prioritisation by UMAS user base*

The current Strategic objectives for UMAS have been summarised in the Appendices and are presented below:

*UMAS Strategic Objectives:*

- *Improved ease of use for Members*
- *Improved administrative capability to assist with management and communication with Members*
- *Implementing certain missing functionality*
- *Ensuring security is at a level that reflects contemporary standards.*

In early 2018, the U-MAS Support Team circulated a discussion document *U-MAS Strategic Analysis and Recommendations*. This document took into account inputs from the Technology Strategy focus group, feedback at U-MAS User Group meetings, and integration possibilities identified through other technology work like the Website Template Project. The purpose of the document is to assist with prioritising U-MAS enhancements – what work will create the most benefit for Member U3As. As of March, 2018, this document is being reviewed by the Network Steering Committee and the Technology Strategy Focus Group.

### 8.1.6 NMDB replacement System

There is general agreement that the current NMDB system is not fit for purpose from a U3A and U3A Network perspective.

*It is recommended that a project to assess the replacement of NMDB is commenced.*

*This could involve:*

- *Review Reporting requirements with Network and Partners*
- *Produce specification for NMDB replacement to capture U3A details and statistics*
- *Prototype using Spreadsheets to confirm process and the capture items*
- *Review implementation options – which may include*
  - *Bespoke build – using Responsive frameworks*
  - *Web Spreadsheet based – hosted in a portal*
  - *Rapid application build (e.g. Microsoft Power Apps)*
  - *Other (TBA)*
- *Build and roll out.*
- *Support.*

### 8.1.7 Technology Support for Network and U3As

From discussions with Network admin staff and the volunteer technical support group members, it is suggested that consideration be given to providing some ongoing technology support for Network and U3As.

The success of the rollout of U-MAS to around 30 U3As is putting more load on the volunteer technical support group at U3A. If suggestions for aggregating course offerings across U3As are implemented this will increase the load too.

It may be prudent for Network to review the resourcing required to provide technology support to Network and the U3As – and include an allowance for a part-time resource to provide a day-to-day technology support to the technical support group and admin staff of Network.

*Recommendation is that further research be done on this option by Network, and that clear outcomes and measures are put in place prior to engagement of such a resource.*

## 8.2 U3As - Technology Strategy Options.

### 8.2.1 Process – Technology Register for U3As

From the focus group meetings, it appears that most U3As have a similar set of core requirements and processes that are satisfied to a greater or lesser extent by a mix of technologies.

The types of core processes mentioned included:

- Run Courses
- Book Venues
- Get Tutors
- Sign up Members
- Enrol Members in Courses
- **Recruit and manage volunteer workers and administrators**

Supporting activities within the U3A may include:

- Planning
- Networking with stakeholders
- Monitoring and Reporting
- Compliance – finance, information management, security, assets etc.
- Processes & Technology to support the U3A and members.

*There were suggestions that a register of candidate technologies that could satisfy each of these business requirements be built and maintained on a U3A Network Portal.*

- A pre-packaged set of technologies, templates and processes could be provided to new and emerging U3As
- Larger and more established U3As could contribute and select technologies and processes that were more appropriate to them.
- Facilitating the sharing of such information is seen as a way to increase collaboration between U3As and to improve the overall compliance and professionalism of Network as a whole

### 8.2.2 Exposing Data from Member Management Systems

Several U3As expressed a desire to expose some of the data in the Member Management Systems in a more contemporary fashion.

- *Learnings from work at Emerald and Whittlesea to could be leveraged by other U3As that wish to expose course data in a mobile friendly manner.*
- *The API wrapper technology discussed in the course aggregation section may also be able to be leveraged to support this objective.*

### 8.2.3 Review U3A web sites.

Many of the U3A websites reviewed are still using older style web technologies which do not work well on modern devices. U3A Network has sponsored the Website Template generator to help smaller U3As provide a modern website experience.

*It is suggested that all U3As are encouraged to review their web presence to check if it is mobile friendly, and if not, to consider the U3A Network Website Template as a starting point*

In addition to Public and Partner facing web sites, there is also the need for a web accessible way to support the different groups within a U3A.

These areas would typically be accessed by authenticated members or partners, as opposed to the general public that access a website.

*Recommend providing guidance to U3As on implementing Portal style functionality after Implementation of a Portal by Network to leverage the learnings.*

*Also provide a space on the Network Portal to share experiences from other U3As embarking on a Portal journey (e.g. Whittlesea?)*

# 9 ACRONYMS AND DEFINITIONS

Term	Description
<b>ACFE</b>	Adult, Community and Further Education Board
<b>API</b>	Application Programming Interface. Provides a way of connecting different systems in a standard manner.
<b>C (Language)</b>	A low level general purpose programming language.
<b>COTA</b>	Council On the Ageing - (but they don't like to use this ageist name !)
<b>DLWS</b>	DL? Workshop Digital Literacy Workshop - a series of workshops run a couple of years ago
<b>DSO</b>	Development and Support Officer (Network staff member)
<b>M&amp;P</b>	Marketing and Publicity
<b>MySQL</b>	An open source database
<b>MyU3A</b>	A member management system originally developed by a member of the Geelong U3A. It is used by a number of U3As and is maintained by a volunteer group. It is believed to be written in a dialect of the C language.
<b>NEC</b>	Network Education Committee, headed up by Anne Thompson, also a member of the Network Committee
<b>NMDB</b>	Network Member Database – Head office list of office bearers + demographic summary information for all Vic U3As
<b>NWO</b>	Network Office YES
<b>P&amp;P</b>	?Policy and Planning, a role on the Network Committee held by Susan Webster
<b>PGS</b>	Program Growth Support - a funding stream under the Network service contract with DHHS
<b>PGSF</b>	? Program Growth Support Fund
<b>PHP</b>	A Modern programming language used extensively for web development.
<b>Pub/Sub</b>	publish–subscribe is a messaging pattern where senders of messages, called publishers create a topic and send messages to the topic. Subscribers then receive messages for the topics that they have subscribed to.
<b>RHB</b>	Resource Handbook
<b>SP</b>	Strategic Plan
<b>SP&amp;P</b>	Department of Aged Care, Seniors Programs and Participation
<b>TUG</b>	Technology User Group - This group has been replaced by the Technology Steering Committee.
<b>U-MAS</b>	A customised version of the MASS member management system developed by Soft Sys. Written in PHP and storing data in the MySQL database.
<b>Web Service</b>	A Web service is a software service used to communicate between two devices on a network. It does so over HTTP using standard technologies such as XML and SOAP.

## 10 REFERENCES

- Excerpt from U3A Network Strategy document as presented to Focus Group
- Technology Strategy V3 April 2017 (attached)
- Focus Group meeting notes - 8 Nov 2017 (Refer Appendices Document)
- U-MAS Developer Meeting - 22 Dec 2017
- Meeting with Web Template Developer – 13 Dec 2017
- MIS Meeting – 7 Dec 2017
- Tech User Group Meeting – 24 Nov 2017
- Presentation on Website Template – Kevin Whelan dated 18/9/2017
- Meeting with MyU3A Support Manager – 18 Jan 2018
- Meeting with Network Office Manager – 25 Jan 2018

## 11 APPENDICES – (REFER TO OTHER DOCUMENT)

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