

1. Introduction

Cloud computing is a generic term for internet-based services that cover such diverse areas as media sharing (e.g. photographs and movies clips), business services and many storage and back-up facilities.

This Advice Sheet focuses on those areas that are most likely to be of interest to the running and management of individual U3As. The information given here is intentionally at a high level but it should provide sufficient detail to enable decisions to be made whether or not to pursue the topic further.

As this is a rapidly growing and changing topic, we will provide further information relevant to the running of U3As as well as covering potential use by Interest Groups and individual members.

2. What Is “Cloud Computing”

Perhaps the easiest way to think of it is to imagine that instead of having applications and data sitting solely on your computer, they sit on the internet instead. The fact that all of this is held remotely means that it can be made available to any device you wish, whether this is a desktop PC, a laptop, a tablet or a smart phone. Furthermore, as all data is kept fully synchronised, every authorised device will be looking at the same up-to-date information.

3. How is this relevant to my U3A?

Every U3A needs to be able to share and back-up its data in a manner that is controlled and secure and which doesn't rely on specific individuals and their PCs (which may or may not be kept up-to-date with the latest software). Cloud computing removes these potential problem areas by automating back-ups, making services available on a wide choice of hardware and allowing joint access by authorised individuals. As storage capacity is unlimited and as information is accessed directly via the internet, there is no need to email any sensitive data. Furthermore, there are opportunities to keep software up-to-date so that the latest version is always being used by all authorised users.

Finally, as authorisations can be both added and deleted without incurring any change to any underlying information, any technical issues relating to passing on responsibilities are eliminated.

In a nutshell, you get automatic back-ups, data that is synchronised across all agreed devices, unlimited storage, secure access for authorised individuals and the use of up-to-date software – again across all devices.

Each of these aspects should be considered as the foundations to your considerations about Cloud Computing.

4. What do we need to consider?

The first things to think about are:

- Information needs:
 - o What information do we have?
 - o Where is this information held?
 - o What do we need to share?
- Requirements of individuals
 - o Who needs to have access?
 - o Who will be responsible for keeping it all up-to-date?

For example, the most important (and the most sensitive) information is that relating to members. Consider:

- Who “owns” the data in terms of keeping it accurate and up-to-date (e.g. Membership Secretary)
- Who may wish to see parts of the data e.g. Interest Group Leaders / Convenors / Committee members.

Other less sensitive information (but important in terms of keeping everyone informed) should also be considered. For example:

- A calendar of events.
- Current and previous Newsletters.

ADVICE SHEET 17

CLOUD COMPUTING

- Guidelines for group leaders.
- Information for specific Interest Groups e.g. photographs / learning materials.

Having worked through this process, you then need to determine how to make the information available e.g.

- Direct access
- Delivered via a website

Only after thinking through what you need should you consider the technology.

5. What are the technical, legal and cost considerations?

First of all, start small and build from there. If you try to do too much at once, the risks are that something will be overlooked or some other mistakes made that could cause the initiative to be put on hold. The opportunities are too great to risk early negative experiences!

- Storage services (includes automatic back-up, availability across all devices etc)
 - o There are many suppliers who offer cloud-based storage. Most of these offer free storage up to certain limits so make sure that your chosen provider allows you sufficient space for your initial needs and that, should you wish to add a lot more information, that you won't be asked to pay unreasonable fees. Note that at this stage in Cloud Computing, amounts of free storage form a competitive start point and excellent offerings are available.
 - o You need to consider:
 - Word processed documents and spreadsheets – these will form the foundation of your requirements and should all fit comfortably onto your supplier's offerings.
 - Photographs – these take up considerably more space but can be stored in different levels of quality to save space.
 - Movie clips – these take up even more storage space so add sparingly.
- Security
 - o This is the area that causes most concern. However, major suppliers all offer usernames, passwords, encrypted access to and from the supplier's hardware, also encrypted storage.
 - o The main threat to security are the people who access the Cloud service! Sharing passwords and usernames is asking for trouble.
 - o Although the major Cloud suppliers offer recovery facilities should a file be accidentally deleted by a user, it is still recommended that you adopt your own back-up and version controls.
- Legal
 - o The main issue here are the laws relating to Data Protection. Whilst UK law is well established, the passing of information between countries is more complex – especially as you may not know exactly where your data resides. Increasingly, there are reciprocal agreements between countries. Please check what your potential supplier has in place.
 - o Don't forget – you are responsible for how your data is actually used!
- Software Applications

More and more suppliers are now offering their Software Applications (Apps) using subscription-based services. Microsoft Office is now available for an annual fee, as are services such as Photoshop. The advantages are that all versions of the apps across all devices will always be up-to-date and people will be working on the same versions, with the latest facilities. Before signing up, check how many users you need to cater for and how many licences you need.

6. What does the future hold?

This Advice Sheet is the tip of the iceberg and its starting point is the administration and management of your U3A. However, it is only a matter of time (if it hasn't happened already) that your members will be seeking advice on other Cloud-based services that share photographs, calendars and other such offerings.

What is certain, is that Cloud Computing is here to stay and will become more prevalent in the future. The quicker you start to use the services, the quicker you will be able to reap the benefits – and the advantages are too great to ignore.