Building a culture of online data back up

AgShare training and technical support has resulted in the safe back up of over 4 terabytes of key data and information previously at risk of loss

Overview

One focus of AgShare.Today's work is strengthening data management, and this includes delivering training and technical support to ensure that project data and reports are properly backed up using cloud-based software like OneDrive. Use of such software means that vital data and documents can easily be accessed and restored if lost – saving huge amounts of donor funds and time.

Recognizing the need

Very early in the lifecycle of AgShare.Today, it became clear that important documents and data belonging to partner projects were at high risk of being lost due to viruses, failed hard drives and theft of equipment like laptops.

Examples of such losses are common, and the implications are enormous in terms of time, money and opportunities lost. Yet the solutions are relatively simple: **(i) provision of tools** (such as cloud-based accounts to back up to), **(ii) strong capacity building** (to teach people the importance of backing up their data and how to do it), and **(iii) technical support** (to help people use the tools and restore data as needed).

But while such solutions are routinely made available to researchers in institutions based in the West, they are usually not available to researchers based in Africa. Overcoming this major gap in research support therefore became another aim of the AgShare programme, in response to demand from our partners.

Providing the tools

To address the data storage needs of our partner researchers, the AgShare.Today team set up a cloud-based platform for scientists to hold their information safely online.

To do this the team chose to base the platform on the Office 365 system and negotiated with Microsoft to have AgShare recognized as an educational non-profit. This gave the substantial licensing discounts required to allow this very high-powered system to be provided at a low enough cost for licenses to be given to all researchers.

One important part of this system was its function of "syncing" – which involves creating a document folder on a researcher's computer that automatically saves anything placed in it to the cloud. Syncing was found to be a much-needed solution to the slow internet conditions found in many areas across Africa, as researchers could work on documents in real time (on their computers) and then have any changes trickle up to the cloud whenever they were online.

Another key approach was providing a private area (OneDrive) which researchers viewed as the

equivalent of their private computer in the cloud. It was very clear from discussion with researchers that if their only option was to use a shared area which others might access, they would not back up all their work for fear of others seeing it. A sense of private space and ownership was therefore crucial to the high adoption rates AgShare has achieved.

Building capacity

The next step in the process for AgShare was to put in place a programme of capacity building. This provided formal training to teach large numbers of researchers the basics of using OneDrive and the benefits the software brought.

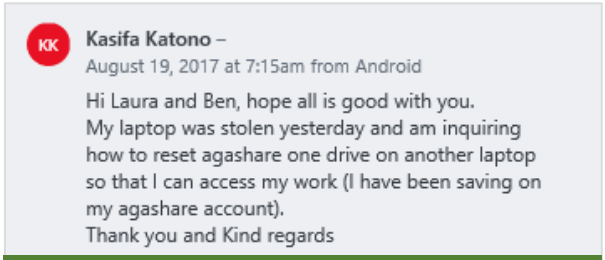
Various such introductions to AgShare's cloud-based platform were delivered in the first year of the programme to introduce people to key software, including OneDrive. Importantly, these were always run as short (afternoon or morning) sessions as part of other capacity-building courses, such as courses on journal-article writing. And they were always combined with other aspects of basic software use that would have a major impact on researchers' work (such as the use of data-validation and data-cleaning tools in Excel).

Care was then taken to provide one-to-one follow-up training to remind the scientists that these back-up systems existed and the benefits they offered. Such follow up was provided both by Skype and face-to-face when team members visited organizations as part of other AgShare engagement activities.

Providing technical support

Once researchers were trained in how to use the back-up systems, AgShare recognized that they would still need support going forwards. Partners can therefore reach out to AgShare in a range of ways – if they lose information, for example. Examples of these channels include Yammer, Skype and email, as well as a formal ticketing system.

This ease of access to AgShare's services has resulted in a large number of support sessions being delivered at the request of researchers (over 180 in 2017 alone), both in person and remotely. Such sessions were used to help researchers to back up data and restore lost data, as well as to deal with a range of other issues which were stalling their work.



Researchers now regularly reach out to AgShare.Today to receive support

Impact

Large amounts of information backed up

The impact of this work has been exceptionally strong. Over 3 terabytes of data have been backed up by AgShare on its server and, by the beginning of 2018, the 245 researchers in the AgShare.Today community had themselves safely stored over a terabyte of data in their private OneDrives. This constitutes hundreds of thousands of documents and Excel worksheets, which in many cases would have existed only on laptops or hard drives at risk of loss.

As a result, large amounts of data have been restored following instances of local file loss or lost or stolen laptops. This constitutes a considerable saving in terms of both researchers' time and the money invested by donors.

Lessons learned

- Using AgShare tools can prevent the loss of years' worth of essential project data.
- Engaging community members through meetings and training sessions in person makes them more likely to reach out to AgShare for data-management support.
- Engaging projects early is crucial to prevent data loss.

Find out more: Email enquiries@agshare.today