

BIW: Project archive BIW: Supply chain archive

Once a project is complete, clients and other team members often require complete copies of their project-related communications. BIW customers have the option, if they wish, of keeping their project data available online, or they can choose to receive a self-contained, fully searchable electronic archive of their data that is almost 'future-proof'. Team members can also receive an archive of the project, but only of the data to which they had access rights or which was issued to them.

The archive challenge

At the end of a construction project or programme of works (but also, sometimes, at intervals during a project), decisions have to be made about what to do with the body of information created by all of the team members. The usual solution is the creation of an 'archive' ("a place or collection containing records, documents or other materials of historical interest") relating to the project. Such archives are invaluable both to the client and to individual team members; they can become 'an entirely reliable rich source for data mining and post-project analysis and review' (CITSEC 2004); as such, they are not usually intended for day-to-day use, they are a back-up.

In most instances, the client would traditionally receive a substantial volume of as-built drawings and other information (eg: the Health and Safety File), but this archive would usually be in either a paper-based form (often in numerous ring-binders), or - reflecting the increasingly wide use of electronic files - stored on back-up tapes, CDs or DVDs. However, such a disk-based archive would, in effect, be a 'dumb' archive, similar to a simple file back-up undertaken by an IT department, as it would not include all the metadata (eg: issue lists, audit trails, etc) created around the project's documentation. The end-user would also need either the software used to originate different types of document or the appropriate viewing applications to access the documents held on the disk(s).

In the past, project team members would maintain paper-based archives of information relating to their own inputs to a project for maybe 15 or 20 years (construction manager Mace estimated that use of the BIW collaboration system removed the need to retain around 350 archive boxes on one project alone) - perhaps to protect themselves against claims and fulfill their professional indemnity insurance (PII) or other obligations after project completion. While supply chain members might nowadays also store such data on electronic media, they would face the same headaches as client organisations. Where a firm works on

numerous projects, the sheer volume of its archives can become a major challenge (a Construction Industry Computing Association seminar in November 2004 heard how, during 70 years of project work, multi-disciplinary consultancy Arup had accumulated more than 100,000 archive boxes, with an index held in 150 lever-arch files, and over 650,000 drawings held on microfilm!).



Particular issues here might concern the durability of the storage media (there have been instances of CDs deteriorating over time, for example) and the continued availability of hardware, software and operating systems used to create or read the stored information. All organisations need clear document retention policies: formal written guidelines about what type of information gets created, maintained, saved, archived or destroyed.

Email can also be a particular issue. Many business-critical communications, ranging from contracts and other corporate documents to project-related documents and drawings, can be sent and received through this route, yet many organisations do not have clear policies on retaining and storing such emails - let alone integrating their content into project-related archives (incidentally, BIW addresses the email issue through its integrated 'team mail' functionality which obviates the need for email communications outside the BIW platform).

BIW archiving options

BIW Technologies (BIW) offers the client and its project team members a range of archiving options:

Client's full offline electronic archive



BIW builds a self-contained archive from the relevant project(s) - essentially, a stand-alone website with all project data (drawings, documents, photographs, etc) and associated metadata (comments, RFIs, audit trail information, etc). This information is downloaded

from the databases at BIW's hosting facility and placed on a USB2.0 storage device (essentially, an external hard disk drive); it requires no installation or third party software apart from a standard web browser, and uses standard technologies in an effort to make the information as 'future-proof' as possible (the downside of such standard technologies is a compromise in performance, particularly with regard to searches). This device can either be stored itself as a back-up, or used to transfer the archive to the client's own corporate network, or both.

Team member's offline electronic archive



BIW builds a self-contained archive from the relevant project(s), but, reflecting the permission levels agreed for the consultant, subcontractor, supplier, etc, the archive only includes the project data and associated metadata to which that company had access

rights, or - more narrowly - all the items which were received by that company. If, say, a supplier was only involved in a single project within a multi-project programme, that company would get an archive only containing data relevant to that single project (as these might be relatively small archives, searching will be quicker than with the client's full archive, particularly for 'received data only' archives). Again, such archives are placed on a USB2.0 storage device that can either be stored itself or used to transfer the archive to the team member's own corporate network, and it includes software applications used to search, access and view data.

Where clients or team members may require regular 'snapshots' or back-ups of their data, the USB2.0 devices can, of course, be re-used, with the cost of the hardware discounted from the price paid for the archive service.

'Live' online archive, health and safety and FM tool

BIW keeps the relevant platform open and available online, allowing the owner and any authorised individuals (eg: operations staff, maintenance contractors, etc) to search, access, view and, where appropriate, update the stored information during the working life of the asset(s). As interaction with the system will tend to be less intense, this service is available for a much reduced monthly subscription. Data is also maintained within the latest version of the software so that the customer does not need to worry about the continued availability of, and support for, older versions of the software or changing hardware technology, over time.

Note:

It is not recommended that customers use full offline electronic archives to make project data available to their supply chain through their own 'extranet'. The 'future-proofing' constraints of the standard search technologies will make the archive slow to use, and - more importantly - full archives are designed for use by the ultimate customer only and so do not recreate the security settings maintained in the original collaboration environment - potentially, all supply chain members could view all data. If customers want supply chain members to be able to access data about past projects, BIW recommends that they use the faster and more secure 'Live' option.

BIW Technologies Limited

21-25 Church Street West, Woking, Surrey GU21 6DJ

T 0845 1300 800 Int +44 (0)1483 712620

F 0845 1300 900 Int +44 (0)1483 756325

E info@biwtech.com

www.biwtech.com