

Digital O&M Manuals – The way forward

There are so many reasons to move the Operation and Maintenance Manuals and other handover documentation to a digital only format that it is amazing that printed versions still persist. Here are some arguments for both formats.

Cost:

This is pretty clear cut. Electronic is quite simply cheaper than printed. It's very hard to find any argument to the contrary.

Production costs

Specialist O&M Authoring companies will charge more for producing a printed manual and an electronic manual than for electronic alone. These extra costs are not just direct printing costs but also those associated with the conversion of the base electronic O&M Manual to a separate printable version.

Storage costs

There can also be costs involved in the storage of large printed O&M Manuals simply because they take up valuable space.

Ease of use:

Finding material

Although there are some who will persist in claiming that paper manuals and files are easier to use, realistically this argument is only valid if they haven't spent any time working out how to use the electronic version or if the electronic version is badly organised, linked or referenced.

If a typical set of printed manuals consist of four or five physical folders sitting on a shelf and you need to access a particular mechanical drawing for example, you have to locate the correct file, check to see if the drawings are included within it or somewhere else then find your way to the particular document you require.

In the electronic manual you just click on the hyperlinks to view the subsections and then to open the drawings. This has got to be easier than physically moving a printed manual from a shelf to a desk, opening it, trying to find the index, thumbing through to the right section then going through the same process to locate the correct drawing within that section.

Viewing

There is a more valid argument that drawings especially are easier to view in full size printed format. Certainly, a very detailed services drawing in A0 or A1 spread out on a desk will probably be simpler to visually scan than the same thing presented electronically on a small screen or monitor if the user is not familiar with the zooming process and moving around the drawing.

Because of this, a good compromise is to just have the more important drawings printed and held in one location on site. This material would also be available with the remainder of the documentation and duplicates of the drawings on a disc.

At this point it's worth mentioning that nowadays, just about everyone has a tablet and or smart phone which can have the O&M Manuals or parts of them loaded directly to the device.

So, take the scenario of an engineer needs details of a certain system. He/she may well appreciate being able to view the full size printed drawing in the office but is also very likely to have a need to view the same thing on a phone or tablet whilst actually there in the plant room looking up at the system involved. This is where an electronic version located on his phone or tablet is useful.

Environmental / Ecological

We believe in doing our bit to slow down the unnecessary wastage of the planet's resources. The carbon footprint associated with the production of and delivery of multiple printed manuals versus a couple of DVDs or CDs is enormous. When you are talking about physical printed files numbering well into double figures versus one of two DVDs, it's not hard to work out which is more ecologically friendly.

Longevity:

Paper manuals inevitably end up having pages removed and lost or put back in the wrong place. They tend to become torn, lost or covered with a layer of some oil or dirt. In other words, their life expectancy is generally quite limited.

Electronic manuals in the form of discs can also be ruined it's true, but they can also very easily be copied to servers and hard drives and handheld devices.

Conclusion:

With the possible exception of printed drawings, there really is very little reason to waste money, office space and paper with printed documentation.

The ability to store everything on cds, dvds, servers, databases, laptops, the cloud, tablets and smart phones, the old arguments of needing to have something to physically put your hands on is seriously diminished.

Even in the event of power failure, in addition to the usual UPS and generator systems, the mobile devices can allow access to valuable information so the old 'what if there's no electrical supply?' question is sorted too.

Come on everyone. Let's move these things into the 21st Century and go digital only.