



“Ask the CRM”

April 2010

Question:

What are your thoughts on using CD's as a long term storage medium?

Response:

This is a question asked of me at every seminar that I had given in recent years. I am a proponent of maintaining records in electronic format, but only when it makes sense. I am not a proponent of retaining everything just because you can. I don't care what vendor marketing brochures or presentations say, as I still believe it is a waste of time, money and effort to retain information that no longer has a business need.

As a consultant I have conducted records inventories for many organizations and I am always surprised when I come across different electronic media (CD's, DVD's, 5 1/4" Disc, Reels) being used for long term storage. I find these filed in storage boxes or filing cabinets. In most cases, electronic media that has been stored for over 8 years may not be readable because the software or the hardware is no longer available or work with your current operating system. Think about it, do you still have equipment to read a 5 1/4 disc? Have you seen a floppy disk drive installed on computers sold on the market today? Even if you have retained the equipment to run the floppy disks, will the software run on your current computers? While the data on the CD may remain readable for 100 – 200 years, it is useless unless you have the equipment and software to read the disc.

If you do not keep a museum of old hardware and computers, you must create a migration plan to move the information to a newer medium. This point cannot be over emphasized. If you are initially investing in a system to store your electronic records in CD format, then you must consider the need to insure the availability of the information in the future. You must develop a technology strategy to insure that the collection is migrated in a timely fashion when newer technologies make your current system obsolete. Depending on the volume of records being maintained the migration could become an expensive proposition.

You also need to include the cost to migrate to the new medium. If not, it is something you should include in your original plan to use CD's for long term storage. You must also consider retaining the software and hardware to read and run the application, if you are going to retain the information in the same medium.

While I personally use CDs as a backup media for specific personal records (such as photographs and articles I've written), I do not consider anything I do as having long term legal retention requirement. But, if I did, I would have to consider some of the following ISO standards:

- ISO 18921:2002, Imaging materials – Compact discs (CD-ROM) – method for estimating the life expectancy based on the effects of temperature and relative humidity.
- ISO 18922:2002, Imaging materials – Recordable compact discs (CD-ROM) – method for estimating the life expectancy based on the effects of temperature and relative humidity.

You can checkout more information on “Understanding CD-R & CD-RW – Disc Longevity” at the Optical Storage Technical Association at their website at “www.osta.org/technology/cdqa13.htm”. Now, I know I don’t meet this standard. Do you? Does your vendor? If not, you may have one of many problems with storing the information on a CD.

Another good site that also provides excellent information is www.archives.gov/records-mgmt. Check out the Frequently Asked Questions section for additional information:

- [Frequently Asked Questions about Optical Media](#)
- [Frequently Asked Questions about Imaged Records](#)
- [Frequently Asked Questions \(FAQs\) about Optical Storage Media: Storing Temporary Records on CDs and DVDs](#) for additional information.

I have the NARA (National Archives & Records Administration) site bookmarked and review it periodically to see what is new.

I’m still an advocate for using CD’s where appropriate, but I am mindful of the problems and costs that may occur in the long term.

Bob Dalton, CRM of Dalton Consulting

Note: My thanks to Barbara Werelius, Records Manager and Czar at Tacoma Public Utilities, for her assistance in the development of this article. Other articles by Mr. Dalton can be reviewed and copied at his BLOG site: askthecrm.blogspot.com. A RSS feed may be established for the BLOG to receive new articles.