

Preservation of Digital Data

D.Schade (HIA, Canada)

Today's Data Era has been created largely by our discovery of ways to automate the unlimited collection of digital data. A central challenge to all fields of data archiving is the preservation of digital artifacts, as opposed to physical artifacts. Digital artifacts are not stand-alone objects; they are embedded within systems that have been designed to make them meaningful and useful. The storage media, processing software, database technology and operating systems supporting those systems evolve rapidly, and the global environment in which they operate changes fast, so the systems need to be modified constantly in order to remain compatible with user requirements and avoid obsolescence. Thus, whereas the preservation of physical artifacts prevents change in the artifacts, in the digital era a continuous evolution of the artifact and the systems within which it is embedded is essential to preserve the value of the artifact.