

【摘要】

近年來，資訊科技的進步，改變了人類溝通的方式、知識的管理和傳承、資訊的散播和儲存，對人類社會產生革命性的影響。檔案館開始面對大量的電子文書，並將原有的珍貴館藏轉換為數位物件典藏。然而，看似穩當的數位典藏方式，即使建立了適當的儲存環境，做好各種安全控管，未必能保證數位物件可供長期使用。為了長久保存數位物件並提供使用，除了轉存、轉置、技術模擬等廣受認同的保存方法外，還需要保存後設資料的配合，國際間已有許多相關研究。本研究以 RLG、NLA、Cedars、NEDLIB 四發展機構所提出的保存後設資料項目為比較對象，得出核心項目，再以多次深度訪談，探求中研院近史所檔案館的需求及館藏特性，建置適用的保存後設資料項目。

經過比較發現，RLG、NLA、Cedars、NEDLIB 所提出的保存後設資料項目，因為定位及應用目的不同，在規模、項目及描述層次上有差異，但描述重點仍有某種程度的共識。其中，NLA 詳細記載歷次更動相關事項，並針對不同型態數位檔訂立不同的描述項目的做法，值得參考。

考量需求與館藏數位檔特性，中研院近史所檔案館保存後設資料項目雖以四種保存後設資料核心項目為基礎，在建置時仍做了部分修正與更動。(1) 保存後設資料的功能以協助保存決策制定及執行為主，不考慮提供使用的部分，也儘量不與原有後設資料重複；(2) 描述層級訂在系列層級；(3) 更動史項目，綜合 NLA 及 Cedars 之優點。限於系統功能限制，保存後設資料仍無法自動產生，也暫時不與數位檔及原有後設資料連結。

根據研究結果，對近史所檔案館及其他典藏機構提出下列建議：(1) 制定數位保存政策及計畫；(2) 測試保存方法及保存後設資料項目；(3) 留意相關科技及標準的發展趨勢；(4) 保存後設資料應儘量以自動、同步方式產生；(5) 明確定義描述規範。此外，對於數位保存後設資料及保存方法應再深入了解，並尋求跨領域合作機會。

關鍵字：數位保存、後設資料、保存後設資料、RLG、NLA、Cedars、NEDLIB

Abstract

Progress in information technology changed ways of management of knowledge that mankind communicate and pass on, the information one is disseminated and stored, and had revolutionary influence on the human society. The archives have to store a large number of electronic documents, and reformatting the already existing collection into digital format. However, seemingly reliable digital preservation way and safe storing environment, may not necessarily guarantee the digital collection could be preserved in an accessible form for continued use. In order to ensure the digital resources are preserved in an accessible form for continued use, several approaches, for example, refresh, migration and technology emulation etc., are widely employed. Successful migration strategies depend upon metadata being created to record the migration history of a digital object and to record contextual information so that a future user can reconstruct (or understand) the technological environment in which a particular digital object was created. And technology emulation involve encapsulating data together with the application software used to create it and a description of the required hardware environment (metadata). Until now, there are internationally a lot of research about preservation metadata. This study employed comparison study method to get core elements from preservation metadata elements set of RLG, NLA, Cedars, and NEDLIB. After that, the depth interview approach was conducted to employee of the Archives to explore the demand for preservation metadata elements set of the Archives of the Institute of Modern History, Academia Sinica. Finally, this study tried to set up the preservation metadata elements set for the Archives.

According to the comparison result, there are lots of difference in the scale, elements and description level between the preservation metadata elements set of RLG, NLA, Cedars and NEDLIB proposed. But there is a common understanding for the focus of preservation metadata elements set. Especially that NLA proposed to record all events in change history of digital objects in detail, and conclude different description items for different format of digital files, is worthy for more research .

Consider the demand for digital preservation and the characteristic of

digital collections, the Archives set up its preservation metadata elements set based on the comparison result with a little bit alternation. Firstly, (1)The function of preservation metadata elements set is to aid decision-making and actions of preservation management, and access-aid is excluded. Secondly, the describe level is in serial levels. Finally, elements recording the change history are combination of NLA and Cedars. Limited to the system function, the preservation metadata elements wouldn't be caught automatically at the time of digital objects produced, and would not link the digital objects and existing metadata.

This study is propose following suggestions for the Archies and other archival institutions: (1)Make digital preservation policy and plan; (2)Test preservation method and preservation metadata elements; (3)Pay attention to the development of technology and standards; (4)Resolve the problem of producing preservation metadata elements in automatic and synchronous way; (5)Define the rule in describing of preservation metadata. In addition, the Archives should try to understand preservation metadata and preservation methods more deeply and seek cooperative opportunities with experts from different fields.

【Key word】

Digital Preservation; Metadata; Preservation Metadata; RLG ; NLA; Cedars; NEDLIB