

## 摘要

本研究主要在瞭解國內歷史檔案館藏於 Web 環境中建置的規劃過程與執行內涵，主要以國內現正進行國科會「數位典藏國家型科技計畫」且已規劃建置 Web 檔案檢索系統的中央研究院近代史研究所檔案館為研究對象，探討其 Web 檔案檢索系統之建置內涵。本研究雖係以近史所檔案館為例，但期望藉由對該館建置經驗之探討，提供國內各歷史檔案主管與典藏單位參考。研究目的包括：探討 Web 環境中歷史檔案館藏檢索系統建置工作的內涵、Web 檔案檢索系統界面的功能與特性、使用者對檔案檢索系統的使用習慣、模式與需求情形，並針對檔案館工作人員、資訊技術人員之 Web 檔案檢索系統建置作業思維觀點予以並列比較，進而與使用者之檔案資訊檢索需求進行對照比較，作為國內歷史檔案館藏 Web 檢索系統設計與建置之參考。

本研究採用深度訪談法，首先以近史所檔案館「近代外交與經濟重要檔案數位典藏計畫」為主要研究範圍，對該館工作人員進行訪談，並以參與該館系統建置之中研院計算機中心的資訊技術人員為訪談對象，此外亦針對外交檔案的使用者進行訪談，以便對相關的研究問題進行探討；並採用比較法，針對檔案館工作人員、資訊技術人員於 Web 檔案檢索系統建構之思維進行對照比較，並依據使用者對 Web 檔案檢索系統之需求與建置觀點進行剖析。最後將檔案館工作人員、資訊技術人員對系統功能建置之觀點與使用者之觀點進行對照比較，以綜合觀點比較歸納出 Web 環境中檔案檢索系統的重要特性與功能。

研究結果，本研究分別從「系統建構」與「使用者需求」兩個面向提出研究結論。於系統建構面向得出結論為：(一) 檔案描述著錄方面：訂定檔案著錄系統建置方針、協調統整既有作業情境與著錄系統間的作業流程、因應檔案描述著錄作業所面臨的問題；(二) 檔案權威控制方面：檔案權威控制方案效能的比較、權威檔合作建置可行性與方案的抉擇評估；(三) 檔案傳輸互通標準方面：重視國際相關標準的採用與整合檢索的重要性、研擬訂定核心欄位促成聯合目錄與整合檢索之實現；(四) Web 檔案檢索系統使用者介面方面：訂定 Web 檔案檢索系統使用者介面設計原則、Web 檔案檢索系統使用者介面的功能規劃、妥善進行 Web 檔案檢索系統的營運管理；(五) 檔案資訊增值檢索之作法方面：配合國中、高中教科書內容增加主題檔案介紹，進行系統使用者 Log 檔統計分析並進行檔案使用者資訊檢索行為研究，結合學術領域研究人員人力投入以進行檔案深度描述，運用資訊技術以提昇增值檢索之效能與服務之強化；(六) Web 環境中歷史檔案檢索系統發展趨勢方面：藉由觀摩國內外其他單位之規劃建置並掌握重點，由網頁得知他館的經驗分享進而交流合作，與資訊技術人員密切交流以有助於系統的規劃建置。於使用者需求面向則分別從「使用者對 Web 檔案檢索系統的觀點與使用經驗」及「使

用者對 Web 檔案檢索系統資訊檢索需求內涵分析」兩方面做成結論。有關使用者對 Web 檔案檢索系統的觀點與使用經驗方面，分別就檔案使用者資訊素養、使用經驗、檔案查詢途徑與使用方式、檔案資訊檢索整體需求、檔案檢索查詢項目使用需求情形、檔案資訊檢索心得觀感、檢索時所遭遇的問題以及對 Web 檔案檢索系統之期許等提列結論。而有關使用者對 Web 檔案檢索系統資訊檢索需求內涵分析方面，則以整體架構需求面向、資訊內涵需求面向、資訊檢索功能面向、資訊輸出功能面向、資訊顯示功能面向、檢索點需求面向等提列結論。

根據研究結果，本研究分別從「系統建構」與「使用者需求」兩個面向提出建議。於系統建構面向之建議包括：(一) 訂定數位典藏與資訊檢索系統建置的相關標準；(二) 建立一專門彙整缺字處理方案的官方正式網站；(三) 建立一個累積資訊技術發展成果的知識庫；(四) 運用「全宗原則」、採行「控制層次」進行檔案描述著錄；(五) 合作建置檔案權威資料庫；(六) 遵循檔案傳輸互通標準以因應內部與對外整合檢索之需求；(七) 進行 Web 檔案檢索系統使用者介面整體規劃；(八) 進行檔案資訊增值檢索方案之規劃；(九) 研擬訂定核心欄位，儘速促成聯合目錄與整合檢索之實現。於使用者需求面向之建議則包括：(一) 建立整合性歷史檔案查詢網站；(二) 運用資訊技術與人工智能分析以強化檔案資訊內涵分析；(三) 提供個人化檔案資訊檢索服務；(四) 研擬並發展增值檢索方案。

關鍵詞：歷史檔案、檔案館、檔案檢索系統、資訊檢索、資訊需求、使用者研究

## **Abstract**

This study aims at understanding the planning process and the implementation of web-based historical archive construction in Taiwan by investigating the National Digital Archives Program that is being run by the National Science Council (NSC) and the contents of construction of the achieves of Institute of Modern History, Academia Sinica, whose retrieval system was completed. Though the study was based on modern history archives, it is hoped that the study can be a reference of construction for competent units and owners of history archives. The objective of the study is to investigate the contents of construction of Chinese web-based retrieval systems for historical archives; their functions and characteristics; and the habits, behavioral patterns and needs of users. A contrastive study between thoughts and opinions of web-based retrieval system construction of archive crews and IT personnel and the needs of users has been conducted to provide a reference for planning and construction of web-based retrieval system for history archives in Taiwan.

In-depth interviews were conducted with librarians in charge of the Digital Archives of the Diplomatic and Economic Records in Modern History Project, and with IT personnel of the Computer Center of Academia Sinica engaging in the construction of the archival system. Moreover, users of diplomatic files were interviewed for related topics. A comparison of the thoughts and opinions on web-based retrieval system of archive crews and IT personnel has been conducted. Needs and views of users have been analyzed. Finally, a contrastive study between the views on system function construction of archive crews and IT personnel and the opinions of users has been conducted in order to find out the important characteristics and functions of we-based Chinese archive retrieval systems.

Based on the research findings, conclusions were made from the following two aspects: system construction and user needs. System constructions are: (1) file description and recording: establishing construction policies for file recording systems, coordinating and integrating the operation workflow of the existing operation environment and recording system, and responding to problems arising out of file description and recording; (2) file authority control: comparing the efficiency of file authority control solutions,

and selecting and evaluating the feasibility and solution of collaborative construction of authoritative files; (3) file transfer protocol: focusing on the importance of international protocols and integrated retrieval, and drafting core columns to promote the realization of joint indexing and integrated retrieval; (4) web-based retrieval system user interface: drawing out principles of design for the user interface of web-based retrieval systems, planning functions for the user interface of web-based retrieval systems, and applying reliable operation management of web-based retrieval systems; (5) handling of value-added retrieval of file information: enriching topic file introduction in accordance with junior and senior high school textbooks, producing statistics on and analyzing system user log files and studying the information retrieval pattern of users, combining the manpower of researchers to produce depth description of files, and enhancing the efficiency and optimizing the service of value-added retrieval with information technology; and (6) the trend of Chinese web-based retrieval systems of historical archives: sharing the experience in planning and construction of other archives home and abroad and promoting exchange and cooperation with them over the web, and making close contacts with IT personnel to facilitate system planning and construction. Conclusions on user needs were made according to “the user’s views and experiences of uses of web-based file retrieval systems” and “analysis on the contents of user’s needs for web-based file retrieval system”. Regarding user’s views on and experiences of uses for web-based file retrieval systems, conclusions were reached according to the user’s information attainments, experience of system uses, paths and manners of file retrieval, overall requirements for file and information retrieval, use of options in file retrieval systems, comments on file and information retrieval, problems encountered in retrieving files and information, and expectations from web-based file retrieval systems. As to the analysis of the contents of user’s needs for web-based file retrieval system of users, conclusions have been drawn according to the needs for overall framework; information contents; information retrieval functions; information output functions; information display functions; and information retrieval.

Based on the research findings, suggestions have been made according to “system construction” and “user needs”. Suggestions about system construction include: (1) establishing standards for digital archives and information retrieval systems; (2) setting up an official website for processing characters that do not exist in regular font sets; (3) developing a knowledge

base for accumulating IT development achievements; (4) describing and recording files with “level control” according to the “principle of respect des fonds”; (5) constructing a file authority database under collaboration; (6) following the file transfer protocols to meet the requirements of internal and external integrated retrievals; (7) making plans for the user interface of web-based file retrieval systems; (8) working out solutions for value-added file and information retrieval; and (9) drawing out central columns and promoting the realization of joint indexing and retrieval. Suggestions about user needs include: (1) establishing an integrated historical archive inquiry website; (2) applying IT and AI to strengthen file and information content analysis; (3) providing personalized file and information retrieval services; and (4) drawing out and developing value-added retrieval solutions.

Keywords : Historical Archives, Archives, Archival Retrieval Systems,  
Information Retrieval, Information Needs, User Study