

國立政治大學圖書資訊學數位碩士在職專班

碩士論文

Master's Thesis

E-learning Master Program of Library and Information Studies

National Chengchi University

圖書館電子書牆優使性研究—以新北市立圖書館為例

Study on Usability Evaluation of E-Book Display Wall from Public
Library: Case Study of New Taipei City Library

指導教授：王梅玲 博士

Adviser: Dr. Mei-Ling Wang

研究生：金有澤 撰

Author: Yu-Tse Chin

中華民國一百一十一年十一月

November, 2022

摘要

現今公共圖書館與大專院校圖書館引進大型觸控螢幕互動裝置，已逐漸形成一股現代圖書館的科技潮流趨勢，而透過圖像大量運用於人機互動相關科技產品為使用者提供便利服務時，尚未能具體得知其產品之效率、效能、可學習性為何，對於使用介面和使用經驗的優使性評估鮮少有相關的探討，因此，本研究將以新北市立圖書館總館的「電子書牆」做為研究個案，研究目的為：(1)探討圖書館電子書牆服務的功能與應用；(2)探討使用者對於電子書及電子書牆的使用經驗與過程之看法；(3)探討使用者對於電子書牆使用介面的優使性評估與滿意度。

本研究運用深度訪談法、優使性測試和優使性評估問卷調查三種工具，其研究採立意取樣，對象為 15 位讀者受測者。經由實證研究彙整出以下五項結論：(1)電子書牆服務的功能與應用方式有隨機瀏覽、主題分類瀏覽、RFID 借閱證身分瀏覽、掃描 QR Code 下載電子書；(2)電子書牆具吸睛力需再增強影音行銷之功能；(3)電子書牆及 APP 使用的可學習性尚可，但仍有介面障礙問題；(4)電子書牆模仿極簡風的使用介面，其優使性表現不如預期導致滿意度不佳；(5)電子書牆對於已下載 APP 的使用者，無再利用的價值吸引力，其重要性與附加價值需要全盤思考並加以正視定位。

依據實證研究之結果，本研究為圖書館電子書牆提供以下十三項建議：(1)電子書牆應發揮科技之優勢；(2)電子書牆借閱電子書流通統計可邁向建立個案評量績效機制；(3)電子書牆可朝向增進電子書應用認知設計以提高附加價值；(4)電子書牆應強化與落實圖書資訊學；(5)使用 APP 閱讀電子書具有跨越時間和空間的便利性；(6)電子書牆的軟/韌體設計內容應提升操作自由度；(7)軟/韌體系統設計須落實使用經驗並導入使用介面；(8)電子書牆使用介面應提供文字說明的資訊；(9)電子書牆及 APP 的使用介面應顯示步驟提示之輔助；(10)由讀者主導採購以及借閱額度客製化；(11)電子書牆的電子書庫存借閱額度應彈性調整；(12)使用者期望電子書牆的推薦機制有更為明確而清楚的方向；(13)電子書牆設置地點與動線要能增加正面觸及率以提升使用率。

關鍵字：電子書牆；優使性；優使性測試；優使性評估

Abstract

The introduction of large touch screen interactive devices in public libraries and college libraries has gradually formed a trend of modern library technology, when providing users with convenient services through the use of a large number of images in human-computer interaction-related technology products, the efficiency, effectiveness, and learnability of the products are not known, and usability evaluation of the user interface and experience has rarely been explored, therefore, this study will use the "E-Book Display Wall" in the main library of the New Taipei City Library as a research case, and the objectives of the study are: (1) To explore the functions and applications of the Library's e-book display wall service; (2) To explore the users' views on the experience and process of using e-book display wall and e-books; (3) To explore the user's evaluation and satisfaction of the user interface of the e-book display wall.

This study uses three tools: in-depth interviews, usability testing, and usability evaluation questionnaires, the study was conducted with intentional sampling of 15 reader-tested subjects. The following five conclusions have been compiled from empirical studies: (1) The functions and applications of the e-book display wall service are random browsing, thematic category browsing, RFID card identity browsing, scanning QR Code to download e-books; (2) E-book display wall are eye-catching and need to be enhanced with audio-visual marketing functions; (3) The learnability of the e-book display wall and the APP is still acceptable, but there are still interface barriers; (4) The e-book display wall imitates a minimalist interface, and its usability performance is not as expected, resulting in poor satisfaction; (5) E-book display wall for users who have downloaded the APP, no reuse value attraction, its importance and added value need to think holistically and be positioned squarely.

Based on the results of the empirical study, this study provides the following thirteen recommendations for library e-book display wall: (1) E-book display wall

should give full play to the advantages of technology; (2) E-book display wall lending e-book circulation statistics can move towards the establishment of a case evaluation performance mechanism; (3) The e-book display wall can be designed towards increasing the awareness of e-book applications to enhance the added value; (4) E-book display wall should strengthen and implement library and information science; (5) The convenience of using APP to read e-books across time and space; (6) The soft / firmware design content of the e-book display wall should enhance the freedom of operation; (7) The design of the software / firmware system should be implemented with experience and an interface for use; (8) E-book display wall using the interface should provide text description of the information; (9) E-book display wall and APP interface should show the steps prompted by the auxiliary; (10) Reader-led purchasing and customization of borrowing quotas; (10) Patron-driven acquisition and customization of e-books lending quota; (11) E-book display wall of e-book inventory borrowing quota should be flexibly adjusted; (12) Users expect a more clear and explicit direction for the recommendation mechanism of the e-book display wall; (13) The e-book display wall should be set up in a location and line to increase the frontal contact rate to enhance the use rate.

Keywords: E-Book Display Wall; Usability; Usability Test; Usability Evaluation