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評估網路書店尋書工具與

閱讀偏好屬性對尋書效能之影響

Exploring the impact of different book finding tools on
effectiveness of recommendation accuracy and novelty

賴依柔

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摘要

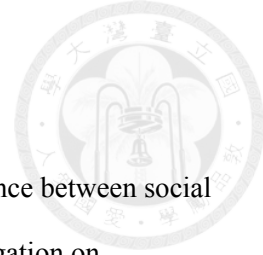
系統評估僅採準確性單一指標，所得到的結果並無法完整呈現使用者在瀏覽尋書時的表現。因此，本研究期望藉由多元化的評估方式，探討網路書店不同尋書導覽工具之尋書效能，使尋書系統能更貼近使用者尋書需求。本研究以博客來網路書店為研究平台，透過實驗法比較主題導覽工具與社會性導覽工具，以「尋書效率」、「尋書體驗」與「所選書籍結果」作為評估面向，並採用新穎性與意外發現等不同於傳統準確性的評估指標，以瞭解尋書工具的探索性功能。此外，本研究亦探討閱讀偏好屬性的調節作用，包括「偏好多樣性」、「偏好開放性」、「偏好涉入程度」和「偏好察覺程度」對尋書效能的影響。

本研究將 52 名受測者使用兩種導覽工具尋找小說與非小說的結果進行分析，研究發現：一、尋書效率方面，使用者運用社會性導覽工具點選的書籍數量較多，顯示社會性導覽工具推薦使用者更多納入考慮的書籍。二、尋書體驗方面，使用者在未來使用意願上較偏好使用社會性導覽工具。三、所選書籍結果方面，使用者對社會性導覽工具所推薦的小說在信心程度上評分較高，在新奇性與意外發現上則給予較低的評分。主要是因為研究平台博客來網路書店容易推薦暢銷書，使得社會性導覽工具尋找小說的決策信心較高，而新穎性和意外發現較少。四、不同文類的確會影響尋書工具的表現，由於小說沒有明確主題較難分類，故社會性導覽工具尋找小說的信心程度較主題導覽工具高。五、讀者的偏好屬性確實會影響尋書工具之尋書結果，閱讀多樣性越高者對社會性導覽工具尋找非小說的信心程度越高，顯示社會性導覽工具推薦小眾書籍因而滿足多樣性高之讀者。因此，未來尋書工具應考量讀者的閱讀偏好屬性，推薦符合其需求的書籍，並強化新穎性與意外發現之探索功能。

關鍵字：系統評估、推薦系統、社會性導覽工具、偏好多樣性、偏好涉入程
度、偏好開放性、偏好察覺性



Abstract



A study was conducted to compare the book finding performance between social (i.e. customers who bought this also bought) vs. subject based navigation on books.com.tw. To fully capture the effectiveness of the exploratory-based book finding tools, three aspects of evaluation were proposed, namely, user experience, search precision, and the quality of the search result. Furthermore, besides traditional accuracy-based criteria, search novelty and serendipity were also introduced in response to recent calls for “non-obviousness” measure that better reflect consumer value when interacting with recommender system. A Latin square experiment was adopted where 52 participants searched fictional vs. non-fictional books alternatively with two book finding tools. Another object of the study was to test the moderating role of users’ preference characteristics, including “preference diversity”, “openness to novelty,” “involvement” and “preference insight” on search performance.

It was found that social navigational tool produced a large consideration set, which was also preferred for future use. Though the social navigation tool generated less novelty and serendipity but higher decision confidence when searching for fictions, mainly because the current algorithm on books.com.tw tend to bring up popular sellers. Furthermore, the social navigational tool is particularly effective in terms of judgment confidence for users with high preference diversity searching for non-fictions, indicating that the social navigation tool was able to bring up more diverse results in non-fictional books.

Keywords: system evaluation; recommendation system; social navigational tools; preference diversity; openness to novelty; involvement; preference insight