

## **Evidence Based Library and Information Practice**

## Evidence Summary

# Perceived Convenience, Compatibility, and Media Richness Contribute Significantly to Dedicated E-book Reader Acceptance

#### A Review of:

Lai, J.-Y., & Chang, C.-Y. (2011). User attitudes toward dedicated e-book readers for reading: The effects of convenience, compatibility and media richness. *Online Information Review*, 35(4), 558-580.

## Reviewed by:

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### Abstract

**Objective** – Investigates the effects of perceived convenience, compatibility and media richness on users' attitudes toward dedicated e-book readers.

**Design** – Convenience sample survey.

**Setting** – Taiwanese university.

**Subjects** – A total of 288 students at the senior secondary (5%), four-year university (78%), and graduate student (17%) levels. Malefemale participation was approximately equal.

**Methods** – Students completed a 23-item survey on dedicated e-book readers, with

questions on perceived usefulness, perceived ease of use, intention to use, convenience, compatibility, and media richness. Data was analyzed using the partial least squares statistical technique.

Main Results – Users state an increased intention to use dedicated e-book readers if they perceive the technology to be compatible with what they desire in a "book," if the device delivers rich media content, and if the device is convenient. Compatibility was found to significantly affect perceived ease of use, and was found to be the strongest influence on intent to use a dedicated e-book reader. Compatibility, media richness and convenience also increased the perceived usefulness of dedicated e-book readers.

Conclusion – Users will prefer dedicated ebook readers that are compatible with their preferences in a "book," that deliver mediarich content, and that they find convenient. The study has implications for the design and development of e-book reading devices.

## Commentary

The primary theoretical basis for this study is the information systems field's Technology Acceptance Model (TAM) (Davis, 1989). TAM has been extensively used and built upon as a framework for studying what influences users to accept and use technology. Additionally, the authors draw from theory in sociology, organizational management, and marketing.

The survey was created by adapting questions from pre-existing published instruments, and was pre-tested on users and experts. Completed surveys were returned by 326 students; 288 surveys were deemed valid for analysis. A significant limitation, acknowledged by the authors, was the use of a convenience sample creating the possibility of self-selection bias. The authors further acknowledge the limited subject selection (Taiwanese university students), and recommend further research across different groups and cultures. Use of the partial least squares technique for data analysis is appropriate for this type of study. Construct reliability and validity were established using confirmatory factor analysis.

The authors never acknowledge the critiques that have been made of the Technology Acceptance Model which forms the foundation of their study. Bagozzi (2007) has articulated problems with overreliance on TAM, commenting that it has led to "the fallacy of simplicity" in the information systems field (p. 244). The authors' paper would have been strengthened had they addressed this criticism directly. They do acknowledge that their study does not examine social and cultural factors which might influence dedicated e-book reader acceptance.

Careful editing would have addressed some inconsistencies in the narrative. The authors occasionally veer into speculative territory unsupported by their findings. After describing the finding that "compatibility shows greater influence on acceptance...than convenience," the authors state that "[m]ore than compatibility, convenience may be a critical factor attracting users to e-book readers" (p. 572). The authors also make some incongruous statements based on dated references ("the e-book market has failed to materialise" p. 562) that contradict their point as well as current reality.

The target audience for this study is e-book reader device developers, not librarians. The authors discuss implications for e-book reader feature development and design, including specific features they believe would enhance compatibility, media richness, and convenience. The study is indirectly relevant to librarians who may be considering loaning actual e-book devices or providing e-books for use by their patrons on their own devices. The factors examined in this study could be included in librarians' evaluative criteria for deciding which e-books or devices may be more acceptable to patrons. However, recently published library science studies conducted from a less theoretical perspective will likely be of more direct interest to practicing librarians (Duncan, 2011; Shelburne, 2009).

#### References

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