



Evidence Summary

Information Professionals' Attitudes Influence the Diffusion of Information and Communication Technologies

A Review of:

Rabina, D. L., & Walczyk, D. J. (2007). Information professionals' attitude toward the adoption of innovations in everyday life. *Information Research*, 12(4), 1-15.

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Abstract

Objective – This study examined the general characteristics and patterns of librarians in connection with their willingness to adopt information and communication technologies.

Design – Online questionnaire.

Setting – General distribution to information professionals through online inquiry. More than 70% of responders worked in public or academic libraries.

Subjects – Librarians and library staff at mostly public and academic libraries.

Methods – The study was conducted during a two week period in April 2006 through an online questionnaire that was sent to library

and librarian-related electronic mail lists. The questionnaire was divided into two parts and contained a total of 39 questions. Part one contained eight questions that asked for demographic data and the respondent's daily attitude toward the adoption of information and communication technologies. Questions regarding age, number of years worked in a library, career, type of library environment worked in, and primary responsibilities within that environment were asked. For one question the respondents were asked to identify which of the categories they fall under when adopting a new technology. The results from part one were used to consider the innovativeness of librarians. The results from part two were used for a study of opinions on innovations and their relative advantage.

Main Results – A total of 1,417 responses were received. Of those, 1,128 were fully completed and considered valid and used for inquiry. The majority of respondents worked in public or academic libraries. Nine hundred and twenty-six respondents, or 88%, were from the U.S. and represented more than 300 distinct zip codes. Two hundred and two respondents, or 12%, were international respondents.

This study notes that the sociologist, Everett Rogers, identified and defined five adopter categories in 1958. Those categories are: innovators, early adapters, early majority, late majority, and laggards. The findings of this study indicate that regardless of the demographic variables considered, more than 60% of respondents, the majority of librarians surveyed, fall into two contrasting adapter categories: early adopters and early majority. The study suggests that the efficient and effective diffusion of new technologies in library settings may be difficult. Three problematic areas among librarians for the dissemination of innovation were identified: conflicting opinions among multiple opinion leaders, deceleration in the rate of adoption, and improper re-invention. The findings of the study also suggest that “contrary to common beliefs, librarians in academic or special libraries are no more innovative than public or school librarians” (Conclusion, ¶3).

Conclusion – The study concludes that librarians’ attitudes are unevenly distributed with most either accepting new innovations or being late adopters. The variables of age, role, tenure, and library type had little impact on the approach of the professional toward innovation. The identification of the three problem areas: opinion leadership, deceleration of adoption, and improper re-invention, represents where more time and effort may need to be spent to make the implementation of new technology a smoother process.

Commentary

This study will be of interest to all persons that are called upon to implement new technologies

because it gives an inside look at how and why individuals adapt to new technologies. It drew on the opinions of a number of diverse professionals, but asked for their own opinions concerning their innovativeness in relation to their peers. As with all studies employing self-report, personal biases may have influenced the results. The study suggests that further research using case studies of individual libraries should be completed.

The authors suggest that future surveys could be conducted within a set of libraries within a geographic area in order to assess local attitudes, and then plan and implement successful technology training accordingly. The article provides an excellent summation and in depth review of the existing literature, and thereby demonstrates the contextual framework for this survey. It would have been helpful if the authors had provided access to the electronic survey that could be used to assist in the replication or refinement of the study at a different institution at a later date.

When the questionnaire was sent out to library- and librarian related electronic mail lists, it was intended to target a U.S. audience only. However, 12% of the responses were from international respondents, which demonstrates the wide “nets” and webs that are frequently created with the use of electronic mail lists. The inclusion of these international responses introduces many variables that are difficult to evaluate or consider in the absence of more information concerning the relative needs and resources of the responders.

As the study was unrestrictive, the authors suggest that further research would benefit from a more controlled sample. With a more controlled sample local attitudes could be assessed and technology training could be designed and implemented.

This research alerts us to the difficulty that we are likely to face when implementing new technologies in our institutions. As the author notes, this study provides reason to conduct further research using case studies of individual libraries.