

Jillian E. Robinson. A Study of Social Media Marketing in North Carolina Special Libraries. A Master's Paper for the M.S. in L.S. degree. November, 2007. 56 pages.
Advisor: Deborah Barreau

This study describes a Web questionnaire survey of special librarians in North Carolina who are members of the Special Libraries Association. The survey, based on the theory of the diffusion of innovations, was conducted to determine special librarians' familiarity and knowledge of social media and its possibilities for use in the marketing of special libraries. This study also aimed to determine special librarians' professional development activities and their impact on the adoption of social media marketing techniques.

The results of this study support classical diffusion theory. This non-random sample showed user perceptions of relative advantage, compatibility, complexity and observability correlated, in most cases, with the adoption of social media marketing techniques.

Headings:

Diffusion of innovations.

Libraries – Information technology.

Special libraries – Marketing.

Marketing – Social media marketing.

A STUDY OF SOCIAL MEDIA MARKETING IN NORTH CAROLINA SPECIAL
LIBRARIES

by
Jillian E. Robinson

A Master's paper submitted to the faculty
of the School of Information and Library Science
of the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements
for the degree of Master of Science in
Library Science.

Chapel Hill, North Carolina

November 2007

Approved by

Deborah Barreau

Contents

List of Illustrations	2
Chapter	
1. Introduction	3
2. Literature Review	5
3. Methodology	20
4. Results and Analysis	23
4.1 The Sample Population – Demographics	23
4.2 Professional Development, Communication, and the Adoption of Innovation	25
4.3 Statistical Analysis of Results	31
5. Discussion of Results	34
6. Study Limitations	39
7. Future Research	41
8. Conclusion	43
Appendix	
1. Survey	45
Selected Bibliography	52

List of Illustrations

Figure	Page
1. Demographics	23
2. Special librarians' reported job descriptions	24
3. Knowledge of social media terminology	27
4. Knowledge of social media applications and services ...	28
5. Evaluation of social media	31
6. Significant correlations among survey variables	33

Introduction

Special libraries address the unique needs of library users who are considered part of a particular organization or field, including those needs of physicians, scientists, government personnel, demographers, journalists, employees in corporate settings, and others. In many cases, the information needs of those with access to special libraries can be vital to important research, including research that may impact human health and well-being. Special libraries exist because of very specific needs and special librarians offer important information services and resources to those they serve. Their specialized collections and knowledge of the subject matter put librarians in a unique position to assist researchers, businesses, healthcare professionals and many others in finding the most relevant, current, and authoritative information available. Despite this, special libraries are increasingly facing budget cuts, competition with the Internet, and in some cases closure. For these reasons, special librarians must continually prove the value of their libraries to funding sources, patrons, administration and organizations.

To survive, many special libraries may need to consider marketing their services and collections in new and creative ways. Marketing allows librarians to persuade funding sources and library users of their collections' unique value. While many libraries use traditional marketing techniques, new trends are emerging that involve the use of Web 2.0 technologies. Technologies such as RSS feeds and tagging, social networking sites, including MySpace and Facebook, and other forms of social media, such as Weblogs (blogs), YouTube, Flickr and del.icio.us have created a new social Web with

greater interactivity. The trend to use these tools for marketing purposes is just beginning to catch on in special libraries. Social media marketing techniques are potentially helpful to libraries facing downsizing or closure and librarians are just beginning to realize the possibilities for social media marketing techniques. It is, therefore, important to study the diffusion of this trend among special librarians. Diffusion theory suggests that an innovation may be adopted based on perceptions of relative advantage, compatibility, complexity, and observability. Using measures of these perceptions, this research addresses the following question: does exposure to social networking and social media marketing through professional development activities and informal communication channels lead to an increased adoption of social media marketing techniques among special librarians?

Literature Review

Special libraries today are facing stiff competition, budget cuts and closures. Library closings are constantly in the news; consider the recent closure of a number of the U.S. Environmental Protection Agency libraries and other corporate and public libraries. In 2001 the Time, Inc. Research Center closed as Time Warner and AOL merged, leaving no known provisions for information in place.ⁱ In another example, the Engineering Societies Library (ESL) closed their doors in 1998 due to unresolved problems that began in the 1980s. First, ESL faced financial problems and a lack of support from its founding societies causing downsizing. Shortly thereafter, the library appointed a temporary manager who reportedly acted as a leader, but because of his temporary status, did not (or could not) make important long-term decisions, such as “developing marketing strategies with the societies, developing a plan to build the user base, designing an automation plan, and initiating a fund raising effort.”ⁱⁱ When closing, ESL gave its collection to various other libraries, including the New York Public Library and Linda Hall Library. Ari Cohen, the former head cataloger of ESL, attributes the closing of the library to a long-term “benign neglect” by its supporting societies and concluded there was no evidence indicating that it may have been possible to save the library from closure. However, the fact that the collections maintained by ESL are still relevant and in-use elsewhere may indicate another conclusion.

Judith Siess blames such closures and cuts on the fact that librarians have failed to market themselves and their services to those in power to make decisions.ⁱⁱⁱ Siess

believes there are three reasons for librarians' failure to market, including librarians' failure to recognize its importance, the general lack of marketing know-how, and librarians' lack of time available to devote to marketing. She goes further to claim that the rise of the Internet and technologies, increased end-user searching, virtualization, outsourcing, and poor economic situations are important reasons to be increasingly concerned with libraries' lack of marketing.^{iv}

Eileen Elliot de Saez suggests that librarians "now need to operate as business directors and managers and must harness marketing concepts and techniques to their other very considerable powers if their services are to survive, offer quality and prosper."^v Elliot de Saez argues that to be most successful librarians should create a mission statement which puts customer satisfaction as its first priority. She further states the importance of strategic marketing planning in fulfilling patrons' needs "to ensure that there is a sustainable fit between resources and the present and future marketplace."^{vi}

Before going any further, it is perhaps useful to first define marketing. In one instance, marketing is defined as "a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging value with others."^{vii} In another definition, marketing is a "social process, geared towards satisfying the needs and wants of individuals and organizations, through the creation of free competitive exchange of products and services that generate values to the buyer."^{viii} It is important to notice that in both cases, marketing is defined as a process rather than merely an action. The social component in the marketing definition is also important in identifying the role that communication between marketer and target market plays in the exchange. Though the target market is considered the "buyer" in the latter definition, in

neither definition is there any mention of selling or advertising. Instead, the buyer may be thought of as the person or group to which a product or service is marketed. In libraries, marketing is the total process through which librarians (or library management) determine the needs of their customers, provide services based on those needs and create value for the customer in exchange for the ability to continue to exist, provide services, and obtain funding. Promotion and publicity are certainly a part of marketing; however they are only one component. Though many, such as Siess and Elliot de Saez, recognize the value of marketing for libraries, librarians continue to struggle with formalized marketing methods.

In almost any major corporation or business, many resources are devoted to marketing, especially where effective marketing can lead to economic gains, better publicity, and an established reputation with customers. Businesses were quick to recognize the importance of marketing. In 1960, the “4 Ps” were introduced as the traditional “marketing mix” – a way of organizing one’s thoughts about marketing by determining the product or service, the price, the placement of the product or service and the best ways in which to promote the product or service.^{ix}

Though it is possible to argue that ideas about marketing have always existed, the late 1950s and 1960s was a time when marketing theories were articulated in the literature. Marketing began to be seen as not just a method or a function, but instead as a management and business philosophy – a way to run an organization. In 1960, Theodore Levitt wrote on his ideas of “marketing myopia,” instances where industries failed to realize the “true” business they were in. For example, Levitt argued that the railroad industry defined their industry inappropriately because they were too focused on their

present situation and failed to look at the long-term needs of their customers. Levitt explains that the railroad industry was “railroad-oriented” rather than “transportation-oriented.”^x Where the railroad industry had the opportunity to fulfill the growing needs of passenger transportation, they failed in looking for new and better ways to serve those needs. After studying numerous other instances in which industries failed to adapt to changing marketplaces and changing needs, Levitt believes, “The view that an industry is a customer-satisfying process, not a goods-producing process, is vital for all businessmen to understand. An industry begins with the customer and his needs...”^{xi}

Before Levitt’s theories of marketing myopia, H. Igor Ansoff stressed the importance of holding strategies for diversification. Ansoff argues that four growth alternatives are open to businesses, including increased market penetration, market development, product development and diversification. Though diversification, defined as a simultaneous departure from the present product line and the present market structure, is not always appropriate as an industry’s first choice, it does provide a planned approach to changing normal business patterns or market structure to prepare for future growth. Ansoff notes the incredible changes in technology that took place during the first half of the twentieth century and argues that one can only expect more such changes.^{xii}

To deal with changes in technology and new products, businesses and industries develop marketing strategies. A review of the original classification of the marketing mix assesses the usefulness of the 4 Ps as a good method for structuring management tasks and marketing plans, however, the authors point out three flaws: “The properties or characteristics that are the basis for classification have not been identified, the categories are not mutually exclusive, and there is a catch-all subcategory that is continually

growing in importance,” the sales promotion subcategory.^{xiii} The traditional marketing mix fails to give marketing an integrated perspective. In contrast to the marketing management philosophy, which consists primarily of management of the 4 Ps, a marketing strategy perspective focuses primarily on the ability to sustain competitive advantage.^{xiv} Wind and Robertson suggest that a marketing strategy perspective provides businesses with an increasingly integrated approach to marketing. Marketing becomes less a short-term experience, and more interdisciplinary, international, and less rigid, as long-term strategic frameworks are planned and integrated^{xv}.

Strategic marketing is not just for profit-driven businesses. Nonprofit organizations, such as museums, community organizations, hospitals, churches and libraries, among others, also have much to gain from strategic marketing. Despite the possibilities for gain, Philip Kotler states, “Of all the classic business functions, marketing has been the last to arrive on the nonprofit scene.”^{xvi} In order to implement a marketing strategy, Kotler recommends that nonprofits first create a marketing committee, appoint task forces to carry out marketing audits, hire marketing specialist firms or consultants as necessary, and eventually create a marketing director position. Kotler describes the “ultimate solution” as the creation of a vice president of marketing position.^{xvii} Though Kotler believes that many nonprofit organizations already practice marketing without knowing it, he suggests that as nonprofit organizations formally implement marketing they will come to realize its great potential.

Kotler began writing his theories in the 1960s and 1970s and up until the rise of the Internet, the traditional marketing mix remained mostly unchanged. But as the use of the Internet increased and businesses went online, ideas about marketing changed, too.

Traditional methods have become increasingly intertwined with electronic methods. Additional “Ps” have been added to the marketing mix, but many still question whether electronic methods are essentially different from traditional methods. In one study of the terminology associated with electronic marketing, it was determined that, “the e-marketing mix provides continuity to the 4 Ps, contributes several new elements, and directly represents personalization, a form of segmentation as an endogenous function.”^{xviii}

Other literature suggests a new focus on marketing relationships. Some, such as Armstrong and Kotler, suggest the “4 Cs” approach, which are customer solution, customer cost, convenience and communication as a way to describe the buyer’s viewpoint in an age of customer relationships.^{xix} Marketing firms are increasingly focusing on improving the knowledge of their customers and forging direct connections to build lasting relationships.^{xx} Technologies are playing a large role in this form of marketing, as it is now possible to use new forms of media in communication.

New marketing techniques are continuing to evolve as technologies are changing. A relatively new phenomenon, Web 2.0, is finding its way into marketing. Web 2.0 is a way of describing new Internet capabilities and services, such as social bookmarking, RSS feeds, blogging, wikis and the use of other social media that increase user interactivity and control over content on the Internet. The term Web 2.0 was first coined by Tim O’Reilly in 2004, and has since spread into many disciplines, creating terms such as Business 2.0 and Library 2.0. Principles that characterize Web 2.0 include the user as contributor, user participation, lightweight programming models, trust and collaboration, an emphasis on the importance of software, and a rich user experience.^{xxi} It should be

mentioned that Web 2.0 is not an entirely new designed version of the World Wide Web per se, but instead a description of the evolution of Web services.^{xxii} Many characterize Web sites of the past as Web 1.0, when information available on the Web only changed when the “owner” of the Web site chose to create, update, or delete that information. Web 2.0 implies a rich, interactive, participatory, collaborative user experience, as opposed to the static Web sites of the past. A take-off on Web 2.0, Library 2.0, as defined by Casey and Savastinuk, is “a model for constant and purposeful change” that “empowers users through participatory, user-driven services.” Many innovative libraries, and especially in academic and public settings where younger generations are concerned, have begun implementing Library 2.0 as a way of communicating with current and potential library users.^{xxiii}

Web 2.0 technologies have allowed for increased communication among library users. In many cases, the term “social media” is used interchangeably with Web 2.0 although there is a slight difference. Social media are the tools used for communication that have Web 2.0 attributes – that is, they are participatory, collaborative, knowledge-sharing, user-empowering tools available on the Web. When compared with the use of traditional forms of media (television, newspapers, radio, etc.) where information flows in one direction, social media allow for a much more interactive experience. Social media, such as wikis, blogs, podcasts, photo sharing sites, social networking sites, virtual worlds and many others, take advantage of the relatively new “social nature” of the Web, allowing users to share opinions, thoughts, interests, and give feedback. Social networking applications, such as MySpace and Facebook, came on the scene in 2002, and have only within the past several years begun to be examined for their possibilities in the

marketing sphere.^{xxiv} The companies providing these services have quickly used the rich information available about their users for their own marketing purposes, but there are opportunities for others to use this information too. Research reports by independent groups, such as Melcrum, a communications research and training business, highly advocate for companies' use of social media to engage employees.^{xxv} Melcrum published a practical guide to using blogs, RSS feeds, podcasts, wikis, virtual worlds, and online social networking communities with the hope of improving communication and collaboration in the workplace.

In the case of libraries, some argue that marketing managers need to have Web 2.0 strategies and techniques as part of their marketing arsenal. Fichter believes that the most critical thing library staff can do to begin implementing these marketing strategies is to learn about social media first hand.^{xxvi} As a relatively new phenomenon, the impact of social media as a marketing tool has not been thoroughly studied, though it is evident that it is beginning to gain attention in the library world, and for good reason. Marketing has become an essential skill as librarians are increasingly advocating for their relevance in an Internet-driven world.

Though marketing is still lacking in many libraries, the idea of formalized marketing strategies in libraries may not be as new as Kotler first imagined.^{xxvii} Nearly as soon as public libraries began in America, there were those who recognized the importance of finding a target market, identifying their needs, and adjusting to serve those needs. Brad Kleindl studied the marketing practices used by public libraries beginning in the 1870s and argues that libraries began to adopt "period business practices" as they learned about the importance of merchandising; that is, "fill shelves

with goods the people want and for which they will return, bring in customers, and get your goods out.”^{xxviii} Kleindl points out the importance of market segmentation, the division of a single heterogeneous group into smaller homogeneous markets, in the marketing practices of public libraries. He also notes that in the case of special libraries though a seemingly homogeneous market is already in place, it does not represent the “conscious effort of segmenting multiple markets or adapting [marketing] mix elements.” Kleindl suggests that public libraries realized that marketing must take place in any library situation, because library customers will always have varying needs. Public libraries were successful in dividing their market into segments based on a number of segmentation variables, and often engaged in research to meet the needs of those segments. Many public libraries communicated with and promoted their services differently depending on the segment they were serving.

Christine Oldman argues that marketing and information science are two disciplines with much in common, beginning with the concept of communication. Information professionals and marketers both rely on communication; however, Oldman notes that the communication of the information world is “not the type that is going to help very much with ... saving one’s job.”^{xxix} Oldman believes a “new” marketing concept has the possibility to change this, a marketing perspective within the library organization. A marketing perspective is one that requires an intensive look at user-needs and market segmentation based on those needs. As Kleindl suggests might be the case in special libraries, Oldman points out information professionals’ “frequent failure to pursue a conscious market segmentation policy when making management decisions.”^{xxx} If special librarians are to market their libraries, Elliot de Saez suggests that after

developing a mission statement and performing a marketing audit, market segmentation can be an effective way to make the best use of resources. With market segmentation, librarians may more easily create the tailor-made services that users are increasingly coming to expect. The use of market segmentation gives librarians a chance to show library customers their value over the competition.

In his 1984 discussion of marketing library services in the United Kingdom, Noah Turner describes the “growing realization” that libraries are a part of a competitive marketplace. He points out that, “However passionately the professionals may believe in the social value of libraries, this will not automatically produce any political value.” For this reason, libraries “must fight their own corner.”^{xxxix} In many cases, it seems, librarians have a difficult time acting as their own advocates. Turner argues that, “If we are proud of our product then we should be proud to stand in the market place and sell it... We will match our knowledge and understanding of the product to the general marketplace reaction and redesign accordingly.”^{xxxix}

When used for marketing purposes, social media allows for an easier way to gauge marketplace reaction. Because new marketing techniques using Web 2.0 technologies are just beginning to be recognized for their value and be adopted for use in some libraries, the extent of the diffusion of this trend is still unclear, as is the extent of librarians’ understanding of social media for use in general. Diffusion of innovations, explained as a kind of social change, has been widely studied in the computer science, marketing, and information science fields. In his classical diffusion theory, Rogers argues that perceptions of the innovation, such as relative advantage, compatibility, complexity and observability all affect the way in which new innovations are diffused

and then adopted or rejected by various groups of people.^{xxxiii} Relative advantage, “the degree to which an innovation is perceived as being better than the idea it supersedes,” compatibility, “the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters,” complexity, “the degree to which an innovation is perceived as relatively difficult to understand and use, and observability, “the degree to which the results of an innovation are visible to others,” determine the decision to adopt a new innovation, such as social media marketing.^{xxxiv} Rogers describes these criteria further claiming that in order to be convinced that a new innovation is worthwhile, one must perceive the innovation to be more effective in terms of cost, time, convenience and satisfaction.

Technology adoption is still an important area of study as organizations continue to struggle with complex technologies. Drawing on organizational learning and economic theories of adoption, Ravichandran proposes a revised diffusion model to explain the assimilation of complex technologies by accounting for two barriers: the uncertainty associated with the evolution of technology, and the learning burden likely to be imposed by the new technology.^{xxxv} In a survey used to identify barriers to the technology adoption process, Ravichandran found that knowledge barriers are more important than adopter perceptions of uncertainty surrounding the technology in assimilation. Ravichandran’s study also asserts the importance of communication of “knowledge stocks” between those providing the new technology and those considering its adoption, which thereby lessens the “learning burden” for complex technologies. Ravichandran concludes that decreasing the learning burden of potential adopters is perhaps more effective than shaping their expectations about the technology in

encouraging adoption.^{xxxvi} Studying the complexity of a new technology, as perceived by the potential adopter is, therefore, important in determining whether a learning burden might affect diffusion and assimilation of innovations.

Before adopting a new innovation, there must be some way in which a potential adopter learns of the innovation. Communication channels are one way in which news of innovations spreads. Rogers asserts that, “Most people depend mainly upon a subjective evaluation of an innovation that is conveyed to them from other individuals like themselves who have already adopted the innovation.”^{xxxvii} For this reason, professional development activities, such as the attendance of conferences, workshops, and presentations, the reading of current literature in the library and marketing fields, as well as informal communication and networking with other professionals are important in the study of social media marketing adoption.

Communication is extremely important in diffusion theory and this literature review would be incomplete without a mention of Mark Granovetter’s influential “The Strength of Weak Ties.” Granovetter argues that an individual’s social network consists of close friends who are considered strong ties, and acquaintances, or weak ties that are less socially involved with one another. Granovetter suggests that weak ties are to a person’s advantage in that they provide links, or bridges between various densely knit social groups of close friends. Granovetter has studied many examples of the use of weak ties, including job finding where he asserts that those who used strong ties were “far more likely to have a period of unemployment than those using weak ties.”^{xxxviii} Weak ties provide individuals with information they could not have possibly known without access to other social groups. In the case of new ideas, Granovetter argues that

weak ties increase both the spread of new ideas, as well as the speed with which these ideas spread. When closely knit groups are somewhat permeable in nature, in other words they are not completely closed-off from others because of the existence of weak ties with other social groups, cultural diffusion, scientific innovations and new ideas in general are more likely to spread. The way in which ideas spread is extremely important in the study of innovation adoption. Granovetter's work suggests the importance of communication with acquaintances rather than close friends in the diffusion of innovations.

With recent library closures and decreased funding in special and other library settings, it is necessary to throw the discussion of library marketing into the forefront. The study of the adoption of social media marketing techniques is lacking in the literature, especially with relation to special libraries. Further research on the diffusion of social media marketing in libraries is necessary in highlighting new trends and special librarians' current marketing activities in general. It is important to understand special librarians' perceptions of social media marketing techniques and their use of marketing to address what Siess describes as libraries' general failure to market and advocate for their own existence. As new professionals enter the field it is important to determine the types of marketing skills needed to ensure the continued relevance of and need for the profession.

ⁱ Susan DiMattia, "Time, Inc. Closes Research Center," *Library Journal*, 126 no. 12 (2001): 15.

ⁱⁱ Ari Cohen, "ESL: Engineering Societies Library: End of a Special Library," *Science and Technology Libraries*, 19 no. 1 (2000): 8.

ⁱⁱⁱ Judith Siess, *The Visible Librarian: Asserting Your Value with Marketing and Advocacy*, (Chicago: American Library Association, 2003).

^{iv} *Ibid.*, xii

-
- ^v Eileen Elliot de Saez, *Marketing Concepts for Libraries and Information Services*, (London: Facet Publishing, 2002), 1.
- ^{vi} *Ibid.*, 26.
- ^{vii} Gary Armstrong and Philip Kotler, *Marketing: An Introduction*, (Upper Saddle River, NJ: Pearson Prentice Hall, 2005), 6.
- ^{viii} Jean-Jacques Lambin, *Market-Driven Management: Strategic and Operational Marketing*, (New York: St. Martin's Press, 2000), 7.
- ^{ix} E. Jerome McCarthy, *Basic Marketing: A Managerial Approach*. (Homewood, IL: Richard D. Irwin, Inc., 1960).
- ^x Theodore Levitt, "Marketing Myopia," *Harvard Business Review*, 39 no. 4 (1960): 45.
- ^{xi} Levitt, "Marketing Myopia," 55.
- ^{xii} H. Igor Ansoff, "Strategies for Diversification," *Harvard Business Review*, 35 no. 5 (1957): 117.
- ^{xiii} Walter Van Waltersshoot and Christophe Van den Bulte, "The 4P Classification of the Marketing Mix Revisited," *Journal of Marketing*, 56 (October 1992): 85.
- ^{xiv} Yoram Wind and Thomas S. Robertson, "Marketing Strategy: New Directions for Theory and Research," *Journal of Marketing*, 47 (Spring 1983): 12.
- ^{xv} Wind and Robertson, "Marketing Strategy: New Directions for Theory and Research," 13.
- ^{xvi} Philip Kotler, "Strategies for Introducing Marketing Into Nonprofit Organizations," *Journal of Marketing*, 43 (January 1979): 38.
- ^{xvii} Kotler, "Strategies for Introducing Marketing Into Nonprofit Organizations," 43.
- ^{xviii} Kirthi Kalyanam and Shelby McIntyre, "The E-Marketing Mix: A Contribution of the E-tailing Wars," *Journal of the Academy of Marketing Science*, 30 (2002): 498.
- ^{xix} Armstrong & Kotler, *Marketing: An Introduction*, 58.
- ^{xx} *Ibid.*, 33.
- ^{xxi} Mark Needleman, "Web 2.0/Lib 2.0—What Is It? (If It's Anything at All)," *Serials Review*, 33 (2007): 202.
- ^{xxii} David E. Millard and Martin Ross, "Blogs, Wikis & RSS: Web 2.0: Hypertext by Any Other Name?" *Proceedings of the Seventeenth Conference on Hypertexts and Hypermedia*, (August 2006): 27.
- ^{xxiii} Michael E. Casey and Laura C. Saastinuk, *Library 2.0: A Guide to Participatory Library Service*, (Medford, NJ: Information Today, Inc., 2007), 5.
- ^{xxiv} Tim Finin et al., "Social Networking on the Semantic Web," *The Learning Organization*, 12 no. 5 (2005), 418-419.
- ^{xxv} *How to Use Social Media to Engage Employees: Strategies to Improve Communication and Collaboration*, (Chicago, Ill.: Melcum Pub, 2007).
- ^{xxvi} Darlene Fichter, "Seven Strategies for Marketing in a Web 2.0 World," *Marketing Library Services*, 21 no. 2 (2007).
- ^{xxvii} Kotler, "Strategies for Introducing Marketing Into Nonprofit Organizations," 43.
- ^{xxviii} Brad Kleindl, "Marketing Practices Used by the Emerging American Public Library System from Inception to 1930," *Journal of Macromarketing*, 27 no. 1 (March 2007): 67-68.
- ^{xxix} Christine Oldman, "Marketing Library and Information Services," *European Journal of Marketing*, 11 no. 6 (1977): 462.

-
- ^{xxx} Oldman, “Marketing Library and Information Services,” 465.
- ^{xxx}_i Noah Turner, “Marketing the Library Service – Sales and Promotion,” *European Journal of Marketing*, 18 no. 2 (1984): 77.
- ^{xxx}_{ii} Turner, “Marketing the Library Service – Sales and Promotion,” 81.
- ^{xxx}_{iii} Everett M. Rogers, *Diffusion of Innovations*, (New York: Free Press, 2003).
- ^{xxx}_{iv} *Ibid.*, 229, 240, 257, 258.
- ^{xxx}_v T. Ravichandran, “Organizational Assimilation of Complex Technologies: An Empirical Study of Component-Based Software Development,” *IEEE Transactions on Engineering Management*, 52 no. 2 (May 2005): 249.
- ^{xxx}_{vi} Ravichandran, “Organizational Assimilation of Complex Technologies,” 262.
- ^{xxx}_{vii} Rogers, *Diffusion of Innovations*, 18.
- ^{xxx}_{vii} Mark Granovetter, “The Strength of Weak Ties: A Network Theory Revisited,” *Sociological Theory*, 1 (1983): 211.
- ^{xxx}_{vii} Rogers, *Diffusion of Innovations*, 290-291.
- ^{xxx}_{viii} Granovetter, “The Strength of Weak Ties,” 211.

Methodology

To study the diffusion of social media marketing techniques among special librarians, a Web survey collected data from special librarians throughout North Carolina. Prior to distributing the survey, the study was reviewed and approved by the University of North Carolina Academic Affairs Institutional Review Board for research using human subjects. The study was limited to special librarians in North Carolina both because of the author's interest in the state of special librarianship within North Carolina, and because of the author's access to the North Carolina Special Librarians' email listserv and contact information. This study's population consists of those individual members of the Special Libraries Association who designated North Carolina as their current state of residence in the Special Libraries Association membership directory. The population includes working professionals, retired librarians, graduate students, and those who may have an interest in special libraries, but are not necessarily employed in one. Due to the nature and the constraints of this study, the exact number and contact information for all special librarians currently employed in North Carolina are unknown. The Special Libraries Association membership directory is the study's closest estimate to the number employed in North Carolina. Non-random, purposive sampling was used to survey 220 individuals.

The study population received two emails requesting their participation in this study: the first, an initial request, and then a reminder two weeks later. Twenty-two emailed surveys were returned as undeliverable, and one person responded that they were

unable to complete the survey due to a career change, creating a population of 197 presumed members of the Special Libraries Association in North Carolina. Sixty-three people responded to the survey, giving a total of 62 responses and a 31.47 percent response rate. Only respondents who currently work or who worked in special libraries within the past year were treated as a part of the sample population, leaving data for 60 respondents.

The Web survey questionnaire was developed based on Rogers' classical diffusion of innovations theory and refined based on a pretest. Definitions were provided for terms including special library, social media, social media marketing and professional development activities. The Web survey was emailed from the author's university affiliated email address, indicating the nature of the study and providing a hyperlink to the survey. A Web based survey instrument was used to collect data. No directly identifying data was collected for use. Respondents were asked to answer up to twenty-six questions regarding their status within in a special library, demographic information, knowledge of social media, and their experience with social media applications. Respondents were also asked about their opinions on the use of social media in marketing applications, currently employed marketing and promotional techniques, and their knowledge of others who had successfully used social media marketing techniques.

All twenty-six questions were closed-ended questions with numerically coded responses; however, the respondents had several opportunities to leave comments, which will be discussed with the survey's results. Levels of activity in professional organizations, levels of communication and discussion with peers regarding new technologies and opinions on where respondents learned about social media were

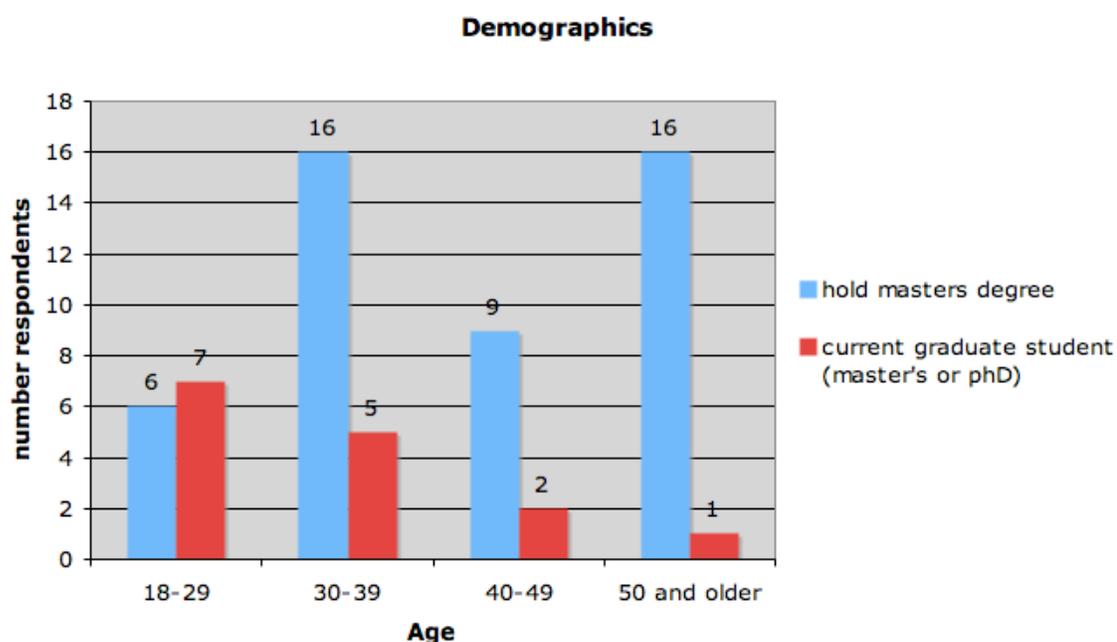
determined using ordinal scales, as were respondent opinions on the compatibility of social media with their needs. Those who had experience using social media marketing techniques were asked two additional questions regarding its advantages and disadvantages. Those who indicated they had used social media marketing techniques rated social media marketing in terms of cost, time, convenience and results achieved using ordinal scales. Assuming the data were not normally distributed; a nonparametric Spearman correlation was calculated and used to look for statistically significant correlations among variables within the sample population.

Results and Analysis

Demographics

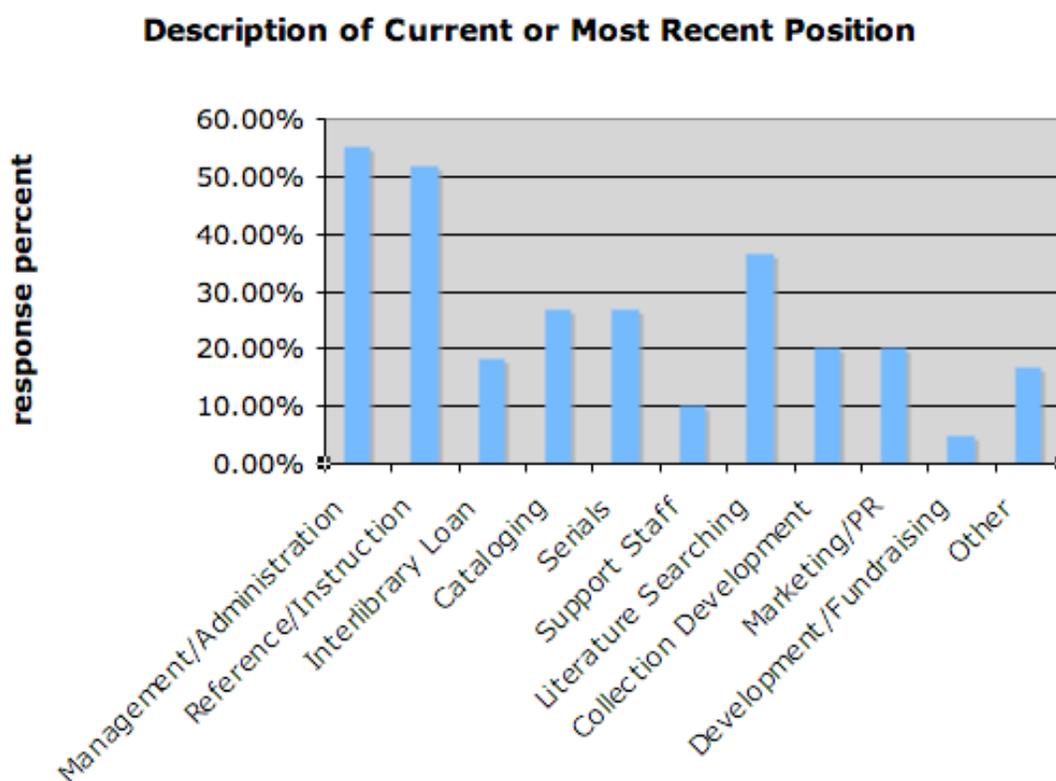
As defined by this study, special libraries are non-public, non-school libraries, which specialize in the interests of the institution they serve, with a depth of information related to those specific interests. A special library may be a part of a university; however, it must not be the university's primary library. According to this definition, 95 percent (60 participants) of the original 63 survey respondents labeled themselves as currently working in or as having worked in a special library within the past year. Other demographic data was also collected. Figure 1 shows descriptions of survey participants' age and educational status.

Fig. 1.—Demographics



Respondents were given the opportunity to indicate the type of work which best describes their position in a special library. They were able to select as many categories as applied, as well as write in responses for job responsibilities not designated by the survey choices. Approximately 52 percent of respondents reported working in a Management or Administrative capacity and 50 percent labeled their work as Reference or Instruction within a special library. Only 19 percent reported working in any sort of marketing or public relations capacity and five percent labeled their work as development or fundraising. Literature searching, cataloging, serials and interlibrary loan were the other major categories describing special librarians' duties. Figure 2 shows participants' reported job duties.

Fig. 2.—Special librarians' reported job description



Professional Development, Communication, and the Adoption of Innovation

Survey questions were designed to portray respondents' professional development activities, opinions about new technologies, regular innovation adoption behavior, and levels of communication with peers in order to answer the question: Based on perceptions of relative advantage, compatibility, complexity and observability, does exposure to social networking and social media marketing through professional development activities and informal communication channels lead to an increased adoption of social media marketing techniques among special librarians? Professional development and communication with peers and colleagues may happen in various circumstances, whether through sessions attended at conferences, contacts made in a professional organization, or informal conversations. Approximately 43 percent of respondents described themselves as active in professional library organizations when given a scale from not active to very active. Thirty-seven percent described themselves as "sometimes active" and only seven percent, or four respondents, indicated that they were not active in professional organizations at all. When asked about the number of library-related conferences attended, approximately 75 percent of respondents replied that they had been to at least one professional conference within the past year, though 25 percent indicated that they had not. Participants were asked to include local conferences as well as national conferences, perhaps indicating that the number who said they were not active in professional organizations may be a bit low. To get at other types of professional development activities, participants were asked to respond to questions indicating the amount of time spent reading library-related material. Eight respondents or approximately 13 percent indicated that they read no library-related literature within the

past week, 35 percent reported reading for less than an hour and approximately 52 percent reported reading for an hour or more.

To determine special librarians' regular innovation adoption behaviors, participants responded to several questions. Nearly all of the population sampled, 93 percent, indicated that they enjoyed learning about new technologies. Respondents gave a similar response when asked whether they were more likely to use new technology if it had been recommended by a friend or someone they knew. Nearly 92 percent indicated that they were more likely to use technology if it had been recommended, as opposed to only eight percent who did not think a recommendation made a difference in the likelihood of their using a new technology. This study also measured participants' levels of discussion regarding new technologies with peers, colleagues or friends and found that 74 percent often discuss new technologies. Twelve percent disagreed that they discussed new technologies often, and nearly 14 percent strongly disagreed that they often discussed new technologies with peers, colleagues or friends.

In addition to understanding adoption behaviors, this survey aimed to discover the types of social media with which special librarians are familiar. Participants were given a list of some popular social media terminology, including social networking, social bookmarking, instant messaging, blogs, RSS feeds, and Wikis, as well as a list of social media applications and services, such as Facebook, MySpace, Digg, Bloglines, del.icio.us, YouTube, Wikipedia, Flickr, and Twitter. Participants were then asked whether they knew of these terms or had heard about the social media mentioned, regardless of whether or not the respondents had actually tried using it on their own. One hundred percent of the 59 respondents who answered the questions indicated they had

heard of blogs, instant messaging, RSS feeds, Wikipedia and YouTube. More than 50 percent of respondents had heard of all other terms listed, except for the application Pownce, which only 4 respondents had heard of, and Digg, which only 27 respondents indicated knowing. All of the respondents indicated that they had heard of at least one of the terms given in the survey. Figure 3 shows participants' responses to their knowledge of various social media terminology and Figure 4 displays knowledge of specific social media applications. When asked to rate the statement: "I believe social media could be useful to me," 71 percent indicated that they either agreed or strongly agreed with that statement, 20 percent indicated they were uncertain, and five percent either disagreed or strongly disagreed that social media could be useful.

Fig. 3.—Knowledge of social media terminology

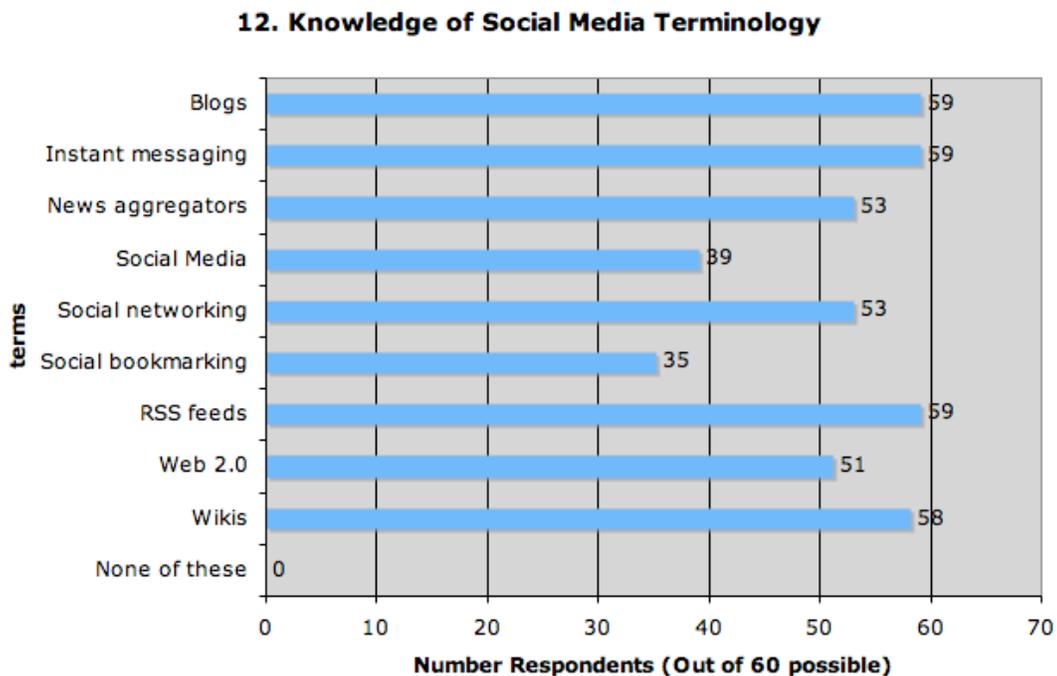
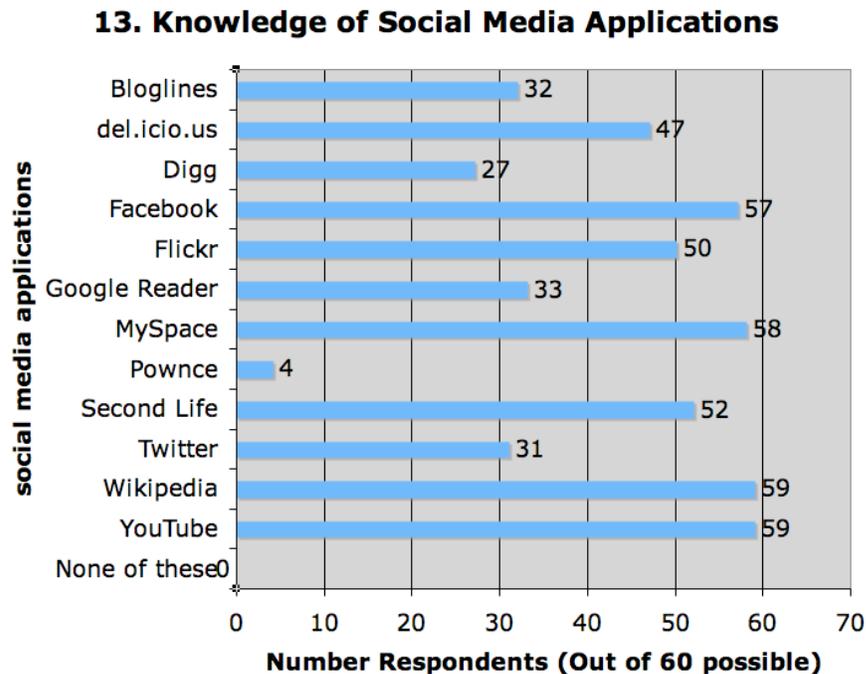


Fig.4.—Knowledge of social media applications and services



To determine how special librarians learn about social media, respondents were asked whether they had learned about social media from discussion with friends, colleagues or peers, and whether professional development activities, such as conferences, presentations, meetings, workshops, and reading of the current library literature had any impact on their knowledge of social media applications. When given a range of choices from strongly disagree to strongly agree, nearly 82 percent agreed or strongly agreed that they had learned about social media from conversations with peers and nearly 62 percent indicated learning about social media through professional development activities. Only two respondents strongly disagreed that they had learned about social media through conversations with peers, and six strongly disagreed that they had learned about social media through professional development activities.

Because I am interested in the use of social media for marketing purposes within special libraries, respondents were also asked to indicate whether or not they are or have been responsible for any aspects of marketing their library. Eighty percent of respondents indicated that they have been responsible for some type of marketing, whether it was marketing the library as a whole, library related events, or instruction sessions. The most popular promotional techniques or devices used by respondents include brochures or flyers, the use of email listservs or emailed newsletters, signage, library events, word-of-mouth, surveys and Web site advertisements of various sorts. Approximately 21 percent (11 respondents) indicated they use blogs, six percent indicated the use of social networks, such as MySpace or Facebook, and one person indicated the use of RSS feeds for promoting their special library in some manner. The survey defined social media as online technologies, such as Facebook, Flickr, Second Life and YouTube, through which people interact with each other or share information, thoughts, ideas, opinions, etc. in various formats. The survey also defined social media marketing as techniques including the use of blogs, RSS feeds, social networking sites and other social sites, (e.g. del.icio.us, Flickr) or Web 2.0 technologies used to market a product or service in some way. Based on these definitions, the study participants were asked to give their opinions regarding social media. Nearly 59 percent of the sample population who answered the question indicated that they knew of someone who had used social media marketing techniques to successfully market a library or library services; 41 percent indicated they did not. This question is important in terms of observability as described by Rogers.

When asked about social media marketing's compatibility or consistency with the marketing objectives and needs defined by each individual's special library, nearly 66 percent agreed that social media marketing may be compatible with their library's needs. Only eight respondents (14 percent) indicated that social media was not compatible with their library and nearly 21 percent indicated that they were uncertain and neither agreed nor disagreed. Approximately 64 percent also indicated that they had considered using social media marketing techniques to market their library, and 22 percent (13 respondents) indicated that they are currently using social media marketing techniques. Of those who indicated current use of social media marketing, nearly 91 percent described those techniques as beneficial. Some respondents left comments about the difficulty of measuring the true results of these technologies and another stated, "This is really new, so it is hard to tell." One respondent found that social media marketing increased visibility, reached out to a younger generation, and provided different venues for communicating with library users. Another stated that social media marketing drew positive, "technology-forward" attention to their special library; however, in the end, the social media marketing techniques were about as effective as traditional marketing techniques, except that they were easier to maintain.

Survey respondents who have used social media marketing techniques rated them in terms of cost, time spent, convenience and results achieved. Figure 5 shows special librarians evaluation of social media marketing. In all categories, more than 50 percent indicated that they agreed or strongly agreed that social media marketing was more effective when compared to traditional marketing techniques. There was the most agreement among respondents in rating cost of social media marketing techniques; 11 out

of 12 respondents found social media marketing more effective than traditional media marketing in terms of cost. Nearly 55 percent agreed that social media marketing was more effective in terms of time spent, approximately 82 percent indicated social media marketing was more effective in terms of convenience, and nearly 56 percent indicated social media marketing was more effective than traditional marketing in terms of results achieved.

Fig.5.—Evaluation of social media

When compared to traditional marketing techniques, social media marketing is more effective in terms of...					
	Strongly Disagree	Disagree	Agree	Strongly Agree	Total Responses
Cost	1	0	11	1	13
Time Spent	1	4	7	0	12
Convenience	1	1	8	2	12
Results Achieved	1	3	6	0	10

Statistical Analysis of Results

I hoped to produce data surrounding special librarians' decisions to adopt or reject social media marketing and information regarding the diffusion and adoption of social media marketing techniques. Nonparametric correlation coefficients were used to determine relationships among variables. In many cases, statistically significant correlations were found, indicating the validity of diffusion theory analysis for this particular study's sample population. Using SPSS statistical software, Spearman's rho was calculated to determine whether correlations exist that are statistically significant at the .05 level.

As expected, statistically significant relationships were found to exist between professional development activities and perceived compatibility of social media marketing. For example, correlations exist between amount of time spent reading library-related literature and those currently using social media marketing techniques. A correlation also exists between those who learned about social media marketing from peers, colleagues, or friends and those who considered using social media marketing. Perhaps surprisingly though, no statistically significant correlations were found between activity levels in professional organizations and those who considered using social media marketing techniques; nor was there a correlation between the number of conferences attended and those who viewed social media marketing to be compatible with their needs. Figure 6 displays statistically significant correlations.

Survey question variables serve as indicators for relative advantage, compatibility, complexity and observability, though the words “observability” and “relative advantage” are not directly used in the survey questions. Relative advantage may be measured in part by whether respondents indicated social media may be useful (see survey question 15). Observability of the innovation may be found in response to knowledge of the successful use of social media marketing (see survey question 21). Overall, the results provide moderate support for correlations among professional development and communication variables and the considered use, current use and perceived compatibility of social media marketing techniques.

Fig.6.—Significant correlations among survey variables

Variable 1	Variable 2	Correlation Coefficient	Significance (2-tailed)	N
9. Enjoy learning new technology	23. Considered use of social media marketing techniques	.372**	.005	56
9. Enjoy learning new technology	22. Social media marketing may be compatible with current needs	.322**	.016	56
4. Age	6. Activity level in professional organizations	.269*	.039	59
6. Activity level in professional organizations	7. Number of conferences attended	.501**	.000	59
18. Learned about social media through professional development	7. Number of conferences attended	.263*	.044	59
11. More likely to use new technology if recommended	15. Believe social media may be useful	.296*	.023	59
15. Believe social media may be useful	10. Often discuss new technologies with peers, colleagues, friends	.339**	.009	59
15. Believe social media may be useful	23. Considered using social media marketing	.333*	.011	58
24. Currently using social media marketing techniques	8. Time spent reading library literature last week	.397**	.002	58
23. Considered using social media marketing	17. Learned about social media marketing from peers, colleagues, friends	.272*	.039	58
25. Social media marketing has been beneficial	17. Learned about social media marketing from peers, colleagues, friends	.636*	.035	11
21. Know of successful use of social media marketing	22. Social media marketing may be compatible with current needs	.354**	.006	58
21. Know of successful use of social media marketing	23. Considered using social media marketing	.314*	.016	58
22. Social media marketing may be compatible with current needs	23. Considered using social media marketing	.501**	.000	58
24. Currently using social media marketing techniques	21. Know of successful use of social media marketing	.452**	.000	58
3. Hold a degree in Library Science	25. Social media marketing has been beneficial	.671*	.024	11
18. Learned about social media through professional development	23. Considered using social media marketing	.270*	.040	58

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Appendix: 1. Survey shows complete variable information.

Discussion of Results

While the theory of diffusion of innovations has been widely studied in many disciplines, there is little in the literature regarding the adoption of new marketing techniques by special librarians. Few studies have focused on marketing techniques currently in use within special libraries, and none have researched special librarians' perceptions of social media marketing. As there is a growing need for marketing within special libraries, it is important to understand the options available, as well as the diffusion of new trends. This study addressed special librarians' marketing behaviors, knowledge surrounding social media and social media marketing, use of social media marketing, and opinions surrounding the effectiveness of social media marketing.

In this population, evidence was found indicating that Rogers' theory of the diffusion of innovation continues to be applicable in the study of social media marketing adoption. Ninety-two percent of participants agreed that they were more likely to use technology that had been recommended by someone, as opposed to the small percentage who did not believe recommendation made a difference. In addition to recommendation by a peer or friend, Rogers believes that perceptions of the innovation held by the potential adopters are extremely important in determining innovation adoption decisions.

Though it is impossible to predict whether special librarians increasingly adopt social media marketing techniques as a result of their opinions on social media's relative advantage, compatibility, complexity and observability based on this data alone, this data does present some interesting findings and statistically significant correlations. First,

very few special librarians within this study's population have actually used social media for marketing purposes. Only 14 of 60 responded that they had used social media marketing techniques, although all respondents indicated they knew about some type of social media. In addition, few special librarians label marketing and public relations activities as a part of their job. Only 19 percent indicated that marketing and PR described their current position, despite more than 50 percent indicating they were in management level positions. These results may indicate that this population of special librarians does not consider marketing to be significant for the management or administration of a special library.

In classical diffusion theory, perceptions of relative advantage, compatibility, complexity and observability all play a significant role in the adoption of new innovations. To learn about new innovations, communication with others, and especially those who are weak ties such as colleagues met at conferences, or those read about in library-related literature, proves to be important in the spread of new ideas. Professional development activities, such as the attendance of conferences, presentations, meetings and workshops and reading of current library literature, provide opportunities to connect and create weak ties among special librarians. According to survey data, a significant correlation exists between those who learned about social media applications through professional development activities and those who have considered using social media for marketing purposes. Surprisingly, the number of conferences attended does not seem to correlate with those who have considered using social media marketing techniques; however this could be the case for several reasons. As a new phenomenon, social media marketing may just be beginning to gain attention in panel presentations, workshops and

other presentations given at conferences; or these topics may not be covered at all with respect to marketing. However, the number of conferences attended does correlate with those who learned about social media applications through professional development activities, suggesting there may be coverage of these topics.

Ideas about the use of social media in marketing spread in correlation with the amount of time spent reading library-related literature. Nearly 87 percent spent at least some time reading library-related literature in the week previous to responding to this survey. A positive correlation coefficient indicates significance at the .01 level between the time spent reading and those who have adopted and are currently using social media marketing techniques.

When given a list of social media terminology and examples, special librarians indicated they were relatively familiar with these concepts and applications. All survey respondents indicated that they knew of at least some form of social media; however, when given the opportunity to decide whether social media could potentially be useful, 20 percent could neither agree nor disagree. The 20 percent who could neither agree nor disagree to this question, may indicate the true percentage of this surveyed population who do not truly grasp social media or its potential uses.

In terms of compatibility, approximately two-thirds of the sampled population agreed that social media marketing techniques may be consistent with the marketing needs of their special library. Again, approximately 21 percent were uncertain about the compatibility of social media marketing techniques. Very few believed that social media presented any obstacles in terms of complexity or learning burdens, as nearly 98 percent disagreed or strongly disagreed that the innovation was too complex to learn and

understand how to use. The observability of social media marketing's success indicated lower numbers, with only about 59 percent knowing of someone who had successfully used the innovation, though this number is still high enough to indicate that this innovation possesses observability for many study participants. Those respondents who know of successful cases of social media marketing correlate at a statistically significant level with those who have considered using social media marketing techniques in their own special libraries.

Perceptions of the observability of this trend also correlate with respondents' perceptions of compatibility, and the current use of social media marketing techniques. Relative advantage, while more difficult to interpret, can be seen by the reported usefulness of social media. Perceptions of the usefulness of social media correlate significantly with considered use of social media marketing techniques. Of those who are currently using or have used social media, the general consensus is that social media marketing techniques have been beneficial in some way – nearly 91 percent of respondents agreed that there were advantages to its use. More specifically, the majority of respondents believed that when compared to traditional marketing techniques, social media marketing was more effective in terms of cost, time spent, convenience and results achieved. Those currently using social media marketing are what Rogers classifies as early adopters. Though this study did not attempt to understand the characteristics of those adopting new innovations beyond their professional development activities, Rogers argues that, in general, earlier adopters participate more socially, are more highly interconnected through social networks, have more contact with change agents, have greater exposure to mass media communication channels and interpersonal

communication channels and seek more information about innovations more actively than do later adopters.^{xxxix} Some of these characteristics may be represented by the time spent reading library-related literature, the discussion of new technologies with peers, colleagues and friends, and the attendance of professional development activities. These generalizations are by no means exhaustive, but provide interesting points for future adoption studies regarding social media marketing in special libraries.

^{xxxix} Rogers, *Diffusion of Innovations*, 290-291.

Study Limitations

This study faced several limitations. First, a non-random purposive sample was used, and therefore statistics give only a description of the population sampled, and cannot be generalized to the total population of special librarians in North Carolina or elsewhere. Despite this disadvantage, this survey data is still important in describing the marketing, professional development, and innovation adoption behaviors of a large number of special librarians within North Carolina. This study could be repeated elsewhere and compared to find similarities and differences between other states, regions and countries. Without knowledge of the precise number of special librarians in North Carolina at present, it is difficult to determine the percentage of the population of special librarians in North Carolina who actually responded to this survey. By using the closest estimate available, the Special Libraries Association membership directory for North Carolina, this study could be duplicated in other places within the United States.

It is also impossible to know whether survey responses represent bias, or if those who responded represent the rest of the population of special librarians in North Carolina. No data previously existed to allow for a comparison of characteristics between survey respondents and the total population. Also, this survey was sent only in online format; no surveys were sent via postal mail, allowing only those with valid email addresses listed in the membership directory to participate. The use of only an online survey may represent method bias and lend to a more technologically savvy group of respondents than might be representative of the rest of the population of special librarians in North Carolina.

Additionally, it is possible that this survey suffers from pro-innovation bias. The mere existence of the survey suggests that social media marketing is a positive innovation deserving of attention. The idea that social media may be helpful in marketing special libraries is implied in the study, which may have influenced survey results. The wording of questions might also impact results. For example, it is probable that few survey respondents would like to admit that a popular new technology may be too complex to learn. This was balanced in some cases by allowing respondents to answer with a “Neither agree nor disagree” response, as well as attempting to word questions in a neutral manner.

Lastly, there are many more aspects of technology adoption and the diffusion of innovations that were not studied. It is unclear which forms of social media special librarians use most, what current marketing activities are used, and whether special librarians really understand marketing concepts or deem marketing important. This study was limited in its scope, but attempts to provide an interesting starting point for additional studies of this nature.

Future Research

This study is not a complete picture of social media marketing within North Carolina special libraries, yet it provides impetus for future studies of social media marketing adoption throughout the United States and elsewhere. The data collected gives future researchers a point of comparison when looking at special librarians' behaviors across the country. The adoption of social media marketing techniques by special librarians still needs much greater examination. Trends in the adoption of new marketing techniques are important for determining material that should be discussed in library science graduate school programs, marketing courses and professional development activities. More research is needed to gain a better picture of special librarians marketing activities and behaviors as a whole. It is still unclear the number of special libraries that have formalized marketing plans and strategies in place. In many cases, special librarians serve as solo librarians, working to complete their daily tasks and fitting in marketing as an afterthought. Marketing is an important skill for a librarian in any type of position. Whether strictly a library manager or reference librarian, each individual affects the way their library is seen by others.

More research is also needed for the evaluation of social media marketing techniques. It is difficult to tell whether social media marketing will have the effect many hope for. As a still somewhat new phenomenon, very few have used and thoroughly evaluated social media marketing techniques. Future studies need to develop a means for evaluating social media marketing versus traditional marketing methods for

use in libraries. Special libraries' users may also play a role in the adoption or rejection of social media marketing. It is difficult to determine what audiences will respond well to this type of marketing. In academic settings with traditionally younger customers or library users, the idea of social media marketing might be much more widely accepted. It is still unclear who is using social media and whether older audiences will be just as willing to use and accept the innovation. Even if there is a willingness to adopt the innovation on the behalf of librarians, knowledge of their target market is extremely important in deciding whether to use these techniques.

Conclusion

There is a perceived gap in the library and marketing literature regarding the use of social media in special libraries, and especially the adoption of social media marketing techniques used in special libraries. Some trade magazine articles discuss social media's use in terms of marketing library services, however most scholarly literature regarding social media has been published in other fields, such as business, communications and marketing. As a relatively new phenomenon, it is unknown how many special librarians know of and have adopted these techniques.

An increasing number of special libraries are experiencing financial difficulties, decreased patron usage of materials, and are even facing closure, making marketing an essential component in advocating for the library's value. New marketing techniques are, therefore, that much more valuable if considered important and useful by librarians in the field. This study aimed to gather information about special librarians' adoption or resistance to social media and social media marketing techniques. It also attempted to examine and explain the impact of professional development activities and social interactions on the diffusion of these ideas.

By surveying a non-random sample of special librarians in North Carolina, a fairly descriptive picture of the sample population's familiarity and use of social media was gathered. Although not a random sample, survey results have implications for the rest of special librarians in the field who are interested in the adoption of social media for use in their libraries. This study is not meant to be a complete view of social media

marketing adoption in North Carolina special libraries, but should provide more information regarding its adoption in some North Carolina special libraries. This information may be tested against other regions to create a more holistic picture.

This study supports Rogers' theory of the diffusion of innovation. Statistically significant correlations between professional development activities and the considered use, perceived compatibility, complexity, observability and relative advantage of social media marketing give reason to support future studies on this topic. Marketing is vital to the existence of special libraries and provides an avenue for understanding customer needs. Social media may give librarians a way to open the lines of communication with their patrons and find new ways of serving those needs. Ultimately, special libraries are much like businesses in that they are increasingly being held accountable when failing to meet expectations. For these reasons it is necessary to adopt marketing, and possibly social media marketing practices in special libraries.

Appendix 1: Survey

1. Special Libraries Survey

1. A special library is a non-public, non-school library, which specializes in the interests of the institution it serves with a depth of information related to those specific interests. A special library may be a part of a university; however, it must not serve as the university's primary library.

Are you currently working in or have you recently (within the past year) worked in a special library?

- No
 Yes

2. Do you hold a Masters degree or higher in Library Science, Information Science or the equivalent?

- No
 Yes

3. Are you currently a graduate student working to complete a Master's degree or Ph.D in Library Science, Information Science, or another closely related field?

- No
 Yes

4. What is your age?

- 18-29
 30-39
 40-49
 50 and up

5. What type of work best describes your current or most recent position in a special library? (Select all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Cataloging | <input type="checkbox"/> Marketing/Public Relations |
| <input type="checkbox"/> Collection Development | <input type="checkbox"/> Reference and/or Instruction |
| <input type="checkbox"/> Development and/or Fundraising | <input type="checkbox"/> Serials |
| <input type="checkbox"/> Interlibrary Loan | <input type="checkbox"/> Support Staff |
| <input type="checkbox"/> Literature Searching | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> Management/Administration | |

2. Professional Development

6. How active are you in library-related professional organizations? (Consider both local and national organizations)

- not active sometimes active active very active

7. In the past year, how many library-related conferences have you attended? (May include both national and local conferences)

- 0
 1
 2
 3 or more

8. In the last week, approximately how much time did you spend reading library-related literature or magazine articles?

- 0 hours
 less than 1 hour
 1-2 hours
 more than 2 hours

9. Do you enjoy learning about new technologies?

- No
 Yes

3. Technology

10. Please rate this statement:

I often discuss new technologies with peers, colleagues, or friends.

- Strongly disagree
 Disagree
 Agree
 Strongly agree

11. Are you more likely to use new technology if it has been recommended by someone you know?

- No
 Yes

12. Of the following terms, which do you know about or have you heard of? (Select all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Blogs (Weblogs) | <input type="checkbox"/> Social Bookmarking |
| <input type="checkbox"/> Instant Messaging | <input type="checkbox"/> RSS feeds |
| <input type="checkbox"/> News aggregators | <input type="checkbox"/> Web 2.0 |
| <input type="checkbox"/> Online Social Media | <input type="checkbox"/> Wikis |
| <input type="checkbox"/> Online Social Networking | <input type="checkbox"/> None of these |

13. Of the following social media applications, which do you know about or have you heard of? (Select all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Bloglines | <input type="checkbox"/> Pownce |
| <input type="checkbox"/> Del.icio.us | <input type="checkbox"/> Second Life |
| <input type="checkbox"/> Digg | <input type="checkbox"/> Twitter |
| <input type="checkbox"/> Facebook | <input type="checkbox"/> Wikipedia |
| <input type="checkbox"/> Flickr | <input type="checkbox"/> YouTube |
| <input type="checkbox"/> Google Reader | <input type="checkbox"/> None of these |
| <input type="checkbox"/> MySpace | |

14. Social media are online technologies, such as those applications listed in the previous question, through which people may interact with each other or share information, thoughts, ideas, opinions, etc., in various formats.

Please rate this statement:

Social media is too complex for me to learn and understand how to use.

- Strongly disagree
 Disagree
 Agree
 Strongly agree

15. Please rate this statement:

I believe social media could be useful to me.

- Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly agree

4. Use of Social Media

16. Which of the following have you used in the past week? (Select all that apply)

- | | |
|--|--|
| <input type="checkbox"/> AOL Instant Messenger (AIM) or IM | <input type="checkbox"/> MySpace |
| <input type="checkbox"/> Bloglines | <input type="checkbox"/> Pownce |
| <input type="checkbox"/> Del.icio.us | <input type="checkbox"/> Second Life |
| <input type="checkbox"/> Digg | <input type="checkbox"/> Twitter |
| <input type="checkbox"/> Facebook | <input type="checkbox"/> Wikipedia |
| <input type="checkbox"/> Flickr | <input type="checkbox"/> YouTube |
| <input type="checkbox"/> Google Reader | <input type="checkbox"/> None of these |

17. Please rate this statement:

I have learned about social media applications, such as those listed in the question above through discussion with colleagues, peers and friends.

- Strongly disagree Disagree Agree Strongly agree

18. Please rate this statement:

I have learned about social media applications through professional development activities (attendance of conferences, presentations, meetings, workshops, and reading of current library literature).

- Strongly disagree Disagree Agree Strongly agree

5. Marketing

19. Are you responsible or were you recently (within the past year) responsible for any marketing of your special library, library services, or library-related events, including instruction sessions?

- No
 Yes

20. What techniques or devices do you currently use or have you used in the past to promote your special library. (Select all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Blogs | <input type="checkbox"/> Online discussion forums |
| <input type="checkbox"/> Branded giveaways | <input type="checkbox"/> Online social networks (e.g. Facebook, MySpace, etc.) |
| <input type="checkbox"/> Brochures/Flyers | <input type="checkbox"/> Signage |
| <input type="checkbox"/> Contests | <input type="checkbox"/> Surveys |
| <input type="checkbox"/> Email listservs | <input type="checkbox"/> Website advertisements |
| <input type="checkbox"/> Letters | <input type="checkbox"/> Word-of-mouth |
| <input type="checkbox"/> Library events | Other (please specify) |
| <input type="checkbox"/> Newspaper/Television advertisements | <input type="text"/> |

6. Marketing (cont.)

21. Please use the following definition of social media marketing techniques for questions 21 & 22.

Social media marketing techniques include the use of blogs, RSS feeds, social networking sites (e.g. Facebook and MySpace) and other social sites (e.g. del.icio.us, Flickr) or Web 2.0 technologies to market a product or services in some way.

Do you know of anyone who has used these techniques to successfully market a library or library services?

- No
 Yes

22. Using the definition of social media marketing given in the previous question, please rate this statement:

I believe social media marketing may be compatible with the marketing objectives and needs defined by my special library.

- Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly agree

23. Have you ever considered using social media marketing techniques to market your library or library services?

- No
 Yes

24. Are you currently using or have you recently used any social media marketing techniques to market your library?

- No
 Yes

7. Evaluation of Social Media Marketing in Special Libraries

25. Have social media marketing techniques been beneficial in marketing your special library, library services, or library-related events?

No

Yes

Comments?

26. Please rate the following statements:

When compared to traditional marketing techniques (not using social media), I believe that social media marketing is...

	Strongly disagree	Disagree	Agree	Strongly agree
more effective in terms of cost.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
more effective in terms of time spent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
more effective in terms of convenience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
more effective in terms of results achieved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Selected Bibliography

- Adams, III, John T. "SLA Seeks Study on EPA Library Cutbacks." *Information Outlook*. 11 no. 3 (2007): 25-27.
- Ansoff, H. Igor. "Strategies for Diversification." *Harvard Business Review*. 35 no. 5 (1957): 113-124.
- Armstrong, Gary and Philip Kotler. *Marketing: An Introduction*. Upper Saddle River, NJ: Pearson Prentice Hall, 2005.
- Casey, Michael E. and Laura C. Saastinuk. *Library 2.0: A Guide to Participatory Library Service*. Medford, NJ: Information Today, Inc., 2007.
- Cohen, Ari. "ESL: Engineering Societies Library: End of a Special Library." *Science & Technology Libraries*. 19 no. 1 (2000): 3-20.
- DiMattia, Susan. "Time, Inc. Closes Research Center." *Library Journal*. 126 no. 12 (2001): 15-16.
- Elliot de Saez, Eileen. *Marketing Concepts for Libraries and Information Services*. London: Facet Publishing, 2002.
- Fichter, Darlene. "Seven Strategies for Marketing in a Web 2.0 World." *Marketing Library Services*. 21 no. 2 (2007).
- Finin, Tim et al. "Social Networking on the Semantic Web." *The Learning Organization*. 12 no. 5 (2005): 418-435.
- Granovetter, Mark. "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory*. 1 (1983): 201-234.
- Hooley, Graham J., James Lynch, Jenny Shepherd. "The Marketing Concept: Putting the Theory into Practice." *European Journal of Marketing*. 24 no. 9 (1990): 7-24.
- How to Use Social Media to Engage Employees: Strategies to Improve Communication and Collaboration*. Chicago: Melcrum Pub., 2007.
- Iacobucci, Dawn. "Let's Network." *Marketing Research*. 19 no. 1 (2007): 30-35.

- Kalyanam, Kirthi and Shelby McIntyre. "The E-Marketing Mix: A Contribution of the E-tailing Wars." *Journal of the Academy of Marketing Science*. 30 (2002): 487-499.
- Kleindl, Brad. "Marketing Practices Used by the Emerging American Public Library System from Inception to 1930." *Journal of Macromarketing*. 127 no. 1 (2007): 65-73.
- Konieczko, Jill. "Library 2.0 in the Corporate World: Marketing Becomes Collaboration; New Technologies Can Expand Your Library's Reach and Usefulness." *Information Outlook*. 11 no. 3 (2007): 40.
- Kotler, Philip. "Strategies for Introducing Marketing into Nonprofit Organizations." *Journal of Marketing*. 43 (January 1979): 37-44.
- Levitt, Theodore. "Marketing Myopia." *Harvard Business Review*. 39 no. 4 (1960): 45-56.
- Mason, Robin and Frank Rennie. "Using Web 2.0 for Learning in the Community." *Internet and Higher Education*. 10 (2007): 196-203.
- McCarthy, E. Jerome. *Basic Marketing: A Managerial Approach*. Homewood, IL: Richard D. Irwin, Inc., 1960.
- Millard, David E. and Martin Ross. "Blogs, Wikis & RSS: Web 2.0: Hypertext by Any Other Name?" *Proceedings of the Seventeenth Conference on Hypertexts and Hypermedia*. (August 2006): 27-30.
- Oldman, Christine. "Marketing Library and Information Services." *European Journal of Marketing*. 11 no. 6 (1977): 460-474.
- Powers, Janet E. "Marketing in the Special Library Environment." *Library Trends*. 43 no.3 (1995): 478-493.
- Ravichandran, T. "Organizational assimilation of complex technologies: an empirical study of component-based software development." *IEEE Transactions on Engineering Management*. 52 no. 2 (2005): 249-268.
- Rogers, Everett M. *Diffusion of Innovations*. New York: Free Press, 2003.
- Slebochnik, Maribeth. "Science and Technology Resources on the Internet: Marketing and Outreach for Science and Technology Libraries: Selected Resources." *Issues in Science and Technology Librarianship*. (Winter 2006).
- Turner, Norman. "Marketing the Library Service – Sales and Promotion." *European Journal of Marketing*. 18 no. 2 (1984): 72-81.

Van Waltershoot, Walter and Christophe Van den Bulte. "The 4P Classification of the Marketing Mix Revisited." *Journal of Marketing*. 56 no. 4: 83-93.

Varadarajan, P. Rajan and Satish Jayachandran. "Marketing Strategy: An Assessment of the State of the Field and Outlook." *Journal of the Academy of Marketing Science*. 27 no. 2 (1999): 120-143.

Wind, Yoram and Thomas S. Robertson. "Marketing Strategy: New Directions for Theory and Research." *Journal of Marketing*. 47 (Spring 1989): 12-25.