

Twittering Libraries:

How and why New Zealand Public Libraries
use micro-blogging

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Abstract

The aim of this research is to discover how and why New Zealand Public Libraries use the micro-blogging platform Twitter. This paper uses a qualitative methodology consisting of open-ended interview questions conducted via e-mail. Rogers' Diffusion of Innovation theory is used as the theoretical framework of this research.

The analysis demonstrates that participants use Twitter as an alternative communication channel with members of the public who are Twitter users. Library websites as well as library services and programs are promoted on Twitter. Using Twitter enables participants to advocate for their libraries as Web 2.0 champions and is an invaluable professional development tool. The number of interactions and feedback from Twitter users who follow the library is a measure of the successful use of Twitter for participants. This research also reveals what software is being used by participants to maximise their use of Twitter.

The results of this research will allow public librarians to gain more knowledge about the micro-blogging software Twitter and how it can be used to assist in the delivery of outcomes and outputs in their public libraries.

1. Introduction

Twitter, in existence since 2006, has increased from 1.2 million unique visitors in May 2008 to 18.2 million in 2009 (Nielsen Wire, 2009). It is being used to keep up with the news, keep others updated with what one is doing and generally to keep in touch with friends, family, and co-workers (Wilson, 2009). Twitter is also a communication channel for businesses (Social Brand Index, 2009) and libraries have joined Twitter in significant numbers especially in North America (Brown, 2009). New Zealand companies and institutions have started using Twitter and at the time of writing, twenty-two New Zealand libraries are registered on Twitter, including twelve public libraries.

Twitter is a relatively new social media and Web 2.0 tool. Although many libraries in the USA and Canada are using it, there is limited literature available on the subject of how Twitter is used in the library field. Literature available mostly consists in case studies of Twitter and how library can use it, but there is little to no overall research available actually showing how Twitter is used and what impact it has on libraries. The research undertaken here aims at answering the following question: “How and why do New Zealand public libraries use Twitter?”

This research question is further addressed using the four following sub-questions:

1. Why do they use Twitter?
2. How do they use Twitter?
3. What impact has their use of Twitter had on their services?
4. What factors facilitate or inhibit the adoption of Twitter?

After reviewing the available literature, this research project consisted in contacting New Zealand public libraries via their Twitter account, obtaining the e-mails of librarians in charge of the library Twitter account and asking them if they would be willing to participate in an e-mail interview. A qualitative methodology is used for this research project because it is mainly concerned by why and how librarians are using Twitter in a library context. The resulting research will enable other libraries in New Zealand to make an informed decision as to whether or not Twitter is a social media they would benefit from using or not.

2. Definition of terms

2.1 Twittering Libraries

Libraries currently registered and actively posting on Twitter.

2.2. Web 2.0

A new form of the internet enabling users to add, share and modify content on the web.

2.3. Library 2.0

Customers' and library staff's participation and input in Library services is supported by the use of Web 2.0 applications (i.e. Facebook, blogs, RSS).

2.4 Social Media librarians

Librarians using social media (i.e. YouTube, Facebook, Flickr, Twitter) on behalf of their libraries or in a professional capacity.

2.5 Social Media

Social media are applications allowing users to engage in social networking.

2.6 Social networking

Social networking is an online activity that allows users to interact: sharing content and commenting on it.

2.7 Micro-blogging

Micro-blogging: broadcasting of limited character count (usually in less than 200 characters) messages via social media such as Twitter or Friendfeed.

2.8 Tweet

A tweet is message on Twitter.

3. Literature Review

3.1 The origin of Twitter

Twitter results from the evolution of the Internet since the 1990s according to Morris (2010). The internet evolved from the internet to the creation of Real Simple Syndication in 2000 and followed by social media and social networking today (Morris, 2010). This form of the internet, or Web 2.0 is a “user-centred Web” which Maness (2006) defines as the Internet as a coordinated, collective and progressive experience where users take part in its development (Maness, 2006, p. 2).

Twitter embodies Web 2.0 concepts and is widely described in the literature as “micro-blogging” which is “broadcast in nature and similar to text messaging, [and] lets users share brief blasts of information (usually in less than 200 characters) from multiple sources” (DeVoe, 2009, p.212). Compared to blogging, micro-blogging allows for more spontaneity and is much shorter than traditional blogging (DeVoe, 2009). It also lacks the organization levels of blogs and can only provide references to content in a hyperlink form (Morris, 2010).

3.2 What Twitter is

“Twitter asks one question, ‘What's happening?’ Answers must be under 140 characters in length and can be sent via mobile texting, instant message, or the web”

(Twitter, 2010a). These messages are delivered to other users who have subscribed to one's account and are its followers. Followers can receive updates from one's Twitter account via the Twitter website, text-messages, e-mails, RSS, and other Twitter third party applications that can be used on a desktop, a cell phone or a mobile, Wi-Fi enabled, device (Harris, 2007).

Twitter users can follow other users to receive their updates or choose to block a user from following them, preventing them from receiving their own updates. A Twitter user can send a Direct Message (or private message) to another follower, share updates from a user they follow with their own network, or address updates to another Twitter user whether they are a follower or not (Kroski, 2008).

3.3 Theories explaining Twitter's success

The literature expresses several theories explaining Twitter's popularity. Morris (2010) supports the idea that Twitter bridges the gap between social media and social networking. It is used "in-between all other forms of communication [...] bridging the gap between blog posts and replies, between e-mails, phone calls, text messages, and face-to-face conversations" (Mathews, 2009, p.590). Another common idea arising from the literature is that Twitter is popular because it is described as a platform that does status-updates in real time exclusively (Porter & King, 2009). Mathews (2009) argues that Twitter arose from the "practice of 'away messages', brief statements left by instant messaging users to indicate when they are away from their computer. When they are 'away' you can't help wondering what they are up to" (Mathews, 2009, p.592). Keenan & Shiri (2009) also state that what makes Twitter so popular is its simplicity, ease-of-use and intuitive interface.

The success of Twitter is based on the fact that it focuses on niche technology, which makes it more inclusive for its users as there are "no alienating cultural elements" (Keenan & Shiri, 2009, p.442). Twitter users can interact with each other regardless of their social status, race or religious inclination: what brings them together is the medium they use to communicate which strips out superfluous content and focuses on content one is interested in. In addition, Twitter is tailored to publish updates that are limited to 140 characters, as text-messages are, which means that

Twitter updates can be shared on mobile devices, allowing users to use Twitter and be connected wherever they are (Keenan & Shiri, 2009).

The literature has shown that Twitter is a product of Web 2.0. Twitter can be used to keep in touch with friends and family but it can also be used to build a network, engage with users, market products or events, and provide customer service and promotion (Morris, 2010). As noted above companies and institutions are attempting to harness the power of Twitter, and libraries are joining in.

3.4 Twitter and current uses by Libraries and Librarians

3.4.1 Twitter and Online Services

The literature shows that libraries implementing Library 2.0 use blogs, IM and texting to interact with their customers (Casey & Savastinuk, 2007; Bradley, 2007; Farkas, 2007); they also use Twitter (Brown, 2008). Case studies are few in the literature and the actual use of Twitter by libraries is mostly documented in the United States and Canada. Twitter can be used as an outreach and communication tool and more specifically for reference services (Steiner, 2009). Some library reference services in America are using Twitter to post reference questions asked at the desk and raise awareness of the online reference service they use (Brown, 2009).

3.4.2 Twitter and Professional Development

Librarians use Twitter as a professional development tool and to facilitate librarian to librarian communications (see Appendix 9.2). Many librarians record and share impressions during conferences, while others use Twitter to follow what is going on when they cannot attend (Kroski, 2008; Mathews, 2008; Milstein, 2009; Appendix 9.3). Librarians can keep abreast of the latest innovations and new technologies by following leaders in the field (Wilson, 2008) using Twitter as a “customizable news feed” (Wilson, 2008, p.11). They can also use Twitter as an internal communication tool (Brown, 2009).

3.4.3 Twitter and monitoring Libraries' uses

Social Media librarians can use Twitter as a monitoring tool to learn how people, who are on Twitter, are using the library and what they say about it (Mathews, 2008; Brown, 2009) and be where patrons are (Brown, 2009). The 'Twitter Search' website allows this in a very easy way (Leelefever, 2009): clicking on the advanced search option, the user enters search terms (i.e. library), selects a location (i.e. Wellington, New Zealand) and obtains a live stream of tweets that can be subscribed to via RSS.

3.4.4 Twitter as a Library Information Channel

Twitter updates from a twittering library can be embedded in a Library's website homepage and provide customers with instant news on what's happening in the library (Mathews, 2008). Libraries can: post mini-reviews on Twitter (Harris, 2007); feed their blog posts to their Twitter account as well as new material from the WebOPAC (Kroski, 2008); and use Twitter API to tweet checked out books (preserving the anonymity of the library patron) by linking to the online catalogue database (Brown, 2009).

3.4.5 Twitter as a marketing tool

According to Cahill (2009), Twitter is a powerful marketing and promotional tool. Libraries broadcast announcements, promote services or events and vacancies (Porter & King, 2009) via Twitter. Libraries can also post pictures with Twitter applications (Farrelly, 2009). Libraries on Twitter can broadcast their achievements, milestones, and advocate for themselves (Porter & King, 2009).

3.5 Advantages of Twitter

Brown (2008) lists the advantages of using Twitter cited by social media librarians she surveyed as: efficiency; marketing; brevity; collaboration; active application; networking; customer service; cost; accessible; easy to use; open API; forward-thinking; and instant information. A Twitter pilot concluded that Twitter is an effective tool to communicate information to customers in real-time, wherever they

are (i.e. via their mobile phone) (Cahill, 2009). Updates on Twitter take minimal time to publish, and what people say about the library can be monitored. Finally, Twitter is a tool that requires little investment in time or money and can be easily discarded once it is out of favour with the community (Cahill, 2009).

3.6 Disadvantages of Twitter

Disadvantages of Twitter were listed by the same Social Media librarians as: brevity; lack of support or interest from colleagues; technical problems (service failure); select audience (technology users); yet another thing to update; and time waster/not necessary (Brown, 2008). Another identified disadvantage is the problem of privacy because follower's question and its associated answer would be visible by any other user, unless "Direct Messages" are used (Steiner, 2009). The other problem is that most reference questions need more than 140 characters to be answered, in which case the person with the query can be prompted to contact a reference librarian via e-mail to complete the reference interview (Steiner, 2009).

Not only does Twitter have disadvantages but some uses that libraries and Social Media librarians make of Twitter are ineffective. Bradley (2009) points out that many libraries either choose to make their updates private (which means that they only show their updates to users they accept as followers) or follow no one on Twitter. For Bradley (2009), a library not following anyone on Twitter means that it is not engaged in their community, and one that doesn't allow users to share their updates can be viewed as overprotective of their content, which goes against the sharing philosophy of Twitter (Bradley, 2009). King (2009) addresses the issue of personal versus professional tweets. When a librarian or a library is on Twitter he argues that some of them are sharing inconsiderate opinions and thoughts about customers online when they should keep this to themselves (King, 2009). These behaviours show that libraries still need to figure out how micro-blogging can work for them, but that sites like Twitter can be used efficiently by libraries and are certainly not a fad (DeVoe, 2009).

3.7 Twitter and current research

Two theories are used to provide a framework to understanding how libraries are using Twitter: the Social Network theory, and Social Media Optimization.

3.7.1 Social Network Theory

Huberman, Romero & Wu (2009) as well as Keenan & Shiri (2009) use Social Network theory to support their analysis of Twitter. This theory states that by studying a map of people's relationships to each other (people are nodes and relationships are links), one can measure their social capital or how influential they are in their network (Information Science Wiki, n.d.). This is an evolving theory that has been studied for over a hundred years (Keenan & Shiri, 2009) and is still being worked on. Using this theory to explain the dynamics of Twitter, Huberman, Romero & Wu (2009) conclude that Twitter holds two networks: the “follower” network (users who follow without interacting), and the “friend” network (users who interact via mentions, private messages and conversations on Twitter). They show that followers on Twitter don't necessarily interact with the user they follow and that a user with thousands of followers might only regularly interact with fifty or so friends.

The article by Huberman, Romero & Wu scientifically argues that the number of followers one has on Twitter does not reflect how popular one is on Twitter (Huberman, Romero & Wu, 2009). Consequently, even if libraries using Twitter show hundreds of followers on their profile, this is not an indication of how successful they are since many of these followers are “inactive” followers or worse, spammers. The Social Network theory shows that the number of followers of a Twitter account doesn't reflect how popular a Twitter account is. It is more meaningful to measure the popularity of a Twitter account by the number of interaction with followers. This theory would be useful in the context of a quantitative research, which is not the framework used here, therefore it will not be used for this research.

3.7.2 Social Media Optimization

Social Media Optimization (SMO) is a term coined in 2006 by Rohit Bhargava in the Influential Marketing Blog. Rohit Bhargava (2006) develops five rules in order to “optimize a site so that it is more easily linked to, more highly visible in social media searches on custom search engines (such as Technorati), and more frequently included in relevant posts on blogs, podcasts and vlogs” (Bhargava (2006). These five rules are:

1. Increase linkability (using url shorteners such as bit.ly or TinyURL)
2. Make tagging and bookmarking easy (Twitter users can Favourites tweets)
3. Reward inbound links (Twitter users can mention other users and share links)
4. Help your content travel (Twitter users can re-tweet content))
5. Encourage mashups (Twitter API can be used to build new applications)

Fichter (2007) relies heavily on these rules when discussing libraries’ online strategies and how their websites need to be more easily linked to, more visible in social media searches on custom search engines, and more frequently included in online discussions. Adapting SMO’s five rules to libraries, Fichter (2007) encourages them to develop a social media strategy to meet the needs of online users as well as users they interact with in person. Twitter allows users to post links and libraries use this feature to share their website’s content. Some url shortening sites like bit.ly even allow users to track the number of times a link is clicked on (bit.ly, 2009). Using Twitter to drive traffic to a library’s website would be using SMO as an online strategy, although a recent study on using Twitter as a marketing tool has shown that “driving traffic by linking to marketing and promotional materials was the most common activity reported, but it wasn’t necessarily deemed the most effective” (Barone, 2010). Social Media Optimization is an interesting set of rules that would be relevant to research in terms of how (if at all) it is used by libraries regarding their online strategy and this can be relevant to the research at hand.

3.7.3 The Diffusion of Innovation theory

Rogers’ Diffusion of Innovation theory (Rogers, 1995) is used to determine the Implementation Success of an innovation or how successful the adoption of a new technology is. This theory has been used in nearly a hundred papers relating to

Information Systems research (i.e. information and library studies) since the early eighties (Diffusion of innovations theory, 2010).

This theory applies to this research project because Twitter is a relatively new technology that is just four years old and only recently used by libraries. The Diffusion of Innovations theory could be used to evaluate how successfully libraries have implemented Twitter. The current research project could study what factors facilitated its adoption or inhibited it, and how successful its adoption is. Rogers offers a classification of users according to how soon they adopt the new technology, this classification could be used to label Social Media Librarians participating in this research. The current research project could find out whether Social Media Librarians interviewed are: innovators, early adopters, early majority, late majority, or laggards (Rogers, 1995).

3.8 Twitter use in New Zealand

Proportionally, New-Zealanders tweet as much as Americans (Chang, 2009), and a “blackout of avatars” campaign against section 92a of the New Zealand Copyright Act was run successfully on Twitter and other social networking sites in March 2009 (Pullar-Strecker, 2009).

The New Zealand government is implementing a “Digital Strategy 2.0” announcing a digital society where members will be able to share information and knowledge thanks to internet- supported communication (Kallenborn & Becker, 2009). In this context, libraries will have to be ready to communicate to their users in the same way, using the same technologies. Chawner (2007) has shown that New Zealand librarians are communicators (their use of e-mail and SMS is significant), and that when they create content, it is mostly via blogging, which is the most widely adopted Web 2.0 technology.

Twenty libraries are using Twitter in New Zealand at the time of writing (LIANZA ITSIG Wiki, 2009). The National Library published a blog post explaining its Twitter use, and far from hinting at a strategy, it mentions how Twitter “seems to satisfy [...] human needs” (Hughes & Johnston, 2009) and how it “made up some rules” (Hughes & Johnston, 2009) for its use. This lack of purpose shows that

research is needed to find out about New Zealand public libraries and their use of Twitter.

Compiling this review has highlighted the impulsive nature of libraries' uses of Twitter, lacking any strategy or theory. Librarians and libraries just decide to do it and see what happens. Some articles analyse the use of Twitter with the Social Network theory which proves to be lacking in terms of showing what Twitter can bring to a library using it.

3.9 Gap in the Literature

Many questions remain unanswered concerning the whys and the hows of Twitter use in libraries and its impact on library services. Conducting research about the uses and perceptions of Twitter in New Zealand public libraries would fill some gaps in the literature. It would also inform the profession about the potential uses and impact of this social media, should they consider using it.

Although the literature reviewed offers a lot of advice from Social Media librarians on how libraries can use Twitter, there is little on how libraries and social media librarians actually use this tool. Although Social Media Policies are increasingly common with businesses (Lauby, 2009), there is hardly any mention of what strategy libraries use with Twitter, and how they rate its success (Brown, 2008). Many articles in the literature are descriptive or exploratory studies and only two (Huberman, Romero & Wu (2009); Keenan & Shiri (2009)) use any theory to approach the Twitter phenomenon without being useful to the research at hand.

4. Problem Statement and Research Question

Twitter is a social media that is increasingly popular worldwide and even more so in New Zealand. The micro-blogging platform is being used in New Zealand Libraries: as many as twenty-two libraries are registered on Twitter at the time of writing. These libraries include the National Library of New Zealand, twelve public

libraries, two academic libraries, four 'corporate' libraries and three school libraries (see Appendix 9.1).

Twitter is a product of Web 2.0 and is defined as 'micro-blogging'. Many articles describe the ways Social Media librarians and libraries can use Twitter, as well as case studies demonstrating how they actually use this tool. The literature has highlighted the pros and cons of Twitter according to librarians and its possible misuses. Identified gaps in the literature are: what Social Media librarians intend to achieve by using Twitter; what is their strategy when using Twitter; and whether they actually measure its success or not.

These gaps in the literature are a motivation to understand the uses and perceptions of Twitter by New Zealand public libraries. The research that will be undertaken will fill the gaps in the literature regarding the factors that influence public libraries to use Twitter. The results of such research would inform public libraries about Twitter: whether it is a social media they would benefit from using or not; how to use it best; and what benefits it can bring them.

A research question that covers all these areas of interest and will address these gaps in the literature concerning Twitter use in New Zealand Public libraries is the following: "How do New Zealand public libraries use Twitter?"

This research question is further addressed using the four following sub-questions:

1. Why do they use Twitter?
2. How do they use Twitter?
3. What impact has their use of Twitter had on their services?
4. What factors facilitate the adoption of Twitter?

5. Theoretical framework

Two theories have been examined in this research: the Social Network theory and Social Media Optimization. It has been shown that, for different reasons, these theories were not relevant to the research at hand. Another theory provides a solid framework for this study: the Diffusion of Innovation theory.

5.1. Rogers' Diffusion of Innovation theory

Twitter is a new technology and the aim of this research project is to discover what factors influence New Zealand public libraries to adopt it, therefore, the Diffusion of Innovation Theory appears to be the ideal theoretical framework for this research.

The Diffusion of Innovation Theory explains the reasons, the process and the adoption rate of new ideas and technologies in societies. Rogers (1995) is at the origin of this theory and defines it as a process by which an innovation is communicated via certain channels over time amongst member of a social group (Rogers, 1995). When decision is made to adopt a new technology, or a new idea, Rogers (1995) states that there are three types of decision- making: optional (decision made by individuals), collective (decision made by a group), authority (decision is made by a few and applies to the majority).

Rogers (1995) describes the adoption of a new technology, or a new idea, in five steps: knowledge (one is exposed to the new concept and observes); persuasion (one becomes interested and seeks more information); decision (one weighs the pros and cons and decides to accept or reject the new idea, or technology); implementation (one puts the new idea or technology into practice and appraises its usefulness); and confirmation (one decides to continue with the experiment or abandon it). There are five different types of adopters of innovations (Rogers, 1995): innovators (risk-takers); early adopters (opinion leaders); early majority (adopt when trend is established); late majority (one adopts after the majority has); and laggards (traditionalists who detest change).

As an innovative communication channel, Twitter uses a blend of new technologies (e.g. RSS, portable devices, new third party applications) and represents a new way of interacting with each other. People communicate via Twitter in one hundred and forty characters or less, they use symbols and acronyms to interact (e.g. @, RT, DM) and they have only done so since 2006, when the micro-blogging platform was launched (Twitter, 2010a). The Diffusion of Innovation theory appears to be ideally suited to the problem statement and research questions as it concerns a new technology: Twitter and a group of people who form a micro-society whose

common point is to work in a library. Using this theory will allow us to frame the scope of this research and to produce a focused interview questions for participants.

6. Research Methodology and Procedures

The aim of this research is to know how Twittering libraries decide to use Twitter, and how they implement and measure its success so that other libraries can benefit from this knowledge. They can then decide for themselves whether Twitter is a social media they would benefit from using or not.

6.1 Method: Choosing Qualitative over Quantitative Methodology

This research is qualitative rather than quantitative. This research project involves finding out why Social Media librarians use Twitter and what they think about this tool. It is concerned with individuals' thoughts and opinions about a topical subject within the library context.

Conducting a quantitative research about Twitter using a survey is possible but impractical. Its result would not bring much new, usable, knowledge. It is possible to analyse 'tweets' from a sample of public libraries over a period of time and do a content analysis. However, this would not give a complete picture of Twitter use. A Twitter feed has a public timeline that mainly shows tweets from the user, including 'tweets' to other users. These occurrences are either 'tweets' addressed to another Twitter user, or responses to 'tweets' from other Twitter users. It is difficult to find out the origin of the 'tweet' a user answers to, more so if the 'tweet' is part of an ongoing conversation. Another problem is that without the username and password of a Twitter user, there is no access to Direct Messages exchanged between users.

In conclusion, without the total cooperation of the users' sample, the accessible data is incomplete and access to Direct Messages could mean that privacy might be an issue as DM are sent 'privately' from one Twitter user to the other. Besides the knowledge of the number of 'tweets' a library does per day, the number of followers they have, or the type of 'tweets' they publish would not contribute to the knowledge of how to use Twitter the most efficiently or why libraries use Twitter at

all. Similarly, a survey would not be possible as there are too few libraries in New Zealand use Twitter and the sample population is not significant enough to warrant it. Also a survey would not get useful responses as the issues surrounding the use of Twitter are still not clearly defined. For these reasons, a quantitative approach to this research has not been chosen.

6.2 Research method: Qualitative Interview

Out of all the different methods of conducting qualitative research, qualitative interview is the most suitable for this research project. Qualitative interviews are flexible and reflect the interviewee's point of view, new questions can be asked to follow up on an interviewee's answer, answers are detailed, and interviewees can be interviewed more than once (Bryman, 2008, p.437). Moreover, the fact that one individual is interviewed (instead of a group) means that the interview is more focused and can be conducted face-to-face but also online either asynchronously (via e-mail) or in real-time (via the phone or instant messaging). This flexibility is ideal for this research project as interviews could be conducted at the participants' convenience.

6.3 Methodology: Semi-Structured interviews

Semi-structured interviews were conducted during the information gathering phase of the research process. This type of interviewing is flexible and more likely to reflect the interviewee's views (Bryman, 2008). The researcher had a list of questions or topics that they wanted to refer to but other questions were asked according to where the conversation was going and the interviewee had the freedom to reply as they pleased and widen the scope of the interview. The researcher also asked questions that were not on their list initially but that were pertaining to the discussion at hand.

These interviews were conducted via e-mail according to the following procedure:

1. first approach of libraries via DM on Twitter to collect potential participants' emails
2. e-mail invitations to participate
3. email questionnaire to participants
4. e-mail with further questions (if needed)
5. Thank you email to participants
6. e-mail to send summary of research results

6.4 Participants' selection

Participants for this research were selected according to purposive sampling, which is done “on the basis of wanting to interview people who are relevant to the research questions” (Bryman, 2008, p. 458).

At the time of writing, twelve New Zealand public libraries were using Twitter. Of all the New Zealand libraries using Twitter, public libraries were the most numerous. Selecting them as the population sample for this research meant that there would be a significant number of participants than with other types of libraries.

Selecting the same type of libraries also meant that comparison would be more meaningful as their services are more similar.

6.5 Limitations of the study

This research will be limited to public libraries in New Zealand only. Another limitation is that the research is limited to twittering libraries that are currently registered and active on Twitter. Finally, the last limitation is the small sample size which means that the findings of this research will not be representative of all the libraries in New Zealand that are using Twitter.

7. Instrumentation

7.1 Human Ethics Approval

Human Ethics approval was sought in order for the research to go ahead. It was anticipated that for the purpose of this research, participants would not be anonymous but data would be confidential when collected, and the participants would not be identified in the published research (see Appendix A.4 for the Human Ethics Approval forms).

7.2 Data collection

Data for this research was collected in the form of e-mail interviews. E-mail was chosen as a communication medium “for reasons of practicality and low cost” (Rutherford, 2008a) as most of the potential participants in this research are geographically distant (travelling costs and time involved would be too onerous). Email interviews were a gain of time as far as transcription was concerned: as they are a textual form of communication, emails eliminate the need for interview transcription (Rutherford, 2008b).

E-mail interviews had another advantage. They allowed “personal distancing” (Gatrell, 2009), enabling interviewees to be more objective and collected when answering interview questions. They also increased “reflexivity by providing both the time and space for [interviewee] to construct, reflect upon and learn from their stories of experience” (James, 2007).

Face-to-face interviews were not possible due to the geographical distance between the interviewer and interviewees and the cost and time involved in organizing such meetings. Interviews using Instant Messaging is a solution that has not been retained as this would require all participants to have IM software uploaded on their PCs, webcams available as well as broadband, which can be a problem in rural areas. Telephone interviews have not been considered due to cost.

7.3 Interview Questions

This set of questions is based on interview questions developed by Rutherford (2007) in her study of the use of Social Software in public libraries.

- What goals did your Library set out to achieve when it started using Twitter?
- Were you involved in the decision to use Twitter in your library? How?
- What kind of interactions do you have with followers of your library Twitter account? Can you give examples?
- Do you measure the level of use by followers of your library Twitter account? How?
- Have your library's goals re Twitter been met? How do you measure these achievements?
- What are the pros and cons of using Twitter for your library?
- What things about your organisation facilitate or inhibit the development of the Twitter service?
- How would you compare Twitter to other social media?

7.4 Data Analysis

Ways in which qualitative data can be analysed are described as “eclectic” (Creswell, 1994, p.153) and this research used content analysis and coding as the main data analysis tools.

The first stage of data analysis consisted in content analysis and coding: reading through the data obtained, developing categories, making comparisons and contrasts and keeping an open mind as far as interpreting findings is concerned.

The qualitative data analysis for this research will follow the following pattern:

- it will be conducted conjointly with the data collection,
- information will be presented in the form of a table to show relationships between categories (e.g. technology, feelings/opinions, actions/ behaviour,

experience/ qualification, career) and themes (e.g. Technology: choice of third party application/ reason why ; feelings/ opinions: frustration/ reason why, etc...), and

- coding will consist in identifying and labelling recurring threads and themes.

The second stage of data analysis consisted in gathering the information obtained and grouping them together as far as they answered the interview questions asked to respondents. Because the answers provided had been ‘related’ to other content thanks to coding, it was possible to provide in-depth answers to the research questions. Coding also helped with the interpretation of the answers provided by the Social Media Librarians.

Presentation of Findings

8. Characteristics of Respondents

Seven Social Media Librarians agreed to take part in interviews for the purpose of this research project after twelve New Zealand public libraries were contacted via Twitter. Four of the respondents work in densely populated areas and three work in towns situated in rural districts.

8.1 Qualifications

Six Social Media Librarians have tertiary qualifications, five of which include a component of Library and Information Science. One Social Media Librarian has no formal qualifications, although having almost completed a BA in Māori Studies, and is studying towards a Library Diploma.

BA	1
Dip LIS	2
BA + Dip LIS	2
BA + MLIS	1
Studying	3

All Social Media Librarians but one have either a tertiary qualification pertaining to library studies or are studying towards one, this shows that Social Media Librarians are committed to librarianship and motivated by their work.

8.2 Professional background & experience

Six Social Media Librarians have more than eight years experience working in libraries and have held a wide range of positions throughout their careers, and three have worked in libraries for the whole of their careers.

Four Social Media Librarians have worked outside libraries during their careers. Three have been working in schools: one as a secondary school teacher, and two as school librarians. One has been working for a government agency “*doing Provider and Vendor registrations*” and for a local government body “*dealing with sales notices and phone queries*” in New Zealand.

Five respondents have connections with the field of Education. One studied towards becoming a teacher, one taught in a secondary school, two worked in school libraries, and another worked in academic libraries. This shows that the Social Media Librarians concerned have had an involvement with Information Literacy and sharing their knowledge. It suggests that they have an interest in enabling members of their community to find and access information regardless of the kind of channel or medium. It also shows that they are individuals who enjoy social interactions and contact with younger generations.

Two Social Media Librarians have had a lifelong interest in IT that has influenced their career choices and their role in libraries.

“I’ve always been partial to computers – seeing how they work, taking them apart, putting them back together”

“[I’ve] been a geek from way back in DOS days.” says one the Social Media Librarians who is currently holding two jobs apart from working in a library: one is “*IT Support and Website Administrator*” for the local council and the other is managing a company “*which provides ICT support for [local] schools*”.

Some Social Media Librarians interviewed are involved in IT because it was a job requirement” *“I became involved IT because I was asked to do it.”*

Other’s involvement with Social Media also sprang from personal preference: *“I became involved in IT and social media at my library because I was pretty much the only one with an interest in it”*; as well as a will to see their libraries more involved in Web 2.0 and Social Media: *“I have been keen to see our Library get more*

involved in this space so I made sure I was at the front of the list of volunteers when we started!”

Facts about the background and experience of the Social Media Librarians interviewed show that they are interested in information technology, and motivated by sharing knowledge and social interactions. One respondent says that *“a selection of people use [Twitter] regularly however [Twitter users are] more likely to be tech savvy users”*. It then makes sense that Social Media Librarians who describe themselves as *“partial to computers”*, *“geeks”* and always interested by Social Media are drawn to use Twitter as a communication medium with a portion of the population who has very similar interests.

8.3 Positions in the library

Five Social Media Librarians are managing Digital Services for their libraries. The two others are involved in Customer services and Reference services in middle-management positions.

Although staff members with an IT background are often responsible for managing the Library’s Twitter account, it is not a necessity. Staff members who deal with customers on a daily basis can also maintain their library’s Twitter account and this shows that Twitter is easy enough to use so that it is accessible to everyone who has an interest in it.

8.4 Twittering libraries and Social Media use

A question raised by this research is what Social Media Twittering Libraries are using alongside their websites at the time of writing:

	Website	Blog	Facebook	Flickr	Twitter
1	✓				✓
2	✓	✓	✓		✓
3	✓	✓	✓	✓	✓
4	✓	✓	✓		✓

5	✓		✓	✓	✓
6	✓			✓	✓
7	✓	✓			✓

This table shows that no Twittering libraries use Twitter by itself. Whatever combination of Social Media Twittering Libraries use, the library’s website is always included. There is a wide range of Social Media being used alongside Twitter: one Twittering Library only uses Twitter and its website whereas another one uses both a blog, a Facebook page, Flickr and Twitter which is a “*good addition to the suite of channels that [they] use*”.

One of the questions that we set out to answer in this research is: “How would you compare Twitter to other Social Media?”

One respondent answered that Twitter is “*less labour intensive than Facebook (uploading photos, content- not restricted to a 140 space limit - . Twitter for us is a sentence a day.*” Indeed, Twitter’s restriction of 140 characters a day means that users who maintain a Twitter account lack the possibility to expand much on their tweets. Twitter requires short updates which suits Social Media Librarians who don’t need to spend much time on thinking about what they are going to write, writing, and publishing a tweet. The feeling is supported by another respondent who “*find it quicker to communicate by using Twitter, rather than Facebook*”. Tweeter similar advantages over blogging according to another Social Media Librarian: “*If we had a blog, we would have to get people to write frequent, well-written posts, and I don’t think we have that option with our Library [for lack of staff and time].*”

Comparing Twitter to blogs, one Social Media Librarian argues that “*Twitter allows direct connections [with followers of the Twitter account] as opposed to blogs*”. Indeed, when a blog post is published, there might be some time before a comment is posted, read and replied to. Even more so if moderation of comments is enabled: a comment might not be published straight away (only when approved) and a conversation might take place over days instead of minutes. Twitter works differently as updates are received immediately and dealt with in a short time when required:

@wcl_library I have to admit that I use the classic catalogue exclusively. I should really try the new one again, I suppose.

5:26 PM Jun 16th via Twitter for iPhone in reply to wcl_library

@dubh we have handy tutorials on the homepage of our new Easyfind catalogue, have a look <http://bit.ly/Q7XUL>, you might get hooked!

5:27 PM Jun 16th via TweetDeck in reply to dubh

“There are fewer hassles with privacy and profiles – people’s identity show through the content of their tweets rather than the (potentially fictitious) content of their profiles.”

The fact is that users on Twitter are quite open about who they are and very often submit their real identity when opening an account on Twitter where users first name and last name appear publicly. By deciding to make their tweets appear on the public timeline, users are, or should be, aware that whatever they publish on Twitter will be accessible by anybody. Should they want their tweets to remain private, they can make their updates private in their Twitter accounts settings. Privacy settings on Facebook are far more complicated than on Twitter with different options available. *“[It] seems to hit a different demographic to Facebook [...] It seems (from my observation and web stats I have seen) that Twitter attracts a slightly older demographics – 30s/ 40s.”*

Twitter appears to attract older users than for other Social Media like Facebook, which seems to attract young adults, and Bebo, which seems to attract teenagers.

One Social Media Librarian explains that *“Social Media are not all the same and the manner in which they’re used isn’t always the same. What changes is the style of voice used and a lot of that depends on the audience you’re trying to reach for whichever medium you’re using at the time.”* This shows that Twitter as the sole medium of communication would be insufficient to reach the entire community Twittering Library serve and why they also use other Social Media. This is confirmed by another respondent who thinks *“it is a good tool to use in conjunction with other tools”*.

9. Decision to use Twitter

This section deals with how the decision to use Twitter, how Social Media Librarians were involved, and how it influenced the way they use Twitter. Social Media Librarians were asked to answer the following question: “were you involved in the decision to use Twitter in your library? How? ”

9.1 Social Media Librarians’ involvement

There are three ways in which libraries started using Twitter. The decision to use Twitter can be made: by formal application for permission, as an informal initiative, or as a result of an initiative by management.

9.1.1 Formal application for permission

Two Social Media Librarians suggested to their managers the use of Twitter, two of whom had to present a report to their leadership team before being given permission to use Twitter:

“I was the one who suggested that we try Twitter to the Senior Management team. I presented a proposal to the Senior Management team and was given the go ahead.”

“I put the Twitter issue forward to my boss, and then had to give a presentation to the Library manager and the team leaders about Twitter and how it worked, and how the Library could use it”

In these cases, the decision process appears to be quite formal as managers with a senior role are consulted on the viability of using Twitter in the library context. However, the fact that Social Media Librarians felt comfortable enough to put the issue forward to their managers shows that management welcomes new ideas and that relationship between team members and managers is good and firmly established in the workplace.

9.1.2 Informal initiative

Two Social Media Librarians started using Twitter without seeking approval from their management team, although one informed their manager of their decision and what it implied:

“It was my decision. I had set up the blog, and was looking at Social Media as a form of communication tool for the library. I felt that Twitter was an interesting development, and we should explore its potential.”

“It was purely my decision to start a Twitter account for our library [...] library leadership was not consulted (I did let my Library Manager know that I was trialling one though and explained what it was)”

In both cases Social Media Librarians who took the initiative to create a Twitter account for their libraries presented it as a *fait accompli*. In the first case it appears that the Social Media Librarian trusted his own judgement to take the initiative of tweeting for the library. In the second case, it appears that in spite of the lack of knowledge about Twitter, the manager trusted the Social Media Librarian enough that the decision was taken without further consultation.

9.1.3 Initiative by management

Three Social Media Librarians started using Twitter with the permission of their managers:

“It was [Manager’s name] (Manager Digital services)’s decision to move our voice to twitter. [...] As the digital outreach contact I am primarily responsible for maintaining our tweetstream”

“A couple of months after the organization decided that using Social Media was an important way to engage with the community [...] we registered for it [Twitter]”

“October 2009 was dedicated to a month of Web 2.0 social networking in the Library. Anyone who wanted to try out various forms of digital media could do so. [...] several people chose to use Twitter under individual accounts [including the respondent]”.

Even though the initiative to use Twitter comes from the management, Social Media Librarians have a certain amount of freedom to use Twitter as they see fit. Two has Twitter written into their role description, and the other is given the freedom to experiment with Twitter with the management’s approval. This shows that team members are trusted by management in their organization, and that team members feel confident enough about this support to take charge and experiment.

9.1.4 Organizational support

Organizational support enabled most of Social Media Librarians interviewed to suggest, use, and manage a Twitter account for their libraries:

“Support from the Library Management Team who gave all staff permission to explore Social Media during October 2009 (Relax, Play and Create Month), also support from my manager.”

“Library manager is very positive and supportive of the service”

“[Manager, Digital Services] and [Manager] are both exceptionally supportive of both our tweetsream”

“Council is very positive about using online community spaces to connect with people”

In all these cases, organizational support facilitated the use of Twitter by Social Media Librarians. Because they were trusted and encouraged to take initiatives and put forward new ideas by their managers, they felt confident enough to suggest using Twitter to their managers, and to experiment with it.

9.2 Twitter and trial periods

Five Social Media Librarians started using Twitter on behalf of their libraries without any formal trial period and two are still trialling it. Twitter is essentially live-streaming and its uses change and evolve fast, using Twitter is highly triable: one tweets or does not tweet as it is easy to start and stop tweeting. Social Media Librarians have actively run their libraries' Twitter account from the start. Two respondents have the Twitter account still on trial meaning that they are waiting for a reasonable period of time using Twitter to see if the advantages Twitter brings them outweigh the disadvantages..

One Social Media Librarian doesn't think *“there was really a trial period because that is not how our manager works. We try it, if it isn't working, we stop it.”*

Having a trial period isn't a defining factor for Social Media Librarians when deciding whether or not they are going to use Twitter.

One Social Media Librarian describes how they:

“spent a bit of time looking libraries who were already tweeting and observed what their policies/Guidelines were and looked how they tweeted, what they used, how often they updated, what they were tweeting and, more importantly, how they were interacting with followers who replied.”

The fact that in five cases there was no trial period for Twittering Libraries might mean that Twitter is so easy to use that it doesn't take time at all to master the art of tweeting. Only one Social Media Librarians found that *“it takes a bit of time to get used to the way it works – the jargon and informal rules for behaviour (e.g. RT) [re-tweeting] – and can be overwhelming”*.

9.3 Social Media Librarians' involvement with Twitter

A question that arose from the current research project was to what extent the Social Media Librarians interviewed were involved with Twitter: whether they just used it on behalf of their institution, professionally, or as an individual.

9.3.1 Personal use of Twitter

When using the Twitter application “When did you join Twitter?”(Hashbang, 2009), which allows one to find out when a Twitter account was created, it was found out that four Social Media Librarians were already Twitter users before their libraries registered an account on Twitter. Two of these four Social Media Librarians explained that they had experimented with Twitter on a personal basis:

“Having used Twitter in a rather vague way in a personal sense”

“I had been experimenting with my own Twitter account for a few weeks”

At the time of writing, all Social Media Librarians interviewed were registered on Twitter. They all maintain their own account as well as the Twittering Library’s. They all created an account that they maintain focusing either on their personal lives or on their professional lives, and sometimes both. Twitter can be used to connect and share with other New Zealand / overseas librarians and follow accounts that they are useful for professional development and all Social Media Librarians take advantage of this, as well as sharing everyday life events and thoughts (see Appendix).

9.3.2 Issues around tweeting for an Public Institution

Three Social Media Librarians created their own account on Twitter after creating and managing their library’s Twitter account.

One explains that *“at first I had more interactions that were more professional [about librarianship matters] in nature, and I felt inappropriate for an institutional account. I set up a new personal account and most of interactions occur there now”*,

Another notes that *“when I first opened the Library Twitter account I did have to be very careful about personal opinion [i.e. expressing their own]. After consultation with my IT boss very early on this led to me splitting off into personal accounts.”*

This shows that there are issues linked to Social Media Librarians maintaining an institutional account for their public library. These issues are linked to tailoring the content of the Twitter account to a particular audience while being unbiased and neutral as representative of a public institution.

One Social Media Librarian points out that *“You know other people will be reading it so we need to keep it clean and not personal”*, and another finds *“that I am constantly on the alert for anything that end up in our Twitter stream that could be*

construed as politically biased.” Yet, another Social Media Librarian points out that “*one of our core values for social media is to be yourself – rather than trying to set up a ‘corporate voice’ account we went for individual staff account [i.e. team members tweeting as themselves about what is going on in the library].*”

There seems to be a dilemma for Social Media Librarians: managing their libraries’ Twitter account reflecting the fact that while they’re tweeting on behalf of a Public Institution, there is still a person behind the tweets. They have to remain a-political, unbiased and neutral while expressing their personality enough so it ‘shines’ through the tweets and endears followers.

Another issue raised by a Social Media Librarian is the scope of their responsibility when tweeting on behalf of the library:

“I feel very self-conscious of what I say online and how it might be mis/interpreted.”

Social Media Librarians tweeting on behalf of their libraries may feel a lot of pressure, from representing their institutions online and this might lead them to create their own Twitter account where they can express their own personality and opinions. However, the internet being ubiquitous, this might not be effective and an individual on Twitter can often be traced back to their workplace. Individuals ruining their online reputation, being fired or missing out on a job over an ill-advised tweet does happen (Popkin, 2010) and Social Media Librarians are becoming aware of this.

10. How Social Media Librarians use Twitter

The following observations have been made using the *Tweetstats* website as well as the data from the interviews with the seven Social Media Librarians. The *Tweetstats* website gives an overview of the Twitter usage of a Twitter account including what platforms and Twitter applications are used by the Twitter account owner.

The aim of this section is to show what Twitter publishing platforms and Twitter applications Social Media Librarians are using and why.

10.1 Publishing on Twitter

Twitter can be published to from an array of publishing platforms (e.g. Tweetdeck¹, Hootsuite², Twhirl³, etc.) not only from the Twitter.com website. Below are the two main platforms respondents are publishing their tweets from.

10.1.1 Twitter.com

The website Twitter.com is used by all Social Media Librarians to publish their tweets. According to them, Twitter.com offers many advantages such as: the ability to know where a person uses Twitter from, the ability to compile lists with twitter.com, the ability to display icons linking to their Twitter account, and the ability to use widgets displaying different elements from their Twitter account.

The ability to have Twitter accounts geo-coded (attached to a geographic location) means that *“it could help the library find more relevant tweets and users to engage, it could help users find more relevant tweets based on place (e.g. limit to NZ only). Potentially we could have a feed of every tweets sent from the library building”*.

Twitter.com also allows users to compile lists of Twitter accounts that can be followed by other users. The Twitter.com List widget⁴ is used by a Social Media Librarian on their library blog: *“if you visit the Library blog [...] there is a small display on the right hand side with the last dozen or so tweets from the Library list”*, they are using this list as *“a Twitter based grouping of all the library staff accounts who may send tweets on behalf of the Library – by following the list people on Twitter can see all of the Library tweets in one place instead of following a number of individual staff”*.

“On the library blog I have the institution Twitter account details”: one respondent uses a Twitter “button”,⁵ or icon, on the library blog which is hyperlinked to their library’s Twitter account. Twitter.com provides the code for this badge that can be copied and pasted in an html box onto the blog.

¹ <http://www.tweetdeck.com/>

² <http://hootsuite.com/>

³ <http://www.twhirl.org/>

⁴ https://twitter.com/goodies/widget_list

⁵ <http://twitter.com/goodies/buttons>

“I have a Twitter feed on the Council website and on the blog using a widget.”

Twitter.com provides widgets⁶ including an html or JavaScript code for the Twitter updates. The code can be copied and pasted in html format on any web page blog to display the Twitter updates of one’s account.

Twitter.com allows users to make the content of their account available everywhere on the internet. By displaying their updates on their blog as well as on the Twitter site, Social Media Librarians allow library updates to be available at several places at one time without having to manually duplicate content. This is efficient and saves staff time.

10.1.2 Tweetdeck

Four Social Media Librarians are also using Tweetdeck. Tweetdeck is a platform that allows one to:

- view what those one follows tweet,
- view when one’s Twitter account is mentioned,
- view private messages
- bundle those one follows into groups/ lists
- filter tweets

All these actions can be done at the same time as Tweetdeck displays columns and an update box that pops up on one’s screen one either of the columns is updated.

One Social Media Librarian uses Tweetdeck *“to get an idea of who’s mentioning our tweetstream, for what purposes and when (for specific events, for reviews, for updates to the New Books page, etc.). It also allows us to see when people are directly contacting us rather than just mentioning us, and it means we can get out timely responses to any and all customer concerns, queries or suggestions.”*

Another uses the Twitter application for *“open searches that pick up keywords. I have searches running for ‘[name of town]’ and ‘[nickname of town]’ that pick up when people ‘tweet’ about the library and I can gauge moods and trends”*. The same person also points out that Tweetdeck is a tool that helps to *“handle the feeds as the [Twitter] website access becomes unmanageable with a huge list of messages”*.

⁶ <http://twitter.com/goodies/widgets>

Although Tweetdeck can be a useful software to monitor what is happening on a Twitter account, one Social Media Librarian is not able to use such software at work as it is blocked by the Library's IT department : *"for security reasons, I can't download any Twitter clients that would let me manage multiple accounts"*. Although Tweetdeck is a useful tool for Social Media Librarians to publish to Twitter, some are unable to use it because of restrictions by their organization's IT Department.

10.2 Posting links on Twitter

10.2.1 Sharing URLs on Twitter

Twitter posts are limited to 140 characters *"so tweets could be sent as mobile text messages which have a limit of 160 characters"* (Twitter, 2010c). This character limit means that Twitter updates have to be brief. However, 140 characters are often not long enough to make a point or inform fully about something that happened. Posting links on Twitter allows Social Media Librarians to point followers to a resource that illustrate or expands on news they wants to share. Yet, links can be quite lengthy and leave little room in a 140 characters update. This is the reason why URL shortening, which *"is a technique on the World Wide Web where a provider makes a web page available under a very short URL in addition to the original address"* (Wikipedia, 2010) , and several websites on the internet provide this service to Twitter users.

Social Media Librarians post links in their Twitter updates. They post *"links to outside websites, and links to new things on our website"*, *"links to the [library's] blog"*, and also, from observing the Twittering libraries' Twitter accounts, links to online catalogue records are also posted.

10.2.2 URL shorteners

Only one Social Media Librarian uses the URL shortener called TinyURL. This URL shortener *"shortens URLs down significantly (but not extremely) and [has] been around for years already"* (TechCrunch, 2009).

Six Social Media Librarians are using the URL shortening service bit.ly. Bit.ly shrinks URLs but also provides users with statistics about the past hour, the past seven days or the past thirty days and shows the number of clicks over that period, the type of referring domains, and what country users who click on links come from.

Social Media Librarians use the URL shortener bit.ly to check on the popularity of the links they post to Twitter:

“If I have posted a web link and want to check how many times it has been viewed, I can go to bit.ly and shorten a link there before posting it in a Tweet. Later I can go back to bit.ly and check how many times the link has been viewed, as this information is recorded.”

Bit.ly allows them to provide statistics to their managers about how many people actually use Twitter to access information provided by the Twittering Library. Some Social Media Librarians *“report anecdotally every quarter on using Web 2.0 technology to promote the library”* and include Twitter statistics. These reports include *“what sort of feedback we’ve received (positive/negative); if use has gone up or down and an explanation if the use has jumped. For example: [...] Flickr stats declining – possibly due to not many photos uploaded in the last quarter”*.

10.3 Sharing photos on Twitter

Some Social Media Librarians interviewed are sharing pictures on Twitter. Photo-sharing on Twitter is used by Social Media Librarians to show what is happening in the library (i.e. Christmas activity), to highlight a photographic collection (i.e. heritage photos) and to show pictures of staff and happenings in library branches (i.e. a branch refurbishment). One Social media Librarian who shares heritage photos with twitter does it because *“they are currently not on line as we are waiting for our new library management system to do so [put pictures online]. Twitter provides one avenue of getting the images out there and to publicize our local history resources”*. Another respondent *“share fun pictures that we think would be interesting to our followers. For example [...] our Library Redevelopment set on Flickr, [...] winners of competitions, or just cute pictures from our programs”*. Another Social Media Librarian who doesn’t share pictures on Twitter yet plans to do so in the near future

because “*a picture says a thousand words – which is quite a few more than the Twitter limit [character limit]*”.

Four Social Media Librarians use TwitPic to post photos on Twitter. Twitter users can post pictures to TwitPic from their mobile phone, through the site itself or using publishing platform that have built-in support for TwitPic (TwitPic, 2010).

Three Social Media Librarians use their Flickr account to share photos on Twitter. One Social Media librarian uses “*Flickr to upload photos, and [she] sometimes send photos from Flickr to Twitter*”. If Twittering Libraries already have a Flickr account, it is not worth posting pictures to Twitter via TwitPic since they can synchronise their Flickr account to Twitter and post pictures there directly. There is a “blog this” button on the side bar above Flickr pictures, users can choose to ‘blog’ a picture to their Twitter account by allowing Flickr access to it (Flickr, 2010).

11. Twittering Libraries and Social Media Librarians’ goals

The literature review pertaining to this research project showed that libraries used Twitter for: online reference, professional development, monitoring of library’s uses, as a library information channel, and as a marketing tool. The following section deals with goals New Zealand public Twittering Libraries look to achieve while using Twitter. Social Media Librarians were asked to answer the following question: “What goals did your Library set out to achieve when it started using Twitter?”

11.1 Alternative communication channel

The responses below show that Social Media Librarians use Twitter as a communication channel:

“to provide an alternative and added way of communicating with library patrons”

“start conversations, share information”

“tell people about...”

“Provide another channel for questions”

“announce anything new”

“an online forum and encourage our customer and staff to engage with us, and each other”

It has been shown that Twittering Libraries all have a website available to their community as well as a range of other Social Media that they use alongside Twitter (see 8.4). One can wonder why Twitter is a communication channel that needs to be added when library users can use the other platforms to get information they need.

Three Social Media Librarians single Twitter out as a *“platform that reaches worldwide, communication is not inhibited by or limited to just followers”* that *“has a wider reach of our services which is not bound by geography”*. One doesn't have to follow the Twittering Library to access its Twitter updates as long as the updates are made publicly available. This means that anyone in the world with internet access can potentially look at a Twitter account and decide to 'visit' it provided whether they are registered on Twitter or not. This is also true for a library's website, which means that the appeal of Twitter for Social Media Librarians lies elsewhere.

Twitter states that *“mobile has been in our DNA right from the start: The 140 character limit originated so tweets could be sent as mobile text messages”* (Twitter, 2010c). This means that using Twitter as a communication channel allows Social Media Librarians to reach out to library customers and potential library customers who are always on the move and find it more practical to receive updates on their mobile device. Using Twitter to make library news available via mobile devices would be cheaper than making a mobile version of the library's website.

However, using Twitter as an information channel isn't as successful as some Social Librarians would have thought. According to one Social Media Librarian interviewed this might be due to *“the considerable lack of mobile internet use (we have a low rate of Smartphone ownership compared to overseas again due to cost of the technology, which diminishes the potential for people to use the net on their phones)”*. Another thinks that Twitter is *“better used in a larger [urban] centre at this present time”* where the mobile devices uptake is greater.

11.2 Twittering libraries as Web 2.0 champions

The responses below from Social Media Librarians show that they use Twitter as a way to show that their libraries are at the forefront of Social Media / Web 2.0 technologies:

“to have the library play an active part in social networking and Web2 technologies”
“Use new technology to promote library services, collections etc.”

The Digital Strategy 2.0 (DS2.0) states that *“connecting New Zealanders to each other and the world, and making new and emerging digital technologies available to New Zealanders, is critical to our ability to succeed in this transformative future”* (MED, 2010). Libraries are involved in this strategy through the Aotearoa People’s Network Kaharoa (APNK), providing *“the technology, communications, training and content gateway to provide free access to the internet for customers”* (APNK, 2010).

If Social Media Librarians want to support the Digital Strategy, they have to be aware of the newest Social Media available and how to use them, including Twitter. However, although most of Social Media Librarians interviewed are aware of the Digital Strategy, they don’t consciously implement it:

“I could not honestly say I am aware of any specific influence this [DS2.0] may have had on our Social Media strategy – but it is something I and many of our staff here are aware of and have read”

“Whilst aware of the National Digital strategy it has not been a factor in our use of Social Media”

Only one respondent appears to be aware of the Digital Strategy 2.0 and says that *“there are projects that fulfill the goals of the strategy but they are not specifically linked to it (e.g. APNK, digitization of newspapers and photo collections). My use of Social media is influenced by the Digital Strategy especially in the area of Content Creation and Confidence in using online tools”*.

These comments show that although the Digital Strategy is a document containing national guidelines about the importance of the digital medium and online tools, it is not widely used by Social Media Librarians, even if they know about it. The Digital Strategy 2.0 is a document that could be used by more Social Media Librarians to support and justify their use of Social Media in libraries.

11.3 Promotion tool

The responses below show that Social Media Librarians use Twitter as a promotion tool to advertise their programs, their services and anything they publish online:

“showcase the library collections (including Local history photograph collections,) , tell people about events such as readings, and book sales etc [...] tell people about newly available resources”

“[Promote] Events e.g. Talks, author visits, disruptions in service - eg the library catalogue is temp down to to a system fault, new collections, new items, new services, and existing coll, items and services [...]Especially timely announcements like new books available today, events today etc.”

“We advertise upcoming programmes and announce anything new – books, CDs, DVDs, bags to purchase, info on the website, etc.”

Using Twitter as a promotional tool proves successful for some Social Media Librarians who have seen their *“book recommendations followed by reserves [and] events information followed by phone enquiries”*. However, spamming can be a problem when using Twitter as a promotional tool. Lance Wiggs (2009) wrote a case study of how Vodaphone New Zealand lost many followers after their Twitter accounts’ content switched from customer-friendly to all promotional. Wiggs (2009) shows how some followers unfollowed the Vodaphone New Zealand Twitter account as they *“saw a corporate PR account turn into a spamming machine”*.

This shows that when using Twitter as a promotional tool, Twittering Libraries ought to exercise caution and avoid spamming their Twitter account with promotional tweets. Indeed, one Social Media Librarian points out that *“tweeting a bunch [of updates] in a row can be annoying to some twitterers.”*

11.4 Professional development tool

The responses below from Social Media Librarians show that they use Twitter as a professional development tool to support staff in learning about Web 2.0 technologies:

“to up skill staff on Web2 technologies”

“I ran ‘Twitter’ classes for staff to increase their awareness – so seen as development training.”

“[name of library] is still very much in the experimental stage of using Twitter. October 2009 was dedicated to a month of Web 2.0 social networking in the Library. Anyone who wanted to try out various forms of digital media could do so. Our first goals were to have fun, own our web-presence, represent the Library in a professional, yet personable way, and see where it leads.”

This has not proved very successful according to some Social Media Librarians. In spite of providing training, they mention that that staff members find using Twitter “pointless” or “have issues around ‘privacy’”. According to others, “staff don’t see how social networking sites/ applications/ tools can be useful” and they fail to see “how it works in a business sense”. Another mentions that some staff members are “still suspicious of what they perceive to be the hype and buzz around Web 2.0” and that although they have “endeavoured to set up PD [professional development]” one Social Media Librarian wasn’t successful as “ staff mainly cites time and workload constraints for not wanting to learn.”

Evaluating reasons why Twitter is not a successful tool for professional development of staff members we find that most reasons are perceived rather than real. Privacy concerns on Twitter that staff members have can be overcome if they are shown that one can decide to make their Twitter account private or public. It is also up to the individual on Twitter to share what they will publicly. The feeling amongst staff members that Twitter is useless is unfounded as we have shown in the literature review how many organizations and businesses actually use Twitter and benefit from it. Finally, staff members citing lack of time and being overworked is unfounded if learning Twitter is part of professional development which time has been allocated for.

Two Social Media interviewed hint at the reasons why Twitter as part of professional development was not successful:

“One of the biggest mistakes from the last Web 2.0 tutorial was that we didn’t talk about this stuff beforehand and it was totally alien to staff and, when you don’t know something you fear it. And a lot of our staff feared tools like this”

“I suspect staff can tend to feel like they are goofing off with social media rather than working”

Fear of what is unknown and Social Media being perceived as play rather than work are the two reasons why including Twitter in Professional development failed to work. This shows how communication amongst staff about new technologies being used and organizational support are important to conducting effective professional development.

11.5 Promote the Twittering Library’s website

The responses below show that Social Media Librarians use Twitter as a way to promote their library’s website:

“link to a library’s own website for more in-depth information”

“Promote our services staff and website”

A library website is increasingly considered as the ‘digital branch’ of a library: a *“library website that is a vital, functional resource for patrons and enhances the library’s place within its community”* (ALA Tech Source, 2009). Libraries’ websites contain a wealth of information that is not all accessible from the homepage and can be buried underneath layers of other web pages. Social Media Librarians post links to their libraries’ websites to highlight these resources and showcase others that the user community might not know are there. This is why they use Twitter to raise awareness of their library’s online resources and promote their website via Twitter.

11.6 Advocate for libraries

The responses below from Social Media Librarians show that they use Twitter as a way to advocate for libraries and their roles in modern society:

“link to interesting news stories about literacy or about libraries”

“basically [tweet] anything we do that will raise the profile of the Library”

“the Twitter account has helped to demystify libraries”

While libraries still attract the traditional library patron who enjoys borrowing books, there is an increasing number of library users who are used to read e-books, listen to audio-books and do most of their research online. Using Twitter is a way to reach out to tech-savvy locals who may or may not be library users, and let them know that their local library is as tech-savvy and can provide them with information that fit their needs in ways they can easily access. Promotion of downloadable e-books, audio-books and online databases via Twitter can be used to advocate for libraries to tech-savvy locals who are using Twitter.

11.7 Connect with library users and potential customers online

The responses below show that Social Media Librarians use Twitter as a way to connect with their users online and encourage them to visit the physical library:

“We also had high hopes of creating some spaces where we can directly connect with our users [...] and meet them where they are at – their own computers – rather than the traditional Library model of waiting for them to come to us.”

“Connect with local users [...] mostly local library customers”

One of the more practical uses of Twitter for Social Media Librarians is to connect with local users on Twitter in order to find out what their needs are and provide them with relevant information regarding their local public library. One Social Media Librarian says they *“follow people that follow us that live in the area (so we can tailor tweets to their interests)”*.

They also follow local Twitter users who may or may not be library patrons in order to encourage them to visit their local library branch:

“remind people we are worth visiting”

“being able to promote our services to local Twitter users who are not also Library users start to build a relationship with those users. Hopefully in time they will step through the library doors or use the library resources”

Doing thus they might hope to attract more users to their library and increase memberships. They might also hope that promoting their library resources and programs will increase library use, boost issues of library material and increase attendance to library events.

12. Social Media Librarians' interactions on Twitter

The following section shows that when asked: "What kind of interactions do you have with followers of your library Twitter account? Can you give examples?" Social Media Librarians answered that they interact with five distinct groups on Twitter: local users, organizations, other libraries, authors, and their own colleagues.

12.1 Interactions with local Twitter users

As a general rule, Social Media Librarians follow Twitter users who follow them on the condition that they are local. This can be done as the location of a Twitter account/user is usually visible from the profile on Twitter.

Answering Direct Messages (DM) is one of the interactions a Social Media Librarian has regularly with their followers ("*I received a question asking about Duck-shooting in the [town] Square in the early 1900s. I did some research and went to Archives for an answer*"). Local Twitter users asking for details about an event or retweeting the library is another form of interaction that occurs.

Another participant notes that interactions with local followers/ library users consist in tweets about "*service suggestions, tip, [and] book recommendations*". Another participant points out that they have been asked questions "*through DM, such as can we put a link to their website on our website, we have answered question from followers, such as how many people attended a computer class, and another follower wanted to use one of our Flickr pictures we had posted on Twitter*". This is akin to a reference service, although questions might require answers longer than 140 characters, as was shown previously in the literature review.

One Social Media Librarian notes that with patrons, *“book recommendations will sometimes be followed up with them reserving”* and that *“events information will be followed by phone calls”*.

One respondent decided not to follow accounts that keep their updates private as *“it is not always easy to tell who wants their tweets kept private (they might just be avoiding spams/ bots) and who wouldn’t mind their tweets retweeted”*. When one is registering an account on Twitter, one can register with one’s real names which will appear on the Twitter profile of the account. If the Twitter account is kept on the public timeline, this means that any tweet from the account can be attributed to its owner. In order to avoid this, some users keep their timeline private although they can share it with whom they decide to accept as followers. This means that there might be a privacy issue if a tweet from a private Twitter account is re-tweeted (broadcasted publicly to the whole network with the author’s identity) without the author of the tweet’s consent. By avoiding following private accounts, this Social Media Librarian avoids this kind of problem.

12. 2 Interactions with Organizations and businesses on Twitter

Three Social Media Librarians follow local businesses and organizations especially if they are book related (*“local businesses that compliment library services (e.g. there is a local café that twitters - they have poetry readings etc)”*). One participant has *“built up a good working relationship with [local tourism organization names] who regularly ‘re-tweet’ my messages out to their networks”*.

Three respondents follow their local city council on Twitter or other Council Departments. One of the participants deems it a *“great merging of Council services”* as far as re-tweeting goes. Both libraries and council pass on each other’s tweets to their own followers by using the ‘re-tweet’ option provided by Twitter.com and other Twitter publishing platforms. By a click of a button, one’s follower’s tweet is automatically copied and pasted and published onto one’s own Tweeter account, with the provenance of the tweet. This means that instead of reaching one network of followers, a tweet reaches two networks of followers at one time.

12.3 Interactions with Libraries and librarians on Twitter

Four Social Media Librarian follow libraries and librarians on Twitter and two others mention following any Twitter account of professional interest.

One finds Twitter “*a short but invaluable way of communicating with other libraries and librarians*”. The reasons for following other libraries / librarians that one respondent gave are: practise reader’s advisory skills; exchange ideas; and keep abreast of what is happening in the profession.

It “*keeps [one] up with what other libraries are doing, establishes contacts within the library world*” and is “*invaluable for networking, for recommended books and links*”.

Another participant also follows other libraries “*to keep an eye on what everyone else is up to*”.

Although using Twitter to up skill library staff members has proved unsuccessful in some cases (see section 11.4), it is invaluable for Social Media Librarians themselves. They have the knowledge to find relevant sources on Twitter and to find other librarians who they network online with. One Social Media Librarian values Twitter for both the knowledge acquired and the people met via this platform: “*I’ve found great book recommendations, new authors to promote in newsletters, software that have made my job easier (e.g. Tweetdeck), book blogs (my advisory skills in my newsletter area, Romance, have increased tenfold), get to hear publishing industry news quickly, know who/ what is generating book buzz, can share ideas. [...] I am connected to people, who are doing what we’re doing, who are interested in what we’re doing. Even better, I get to meet them at conferences and extend on anything we’ve briefly mentioned on Twitter.*”

12.4 Interactions with Authors and writers on Twitter

One respondent uses Twitter for “*author’s interactions*”. Following authors on Twitter allows them to “*interact directly and informally, with the people who write what we promote – authors retweet favourable book reviews, touch base with authors about characters, plots, etc.*”

Many authors and writers are using Twitter and lists compiling them have been published online by websites such as Mashable (Chapman, 2009). Some NZ Twittering libraries also make publicly available their own lists of New Zealand authors, poets and writers on Twitter (wcl_library, 2010). Making connections with authors on Twitter in an informal way might lead to opportunities for Social Media Librarians to conduct blog interviews, for example.

12.5 Interactions with Library staff on Twitter

One Social Media Librarian follows their library's staff members that are on Twitter as a way to give and receive feedback about Web 2.0 tutorials: "*a lot of our recent followers are our staff who're currently in the middle of a Web 2.0 tutorial*". They are encouraged to register on Twitter and interact with their Twittering Library account because the Social Media Librarian believes that there is "no point in our staff promoting our tweetstream if they have no experience of how it's used or even what it is."

12.6 Blocking followers on Twitter

One respondent has been "*attempting to follow most of the people who follow me – unless a particular feed is less than interesting*". There appears to be a consensus with all respondents that they will block any account following their libraries that is: spam, a bot, linked to pornography or dating sites, social media expert (users who tweet quotes or re-tweet other users' tweets and claim to be Social Media experts or gurus), sales site or that post offensive content:

"[I] have blocked two followers that were blatant spam accounts trying to drive traffic to some very dodgy dating sites"

"I only block if it is obviously spam"

"I block any porn / dating/ spam accounts"

"I block porn / obvious sales sites"

"Emails of new followers are sent to my work and home accounts and I will check names and if necessary profiles [...] Criteria I use to block are: Whether this follower

is local. Whether this follower is library connected. Whether this follower is IT connected. If necessary I will check a profile and/or website”.

Bennet (2009) explains that blocking a user on Twitter is only a partial block. Blocked users, even though they can't follow or send Direct Messages, can still read the public timeline of a user that's blocked them. They can send replies that can be viewed publicly, and re-tweet messages which give the false impression that the user who blocked and the user who has been blocked are still friends on Twitter.

Consequently, Social Media Librarians may be wasting time by blocking users on Twitter as it doesn't really affect the blocked account much, although it reduces the amount of spam updates to read. However, Social Media Librarians might want to avoid bad publicity for the Twittering Library by blocking irrelevant and unwanted followers. Blocking followers on Twitter might be comparable to moderating comments on a blog. Yet moderation on a blog is much more effective than blocking users on Twitter. A moderated comment on a blog never appears in a public timeline, whereas a reply on Twitter will, whether it is a positive mention or a negative one.

13. Usage of Twittering Libraries' accounts

This section deals with how Social Media Librarians measure the usage of their library Twitter account. When asked: “Do you measure the level of use by followers of your library Twitter account? How?” Social Media Librarians appear to value the quality of exchanges on Twitter more than the number of followers.

13.1 Statistics

None of the Social Media Librarians formally keep statistics on their libraries' Twitter accounts:

“we don't measure the level of use of our library Twitter account in any hard and fast way.”

One of the reasons for not keeping statistics is the lack of followers on the libraries' Twitter account:

"We did have a widget originally but have decided not to count officially as we do not have enough traffic to have trouble with numbers"

Another reason according to one of the Social Media Librarians interviewed is the unreliable nature of statistics on Twitter, especially as far as the number of followers is concerned:

"I don't measure the level of use. Metrics on twitter look to be fairly meaningless. Number of followers could be a measure, but I am ambiguous about using it (sic). I don't really use metrics at all as the main one is followers. But number of followers seems fairly meaningless as there is no way of telling if the followers are genuinely following you for what you post, or are spam followers, or just people looking to boost their own follow numbers."

This feeling is echoed by two other Social Media Librarians who are dubious of followers' motivations and value local followers:

"Many followers are organisation accounts that I suspect are watching what we do so they can learn from it rather than individual library followers."

"It's more important to me that the people are based in [locality] or somehow linked to [locality] District so I'm not too fussed on the total numbers."

The feeling that the number of followers of a Twitter account doesn't reflect the real amount of followers who actually follow the Twittering Library's updates reinforces the findings of the Social Network theory is accurate (see section 3.7.1). The number of followers of a Twitter account matters less than the quality of interactions that occur on the Twitter account: via re-tweets (when a follower 'cites' a tweet to their own network with that Twitter account's name) and mentions (when a follower mentions a Twitter account in a conversation or is having a conversation with one's Twitter account owner).

13.2 Direct Messages, mentions and Re-tweets

Social Media Librarians measure the actual level of use of their library's Twitter account by the amount of Direct Messages, mentions and re-tweets they get.:

“an informal collection of direct replies to tweets [...] another way that I measure the level of use by followers of our library Twitter account – is by looking at the number and frequency of retweets.”

“Other ways of measuring value is in what sort of interactions we have with our followers; who RT's us. All interactions with followers are valued. In descending order of value - Unsolicited questions or comments about the library business; replies to our tweets; RT. If someone tweets us out of the blue that means that the library is top of mind for that query for that person. It shows that the account has been useful in raising the profile of the library”

“I just go by [...] how often ‘tweets’ are ‘re-tweeted’”

13.3 The value of feedback

Social Media Librarians appear to give little importance to the number of followers they get on their libraries' Twitter account. They measure the level of use of the account by how much followers interact with them and by the quality of the exchange that occurs.

Two Social Media Librarians underline the importance of getting feedback from the library Twitter accounts' followers. It encourages them to carry on using Twitter as they have an audience, and it gives them the feeling that their 'twittering' is worthwhile:

“I'd think that there's nothing more frustrating than to tweet to a non-responsive audience.”

“I don’t know if it is super important, but I think it would validate the information we are putting out there if our followers, especially our library users, commented on it.”

These comments seem to suggest that although Social Media Librarians value feedback from followers, they seem to deplore the fact that they don’t get much.

14. Measuring success for Twittering Libraries

When asked: “Have your library’s goals re Twitter been met? How do you measure these achievements?” three Social Media Librarians answered that it was early days yet and three answered that it was too early days yet to answer this question. One respondent was unable to answer this question as they *“have nothing at this time to measure achievement or success.”*

14.1 Meeting goals for Twittering Libraries

“Yes, I think so. Our staff is following us [alongside other non-staff Twitter users]. I count that as a huge milestone.”

“Yes, I think we have some actual library user followers, and have gotten some feedback from them saying they liked it, so I think in that way it has been a success.”

“Yes the goals are being met.”

As far as three Social Media Librarians are concerned, the goals they set out to meet regarding Twitter are being met. Two of them rate their success by other library staff following the Twittering Library, and by local Twitter users (library customers or not) following and interacting with the Twittering Library. The third Social Media Librarian deems Twitter a success as although they *“don’t report exact numbers [, they] do report anecdotally every quarter on using web 2.0 technology to promote library services.”*

“Early days yet. We have only been up for 2 – 3 months.”

“The Library’s involvement with Twitter is still under development as it is a new medium for us [...] How (and if) the Library continues to use Twitter remains to be seen”

“No not as yet.”

Three respondents find it is early days for them to say whether they have met their goals regarding their use of Twitter or not. One of them remarks that there *“only appear to be a few locals following so are not reaching what we would have initially seen as our core target (users of the library or enticing locals to be users of the library).”* Another find that their goals fail to be met yet because of a lack of local followers as their *“community is still far behind larger centres in technology take-up. [There are] still a lot of rural borrowers without broadband access. [There are] still not enough young people taking up Twitter. [...] [There are] still not enough local adults taking up Twitter.”* The third Social Media Librarian *“was/ [is] hoping we can get some of our customers to engage in conversations over Twitter”*.

Factors that inhibit the use of Twitter are hinted at here: lack of broadband internet and lack of local community members who are tech-savvy.

The feeling that a successful Twittering Library should interact with their followers who should be mostly locals is shared amongst all Social Media Librarians interviewed.

One Social Media Librarian says that they *“would like to see a little more back and forth between us and our followers.”* It appears that for the majority of Social Media Librarians interviewed, interaction with local followers is the thing that they value the most in terms of measuring success of their Twitter use. At the time of writing, however, interactions with local Twitter followers seems lacking.

14.2 Measuring success for Twittering Libraries

Two Social Media Librarians measure their achievements with Twitter by the number interactions and feedback they get from followers. They also measure the success of Twitter in terms of how much it increases the value of the library as an information source, how useful it is to them as a source of information, and how much they enjoy using the technology:

“I mark our success not only by how often we are ‘re-tweeted but also that we are keeping people regularly informed and that we are still enjoying using the media.”

“I measure our achievements by feedback from my tweets. How helpful I find other tweets.”

Other Social Media Librarians are making plans for their success with Twitter in the future:

“In the future I would like to see Twitter used as a tool for interacting with customers more than we are now”

“This [minimal interactions] is something I hope to improve as we develop our feed and grow our followers”

“In time, would like to think that tweets could be aimed at specific interests that followers had.”

Two more signs that Twitter would be used successfully by Social Media Librarians are: a significant amount of interaction between them and local followers, and providing tailored information to their followers via Twitter.

15. Advantages and disadvantages of Twitter

When asked the following question: “What are the pros and cons of using Twitter for your library?” at the time of writing, Social media Librarians judged that advantages outweighed disadvantages.

15.1 Advantages

15.1.1 Advantages for Twittering Libraries

“[Twitter] is a way of reaching people that is cheap in terms of cost and staff time”

“It seems fairly easy to maintain.”

“140 char limit forces brevity”

“It’s free”

“It is a free, easy to use programme where we can promote the Library”

“Instant information network.”

“Twitter is a fast, easy to use and efficient way to communicate”

“Short and sweet – I have learnt to keep things short, sharp and upbeat”

Most Social Media Librarians interviewed list four main advantages to Twitter: it is free, easy to use, it takes little staff time, and information travels fast.

It doesn't cost anything to register on Twitter but some Twitter applications which are currently free may not stay free forever. Twitter.com itself might not stay free and some features might only be available for a fee in the future (Frommer, 2009).

Only one respondent thought that *“it takes a bit of time to get used to the way [Twitter] works – the jargon and informal rules for behaviour (e.g. RT) – and can be overwhelming”*, all the other respondents thought Twitter easy to use and didn't mention having any trouble with the way Twitter works or what to do and not to do on Twitter, although they might have experienced troubles with it when they first starting using it.

One Social Media Librarian felt that *“we need to post at least one thing everyday [...] just to confirm to our users we are committed to Twitter”*. Another admits that they *“continue to [tweet] because of the amount of followers there are now”*. This shows that even though it doesn't take long to send a tweet, some Social Media Librarian might spend more time than required tweeting because they feel obligated to do so by the number of followers they have. However, as we have shown that the number of followers doesn't reflect the number of Twitter users who actively follow the Twittering Library, this feeling of obligation might be unfounded.

15.1.2 Advantages for Social Media Librarians

“[Twitter] keeps me up with what other libraries are doing, establishes contacts within the library world.”

“ Knowledge network – I've found great book recommendations, new authors to promote in newsletters, software that has made my job easier (e.g. TweetDeck), book blogs (my readers' advisory [...] have increased tenfold), get to hear publishing industry news quickly [...] People network – I'm connected to people who are doing

what we're doing, who are interested in what we're doing. Even better, I get to meet them at conferences and extend on anything we've briefly mentioned on Twitter."

Most Social Media Librarian praise Twitter for being a great professional development tool. Twitter allows them to network with other members of their profession on a local, national and international level. It enables them to keep up with innovations and new ideas in their field. It allows them to improve their skills and access a wealth of information on issues pertaining to their profession.

15.1.3 Advantages with the local community

"[Twitter] has been a way of promoting other groups that have interactions with the library and they have seen this as a positive"

"It seems a good tool for communicating with customers as long as customers are also on Twitter"

"people who follow the library account are interested in the library [...] builds relationships with variety of people"

Building a relationship with local community members and organizations seems to be the main advantage of Twitter for most Social Media Librarians. Twitter is used as a digital outreach tool and allows Social Media Librarians to informally reach out to local Twitter users who may or may not be library users but who, otherwise, would have little interaction with the library (other than using its resources). It draws the attention of these users to library resources they might not know were available or didn't think the library would have:

OMG @wcl_library has downloadable audio books on their site
<http://www.wcl.govt.nz/downloads/> - that is so very perfect.

10:03 PM May 4th via web

15.2 Disadvantages

15.2.1 Disadvantages for Twittering Libraries

The type of followers the Twittering Library attracts is an issue for some Social Media Librarians, especially as many followers are in fact organizations. Indeed, one respondent points out that “*currently it [Twittering Library] is attracting more businesses than individuals*”. Another respondent points out that “*many followers are organisation accounts that I suspect are watching what we do so they can learn from it rather than individual library followers.*”

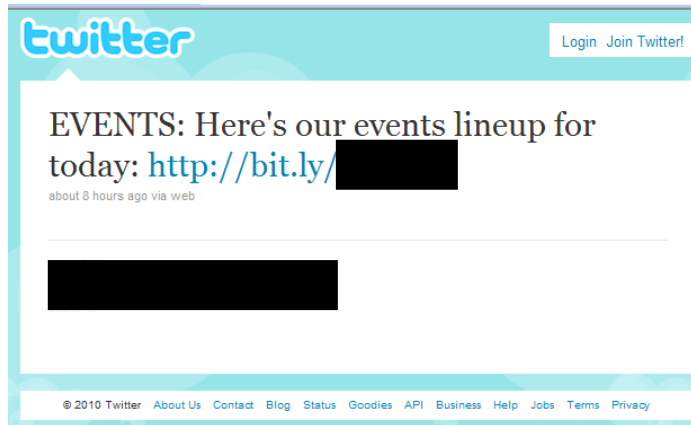
Social Media Librarians can block unwanted followers but as we have shown, this doesn't prevent them from reading Twitter updates on a public timeline. If Twittering Libraries are followed because, according to some Social Media Librarians, they are an example of good practise, this should not be a problem.

“Questions can be tricky to answer using in less than 140 chars; timing of tweets can be tricky especially when promoting activities [...] Twitter is a live streaming account. Therefore it's no use tweeting about events in the library at 7.30am. It's more than likely people are getting ready for work or school and therefore will miss the notification.”

“Sometimes there is not enough room to fit in a message (140 characters). This is a problem when ‘re-tweeting’ other messages.”

The limited length of tweets is a problem for some Social Media Librarians as well as the timing of tweets. The new ‘re-tweet’ feature introduced by twitter.com (Williams, 2009) enables libraries to pass on a tweet to their network of followers without having to manually add the @xxxx for the origin of the tweet and without compromising the content of the tweet by shortening it and/ or omitting content.

The timing of tweet can also be a problem as describes a Social Media Librarian. They can never be sure that followers have read the update because they might not be on Twitter at the time. Some Social Media Librarian are tweeting a link to their online calendar every morning in order to provide a line up of the days' events at their libraries.



This would allow them to promote to their followers a link on a daily basis about what is happening at their libraries. Followers might learn of the online calendar this way and take the habit of checking it to see what's on in their libraries.

15.2.2 Disadvantages for Social Media Librarians

“If I’m away it doesn’t get updated as frequently [...] the alternate isn’t at their desk as often as I am during the day. She also has desk duties which keep her busy. She also has her own twitter account for the library. I’m not sure this is successful though”

Being the sole staff member responsible for maintaining the Twitter account for their libraries can be a problem for some Social Media Librarians. Getting other staff members on board who are competent Twitter users can help ensuring that the Twittering Library’s account gets updated regularly even if the one who usually does it is absent. This what another Social Media Librarian does, being part of a team of three to update their library’s Twitter account: *“two others can / do update Twitter. We didn’t really designate roles for twitter posts.”*

“It can be difficult to find persons/organisations that are on Twitter.”

The Twitter.com website has an option that allows users to look up people by typing up their names or their usernames. This means that a Twitter user can easily find friends or acquaintances on Twitter. However, this might prove more difficult when organization want to find Twitter users, no matter what their names are, who live nearby or who use their products. We have seen that some Social Media Librarians use Twitter search advanced search option (Twitter, 2010b) to find local

Twitter users. This is a good tool to find potential followers or organizations that can be good information sources.

“Time – There’s not enough time in the world to read all of the tweets that come across our stream. There’s certainly never enough time to check out all of the links that people flick out.”

Time management can be an issue when using Twitter. Unless Social Media Librarians monitor the Twitter activity on the Twittering Library’s account continuously, they will miss a fair amount of content as Twitter is live streaming. Realistically they cannot afford to spend their whole working day just doing that. However, using Twitter platforms like Tweetdeck that have an in-built update summary box popping up when there is a new Twitter update on their screen (the same way e-mail alerts pop up when using Microsoft Office Outlook). This might help them make the most of the time they can spare on monitoring Twitter.

15.2.3 Disadvantages with the local community

“many [library] users don’t subscribe to Twitter”

“small number of locals on Twitter (this is part of a wider issue re lack of Broadband access across [name] District)”

“ we do not have a lot of actual library user followers, but that may just be our users – not online very much.”

The lack of local Twitter users appears to be a common problem that Social Media Librarians face. According to one of the respondent, there are *“still a lot of rural borrowers without broadband access”* and another describes Twitter as *“a niche application [which is] not mainstream, a selection of people use it regularly however they’re more likely to be tech savvy users”*.

This shows that Twitter is not meant to be a platform for everyone to use. People who favour this micro-blogging platform would be tech savvy individuals who live in an area where broadband access is easy. Consequently, important urban centres with a large population would have more Twitter users than small city centres in rural areas. This means that Social Media Librarians who work in libraries situated in small urban centres have more difficulty finding potential followers than their counterparts who work in big cities.

16. Organization's involvement

When asked: "What things about your organisation facilitate or inhibit the development of the Twitter service?" Social Media Librarians pointed out the importance of a supportive management. They also deplored the lack of Social Media engagement from other staff members in their libraries.

16.1 Supporting Twittering Libraries

"Library manager is very positive and supportive of the service."

"[name] District Council is very positive about using online community spaces to connect with people"

"It is great that the [name] Library has been given the chance to try out forms of digital media and social networking, like Twitter"

In most cases, Social Media Librarians manage a Twitter account on behalf of their libraries with the support of their managers. This is allowing them to be confident enough to experiment with Twitter and finding the right 'voice' for their Twittering Library, one respondent explained that *"a lot of what you see on our tweetstream now is a result of (much) trial and error"*. This Social Media Librarian feels trusted enough by their managers that they can make mistakes or try things out with their use of Twitter.

However, in one case, the lack of interest in the activities of one Social Media Librarian allows for more freedom as far as managing the Library's Twitter account is concerned:

"The library manager doesn't even look at Twitter, so that probably facilitates the development, as she can be a bit of a micro-manager." This shows that as far as the management of a Twitter account is concerned, Social Media Librarians who update

the account are the ones who are primarily responsible for how it is run. This responsibility cannot be shared or overseen by a manager. Social Media Librarians need the trust of their managers so they know that when answering a Twitter query, they do not need to consult management before replying. Twitter is a live-streaming service and answers must be provided in real time otherwise the purpose of maintaining such a service is lost.

16.2 Inhibiting Twittering Libraries

Staff members' attitude towards Twitter and Social Media Librarians who use it is one of the main things inhibiting the use of Twitter according to most Social Media Librarians:

“Some people (i.e. staff) have stopped ‘tweeting’ for the library: I suspect they have become a little disillusioned with twitter and social media in general. Other is probably a combination of a slowdown in enthusiasm after our initial push and just letting it slide in day to day work pressure. [...] There are also those who don’t agree with this [Twitter] and this inhibits how often I tweet and how much time I spend on the project”

“I feel I have to be very careful about how much time I devote to Twitter. I feel that staff may think that I don’t have permission to carry on tweeting. I am also aware of the perception from some staff that social media is just about mucking around and having fun in work time (rather than being seen as legit and relevant way of communicating) and have considered closing my library twitter account because of this”

“I suspect staff can tend to feel like they are goofing off with social media rather than working.”

Two issues reflected here are the perception of Social Media and Twitter by library staff and the way it impacts on Social Media Librarians who tweet for their libraries. It appears that although the use of Twitter is supported by managers in most libraries where Social Media Librarians were interviewed, library staff members in these libraries do not know of, use, or support the use of Twitter themselves. This

impact on the way Social Media Librarians feel about their tweeting on behalf of their libraries as they seem to feel judged by their colleagues as if they weren't entitled to use Twitter and as if it wasn't proper work to use Twitter during work hours. This might also show that promoting and marketing public libraries (by traditional or new means) is not something New Zealand Public librarians see as part of their jobs.

“Our Council IT has blocked www.twitter.com [...] we used to be able to access the site through: www.twitter.com and then, one day, it was blocked.”

“For security reasons I can't download any Twitter clients that would let me manage multiple accounts which is annoying but not inhibiting”

Council IT services blocking Twitter related services has been described as inhibiting by two Social Media Librarians. In one case, Council IT services have prevented the downloading of Twitter publishing platforms (e.g. Tweetdeck) other than twitter.com and in the other case; they have blocked the access to the twitter.com site itself.

Council IT services blocking access to Twitter related services and platforms might not be permanent as New Zealand city and regional councils are starting to use Twitter themselves⁷. If local and regional councils are using Twitter, this would make using this service more legitimate. IT council services might allow access to Twitter related services to other council units more easily in the future, including libraries.

17. Conclusion

This section includes three parts including: how Social Media Librarians interviewed fit in with Rogers' Diffusion of Innovation Theory, what can be learnt from this research project pertaining to Twittering Libraries, and suggestions for further research.

⁷ <http://twitter.com/WgtnCC/nz-councils/members>

17.1 Twitter and Rogers' Diffusion of Innovation theory

17.1.1 Adopters' categories

Rogers (1995) describes five types of adopters as far as an innovation is concerned: innovators, early adopters, early majority, late majority, and laggards.

Twitter has been in existence since 2006 and many libraries worldwide are already using it. However, Twitter has only been fairly popular in the last year and a half in New Zealand. Knowing this and the Rogers' categories of adopters, Social Media Librarians who took part in this research project are classified as either 'early adopters' or 'early majority'. It is not considered that any of them are 'innovators' as other Twittering Libraries have been in activity overseas for much longer than New Zealand Twittering Libraries. They are the one who would be 'innovators' as the first libraries and first library staff members who used Twitter in this way. The innovators as far as New Zealand Twittering Libraries are concerned (whether public, academic or school libraries) are not part of this research project (e.g National Library of NZ).

Individuals in the early adopters are the most influential in terms of opinion. They're generally younger, their social status is higher, they are more financially aware, well-educated, and they are more socially developed than late adopters (Rogers, 1995).

Individuals in the early majority are significantly slower to adopt an innovation. They take longer when going through the process of adopting an innovation, their social status is above average, they have contact with early adopters, and they show some opinion leadership (Rogers, 1950).

Some Social Media Librarians interviewed have the characteristics of early adopters while others have the characteristics of early majority and sometimes both. It has not been possible, at the time of writing, to classify the respondents in one category or another. This may show that Rogers' categories are no longer current and that his model needs to be reviewed or adapted to contemporary technologies.

17.1.2 Adoption process

Rogers describe five stages in the adoption process of an innovation (Rogers, 1995). The five stages are: knowledge, persuasion, decision, implementation, and confirmation.

Social Media Librarians were instrumental in many stages of the innovation adoption. At least four respondents had sufficient knowledge about Twitter to persuade their managers and leaderships teams to let them experiment with Twitter. All Social Media Librarians were involved in the implementation stage as well, creating and managing the Twitter account on behalf of their library.

The only two stages were all but two were not involved are the decision and confirmation stages. Library managers and leadership teams took the decision to use Twitter and they are the ones who allow Social Media Librarians to continue to use the innovation (i.e. Twitter) and develop it to its full potential.

17.2 Best practice for Twittering Libraries

17.2.1 Importance of location

Broadband access and a tech savvy population are the two ingredients that make Twittering Libraries successful according to Social Media Librarians interviewed. Consequently, proximity to big urban centres benefits libraries that would aspire to maintain a Twitter account as it is more likely where broadband access is widespread and tech savvy members of the community are more numerous.

17.2.2 Choice of who maintains the Twitter account

Library staff member(s) who are responsible for managing and updating the library's Twitter account should be chosen according to how interested they are into the micro-blogging medium and whether they have a similar mindset and interests to Twitter users. This research project suggests that it would benefit a library to have two or three staff member sharing the responsibility to tweet on behalf of their library.

One Social Media Librarian described how “*two others can/ do update Twitter. We didn’t really designate roles for Twitter posts, they just evolved. [name] mostly does new books, [name] will do programmes, and I will do programmes, links to outside websites, and links to new things on our website*”. This means that if one is unable to tweet, the others can do so as a matter of course.

17.2.3 Develop guidelines

Several Social Media Librarians interviewed have developed guidelines that they share concerning how the Twittering Library’s account should be updated. Developing guidelines means that even though two or three people are updating one Twitter account, updates are homogenous and similar in format. One Social Media Librarian describes their guideline as follows: “*add value to all retweets, stagger tweets throughout the day, tweet at least one library website page, respond to followers comments, questions, concerns within a timely manner.*”

17.2.4 Involve other staff members

This research project has shown that some Social Media Librarians felt self-conscious about using Social Media at work and how other staff members’ perceived negative attitudes impacted on their use of Twitter. This suggests that training all staff, or at least familiarising them, in the use of Social Media including Twitter would benefit Twittering Libraries. This research project suggests training should address privacy concerns, demonstrate how Social Media benefit libraries (e.g. examples of successful interactions in library news bulletin), show how to use the medium, and allocate sufficient time for practise.

17.2.5 Use efficient software

Management of staff time is a concern when using Twitter and the use of adequate software to manage the Twittering Libraries’ account efficiently and get the most out of it is important for the Social Media Librarians interviewed. This Research project suggests that using a Twitter publishing platform, such as Tweetdeck, that

allows the monitoring of follower's updates, replies to tweets, mentions Direct Messages, and trends at one glance is very helpful.

The URL shortener bit.ly is also a favourite amongst respondents as it allows them to shorten URLs but also to get statistics on how many people click on the links they post on Twitter.

17.3.6 Remain neutral

This research project has shown that Social Media Librarians who tweet on behalf of their libraries have experienced the necessity to remain neutral (e.g. apolitical, unbiased towards collection, etc.) in their Twitter updates. All have created their own Titter accounts that they maintain and where they express their personality more freely.

17.3.7 Be proactive

Many Social Media Librarians interviewed regret the lack of local followers on their library's Twitter account as well as the lack of interaction between themselves and the followers. This research project suggests that by using Twitter Search advanced search option, Social Media Librarians can actively seek local Twitter users who have an interest in libraries and services they provide. This can be a way the number of followers can be increased. A solution to increasing the interactions on the Library's Twitter account, according to on Social Media Librarian is to "*lead by commenting on our follower's tweets more*". It would be interesting to see if, in the future, this has been done and what the outcome would be.

17.3 Suggestions for further research

At the time of writing, this research project is the first of its kind about why and how Twitter is being use by Public Libraries in New Zealand. There is scope to conduct more research about this topic in different ways. One suggestion is that this research project be revisited in a couple of years in order to increase the body of knowledge presented here and revise the conclusion reached is necessary.

Another research project could be conducted to investigate what Twitter users who follow Twittering Libraries think about the fact that their local library is on Twitter. It would be interesting to know what value they give to this service. Researching attitudes of non-tweeting staff in Twittering libraries could also bring some insight into the adoption rate of Twitter in-house.

Another suggestion is to extend the current research project to all libraries using Twitter in New Zealand. Since this research project was undertaken, two New Zealand libraries, one academic and one public, have joined Twitter. As the number of NZ Libraries on Twitter is increasing, there could be an opportunity to conduct a quantitative research on the topic of Twittering Libraries using a survey based on the research project presented here. This research could be done as a survey, or a content analysis of tweets.

Two other topics of interest that would be worth researching are how aware Social Media Librarians are of Social Media Optimization's rules (see 3.7.2) and whether Social Media Guidelines or Policies (see 17.2.3) are observed in New Zealand libraries using Social Media. Because some libraries are using more and more Social Media, Social Media Optimization's rules might help them to develop online strategies so their digital outreach produces results. Conducting research pertaining to how aware librarians are of Social media Optimization might contribute to making these rules more mainstream for librarianship. As libraries increase their use of social media, guidelines will become increasingly important in order to streamline their Social Media effort. Investigating whether libraries have these guidelines or policies in place or not, and if they have, finding out what they are, might be useful for the Library community.

A. Appendices

A.1. New Zealand Libraries' Twitter accounts

Type	Library	Twitter username	Twitter url
Academic#1	Lincoln University Library Canterbury, New Zealand	@LincolnULibrary	http://twitter.com/LincolnULibrary
Academic#2	Otago Library Dunedin, New Zealand	@OtagoLibrary	http://twitter.com/OtagoLibrary
Corporate#1	Wellington Medical Library Wellington, New Zealand	@WMLIB	http://twitter.com/WMLIB
Corporate#2	Lesbian Information, Library and Archives Centre Wellington, New Zealand	@lilac_library	http://twitter.com/lilac_library
Corporate#3	RNZFB Library Auckland, New Zealand	@rnzfblibrary	http://twitter.com/rnzfblibrary
Corporate#4	Energy Library Wellington, New Zealand	@Energy Library	http://twitter.com/EnergyLibrary
National	National Library, Wellington, New Zealand	@NLNZ	http://twitter.com/NLNZ

	Zealand		
Public#1	Hastings Libraries Hawke's Bay, New Zealand	@HDLibraries	http://twitter.com/HDLibraries
Public#2	Palmerston North City Library Palmerston North, New Zealand	@citylibrary	http://twitter.com/citylibrary
Public#3	Mt Roskill Library Auckland, New Zealand	@mtroskillib	http://twitter.com/mtroskillib
Public#4	Invercargill Library Invercargill, New Zealand	@invlibrary	http://twitter.com/invlibrary
Public#5	Wellington City Libraries Wellington, New Zealand	@wcl_library	http://twitter.com/wcl_library
Public#6	Upper Hutt Library Upper Hutt, New Zealand	@UHLibrary	http://twitter.com/UHLibrary
Public#7	Manukau Libraries Manukau, New Zealand	@Manukau_Libs	http://twitter.com/Manukau_Libs
Public#8	Dunedin Public Libraries Dunedin, New Zealand	@dnlibraries	http://twitter.com/dnlibraries
Public#9	Rodney Libraries Rodney District, New Zealand	@rodneylibraries	http://twitter.com/rodneylibraries

Public#10	Central Hawke's Bay District Libraries Central Hawke's Bay, New Zealand	@chblibraries	http://twitter.com/chblibraries
Public#11	Tararua Library Tararua District, New Zealand	@tararualibrary	http://twitter.com/tararualibrary
Public #12	Kapiti Libraries Kapiti Coast New Zealand	@kapiti_lib	http://twitter.com/kapiti_lib
School#1	Golden Bay High School Nelson, New Zealand	@gbhslibrary	http://twitter.com/gbhslibrary
School#2	Summerland primary school Auckland, New Zealand	@summerlandlibra	http://twitter.com/summerlandlibra
School#3	King's High Library Dunedin, New Zealand	@Kingshighlib	http://twitter.com/Kingshighlib

A.2. Example of Librarians to Librarians interactions on Twitter

This conversation between librarians on Twitter shows 'librarian to librarian' tweets about a professional issue (read from top to bottom):



<http://twitter.com/jenica26/status/7839905934> <http://twitter.com/flexnib/status/7842567666>



<http://twitter.com/flexnib/status/7842582330> <http://twitter.com/chawnerb/status/7842661104>



<http://twitter.com/flexnib/status/7843039664> <http://twitter.com/chawnerb/status/7843098057>



<http://twitter.com/Suelibrarian/status/7843296740> <http://twitter.com/chawnerb/status/7846945539>

A.3 Librarians following conferences via Twitter



<http://twitter.com/librariano/status/4852140502> <http://twitter.com/haikugirlOz/status/4852010747>

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