

Talking with Tweets:
An Exploration of Museums' Use of Twitter for Two-Way Engagement

Sydney Jaramillo

A thesis
submitted in partial fulfillment
of the requirements for the degree of

Master of Arts

University of Washington

2017

Committee:

Jessica Luke

Angelina Ong

Program authorized to offer degree:

Museology

© 2017

Sydney Jaramillo

University of Washington

Abstract

Talking with Tweets:
An Exploration of Museums' Use of Twitter for Two-Way Engagement

Sydney Jaramillo

Chair of the Supervisory Committee:
Jessica J. Luke, Ph.D.
Museology

Past research has shown that although Twitter is an ideal platform for audience engagement, museums are not using it as such, and are instead using it almost solely as a promotional tool. This study aimed to understand the extent to which museums are using Twitter as a means to engage in two-way communication with their audiences. Through document analysis of 633 tweets from six museums and interviews with three museum professionals this study created a holistic understanding of museums' use of Twitter for two-way audience engagement.

This research discovered that, although museums continue to use Twitter for promotions, they are also using it for audience engagement. This engagement comes down to having conversations with an audience. They are using Twitter as a place to share their audience's experiences, build connections with that audience, and share stories that their audience is interested in. If museums put in the effort to engage with their audience on Twitter, they may be able to better understand what their audience values and is interested in, as well as, how they think about the museum.

Keywords: *Twitter, tweets, engagement, interactive, noninteractive*

Table of Contents

Chapter 1: Introduction	3
Chapter 2: Literature Review	6
The Psychology of Social Media Use	6
Potential for Social Media Use in Museums.....	10
Opportunities for Twitter in Museums	13
Potential Versus Actual Use of Twitter	19
Chapter 3: Methods	21
Research Approach	21
Methods.....	21
Sampling Strategy and Subject Recruiting	22
<i>Twitter Accounts</i>	22
<i>Interview Participants</i>	23
Research Sites	23
<i>Woodland Park Zoo</i>	23
<i>Seattle Aquarium</i>	24
<i>Renton History Museum</i>	24
<i>The Hammer Museum at UCLA</i>	24
<i>Eureka! The National Children’s Museum</i>	25
<i>The National Postal Museum</i>	25
Data Collection	26
<i>Document Analysis</i>	26
<i>Interviews</i>	26
Data Analysis	26
<i>Document Analysis</i>	26
<i>Semi-Structured Interviews</i>	28
Limitations	28
Chapter 4: Findings and Discussion	29
How are museums using Twitter?.....	29
<i>Type of Tweets</i>	29
<i>Content of Tweets</i>	30
<i>Intent of Tweets</i>	31
What is the nature of museums’ two-way engagement on Twitter?.....	33
<i>Noninteractive vs. Interactive Tweets</i>	33
<i>Two-Way Engagement on Social Media</i>	37

What are examples of two-way engagement on Twitter?.....	39
<i>Content that Elicits Interaction</i>	39
<i>Using Twitter for Engagement</i>	42
To what extent are the tweets accomplishing their goal?	44
<i>Noninteractive vs. Interactive - Replies, Retweets, and Likes</i>	44
Chapter 5: Conclusion	46
Conclusion	46
Recommendations.....	48
Implications.....	50
Appendix A: Interview Guide	56
Appendix B: Tweet Coding Rubric	58
Appendix C: Overview of Document Analysis Data	60

Chapter 1: Introduction

Today's communication environment is fast and ever-changing. News printed in the morning can become old by lunch and responding to an email in less than a day is, considered by some as, too slow. Instant messaging, texting, and social media have become the new norm for communication.

The growing pace at which information is being shared has led to an increase in people connecting with others and following world news and events across multiple platforms. So much so, that a 2016 Pew Research Study found that 56% of adult internet users were using two or more social media sites (Greenwood, Perrin, & Duggan, 2016), which is indicative of the fact that it is no longer sufficient for organizations to be active on only one social media platform. There are a growing number of social media sites to choose from; but, while Facebook remains the most popular site, other social media platforms are steadily increasing (Greenwood et al., 2016). Twitter™ has seen a steady increase over the past five years and currently, 24% of online adults report that they use it (Greenwood et al., 2016). Twitter fits neatly within this evolving, fast-paced, and ever-changing environment. Every day over 500 million tweets are tweeted (Stats, 2016) and every month there are 320 million active users on Twitter (Twitter, 2016).

With such a staggering number of monthly users and daily tweets, Twitter presents an opportunity for museums to engage with massive online audiences in real time. Landon (2010) argues that "Twitter is more than just a place to tell the world what's going on in your little neck of the woods - it is also a place to connect to other people - both in your own community, and across the globe" (p. 14). The literature surrounding Twitter idealizes it as a tool for two-way communication and there are numerous books that describe how to best promote yourself or your company on Twitter (Hill, 2010; Koontz & Mon, 2014; Wallace, 2016). Two-way

communication differs from one-way communication in the expected response to the message. One-way messaging expects little to no direct response while two-way seeks a direct response. Professionals in the field assert, “Twitter is one of the most personal and immediate tools you can use to reach out to your public, actual and potential, when they are outside your four walls” (Stewart, 2010, p. 45).

Twitter’s many features (e.g., mentions, hashtags, replies, retweets, likes, and direct messages) give museums many ways to encourage their audiences to engage with them (Davies, 2010; Hill, 2010; Lovejoy, Waters, & Saxton, 2012; Osterman et al., 2012; Simon, 2008; Smitko, 2012). For example, by retweeting posts museums can connect themselves to others; mentioning users provides museums with a way to ‘shout out’ to visitors, supporters, and sponsors; and replies allow museums to respond to an individual user’s post.

While these features can prove to be very useful, reports suggest that museums are not necessarily using Twitter to its full capabilities. The prevailing undertone of the majority of literature is that museums continue to misuse the platform despite professional encouragement that it is an effective means of engaging with audiences. Museums continue to use Twitter to disseminate one-way messages, such as promotions and marketing for their events. A 2012 study concluded that “organizations are continuing to use social media as they would a traditional information subsidy” such as newsletters or event bulletins (Lovejoy et al., 2012, p. 316). This and other studies suggest that although a handful of “organizations are fully utilizing the dialogic capacity of social media, most use their sites to simply broadcast one-way messages” (Lovejoy et al., 2012, p. 314). A later study conducted in 2014 came to a similar conclusion. It found that Twitter is not a useful tool for engagement since museums continue to use it as a promotional

tool (Langa, 2014). This begs the question: if some people thinks museums are not using Twitter ‘optimally’ then, how are they using it?

These studies argue that, despite encouragement from social media professionals advocating for Twitter being a tool for engagement, museums are, for the most part, using it solely as a marketing tool (Lovejoy et al., 2012; Langa, 2014). Twitter is being held up as a great way to connect with and engage online audiences but there is very little actual evidence or examples of what this museum Twitter use looks like. Therefore, the purpose of this study is to both understand how museums are using Twitter and the extent to which museums are using it as a means to engage in two-way communication with their audiences. Specifically, the study aimed to answer the following questions:

1. How are museums using Twitter?
2. What is the nature of museums’ two-way engagement on Twitter?
3. What are examples of two-way engagement on Twitter?
4. To what extent are museums’ two-way engagement tweets accomplishing their intended goals?

Museums often approach social media with an air of caution. However, if they want to remain relevant and engage with their community, they must adapt to meet people where they are at, and studies show that a large portion of the population is online. There are museums that are using Twitter as an engagement tool and their stories and examples can help guide other museums to use Twitter as an engagement tool. By better understanding the way museums are using Twitter for two-way engagement, this study aims to provide real-world examples (sharing news, conversing with visitors, tweeting with the intent to engage, etc.) so that more museums understand the potential of Twitter as a means to engage with online audiences.

Chapter 2: Literature Review

When it comes to Twitter, and more broadly social media, there are an incalculable number of articles, books, and blogs that attempt to give advice, provide solutions, and help organizations and brands use social media ‘right.’ To better understand where the academic world stands on social media, this chapter will examine what drives people to use social media, how social media is perceived by museum professionals, the pervasiveness of Twitter as a social media platform, and finally, it will explore the opportunities Twitter presents to museums. Exploring these areas will provide a frame of reference for this study and help place in context the purpose and goal of this research.

The Psychology of Social Media Use

Social media, as the name suggests, is a way for people to socialize — talk and connect with each other. With 76% of American adults using at least one social media site (Perrin, 2015) organizations, marketing teams, and brands are eager to better understand why people continue to return to them day after day. A survey from the *New York Times* on social media usage found that 78% of the respondents used social media “to stay in contact with people who they otherwise might lose track of, or who would slip out of their lives” (“Social Media And Psychology -- Why Do People Share?,” 2015). Consequently, “by sharing things that will potentially get these friends engaged, people can keep those friends’ attention and feeling of friendship long after they stop seeing them on a regular basis” (“Social Media And Psychology -- Why Do People Share?,” 2015). Social media not only allows us to engage with one another, it

also allows us to share our lives with these people and keep them interested in our lives despite the distance or time.

However, as McMahon (2015) suggests, there is much more going on behind the scenes that encourages a continued participation in social media. McMahon argues that one reason social media is so popular is because of the continued stimulation it provides. She explains that we are continually drawn to social media because of its ever-changing feature enhancements and user interface changes. Whether it is an update to the layout of a current site, an addition of a new feature, or the appearance of a brand-new site, social media is always changing and this keeps us coming back time and time again.

McMahon elaborates and explains that beyond interface and feature updates, social media users see an infinite stream of posts from the people with which they connect. Social media is a space partly built by users who create content for these sites through their activity and engagements with their friends and followers (McMahon, 2015). If a user does not come back to social media frequently they risk missing out on the numerous changes that are taking place. Thus, users are constantly urged to check their social media so that they know what is going on in their world. When they only have a few friends, this can be a quick check in. However, over time, as users add more friends and make more connections, this process takes more time. Soon checking in with everyone is a lengthy task (Fig.1).

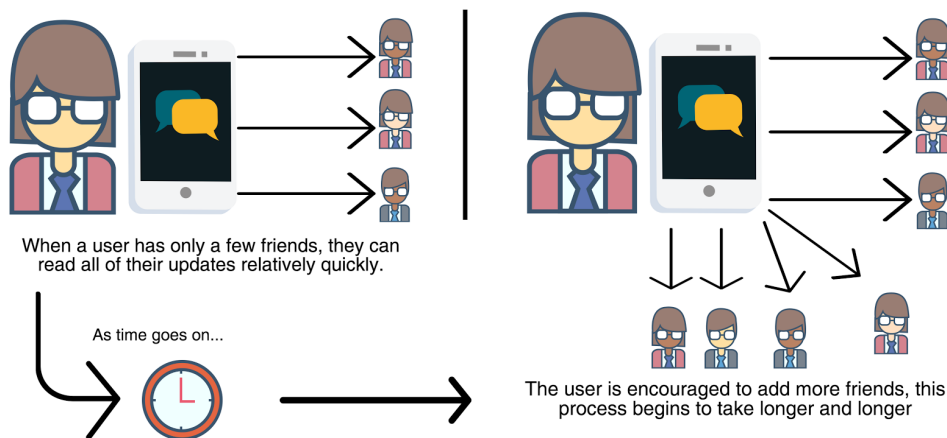


Figure 1 Adding more friends can lead to an overwhelming amount of information.
© Jaramillo, 2017

On another level, social media's continued growth in popularity can be attributed to the desire to conform. McMahon argues that "If everyone we know is on a particular site, it is very hard to avoid such normative social influence (Deutsch & Gerard, 1955). Again, this has a corollary in what has become known as 'fear of missing out' (FOMO) – removing oneself from such a website has psychological side-effects" (2015, para. 11). If we choose not to participate in social media we miss out on what is going on and we struggle to stay in touch with our friends or know what is happening around us since all of that information is being shared almost exclusively on social media sites. FOMO leads people to start using and remain a part of these social media sites even if the task becomes exhausting ("How Millennials Use and Control Social Media," 2015; McMahon, 2015). This behavior was highlighted in a 2015 study from the American Press Institute that found that while millennials considered Facebook's flood of information to be draining, they continued to remain a part of the site since many of their older friends and family still used it ("How Millennials Use and Control Social Media," 2015).

Fundamentally, users return to social media sites because they are continually 'rewarded' with new and interesting information, and humans thrive on being rewarded for their actions

(McMahon, 2015). The need for reward is also reinforced through the act of sharing information. When a user shares information, others have the opportunity to like their post, comment on it, or share it further. When someone does any of these three things, the user is being ‘rewarded’ for posting. The same is true for sending a friend request or following someone (McMahon, 2015). The user is also ‘rewarded’ if someone accepts their friend request or follows them back. These actions follow at set style of reinforcement that is strengthened because the behavior is not guaranteed a reward (McMahon, 2015). It is not a given that a friend request will be accepted or that a post will receive likes and comments, and this makes the behavior even more compelling.

Emerging studies are finding that people can become addicted to the internet in the same way people become addicted to gambling (McClurg, 2017). These researchers see similar patterns in the reward system between gambling and internet use. In gambling, “even though most of the time when you're sitting in front of a slot machine you don't win, every once in a while you do. And that intermittent reward is what hooks people” (McClurg, 2017, para. 34). When a person sees a notification from a social media platform, mostly

“the notification is about something trivial. But, every once in a while, it's something meaningful to you — like, perhaps, a notification that someone has tagged you in a Facebook photo. Researchers studying Internet use say that kind of message is irresistible” (McClurg, 2017, para. 35).

Internet addiction is not yet classified as a disease but its compelling nature and reward system can make it almost irresistible (McClurg, 2017). While internet addiction is a dangerous path, the underlying reward system has benefits that can be tapped by organizations. Humans, like most animals, are hardwired to desire rewards and will repeat behavior that gives them those rewards but even more so if the rewards are not always guaranteed. Understanding why people

participate in social media and their motivation can help brands and institutions use social media platforms more efficiently.

Potential for Social Media Use in Museums

Given the social and habit-forming nature of social media, museums have an opportunity to engage with audiences on a platform they already frequent regularly. Landon (2010) points out when a museum is not online, they “simply have no idea what people may be saying about [them] online - whether good or bad” (p. 11). Social media can be daunting because it gives some of the power of content creation over to the public. Anyone can post a photo of your museum, share your posts, critique your museum, compliment you, recommend you, etc. Museums have little to no control over what is being said about them online or where their content is shared but by being present online, a museum has the ability to listen to what people are saying, react, and respond to them rather than being silent (Stewart, 2010). Despite these anxieties, museums are slowly seeing social media as beneficial and as a way to engage in discussions, receive feedback, create an audience that exists outside of their brick and mortar walls (Davies, 2010; Marakos, 2014). Studies and experience have shown that being online is better than not being online (Davies, 2010; Landon, 2010; Stewart, 2010). When it comes to social media, ignorance is not bliss.

While being present online is important, it is equally as important to remember the nature of social media sites and use them appropriately. Social media platforms are so much more than just another advertising platform for museums. They have the capacity to be a tool for crowdsourcing and audience engagement. There are various ways both museum visitors and museums themselves can use social media to have a conversation and engage with one another.

Visitors can share photos of a museum to Instagram, share their experience with their friends on Facebook, or ask the museum a question on Twitter. In response to these invitations, museums can respond by hosting a curator question and answer sessions on Twitter, sharing behind the scenes photos on Instagram, contributing to a social media trend by using a hashtag on Twitter or Instagram, crowdsourcing ideas for exhibits or programs on Twitter, or soliciting donations for their annual giving campaign on Facebook or Twitter (Landon, 2010). All of these actions reflect those of the online audience. These platforms are not only a way for people to share their lives with their friends, they also open the door for museums to be a part of these visitors' lives (Stewart, 2010). Each social media site provides a certain set of tools to reach an audience but when it comes to talking and engaging with people directly, Twitter provides some unique opportunities.

The Ubiquity of Twitter

Twitter is a microblogging site that was created in 2006 with the mission “to give everyone the power to create and share ideas and information instantly, without barriers” (Twitter, 2016). It is based on a system of users and followers and is composed of 140 character tweets, hashtags, mentions, and retweets. Tweets refer to unique user-generated content that is pushed out to a person's followers (Fig. 2).

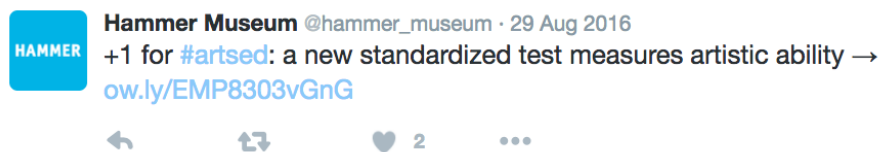


Figure 2 The Hammer Museums posted this original content with a link to an interesting art article.

Hashtags, indicated by the ‘#’ symbol, are a way to create searchable ‘tags’ for content so that certain topics can be tracked regardless of following (Fig.3).



Figure 3 The Seattle Aquarium uses #BeachNaturalist to identify one of their programs.

Mentions are generated using the ‘@’ symbol in front of a person’s Twitter ‘handle’ or username this notifies a person that they have been mentioned in a tweet (Fig. 4).



Figure 4 The Eureka! Museum mentions @HullUniCareers and @artjobsonline in a tweet about a job posting.

Retweets are reused tweets that are shared from one person’s feed to another’s (Fig 5.).



Figure 5 Woodland Park Zoo retweets a visitors post about on of their animals.

With only 140 characters to use when composing tweets, Twitter is a constant stream of short concise messages with a relatively brief active life span.

Twitter is quickly gaining traction as a social media site. A Pew Research Center study from 2016 showed that Twitter ranked third in frequent social media use behind Facebook and Instagram¹ (Greenwood et al., 2016). As of June 30, 2016, Twitter had 313 million active users and over one billion monthly visits to sites with embedded tweets (Twitter, 2016). According to Internet Live Stats, a website that monitors internet usage, on average there are over 500 million tweets sent per day (Stats, 2016). Twitter's traffic numbers continue to rise and as an increasing number of organizations, politicians, and celebrities embrace Twitter. Currently, Twitter use is more prevalent among younger and more highly educated populations; however, if Facebook's past growth is any indication, it is expected that Twitter will expand to include a larger and more diverse population as it grows in popularity (Greenwood et al., 2016). In general, when social media is discussed, it is often pushed aside as being meaningful to only a younger demographic; yet, numerous studies have shown that as a site gains popularity and becomes the norm, its population becomes more cross-generational and is no longer isolated to one age group (Davies, 2010; Duggan, Ellison, Lampe, Lenhart, & Madden, 2015; Greenwood et al., 2016; Pew Research Center, 2013). Twitter is on track to become a place where all, regardless of age, can engage and talk to one another.

Opportunities for Twitter in Museums

Museums are faced with an overwhelming choice of which social media platform they should use to connect with their audiences and careful consideration should be taken when choosing. Each platform comes with a specific set of tools that can be used by museums. For example, Facebook has a tool that allows you to create events. So, if a museum wants to promote and share their events then Facebook might be their best option. Instagram is composed entirely

¹ Instagram is part of the Facebook company.

of photos, so if a museum wants to share photos exclusively, then it may be the best choice. Likewise, Twitter's instant feedback-based platform has the potential to be a very personal way to connect to visitors (Landon, 2010; Langa, 2014). While many of these social media sites allow museums to accrue followers or make friends that can then become visitors, volunteers, or donors, Twitter elicits an immediate interaction from audiences (Kinney & Ireland, 2015; Landon, 2010; Stewart, 2010) as it is a fast-paced environment that provides unique engagement opportunities.

In 2008, Simon said Twitter was a distinct platform because rather than it being a one-sided lecture followed by questions from the audience, it was a cocktail party. Describing Twitter as a cocktail party is a great way to start exploring the potentialities of Twitter as a two-way engagement tool. You do not attend a cocktail party and only sit and listen to others speak, you have conversations (Simon, 2008). You mix and mingle. A study from 2013 found that "social media is not just about opening up another marketing channel, but it enables audience's participation in many levels" (Marakos, 2014, p. 80). Twitter is a platform on which you can immediately engage with an audience, know what is currently trending, garner audience feedback, and respond.

However, simply creating an account and tweeting will likely not make a museum popular on Twitter. Museums have to be creative in developing and maintaining an active following. To be successful, it is important for museums to understand what 'interest' is and how it can be harnessed. Studies have shown that "people who are interested in what they are doing...tend to have positive feelings, be invigorated, and choose to re-engage with a particular object/activity/idea, or content repeatedly" (Renninger & Hidi, 2015, p. 1). Once a museum has attracted someone's interest, they can expect them to continue to engage repeatedly so long as

interest is continually triggered and positive feelings continually associated. Triggering “refers to the capture of interest in response to the environment... which is likely to result in continued engagement” (Renninger & Hidi, 2015, p. 33).

There is not a simple formula for how this interest can be triggered, since much of it depends on the individual person. Discovering what type of content will pique followers’ interests can be a process of trial and error. It is clear, though, that if museums want followers to directly engage with them, they must appeal to an interest to participate in a dialogue with the museum. There are numerous paths through which this might be accomplished, but one way that is often cited is abandoning a strict, authoritative, institutional voice and connecting to the online community as a person (Kinney & Ireland, 2015; Simon, 2008; Stewart, 2010).

A study that looked at how brand spokes-characters tweeted suggests that “consumer–brand relationships can evoke the same emotions as interpersonal relationships, if the relationship is properly maintained” (Kinney & Ireland, 2015, p. 135). It further stressed that through Twitter, brands could engage with their customers on a one-to-one level (Kinney & Ireland, 2015). This claim is evident in how the burger restaurant chain, Wendy’s, uses their Twitter account. In late 2016, Wendy’s hit the social media spotlight when a Twitter user for called them out falsely advertising their beef as never frozen. Wendy’s responded with wit and sarcasm, denouncing them as being misinformed and naive (Marks, 2017). After that tweet took the internet by storm, Wendy’s proceeded to continue their ‘roasts’ of people but doing so by adopting a persona. They even went as far as solving someone’s math homework when a picture of it was tweeted at them (Fine Brothers Entertainment, 2017). Wendy’s unconventional use of social media was not the norm for companies at the time and proved how the dynamic nature of Twitter offered unique ways for them to build a customer base and strengthen their brand.

As the Wendy's example highlighted, tweeting in a colloquial voice can be a very successful tactic. Twitter is personal, so being a real person on Twitter is essential (Stewart, 2010). Being overly formal in tweets can create an atmosphere of a lecture hall rather than Simon's hypothetical cocktail party. Moving away from institutional voice is key to creating an atmosphere that is friendly and approachable (Stewart, 2010). A museum's followers have "invited you to enrich their lives and thoughts" (Stewart, 2010, p. 46) and they can quickly unfollow and remove a museum from their lives if its tweets are constantly promotions for its latest event or exhibit (Stewart, 2010). A study from 2014 that examined coded tweets from 48 museums found that Twitter was not a useful tool for engagement with museum audiences because the museums were only tweeting low-engagement content such as promotions for their events and exhibits (Langa, 2014). The study coded the museums Twitter engagement on a weighted scale of engagement adopted from the Stratford Institute for Digital Media. This weighted direct engagement (such as conversations with visitors frequently) higher than indirect engagement (such as sharing content from other institutions) (Langa, 2014). This study found that museums Twitter accounts were not being used for engagement as recommended.

If Twitter is a cocktail party, as Simon suggests, then the constant mixing and mingling naturally results in a considerable amount of information sharing. Consequently, a major area where Twitter is outpacing other social media sites is in the realm of current news and information sharing. An Associated Press study exploring reasons why millennials use Twitter over Facebook, found that "about one-third say they go to Twitter mainly to look for interesting articles or links their followed friends or organizations post, to share their own content, or to get more information on something they heard either on social media or in the news" ("How

Millennials Use and Control Social Media,” 2015). This study shows that people turn to Twitter to find out what organizations, news, and pop culture are saying and how the world is reacting.

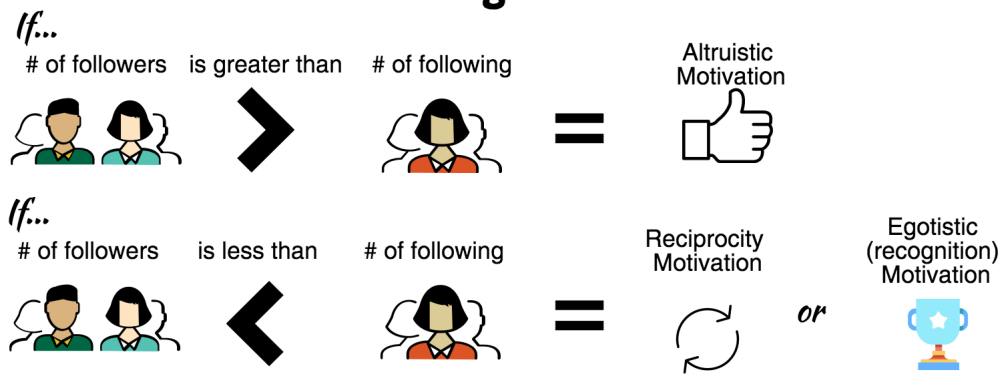
On Twitter, this is accomplished through the retweet function. Retweeting can “connect [a museum’s] story to other relevant stories, thus gaining relevance and interest” (Landon, 2010, p. 15). Just like everyone has that one friend who they can count on for the latest political news, so too can museums become that friend people turn to for the latest update of dinosaur facts or art news. When a museum shares information that is beyond its direct circle of interest, it shows that it cares about sharing relevant information even if it is not directly related to the museums. Retweeting news and interesting articles makes the museum much bigger than its physical walls.

Retweeting can also help keep information relevant and top-of-mind. Since tweets are limited to 140 characters, Twitter is about snippets of information rather than paragraphs. Once a tweet is sent, it is quickly pushed down the feed by more tweets. Retweets create long-term potential for content by extending the lives of tweets and broadening their reach. For example, if someone retweets a post about an event a museum is hosting, or a photo of one of their animals, that tweet is then sent out to all of the retweeters’ followers and has a new life. Now, not only are the museums’ followers seeing the post, but all of the retweeters’ followers also see the post. This can raise the public’s awareness of a museum while also encouraging more people, outside of that museum’s immediate circle, to follow and engage. As this process continues, a single tweet can grow exponentially and potentially lead to its topic trending on Twitter, either locally or worldwide.

Retweeting, like most actions, is the result of a specific set of motivations and understanding these can help museums to leverage their Twitter use. A 2015 study of over 400 Twitter users further explored the nature of a Twitter account and predicted that motivations for

retweeting could be categorized as egotistic, altruistic, or reciprocity-based (Fig. 6). The research concluded that if an account had more followers than people it was following (e.g., celebrities, companies, brands etc.), retweeting information is seen as being altruistic. For example, if there is breaking news or an interesting scientific finding, a person with an altruistic motivation would share that information because they felt a duty to their followers to do so. In contrast, those who were following more people than their number of followers, were more likely to retweet information if there was a possibility for reciprocation or recognition (egotistic motivation) (Lee, Kim, & Kim, 2015). This group would likely retweet content if they knew that the person they retweeted it from would follow them, like their post, send them a direct message, etc. (reciprocation). This same group of people is also likely to retweet something because they believe that in doing so they will be seen as smart, interesting, or on trend (egotistical).

Motivations for Retweeting



Results of Reciprociprication or Recognition

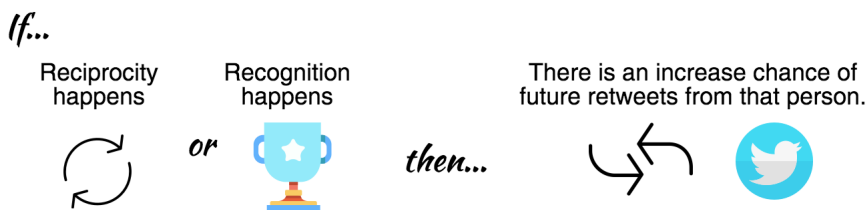


Figure 6 There are three motivations for retweeting. If these motivations are fulfilled, the likelihood of future retweets increases. © Jaramillo, 2017

Most museums have a larger number of followers than people they are following and according to this study fall into the altruistic motivation category. This is reinforced by most museums' missions, which often include some piece about sharing information or knowledge. Contrary to this, most museum followers are retweeting a museum's post in the hope of recognition or reciprocity. Museums can provide this recognition by following that person, retweeting one of their tweets (perhaps one that has to do with the museum), or by replying and thanking them. The takeaway from this study is that if museums want to have an increased number of retweets they must recognize and engage with people when they share the museum's information. Retweeting is a way for the museum to trigger audience interest to engage and provides the museum a way to show its appreciation for that interaction. As McMahon (2015) explained, if interactions on social media are rewarded, there is an increased chance of that behavior being repeated in the future, Retweeting is a way to reward that behavior and can help museums create a sustained cycle of engagement.

Potential Versus Actual Use of Twitter

Being on social media can be complicated for museums. They are simultaneously trying to balance being altruistic, by sharing relevant information, being approachable, by presenting a real persona on Twitter, and being engaging, by curating content that triggers interest. A museum's followers will follow its account and retweet its content only if a psychological impetus to do so is facilitated by the museum. When social media behavior is rewarded, the museum's following will grow. This cycle of growth will continue but requires active use of Twitter by tweeting and retweeting on multiple levels, to multiple audiences, using multiple triggers. But this engagement does not appear to be happening in the museum field.

Recent studies show that museums are repeatedly not using Twitter as an engagement tool. A 2014 paper presented at the iConference noted that of the 50 museums sampled, their most frequent tweets were low engagement content such as reminders about events (Langa, 2014). In two additional studies examining non-profits' use of Twitter, it was found that more often than not, non-profits were not engaging in two-way conversations with their audiences (Waters & Jamal, 2011; Lovejoy et al., 2012). In both of these studies, non-profit organizations were most often sending one-way tweets such as information about events or hyperlinks to their websites. Twitter is a platform that is built on fast-paced information, and thrives on sharing and reacting. It has the potential to be a platform where direct and rapid communication and engagement can happen (Landon, 2010) and it can be a very personal and intimate way to connect with your audience (Stewart, 2010). But this does not appear to be the case with museums. This study aims to understand the disconnect between Twitter's potential and actual implementation in museums by exploring what museums are tweeting, understanding the best practices of two-way engagement of museum audiences on Twitter, and determining if these Tweets are accomplishing goals set by museums.

Chapter 3: Methods

The purpose of this study was to understand the extent to which museums are using Twitter as a means to engage in two-way communication with their audiences. The research was guided by the following questions:

1. How are museums using Twitter?
2. What is the nature of museums' two-way engagement on Twitter?
3. What are examples of two-way engagement on Twitter?
4. To what extent are museums' two-way engagement tweets accomplishing their intended goals?

Research Approach

This study was a qualitative descriptive study that looked at individual tweets from six museums and interviewed three museum professionals from across these six sites. Because this study's purpose was to better understand exactly what museums are tweeting when they are trying to engage audiences in conversation, the tweets had to be analyzed for not only content but also for intent and context. This type of analysis was necessary in order to accurately collect the detailed information of each museum tweet. Concrete findings could be inferred from the analyzed data while being cautious about their applicability and implications for the field at large.

Methods

Twitter is a platform that is content driven and as such, that content needed to be deconstructed to be understood. The most appropriate method to do this by was **document**

analysis, which allowed for a detailed examination of each tweet. Document analysis also allowed for a detailed understanding of the way certain features of the tweets impacted its interactions on the platform.

Along with the document analysis, **semi-structured interviews** with museum professionals were conducted to further explore the thought process behind tweeting and the perception of Twitter, from the museums professionals' points of view. They provided insight into the 'why' behind the tweets that were sent. The interview questions were focused on how the museum used Twitter, how they were participating in two-way engagement, and how they perceived two-way engagement on social media overall (see Appendix A for the interview guide).

Sampling Strategy and Subject Recruiting

Twitter Accounts

Convenience sampling was used when selecting which Twitter accounts to analyze. From June to September 2016, the researcher tracked a large number of Twitter accounts to better understand, broadly, which museums were active on Twitter. During this time, the researcher made note of those account that were particularly active and had varying interactions with their audience. Based on these observations, six sites the fit into the following criteria were selected:

1. Twitter accounts needed to represent a broad range of museum disciplines.
2. Twitter accounts had to be 'active,' meaning they tweeted, retweeted, or replied a minimum of 30 times a month. This was set as a benchmark as it indicated that the museums were tweeting, on average, at least once a day.

3. Twitter accounts had to be from museums that were not widely known. This made it more likely that the followers would be people interested in the museums because of its content rather than because of its notoriety.

Interview Participants

Interview participants were also recruited purposively from the sites chosen for document analysis. To be eligible to participate, the museum professionals had to be one of the people in control of the Twitter account, preferably the sole manager, and be responsible for tweeting.

Research Sites

For this research, six sites were chosen representing an aquarium, a zoo, a small local history museum, an art museum, a children's museum, and a large national history museum. A total of 635 tweets were coded and 633 analyzed from across all six sites². Three interviews were conducted with museum professionals from across the six sites.

Woodland Park Zoo

Woodland Park Zoo is located in Seattle, WA. Their mission states, "Woodland Park Zoo saves animals and their habitats through conservation leadership and engaging experiences, inspiring people to learn, care and act" (Zoo, n.d.). As of April 2017, they had 22,200 Twitter followers. For this study, 32 tweets and retweets from August 2016 were analyzed. An interview was conducted with Rebecca Whitham, the Associate Director of Digital Communications.

Woodland Park Zoo was chosen because it is a medium sized zoo that has a local following in Seattle.

² Two tweets were excluded from the data set for being outliers that would skew the data. These tweets were public service announcements that were retweeted by the museum and were entirely unrelated to the museum or its audience, and thus had no bearing on this research.

Seattle Aquarium

The Seattle Aquarium is located in Seattle, WA. The mission of the Seattle Aquarium is “Inspiring Conservation of Our Marine Environment.” As of April 2017, they had 16,200 Twitter followers. For this study, 95 tweets and retweets from August 2016 were analyzed. The Seattle Aquarium posts a lot of updates from their animals and often participates in Twitter trends and popular hashtags.

Renton History Museum

Renton History Museum is located in Renton, WA. The mission of the Renton History Museum is to “document, preserve, interpret, and educate about the history of greater Renton, in ways that engage diverse people of all ages” (“Renton History Museum,” n.d.). As of April 2017, they had 1,385 Twitter followers. For this study, 44 tweets and retweets from August 2016 were analyzed. An interview was conducted with Elizabeth P. Stewart, the Executive Director. Renton History museum is a small local history museum with limited staff but they have an interesting connection to their local community.

The Hammer Museum at UCLA

The Hammer Museum is located in Los Angeles, CA and is part of the University of California, Los Angeles. Their mission states, “The Hammer Museum at UCLA believes in the promise of art and ideas to illuminate our lives and build a more just world” (“About Us - Hammer Museum,” n.d.). As of April 2017, they had 139,000 Twitter followers. For this study, 230 tweets and retweets from August 2016 were analyzed. Arielle Feldman the Assistant Manager of Digital Communications was interviewed as the Hammer Museum had the largest individual data set with 230 tweets. The Hammer Museums is part of the University of California

Los Angeles campus and, along with their general audience, has a large young college student following

Eureka! The National Children's Museum

Eureka! The National Children's Museum is located in Halifax, West Yorkshire, England. Their mission is to “engage children from birth to 11 in a range of play-based learning experiences which facilitate their emotional, intellectual, physical, social and creative development” (“About us - Eureka! The National Children's Museum,” n.d.). As of April 2017, they had 8,787 Twitter followers. For this study, 114 tweets and retweets from August 2016 were analyzed. Eureka! is an international museums that retweets a lot of content that its visitors share and caters, almost exclusively, to families.

The National Postal Museum

The National Postal Museum is located in Washington, DC and is a part of the Smithsonian Institution. Their mission states, “The Smithsonian's National Postal Museum is dedicated to the preservation, study and presentation of postal history and philately. The museum uses exhibits, educational public programs and research to make this rich history available to scholars, philatelists, collectors and visitors from around the world” (“History of the Smithsonian National Postal Museum,” n.d.). As of April 2017, The National Postal Museum had 29,700 followers. For this study, 120 tweets and retweets from August 2016 were analyzed. The National Postal Museum is one of the smaller lesser know museums in the Smithsonian Institute and focuses on a very narrow part of history.

Data Collection

Document Analysis

To obtain a consistent set of data across all of the sites, Twitter engagements between museums and their followers were collected for each site from August 2016 records. August was chosen based on the following criteria: 1) the month chosen was one in which there were few major holidays or events that could impact the number or frequency of tweets, and 2) it was a summer month when museums across the board naturally have more visitors and events. This provided each museum with relatively even footing when it came to Twitter account usage. Each would have an increased number of visitors and thus possible increase in Twitter account usage.

Interviews

Three interviews were conducted with museum professionals who posted to the Twitter accounts on behalf of the museums. The interviews were conducted over the phone and audio recorded by the researcher. The interviews averaged 30 minutes in length and were conducted between March 22 and April 26, 2017.

Data Analysis

Document Analysis

Twitter data from the sites was analyzed using a framework informed by three studies: *Does Twitter Help Museums Engage with Visitors?* (Langa, 2014), *What Happens When Animals Tweet? A Case study at Brookfield Zoo* (Hood, Watters, Halverstadt, & Hood, 2015), and *Brand Spokes-Characters as Twitter Marketing Tools* (Kinney & Ireland, 2015). While the exact frameworks from these studies were not used in this research, they did influence the final coding rubric for this study. Table 1 describes the framework for how Tweets were coded for analysis:

Level 1 (Type of Tweet)	
Original Content = OC	Content Tweeted by the museum itself
Retweet = RT	Content that the museum has retweeted
Retweet with Text = RTT	A retweet that also includes content from the museum
Reply = R	Tweets that are in response to a tweet in which someone else mentioned the museum
Level 2 (Content)	
Text = T	Content that is text only
Photo/Gif = P	Content that includes a photo or gif
Video = V	Content that includes a video
Poll = PO	Content that includes a poll
Level 3 (Intent)	
Promotional = P	Content that promotes the museum, its programs, or its events
Educational = ED	Content that has an educational purpose. Facts of the day, did you know, etc.
Engaging = E	Content that is meant to engage the audience. For example, mentioning someone, asking a question of the audience, replying to someone's tweet about the museum or retweeting someone's tweet about your museum. OR Content that is truly social tweet. Saying hello, checking in, etc.
Problem Solving = PS	Content that is meant to solve someone's problem such as addressing complaints.
Announcements = A	Content that is an announcement from the museum - hours, closures, etc.
News Stories/Information Sharing = N	Content that is sharing news either related to the museum directly or that is about a topic the museum cares about
Miscellaneous = M	Content that is truly miscellaneous.

Additionally, the number of likes, retweets, and replies were also recorded for each tweet. A full coding rubric with examples can be found in Appendix B.

Semi-Structured Interviews

The interviews were analyzed in context with one another to explore how different museums approach Twitter use and understand it as a tool. The interviews supplemented the findings of the document analysis by providing insight into the thought process that some of the Twitter account managers go through when posting tweets.

Limitations

Although careful attention was paid to select a group of research sites that represented many types of museums, the findings cannot be applied to the field at large. Rather the conclusions from this qualitative descriptive research can provide examples from which other museums can draw inspiration.

When coding tweets, a detailed and specific coding rubric was created; however, there is a margin of error to be considered. This is especially true when coding the intent of the tweets. The researcher was limited in her knowledge of museum practices, events, and exhibits and thus had to make educated assumptions about tweet intention. If there was additional time, the researcher would have had other researchers code the tweets to ensure reliability of the results.

Additionally, there were site-specific limitations. During the month of August, the Renton History Museum was undergoing a renovation of their museums and many of their tweets were updates about the progress of the renovation. This may have resulted in a change in the types of tweets being posted since the museum was closed for renovations and thus did not have any exhibits or events about which to post.

Chapter 4: Findings and Discussion

This study was structured as a qualitative descriptive study that answered four research questions through document analysis of tweets from six museums and semi-structured interviews with museum professionals from a subset of the museums. In total, 635 tweets were coded for this study. Two tweets that were truly miscellaneous were eliminated to avoid skewing the results. This left 633 tweets for analysis. The data, collected from six museums, were analyzed as a whole data set so that the results would be representative of the field at large. In exploring analysis by individual institution type, it was evident that some museums posted almost exclusively one type of content (e.g. educational or promotional) and as such, would strongly misrepresent or bias cross-site results. By looking across all of the data, a more holistic rather than siloed view of the tweets is achieved. Appendix C shows the breakdown of tweets from each museum.

How are museums using Twitter?

Type of Tweets

Before diving into the details of museums' two-way engagement on Twitter, it is necessary to understand how these museums were using Twitter. The study found that across the six sites the museums were tweeting primarily original content (59%) followed by retweets (30%). Replies and retweets with additional text were the least common type of content, and together represented only 11% of the tweets. These museums are mostly sharing their own original content and retweeting content created by others. (Fig. 7).

Nearly 60% of the museums' tweets were original content. (n=633)

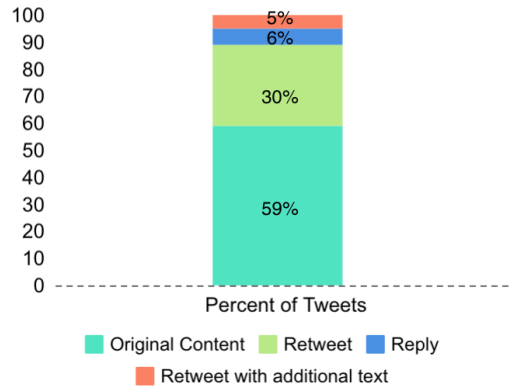


Figure 7 Type of tweet.

Content of Tweets

The six museums in this study posted mostly photos/gif and text and rarely posted videos (Fig. 8). Of the 633 tweets, 49% contained photos/gifs and 47% were text only.

The content of the tweets was mostly split between photos/gifs and text. (n=633)

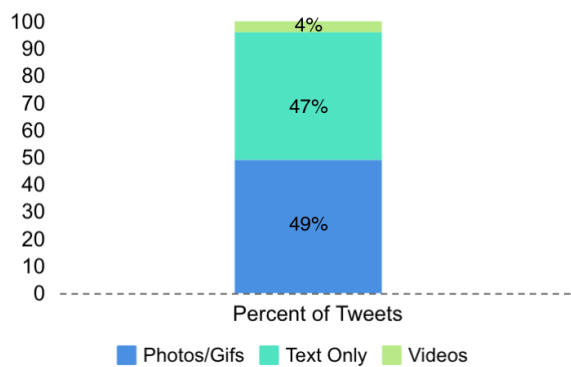


Figure 8 Content of tweet.

The high percentage of photo-based tweets is reflective of the visual and fast-paced nature of Twitter. Something visual will grab the attention of an audience much more so than words alone. Since August 2016, Twitter has rolled out an embedded video feature, which may lead to an increase in the number of videos posted.

Intent of Tweets

The tweets from across all six museums were analyzed for intent according to six categories: Announcements, Educational, Engaging, News/Information Sharing, Promotional, and Problem Solving. Examples of the types of intent are provided below for reference (Figs. 9-14).

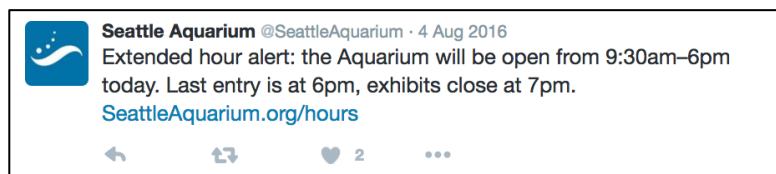


Figure 9 Announcement tweet.



Figure 10 Educational tweet



Figure 11 Engaging tweet

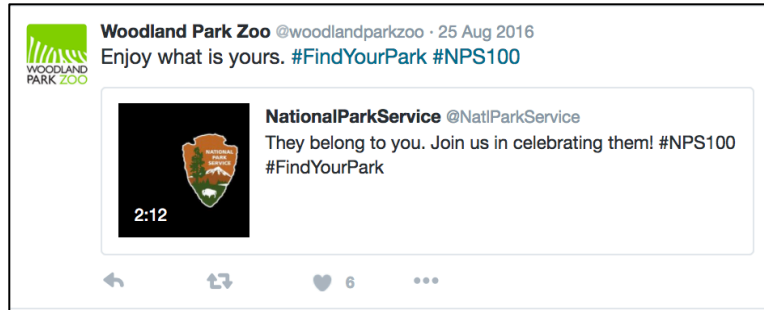


Figure 12 News/Information Sharing tweet



Figure 13 Promotional tweet



Figure 14 Problem Solving tweet

The largest three categories of tweets reflect the main intentions of the museums. Promotional tweets were 38% of posts, educational tweets made up 24%, and engaging tweets represented 20% (Fig. 15).

The intent of the tweets was split mainly between promotional, educational, and engaging intent. (n=633)

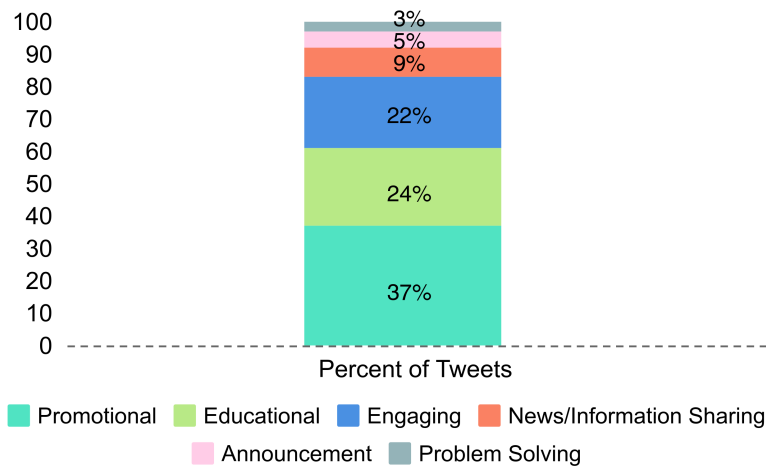


Figure 15 The intent of the tweets was mainly promotional suggesting that museums still use Twitter as a platform to promote themselves.

The museums are still using Twitter predominantly to promote themselves; however other intents are evident. This trend is more pronounced when the tweets are grouped into two broad categories - noninteractive and interactive.

What is the nature of museums' two-way engagement on Twitter?

Noninteractive vs. Interactive Tweets

Separating the tweets into these two researcher-defined categories (Noninteractive and Interactive) allows the tweets to be analyzed in line with the themes pulled from the literature. The literature suggests that tweets that are engaging, solve problems, educate, and share news or information all help to trigger a follower's interest to engage with the museum (Davies, 2010; Landon, 2010; Osterman et al., 2012; Simon, 2008; Stewart, 2010); therefore, interactive tweets

were those coded as Educational, Engaging, News/Information Sharing, and Problem Solving. Noninteractive tweets were those coded as Announcements and Promotional. Interactive tweets are intended to elicit audience interaction in some way. Examples of interaction could be the audience liking a tweet, retweeting a post, replying to a post or talking directly with the museums. When the data is examined in this way, 57% (n=360) of the tweets are classified as interactive, and 43% (n=273) are noninteractive (Fig. 16).

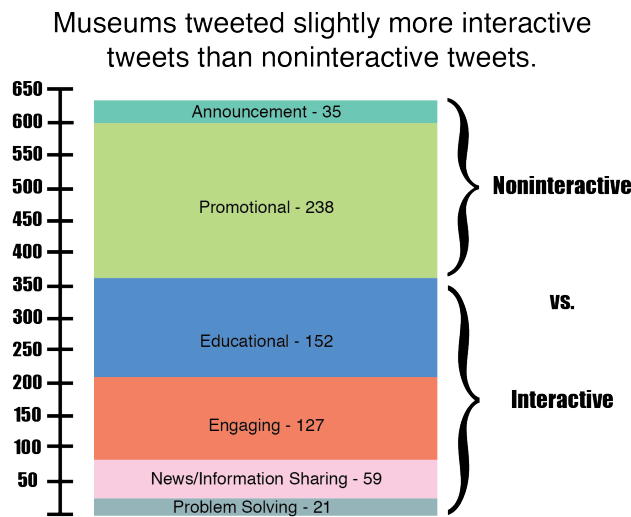


Figure 16 The breakdown of noninteractive versus interactive tweets.

Therefore, while promotional tweets remain the largest single category of tweets, interactive tweets, as a whole, represent more than half of the data.

Noninteractive Tweets

Noninteractive tweets make up less than half of all tweets but include the largest individual intent category - promotional (87%). The remaining 13% of noninteractive tweets were announcements (Fig. 17). The majority of noninteractive tweets (59%) are original content, while 38% are retweets and 3% retweets with additional text (Fig. 18).

The majority of noninteractive tweets are promotional. (n=273)

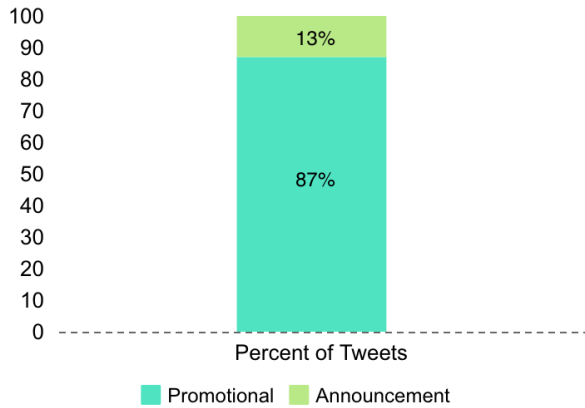


Figure 17 Breakdown of noninteractive tweets by intent.

Original content makes up more than half of noninteractive tweets. (n=273)

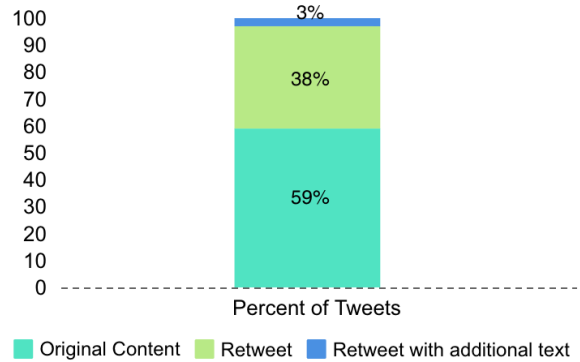


Figure 18 Breakdown of noninteractive tweets by type.

This is not surprising given that 87% of these tweets were promotional and thus were a result of the museums creating content to promote themselves. Noninteractive tweets were also split mostly between photos (54%) and text (41%), with videos making up the remaining 5% (Fig. 19)

Noninteractive tweets contained mostly photos/gifs and text. (n=273)

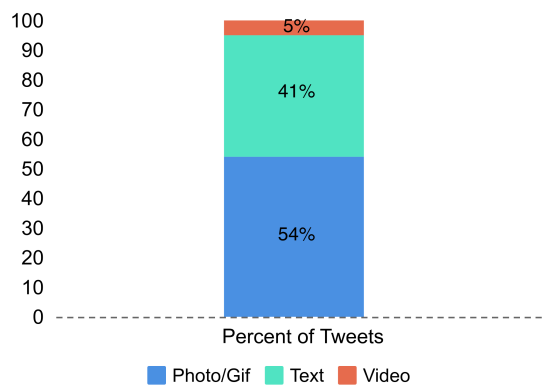


Figure 19 Breakdown of noninteractive tweets by content.

Interactive Tweets

Interactive tweets were mostly education (42%) or engaging (36%). The remaining 22% was split between news/information sharing (16%) and problem solving (6%) (Fig. 20). Given that most museums’ missions have some educational component, it is not surprising that 42% of the interactive tweets were educational. Interactive tweets were split primarily between text (52%) and photos/gifs (45%) with videos composing the remaining 3% (Fig. 21).

Interactive tweets were mainly educational or engaging. (n=360)

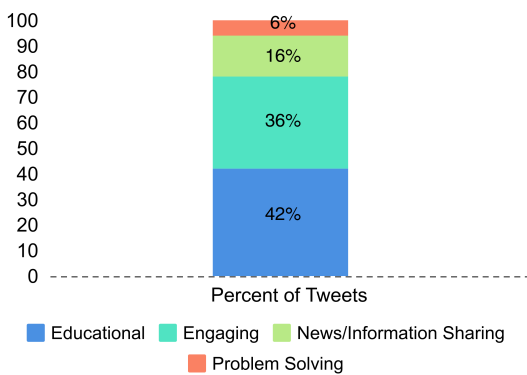


Figure 20 Breakdown of interactive tweets by intent.

Interactive tweets were mainly text and photos. (n=360)

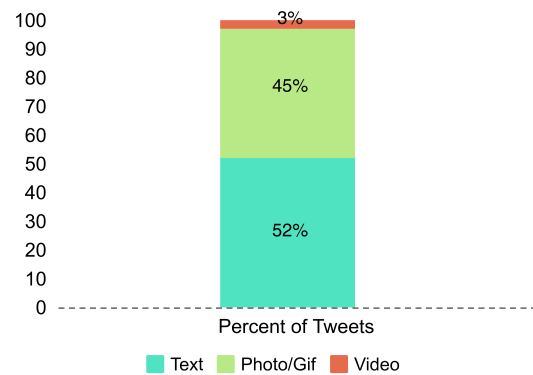


Figure 21 Breakdown of interactive tweets by content.

The content of these tweets was 58% original content, 24% retweets, 12% replies, and 6% retweets with additional text (Fig. 11).

Interactive tweets were mainly original content. (n=360)

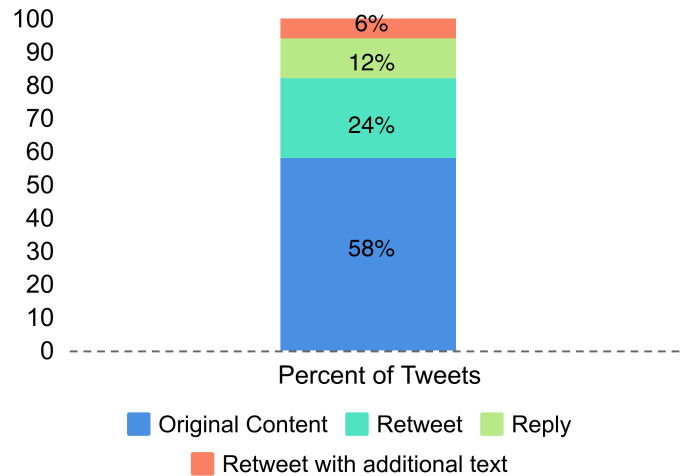


Figure 22 Breakdown of interactive tweets by type.

Two-Way Engagement on Social Media

For each museum professional, the definition of two-way engagement differed slightly.

Rebecca Whitham, Associate Director of Digital Communications at Woodland Park Zoo, explained:

“When social media started we were calling it two-way because for so long brand communications were one way. It was us broadcasting, it was us publishing and what [the audience] did with it, we didn't always know but we knew is if we put it out there, [the audience] might do something with it. So the two-way became about actually being able to hear the audience react. In some cases, it is still really truly one-way, you can just now hear what your audience says in return. Truly for it to be two-way it is more about a dialogue.”

She went on to explain that they saw that dialogue happening more on Facebook and Instagram than on Twitter. She elaborated:

“Twitter is good at literally two-way conversation. The poster to the responder, the responder to the poster, that kind of back and forth. And what Facebook and Instagram

are doing a little bit differently is that 20 people can join a thread and the conversation is going in many ways. It is no longer about us engaging with those people but rather all of them talking amongst each other.”

Since Woodland Park Zoo is interested in seeing multifaceted conversations happen, they use Facebook and Instagram much more than Twitter but keep Twitter as a way to answer questions people may have, to solve customer service issues, and to engage in trends that are happening around them.

For Arielle Feldman the Assistant Manager of Digital Communication at the Hammer Museum, two-way engagement was more about conversations the museum could have with the audience. She said Twitter is “about having a conversation with people.” So she will “post something and ask ‘what do you think?’, ‘tell us who your favorite artist is, ‘or ‘do you think this article is relevant?’ because we want it to feel like we are not talking at people.” She wants to “make it feel like [the audience] can talk to us and respond to us and we are paying attention.” Feldman sees two-way engagement as a way to show the audience that the museums is listening to them and wants to hear what they have to say in return. Using Twitter in this way allows her to talk with her audience and form a relationship that is beyond just a museum speaking to an audience.

Elizabeth Stewart, Museum Director at Renton History Museum, had a more community-centered approach to two-way engagement and Twitter use. She said “I’d like it to be more than promoting the museum but a way to link people together in the community.” For Stewart, two-way engagement revolves around sharing stories and news that is relevant to their community and in doing so, she is able to fortify that community even further.

Museums, as previous studies suggest, use Twitter to promote themselves; however, they also go beyond this mode of communication and are using Twitter to interact with their

audiences. More than half of their engagement on Twitter was interactive. The museums studied are making an effort to post information that will be relevant and interesting to that audience. This comes in the form of sharing news relevant to the mission of the museums, answering questions, and sharing their visitors' posts that they feel would be meaningful to others. The museum professionals behind these accounts understand Twitter to be a place for engagement and not simply promotion.

What are examples of two-way engagement on Twitter?

Content that Elicits Interaction

When it comes to content that elicits a response on Twitter, all three museum professionals agree that promotional tweets are not a successful way to engage with their audiences. Stewart said that “the promotional part of [Twitter] has become the least successful part.” This correlates with what Feldman sees on the Hammer Museum’s Twitter feed analysis, adding “our program tweets tend to perform worse out of anything we post.”

What Twitter use really comes down to is balance. A museum needs to promote their events and Twitter is a great platform to reach a lot of people but they have to balance it with other content that is interesting and relevant to their audience. Feldman balances this by posting “at least one tweet per program...but the rest is interesting articles about what is happening in the art world, artist birthdays, or something funny in the art world.” Stewart also posts “conversational things about the neighborhood” or “more outwardly focused” content such as information about town hall meetings discussing funding for culture institutions and finds that these types of tweets receive the most interaction. She went on to say “the extent to which museums can be more outwardly focused - participating in a conversation about their field or

their local community - that makes you a player in the community and it is just more interesting to people.” Whitham echoed this idea and went on further to say, “the golden rule of social media is providing value.” If a museum's content does not provide value to the follower, then they will cease to be a follower. When thinking about providing value, Whitham said “It's not about what I think is important, it is about what you, the audience member, thinks is relevant to your life.” So while a museum has to talk about itself and its programs, that content has to be balanced with content that the audience finds important. Feldman sums the idea of balance well when she says, “You have to give them engaging content that is not just saying ‘Come here and see this thing.’”

A museum's content on Twitter needs to be diversified. Promotions remain the most common intention of tweets and this reflects the old way of museums to audience communication. The museum professionals know that these tweets perform the worst and try to limit their number and frequency. For some museums, sharing news and interesting articles is about becoming an information source to their community. These tweets help integrate the museum as part of the community - whether that is their local community or the broader community the museum belong (i.e. art or science). Listening to the audience is also vitally important. If a museum posts tweets that ask for the audience's feedback or opinions, answers questions, or responds to customer service issues, they cement the idea that the museum cares about what the audience has to say and are open to dialogue. This type of engagement adds to the diversity of the type of tweets the museum posts and shows the audience that the museum is interested in more than just telling them about museum exhibits and events.

This study wanted to understand what two-way engagement on Twitter looked like. This required looking closely at the content of each tweet and the level of interaction it had. To

understand if there was a different level of engagement on visual and nonvisual tweets, this study looked at the average number of replies, retweets, and likes between the two sets of tweets. Once again, retweets were removed to eliminate outside audience influence. Table 2 shows the breakdown.

Table 2.
Visual tweets had a much higher average number of replies, retweets and likes when compared to text only tweets.

Text Only n=232			Visual (Photos/Gifs/Videos) n=211		
Average Number of Replies	Average Number of Retweets	Average Number of Likes	Average Number of Replies	Average Number of Retweets	Average Number of Likes
0.11	1.53	2.33	0.48	6.66	13.38

When tweets contained a visual component (photo, gif, or video) they received, on average, 436% more replies, 425% more retweets, and 574% more likes. Visual content elicits higher levels of engagement versus text only content.

This was echoed in the interviews with museum professionals. Both Feldman and Whitham said that content that has a photo attached to it tends to perform better because it catches the audience's attention more than words alone will. Feldman also posits that “now that Twitter has native video ability, tweets that include video are also performing better than those that have only text.” In order to attract their audience’s attention, the museums consciously use visual content in their tweets. Although the data shows that text is still the dominant type of tweet, the museum professionals understand the power of visual content and are making a concerted effort to include visuals in their tweets. As Twitter further develops its native video ability and auto play features, videos may also rise in frequency.

Using Twitter for Engagement

Based on interviews with museum professionals, it became clear that using Twitter for engagement necessitates that the museum listens and responds, especially in a real-time virtual environment. Whitham explained that Twitter “is not just another platform for us to be able to blast our stories. It is really an opportunity for us to hear what people are talking about and see how they are responding to things, for them to tell their own stories so we can understand what is resonating out there.” Feldman also stressed this importance saying:

“a lot of what happens now is not us just talking at people but us responding to them and asking them questions. And not just answering logistic questions like ‘when are you open?’, ‘what time does the program start?’ but also it is also looking at what people are posting on social media; and, if they are really mad about something, it is an opportunity for us to reach out and say ‘Hey, thanks for your feedback we would love to know more’ and not just letting it go.”

Similarly, Stewart explained that they use Twitter to answer questions, or reply to direct messages for more information about an event or exhibit.

For Whitham, Feldman, and Stewart, being present on Twitter is important so that they can listen to their audience and understand what is important to them. It also gives them the power to respond to the audience and address issues that they may be having. This requires that they are present on Twitter throughout the day. Stewart keeps a social media management app open on her desktop all day when she is at work and checks in occasionally in the evening after she leaves work. This allows her to be aware of what is being said in reference to Renton History Museum at any given time. Feldman had a similar process. She said “that being a Social Media manager means being quick to respond and kind of being on-call at all times for better or worse. If someone is coming to an event today and then ask a question on Twitter, they expect a response immediately.” Whitham also stressed the importance of being able to respond in a timely manner. She said:

“The reality is we do not just get to do social media nine to five. So our team is responsible for monitoring in the evening hours and on the weekend...Especially with an attraction like ours where the majority of the people who are visiting are visiting on the weekend. When they have customer service questions, or they are sharing a photo from an experience they had, it is happening when we are not in the office. So [being online outside of office hours] is a commitment we have to make.”

For all three professionals, knowing what people are saying about the museum and being able to respond quickly is a core part of how they use Twitter. Twitter’s fast-paced environment requires that responses and engagement happen quickly. As the professionals stressed, if someone has an urgent question, responding a day later is useless. Similarly, if someone visited your museum and shared an interesting photo, retweeting in days later is not as impactful. Being perpetually present is vital to having an active and engaging Twitter.

Listening and responding is a small, but vitally important, piece of the larger picture of conversations on Twitter. Whitham said that Twitter “is an opportunity for us to slow down for a second and listen to what our community is busy obsessing about and figure out if we can be an organic part of that dialogue.” Both Whitham and Feldman talked about the conversational nature of Twitter and explained how they use it. Feldman said that “Twitter is one of our biggest and best performing tools because following, favoriting and retweeting is just a natural part of Twitter and it is a conversational tool.” Woodland Park Zoo, which is more active on Facebook than Twitter, has found that “on Twitter we are talking more directly with people whereas on Facebook, the conversation kind of gets away from us and becomes people talking amongst each other.” Regardless of the extent of their use of Twitter, both Feldman and Whitham saw Twitter as a conversational tool that they could use to talk with their audiences and directly respond to them.

This type of engagement requires that they be constantly present on Twitter and this requires them to check in with Twitter outside the traditional nine-to-five hours of work. If they

want to grow an audience that is eager and willing to engage with them they must be willing to respond when their audience is engaging which means being available in the evenings and on the weekends. Twitter is a place for museums to listen to, react to, and engage with their audience and because they value this, they are willing to be continuously present.

To what extent are the tweets accomplishing their goal?

Noninteractive vs. Interactive - Replies, Retweets, and Likes

To understand the type of engagement that occurred with both noninteractive and interactive tweets, the average number of likes, retweets, and replies were analyzed. Since retweets retain their original like and retweet data, they were removed from this data set to ensure that it reflected the museum audience's opinions rather than the opinions of audiences outside the museums. There were 169 noninteractive tweets and 274 interactive tweets in this data set. Table 3 shows the breakdown of average replies, retweets, and likes for both noninteractive and interactive tweets.

Table 3
Average number of replies, retweets, and likes on noninteractive tweets versus interactive tweets.

Noninteractive n=169			Interactive n=274		
Average Number of Replies	Average Number of Retweets	Average Number of Likes	Average Number of Replies	Average Number of Retweets	Average Number of Likes
0.25	3.63	7.02	0.31	4.19	7.98

This data shows that interactive tweets receive a slightly higher average number of replies, retweets, and likes versus noninteractive tweets. This is reflective of the literature, which suggests that interest to engage can be triggered through interactive content.

It is difficult to precisely measure if the tweets are accomplishing their intended goal at these museums; however, the data suggests a positive relationship between engagement intent and results. Interactive tweets generated by these museums generated a higher average number of replies, retweets, and likes when compared to noninteractive tweets which suggests that interactive tweets do trigger a higher level of engagement. These museums also experienced more engagement on interactive tweets and work to provide more posts that will help them connect and talk with their audience. It is equally important to acknowledge that noninteractive tweets accomplish a specific goal for their museum. A promotional tweet informs the audience about what the museum has going on and announcements lets the audience know of last minute or important changes that may affect them. While these museums agree that these tweets will not receive the same level of engagement as an interactive tweet, they understand their importance when looking holistically at how Twitter can be used as a marketing strategy.

Each institution is using Twitter differently; yet, they agree on the way Twitter should be used and why it is an important and unique tool. Despite their individual feelings about Twitter, both interview and document data suggests that engagement is happening and can be fruitful.

Chapter 5: Conclusion

Conclusion

Information is spreading at a speed never before seen and museums are working to keep pace with that information. Twitter is a tool that allows museums to engage with their audience in real-time and participate in the fast-paced information age. In the past, museums have continued to use Twitter almost exclusively as a promotional platform (Waters & Jamal, 2011). However, as they have learned about the ways they can use Twitter and harness it as a tool for not only promotion but also audience engagement, Twitter has become a powerful way to talk with and listen to their audience.

This study found that engagement can and is happening on Twitter. It requires that the museums make an effort to have conversations of Twitter. Simply being present on the platform does not guarantee engagement. Previous studies suggested, “organizations are continuing to use social media as they would a traditional information subsidy” (Lovejoy et al., 2012, p. 316) and “have taken to the Twitter platform as a means to enhance their marketing” (Langa, 2014, p.419). As this literature suggests, museums need to understand that Twitter does not function like traditional media outlets and they cannot treat it as such. The six museums sampled in this study demonstrated that their largest individual intent category is promotional yet; it does not make up the majority of the tweets. The intention of the tweets is balanced primarily between promotional, educational, and engaging tweets. The museums in this study are using Twitter in a variety of ways and not, as the literature suggests, solely as a marketing tool.

The museum professionals in the study all discussed the importance of having diverse content on Twitter. Museums understand that promotional tweets do not lead to engagement and, therefore, balance their Twitter activity by posting information and news that their audience is

interested in hearing. This falls inline with what Landon (2010) argues; “Twitter is more than just a place to tell the world what’s going on in your little neck of the woods - it is also a place to connect to other people - both in your own community, and across the globe” (p. 14). Sharing stories and news that are related to the museum and its mission broadens the museum’s scope; and responding to questions, sharing visitor photos, and posting interesting facts, diversifies a museum’s content while showing the audience that the museum is interested in more than promoting themselves. Diverse Twitter content will ensure that a museums feed is relevant and interesting to their audience.

Twitter’s conversational nature and built in abilities (hashtags, mentions etc.) make it ideal for listening to an audience. Twitter can be a place where museums can understand what their audience is thinking about and reacting to at the moment. Museums are able to hear about the experiences people are having at their museum (good or bad) and not only notice it but also respond. As Landon (2010) says “If you’re not actively listening, and you’re not participating, you simply have no idea what people maybe saying about you online - whether good or bad” (p.11). Twitter allows museums to address problems visitors are having or share photos they took while at the museums. Both of these help show the audience that the museum is listening and willing to engage with them. When museums use social media they give much of the control over to the public, but as this study shows, using social media can lead to fruitful interactions between a museum and its audience, and even between the audience members themselves. Sharing follower’s posts or responding to them furthers their interest to interact with the museum and will help reinforce the engagement behavior.

This study discovered that when a museums posts interactive content, they see increased level of engagement. Over half of the tweets analyzed were interactive in nature. Interactive

tweets had a higher average number of replies, retweets, and likes versus noninteractive content, which suggests that when a museum makes the effort to post interactive tweets they will see an increase in engagement. To sustain this engagement, however, the museum must continue to post a variety of content that will be able to appeal to many audiences. This, as Renninger and Hidi, (2015) will keep their interest triggered and they will want to engage again.

Part of having conversations with an audience requires museum professional to be ever-present on social media. If museums are only monitoring their social media accounts from nine to five they will miss engagement opportunities with their audience that visits in the evenings or on the weekends. Twitter is a fast paced platform and it is much less helpful or meaningful if a question is answered or post shared days after the fact. To achieve this level of responsiveness, museums may have to rethink their staff structure or job requirements but is not unachievable - even for the smallest of museums. Stewart (2010) said “Twitter can only be useful to your organization to the extent that you interact with your followers, and afford them chances to interact with you” (p.45-46). Twitter is a useful tool for engagement but only so long as the opportunities for engagement are created. If a museum’s Twitter feed goes silent in the evenings and on the weekends, opportunities are lost.

Recommendations

As museums continue to use Twitter, there are three key ideas to take away from this study – 1. Provide diverse content, 2. Be constantly present on the platform, and 3. Listen, respond, and have conversations.

Museums will always have events, programs, and exhibits that they need to market; the key is to ensure that is not the only type of tweet on its feed. Posting content that is meaningful,

provides values, and is relevant to your audience will ensure that they remain as followers. Further posting content that contains a visual element will greatly increase the level of engagement on the post. Similarly, posts that were interactive in nature had a higher level of engagement than noninteractive tweets. Museums should be aware that content that is interactive or contains visual content will have a higher level of engagement.

The museums professionals interviewed in this study all emphasized that social media, including Twitter, is not a nine-to-five job. It requires constant vigilance so that the museum can be aware of what is being said to or about it online. Museum may need to rethink staffing and position descriptions to achieve this, but it is possible.

Twitter provides a unique platform to know what is going on right now in a museum's community. It thrives of instantaneous information sharing. This makes it ideal for listening to the concern a visitor may have and addressing it, sharing their positive experience with others, and engaging them in a dialogue which may lead to a build up of the audience.

There are many benefits to using social media - Twitter in particular - and not using it is a lost opportunity to reach your audience. Elizabeth Stewart, from Renton History Museum, summed this idea up well when she said:

“I continue to be surprised at the number of museums that are not using [Twitter] at all. I think it is skepticism around what good it does. I am always mystified when [museums] are not using [Twitter] or not monitoring it because it takes so little effort.”

Being active on Twitter is a way to show your audience that you value their opinion and feedback and are willing to listen to them. If museums are willing to put forth an effort to listen to and talk with their audience on Twitter they will find that their audience will, in turn, engage with them.

Implications

Although this research aimed to represent a wide range of museums, it is not comprehensive of the museum field and cannot accurately reflect trends. This study serves only to provide clarity on how a handful of museums are using Twitter to engage their audiences and help the field have a better understanding of the type of engagement that can happen. Due to the nature and scope of this study only six museums and one month of tweets were studied. A study that sought to understand trends within the field would need to look at many more museums and examine their tweets over multiple months. A more comprehensive study might look at multiple of each type of museum (zoo, aquarium, history, science, children's etc.) and examine their tweets over a year. This would allow for the museums to be examined separately by type of museum as well as a whole. The study could further be broken up by size of museum to understand if there are any differences between the way small and large museums use Twitter. A study of this scope would be able to show trends within specific types of museums as well as in the field at large.

This research looks solely into Twitter use but, as suggested in the literature review, each social media platform can be used in a unique and specific way. Another avenue of future study could look into how museums are using other platforms (Facebook, Instagram, Snapchat, etc.) and then explore two-way engagement on those platforms. This would provide museums with a variety of studies to look to when deciding which social media platform best suits their needs.

Finally, Stewart (2010) argues "Twitter is one of the most personal and immediate tools you can use to reach out to your public, actual and potential, when they are outside your four walls" (p. 45). This begs the question what percentage of museums' follower are actual visitors versus only potential visitors and what drives people to follow a museum they do not visit. This

would help museums better understand the make up and needs of their audiences, as well as provide insight into what makes total ‘strangers’ follow a museum on Twitter.

This study is but one avenue of exploration. There are numerous other studies to be done and further conclusions to be drawn. Future research will be able to draw broader, field-wide conclusions, understand the differences in social media use, and look more deeply at the Twitter follower.

References

- About us - Eureka! The National Children's Museum. (n.d.). Retrieved April 7, 2017, from <https://www.eureka.org/explore-eureka/about-us/>
- About Us - Hammer Museum. (n.d.). Retrieved April 7, 2017, from <https://hammer.ucla.edu/about-us/>
- Davies, P. (2010). Making the Case for Twitter. In *Twitter for museums: strategies and tactics for success: a collection of essays* (pp. 32–43). 8 Albany Street Edinburgh EH1 3QB: MuseumsEtc.
- Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015, January 9). Frequency of Social Media Use. Retrieved November 14, 2016, from <http://www.pewinternet.org/2015/01/09/frequency-of-social-media-use-2/>
- Fine Brothers Entertainment. (2017). *YouTubers React to Wendy's ROASTS Twitter!!!* YouTube. Retrieved from <https://www.youtube.com/watch?v=WPsw3H---H4>
- Greenwood, S., Perrin, A., & Duggan, M. (2016, November 11). Social Media Update 2016. Retrieved February 14, 2017, from <http://www.pewinternet.org/2016/11/11/social-media-update-2016/>
- Hill, L. (2010). What to Tweet About. In *Twitter for museums: strategies and tactics for success: a collection of essays* (pp. 90–107). 8 Albany Street Edinburgh EH1 3QB: MuseumsEtc.
- History of the Smithsonian National Postal Museum. (n.d.). Retrieved April 7, 2017, from <https://postalmuseum.si.edu/about/history-of-the-smithsonian-national-postal-museum.html>
- Hood, C., Watters, J., Halverstadt, B., & Hood, K. (2015). What Happens When Animals

- Tweet? A Case study at Brookfield Zoo. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 1930–1939.
- How Millennials Use and Control Social Media. (2015, March 16). Retrieved March 21, 2017, from <https://www.americanpressinstitute.org/publications/reports/survey-research/millennials-social-media/>
- Kinney, L., & Ireland, J. (2015). Brand Spokes-Characters as Twitter Marketing Tools. *Journal of Interactive Advertising*, 15(2), 135–150.
- Koontz, C., & Mon, L. (2014). *Marketing and Social Media: A Guide for Libraries, Archives, and Museums*. Rowman & Littlefield.
- Landon, K. (2010). Why Use Twitter? In *Twitter for museums: strategies and tactics for success: a collection of essays* (pp. 10–21). 8 Albany Street Edinburgh EH1 3QB: MuseumsEtc.
- Langa, L. A. (2014). Does Twitter Help Museums Engage with Visitors? In *iConference 2014 Proceedings*. iSchools. <https://doi.org/10.9776/14130>
- Lee, M., Kim, H., & Kim, O. (2015). Why Do People Retweet a Tweet?: Altruistic, Egotistic, and Reciprocity Motivations for Retweeting. *Psychologia; an International Journal of Psychology in the Orient*, 58(4), 189–201.
- Lovejoy, K., Waters, R. D., & Saxton, G. D. (2012/6). Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less. *Public Relations Review*, 38(2), 313–318.
- Marakos, P. (2014). Museums and Social Media: Modern Methods of Reaching a Wider Audience. *Mediterranean Archaeology and Archaeometry*, 14(4), 75–81.
- Marks, G. (2017, January 9). So who's behind all those snarky tweets from @Wendy's?

The Washington Post. Retrieved from <https://www.washingtonpost.com/news/on-small-business/wp/2017/01/09/so-whos-behind-all-those-snarky-tweets-from-wendys/>

McClurg, L. (2017, May 18). Is “Internet Addiction” Real? Retrieved May 18, 2017, from http://www.npr.org/sections/health-shots/2017/05/18/527799301/is-internet-addiction-real?utm_source=npr_newsletter&utm_medium=email&utm_content=20170518&utm_campaign=npr_email_a_friend&utm_term=storyshare

McMahon, C. (2015, September 28). Why do we “like” social media? Retrieved March 21, 2017, from <https://thepsychologist.bps.org.uk/volume-28/september-2015/why-do-we-social-media>

Osterman, M., Thirunarayanan, M. O., Ferris, E. C., Pabon, L. C., Paul, N., & Berger, R. (2012). Museums and Twitter: An Exploratory Qualitative Study of How Museums Use Twitter for Audience Development and Engagement. *Journal of Educational Multimedia and Hypermedia*, 21(3), 241–255.

Perrin, A. (2015, October 8). Social Media Usage: 2005-2015. Retrieved March 27, 2017, from <http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/>

Pew Research Center. (2013). *Twitter News Consumers: Young, Mobile and Educated*.

Renninger, K. A., & Hidi, S. (2015). *The Power of Interest for Motivation and Engagement*. Routledge.

Renton History Museum. (n.d.). Retrieved April 7, 2017, from <http://www.rentonwa.gov/living/default.aspx?id=13334>

Simon, N. (2008, April 1). Cocktail Party Participation: Revisiting Twitter. Retrieved

January 23, 2017, from <http://museumtwo.blogspot.com/2008/04/cocktail-party-participation-revisiting.html>

Smitko, K. (2012). Donor engagement through Twitter. *Public Relations Review*, 38(4), 633–635.

Social Media And Psychology -- Why Do People Share? (2015a, September 1). Retrieved March 21, 2017, from <https://www.avidian.com/blog/social-media-and-psychology-why-do-people-share>

Social Media And Psychology -- Why Do People Share? (2015b, September 1). Retrieved March 21, 2017, from <https://www.avidian.com/blog/social-media-and-psychology-why-do-people-share>

Stats, I. L. (2016). Twitter Usage Statistics. Retrieved November 9, 2016, from <http://www.internetlivestats.com/twitter-statistics/>

Stewart, E. P. (2010). Twitter and Your Organisation. In *Twitter for museums: strategies and tactics for success: a collection of essays* (pp. 44–63). 8 Albany Street Edinburgh EH1 3QB: MuseumsEtc.

Twitter. (2016, June 30). It's what's happening. Retrieved October 16, 2016, from <https://about.twitter.com/company>

Wallace, M. (2016). *Museum Branding: How to Create and Maintain Image, Loyalty, and Support*. Rowman & Littlefield.

Waters, R. D., & Jamal, J. Y. (2011/9). Tweet, tweet, tweet: A content analysis of nonprofit organizations' Twitter updates. *Public Relations Review*, 37(3), 321–324.

Zoo, W. P. (n.d.). About Us. Retrieved April 5, 2017, from <http://www.zoo.org/about>

Appendix A: Interview Guide

INTERVIEW GUIDE

Museums' Use of Twitter for Two-way Engagement

Sydney Jaramillo

Museology Graduate Program

Thank you for taking the time to speak with me today. I am asking you to participate in a research study that is part of my Master's Thesis work at the University of Washington. The purpose of this research is to understand the extent to which museums are using Twitter as a means to engage in two-way engagement with their audiences. This interview should take approximately 30-45 minutes. I will be recording this interview for my records. I will be the only one to hear the recording. Your participation in this study is voluntary. Refusal to participate will involve no penalty or loss of benefits, and you may discontinue participation at any time. If you have any questions now or in the future, you may contact my advisor or me.

Do you have any questions? Do you agree to participate in this interview?




My questions will center around how your institution uses Twitter—its role and your process—but I also want to discuss with you the potential of Twitter as a two-way engagement tool.

1. To what extent do you see Twitter as a useful tool for audience engagement?
(Follow Up)
 - a. Is it helpful?
 - b. Do you see audience engagement happening?
 - c. What would make it easier or better?
2. Can you tell me about the thought process that goes into posting on Twitter?
(Follow up)
 - a. Are there any content considerations you make?
 - b. Do you have a plan of what to tweet and when?
 - c. Is there a type of tweet (photo, video, text) that you prefer to post?
3. What type of tweets, if any, do you see getting the best response on Twitter?
4. Does someone actively monitor your Twitter account?
5. What are your policies (institutional or personal) regarding retweeting, replying, and following accounts?
6. Now, I would like to discuss what you believe “two-way engagement” within social media to mean.

- a. Can you tell me about what online activities you consider to be two-way engagement?
 - b. Do you believe two-way engagement is important in this context?
 - c. Do you think this type of engagement can happen on Twitter? Why or why not?
7. Thank you those are the end of my questions. Is there anything you would like to add or think I should know about?

Thank you again for your time. Would you mind if I quote you using you name, position, and institution in my final paper? (if no, would it be ok to quote you anonymously?)

Appendix B: Tweet Coding Rubric

Code	Description	Example
Level 1 (Type of Tweet)		
Original Content = OC	Content Tweeted by the museum itself	
Retweet = RT	Content that the museum has retweeted	
Retweet with Text = RTT	A retweet that also includes content from the museum	
Reply = R	Tweets that are in response to a tweet in which someone else mentioned the museum	
Level 2 (Content)		
Text = T	Content that is text only	
Photo/Gif = P	Content that includes a photo or gif	
Video = V	Content that includes a video	
Poll = PO	Content that includes a poll	
Level 3 (Intent)		
Promotional = P	Content that promotes the museum, its programs, or its events	
Educational = ED	Content that has an educational purpose. Facts of the day, did you know, etc.	
Engaging = E	Content that is meant to engage the audience. Mentioning someone, asking a question of the audience, replying to someone's tweet about the museum or retweeting someone's tweet about your museum. OR Content that is truly social tweet. Saying hello, checking in, etc.	

<p>Problem Solving = PS</p>	<p>Content that is meant to solve someone's problem - such as addressing complaints.</p>	
<p>Announcements = A</p>	<p>Content that is an announcement from the museum - hours, closures, etc</p>	
<p>News Stories/Information Sharing = N</p>	<p>Content that is sharing news either related to the museum directly or that is about a topic the museum cares about</p>	
<p>Miscellaneous = M</p>	<p>Content that is truly miscellaneous. Something that does not fit into any other category.</p>	

Appendix C: Overview of Document Analysis Data

Museum	Number of Tweets	Type of Tweet				Content of Tweet				Intent of Tweet					
		Original Content	Reply	Retweet	Retweet with additional text	Text	Photo/Gif	Video	Poll	Announcement	Educational	Engaging	News/Information Sharing	Promotional	Problem Solving
Eureka! The National Children's Museum	113	20%	21%	58%	0%	58%	42%	0%	0%	6%	0%	37%	4%	41%	12%
Hammer Museum at UCLA	230	53%	3%	41%	3%	35%	61%	9%	0%	0%	1%	19%	9%	70%	2%
The National Postal Museum	120	100%	0%	0%	0%	83%	17%	0%	0%	0%	93%	0%	0%	7%	0%
Renton History Museum	43	53%	0%	9%	37%	44%	56%	0%	0%	0%	21%	9%	42%	5%	0%
Seattle Aquarium	95	74%	0%	25%	1%	25%	66%	8%	0%	16%	27%	29%	6%	21%	0%
Woodland Park Zoo	32	47%	31%	6%	16%	34%	50%	16%	0%	9%	9%	38%	28%	6%	9%