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**“The University of Michigan has accepted your friend request”:
A Case Study of the University of Michigan’s Use of Social Media**

By Sarah Kossek

*A Senior Thesis
submitted to the Department of Communication Studies
of the University of Michigan
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*This thesis is dedicated to my mom, Ellen,
whose passion for research inspired me to
embark on a research project of my own. I love you!*

I would like to thank Susan Douglas and Aswin Punathambekar for their invaluable guidance throughout this project. I couldn't have done it without you!

Special thanks to the staff at the Office of the Vice President for Communications, Michigan Marketing & Design, and News Service of the University of Michigan who provided crucial insight into the university's social media use.

Abstract:

Although social media is a seemingly ubiquitous practice, one realm it has yet to fully infiltrate is that of institutions of higher education. The University of Michigan, for example, began regularly updating a Facebook page in August 2009, but they have yet to fully infiltrate the use of this social media platform, let alone delve into any others. U-M differed from classic diffusion of innovation models, which explains some of their adoption difficulties. They have also encountered various barriers to adoption, most notably time and staffing issues. Finally, the university is not utilizing all the communicative affordances of Facebook, and they are also treating it as a “one size fits all medium” rather than using it to reach multiple audiences in a variety of different ways,

In order to offer a detailed analysis, a theoretical framework of the diffusion of innovation and communicative affordances was established to provide a basis for the study. This information was combined with a history of social media, as well as an archival analysis of previous moments of technology integration at U-M. The historical perspective is often lacking in analysis, and this provided a crucial background for analyzing university communication through social media. Finally, a case study of five key mediating personas from U-M provided insight into the university’s current social media efforts. Detailed analysis followed to synthesize themes and generate conclusions.

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Screen capture from the University of Michigan's Facebook fan page (November 2009)

facebook Home Profile Friends Inbox Sarah Kossek Settings Logout

University of Michigan

Wall Info Photos Boxes Events Discussions

University of Michigan Just Fans



UNIVERSITY OF MICHIGAN

Suggest to Friends
Subscribe via SMS

Welcome to the official University of Michigan Facebook page! Its breadth of accomplishment and activity separates Michigan from other institutions. Share your great experiences here, or create new ones.

Go Blue!

Information

Founded: 1817

Fans

6 of 67,446 fans See All

 Garret Nowakowski	 Rebecca Marshall	 Jordan Pecherer
 Firas Adam	 Matt Keagy	 Lara Benson Heisler

Favorite Pages

University of Michigan President Coleman spoke with Bloomberg about the university's finances and its partnership with Google to digitize books. Coleman says the university is in "very good financial shape." Video: <http://www.youtube.com/watch?v=PpXOlzUJQP8&feature=fvsvr>



Coleman Says Univ. of Michigan in Good Financial Shape: Video
Source: www.youtube.com
Nov. 6 (Bloomberg) -- University of Michigan President Mary Sue Coleman talks with Bloomberg's Lori Rothman and Mark Crumpton about the university's finances and partnership with Google Inc. to digitize books. Coleman says the university is in "very good financial shape." (Source: Bloomberg)

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Shoine Melton @ Barry... ditto. I am in Alabama. I am tired of getting tortured when I wear my MI gear!
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Shoine Melton @ Rob V. I hear you on that. I remember when everyone was so excited when they got rid of Wayne Fontes. Now they really ain't doing nothing. But they had better change something before all of the die-hard fans die off! I have met them all over the U.S.; they are all at least in their fifties. Go Blue!
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University of Michigan This Friday, the U-M African Studies Center presents Nontombi Naomi Tutu: Race and Reconciliation 2009 - <http://www.facebook.com/event.php?eid=150279303574&ref=mf>



Nontombi Naomi Tutu: Race and Reconciliation 2009
Location: Rackham Auditorium, University of Michigan
Time: 7:30PM Friday, November 13th

November 11 at 9:43am · Comment · Like · Share

1. Introduction

“The University of Michigan has accepted your friend request” is not a notification that is likely to appear on your Facebook “newsfeed”. Although social media is a seemingly ubiquitous practice, one realm it has yet to fully infiltrate is that of institutions of higher education. The University of Michigan (U-M), for example, began regularly updating a Facebook page in August 2009, but they have yet to fully delve into other social media practices such as Twitter. Additionally, U-M is not updating their Facebook page in a manner that will establish a strong presence online. While they do rank high in fan count among institutions of higher education (they currently have the third largest number of fans) they are not creating a meaningful presence online. Rather than facilitating a conversation through their Facebook, they are instead relying on simply disseminating messages to create their presence in social media. U-M is not alone in their lack of online presence; there are numerous institutions of higher education that have yet to take advantage of all the merits of social media and fully implement it into their official communication regimes. Social media is a rapidly growing medium that is beginning to infiltrate institutions of higher education; U-M needs to quickly and effectively adopt it if they wish to stay current and create meaningful communication with their audiences.

U-M seems to have implemented social media practices without truly understanding the communicative affordances of these technologies. All communication platforms are capable of performing certain functions, while not being able to perform others; this constitutes a communicative affordance (Ling, 2004). In some cases, the affordances of the social media platform did not match up with the university’s strategic communication

goals, and therefore became more of a hindrance in their communication plan than a strategy enhancing aid. Furthermore, the university's implementation of social media differed from classic diffusion of innovation models. These differences can account for some of the difficulties the university has faced with adoption. Finally, although there are members of U-M with innovative ideas about social media use, a lack of staff and resources to implement these strategies creates a slow path to adoption. Many other barriers to adoption, including a fear of loss of control of the message, censorship, unfamiliarity with the medium, and treating Facebook as a "one size fits all" platform, are also hindering the university's social media use. Although social media is still considered an emerging media platform, especially in terms of use in higher education, it is one that if used correctly has the capability to connect audiences in a whole new interactive way. Prompt and efficient use of the platform is necessary to foster connectivity and engagement with other members. U-M needs to strategically use social media platforms that fit their needs if they want to truly engage with their audience. It is also crucial that they quickly implement their strategy in order effectively utilize the platform's capabilities and properties.

In order to analyze university communication in an age of social media, this study utilizes a variety of methodological frameworks. Archival research of previous moments of technology integration at U-M will be presented along with an historical background of social media. The historical perspective is often lacking from the practitioner's perspective of technology adoption, and therefore including it in this analysis will provide depth to the university's approach to social media integration. To establish the university's current level of social media use and fluency, as well as their strategy for the future, a case study of U-M's current strategic use of social media will be provided as well. The case study consists of

interviews with a small number of key members of the university's Office for the Vice President of Communication (OVPC), and some its departments, specifically Michigan Marketing and Design (MM&D) as well as the News Service. Finally, key theories will be synthesized from the various methods, incorporating the diffusion of innovations and communicative affordances framework, to create a thorough analysis of the university's social media use. Through these methods, a clear image of the role of social media in higher education communications will emerge.

The OVPC, headed by David Lampe, provides a "wide range of communications services to the campus community, all designed to enhance the reputation of the university" (OVPC, 2010). MM&D, one of the OVPC's umbrella organizations is responsible for maintaining the university's official Facebook page. This department consists of "a team of writers, designers, product managers, and web professionals who provide creative services for units across the University of Michigan campus and health system" (Michigan). Finally, the News Service houses the university's press release team and focuses on media relations. All these organizations, underneath the OVPC umbrella, provide valuable insight into the university's use of social media for official communication purposes.

Although originally intending to grow and develop the research sample using the snowball method, it became clear that the initial subjects were paramount to the university's social media use, and their input would adequately convey the university's social media strategy. The snowball sampling technique occurs when existing subjects recruit future study subjects from among their acquaintances ("Snowball"). Thus, the sample begins to grow like a rolling snowball and accumulate study subjects, or in this case, interviewees. The five subjects interviewed, while small in sample size, represent the key

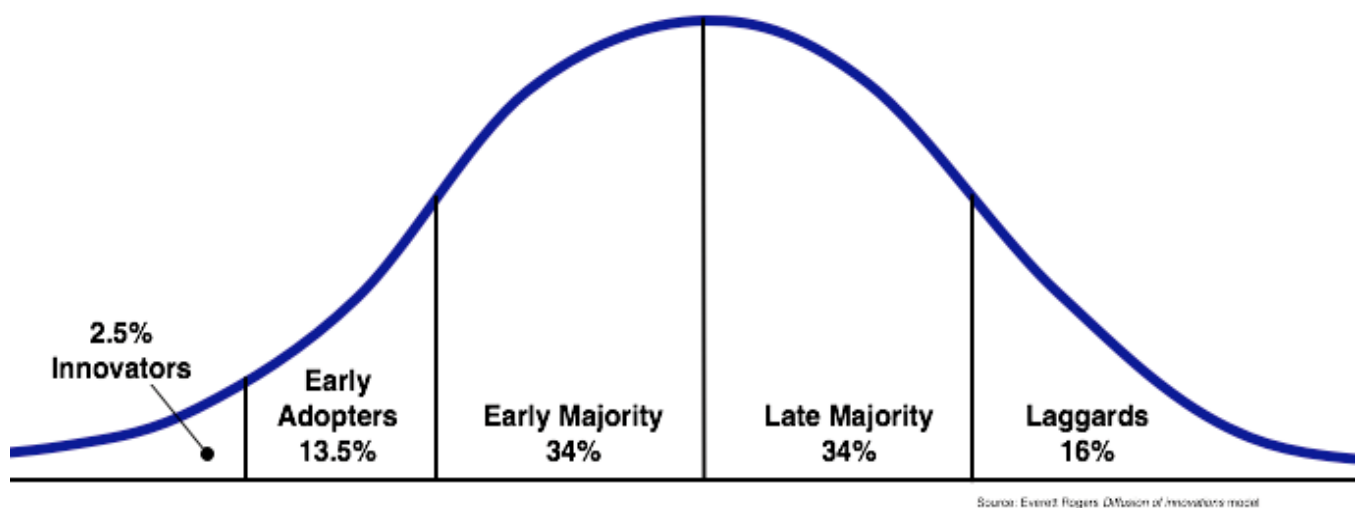
members of U-M's social media team. These are the mediating personas actually creating and implementing the university's social media plan, and therefore interviewing other associates would have established a smaller knowledge base than that accrued from the interviews with the key members of the OVPC, MM&D, and News Service.

2. Diffusion of Innovations

While social media is not new to the year 2010, it is new in the field of university communications. As social media represents a new way of communicating within, and beyond, a university, it constitutes an innovation. Everett Rogers (1983) describes the diffusion of innovations as the “process by which an innovation is communicated through certain channels over time among the members of a social system” (Rogers, E., 1983). In this case, social media is the innovation, and the channel it is diffusing through is that of institutions of higher education. While this is a widely accepted definition of the diffusion of innovations model, there is some debate as to the number of steps involved in the process. Rogers, for example, defines the stages in the Decision Innovation Process as knowledge, persuasion, decision, implementation, and confirmation (Rogers, E., 1983). In the first stage, individuals become aware of the innovation, in the second stage they seek information about the innovation, which leads them to their decision to use the innovation, the actual employment of innovation, and finally the decision to continue to use the innovation in the future (Rogers, E., 1983). An innovation is further described as possessing certain characteristics, such as relative advantage, compatibility, complexity, trialability and observability, which affect the “ultimate rate and pattern of adoption” (Rogers, E., 1983).

The rate of adoption of an innovation is defined as “the speed with which members of social system adopt the innovation” (Rogers, E., 1983). Rogers further classifies the rate of adoption by creating a series of five adopter categories: innovators, early adopters, early majority, late majority, and laggards (Figure 1). The innovators constitute the first group to adopt the technology and they are usually social, have a high social class and interact with other innovators (Rogers, E., 1983). Not too far behind them come the early adopters, who tend to be younger, and then after a period of time comes the early majority. The early majority have above average social status, but still adopt much slower than innovators (Rogers, E., 1983). The late majority adopt “much later” than the average adopter member of society, and they approach the innovation with “skepticism” before they finally adopt (Rogers, E. 1983). Finally laggards are the last group to adopt. This group has a low social class, tends to be older in age, and is more interested in “traditions” than new innovations (Rogers, E. 1983).

Figure 1: Everett’s Model of Rate of Adoption (Rogers, E., 1983)



In a study of the integration of information systems in small businesses, however, Thong (1999) describes integration as a three-step process of “initiation, adoption, and finally implementation” (Thong, 1999). Integration refers to the period of time where information is gathered and evaluated about the technological innovation. Adoption is the time where a decision is made about whether or not to accept the innovation, and finally implementation occurs after the decision has been made to adopt (Thong, 1999). Yet the Zmud and Apple (1989) stage model describes the stages of implementation as “initiation, adoption, adaptation, acceptance, routinization, and infusion” (Cooper and Zmud, 1990). The first stage, initiation, is when the innovation is first thought about. In the adoption stage organizational backing is obtained for the innovation. The adaptation stage is where the innovation is developed, installed, and maintained for widespread use. In the acceptance stage the innovation becomes used by a larger audience, up until the routinization stage where the innovation is seen as normal. Finally in the infusion stage the innovation is used to its fullest potential (Cooper and Zmud, 1990).

In a similar study on organizational factors affecting the implementation of internet technology, Aguila-Obra and Padilla-Melé (2006) identified the same stages of the internet adoption process as in the Zmud and Apple Stage Model (Aguila-Obra and Padilla-Melé, 2006). This model describes each stage based on the level of use of the technological innovation. In the implementation stage, for example, the level of Internet technology use is described as “basic” whereas in the infusion stage the technology is so integrated into the system that “organizational units have been created to manage the use of Internet technology” (Aguila-Obra and Padilla-Melé, 2006). While it is hard to say which of these series of steps represents the “true” model of implementation, it is widely agreed that the

model involves knowledge of the innovation, a decision about whether to adopt, and eventually implementation. Kwon and Zmud (1987) also recognized the six stages of implementation (initiation, adoption, adaptation, acceptance, routinization, and infusion), but they referenced them in the framework of Internet Technology (IT) adoption (Fichman, 1992).

There is, however, widespread agreement about what constitutes the two main types of innovations: process and product. A process innovation is referred to as a “new good or service that is introduced to meet external user or market need” (Damanapour and Gopalakrishnan, 2001). A product innovation, on the other hand, includes any “new element” that is introduced into the organization (Damanapour and Gopalakrishnan, 2001). According to Rogers, a radical innovation is a fundamental change representing “revolutionary change” in technology, whereas incremental innovations are “simple changes in current technology” (Rogers, E., 1983). Social media on a university level refers to a radical process innovation. It is a process innovation because it will affect data processing and distribution of information, which represents a major change in the communication regime. Furthermore, social media represents a radical innovation, as it is a large shift in the way we communicate and is expected to have an enduring affect for years to come.

When deciding whether or not to begin the process of adopting the innovation, there are a plethora of factors that need to be considered. In their study of Internet adoption in small and medium sized enterprises, Mehrtens et al. (2001) note that the majority of factors to be considered are based on the attributes of the innovation itself as well as the organization that is adopting the technology (Mehrtens, Cragg, and Mills, 2001).

The factors that are based on the attributes of the organization include, “the relative advantage of the innovation over the current situation, the compatibility of the innovation with aspects of the organization, the innovation’s complexity, the innovation’s trialability, and the observability of the innovation” (Mehrtens, Cragg, and Mills, 2001). Another important factor to consider is the relative interest of the firm in adopting the innovation. Due to the fact that diffusion of innovations is a process that takes time, it is crucial that those involved are truly engaged with the development (Mehrtens, Cragg, and Mills, 2001). The study also cites the four categories of factors that influence the adoption of new technologies as: “1. characteristics of the firm, 2. competitiveness and management of new strategies in the firm, 3. influences of internal and external parties on the adoption decision process, and 4. characteristics of the new technologies adopted” (Mehrtens, Cragg, and Mills, 2001).

Rogers additionally set forth six features of technology, which largely determine its acceptance. They are listed under the acronym STORC: simplicity refers to whether the innovation is “easy to understand, maintain, and use;” trialability addresses whether the innovation can be tried out on a “limited basis;” observability discusses whether the “results of the innovation are visible to others;” relative advantage addresses whether the innovation is “better” than whatever it is replacing; and finally compatibility questions whether the innovation is consistent with the “values, past experiences, and needs of the potential adopters” (Rogers, E., 1983). Additionally, information technology adoption normally falls under one of three categories: personal productivity aids, which allow for better performance; enrichment add-ons, which “inject’ new material into the technology, without influencing the basic method; and paradigm shifts, which fully take advantage of

new technologies (Rogers, D., 2000). Higher education technology adoption normally falls under the first two categories, personal productivity aids and enrichment add-ons (Rogers, D., 2000). Social media in a university setting has the potential to become a paradigm shift in the way universities utilize technologies in their communication methods.

Barriers to Technology Adoption

There are many barriers that affect the adoption of innovations. First and foremost, without knowledge of the innovation, it is impossible for the adoption to spread (Thong, 1999). Attitudinal barriers are also obstacles in the spread of innovations. Skills, time, and staff necessary to plan for the adoption create barriers as well (Thong, 1999). Monetary investments are also normally necessary for the adoption. Thong also identifies relative advantage, compatibility, and complexity as impediments to the adoption (Thong, 1999). If the innovation isn't better than its precursor, is inconsistent with existing values on the part of the adopter, or is too difficult, the chances are the adoption will be unsuccessful. Fichman (1992) also identifies a barrier in the classical diffusion of innovations framework as described by Rogers: the classical model works under "the implicit assumption that individuals are adopting innovations for their own independent use, rather than being part of larger community of independent users" (Fichman, 1992). While this is certainly true of social media use on a university level, there also exist some organizational barriers. For example, "any individual's interaction with the system must fit in with some larger organizational process" (Fichman, 1992). In the case of a university, anyone outputting official university communications must do so within the guidelines set forth by the institution.

Diffusion of Innovations at a University Level

On a university level, diffusion of innovations is known to be “slow” (Murray, 2008). According to Murray, in earlier centuries it may have taken over 30 years to “introduce ‘modern’ inventions like the telescope, microscope, and barometer¹” to students, and the “rate of change in 21st century campuses is remarkably similar to earlier centuries” (Murray 2008). Murray elaborates that the “typical modern adoption time” is approximately a quarter-century “or longer”, from introduction of the innovation to full acceptance (Murray 2008). Similarly, in a study of 200 institutions of higher education, Siegfried et al. (1995) found the average time of “adoption of 30 specific innovations by the first institution and its adoption by other institutions to be more than 25 years (Murray, 2008). Contrastingly, Mansfield (1968) studied innovations in the coal and railroad industries and found the adoption rate at an average of eight years (Murray, 2008).

One reason that institutions of higher education may be slow to adopt innovations is because “schools usually follow businesses and government in the adoption of new technologies” (Murray, 2008). Siegfried et al., who describe implementation on a university level as occurring at a “snail’s pace,” also offer their own input as to why the change is so slow: “[The universities] have no stockholders, and their governing boards have no measures to judge performance” (Murray, 2008). In other words, as universities are “insulated” from many competitive pressures, there isn’t a strong influence to promote the quick adoption of innovations (Murray, 2008). Seigfried et al.’s report elaborates:

...top university administrators often operate reactively, Their agendas are molded by whoever is sufficiently motivated to demand their attention. Short-run problem solving

¹ Although the telescope, microscope, and barometer do not represent the most cutting edge in technology adoption, there is not yet much data about the adoption of email and other new innovations.

erodes the time available to focus on the 'big picture'. And administrators' ability to initiate change is constrained by the academic tradition of collegial decision making.”

Murray goes on to definitively state that the “typical bureaucracy” associated with university decision-making is the largest barrier associated with the slow diffusion of innovations (Murray, 2008).

Another large barrier to diffusion of innovations on a university level is the fact that there are “no set of established institutional norms” pertaining to implementation and adoption of innovations (Rogers, D., 2000). Johnson and Lui (2000) note that while technology integration is “heavily discussed” in the realm of higher education, “there is no model teachers can use as a guide to successfully integrate new technology” (Fazfar, 2008). Mills College, a “pioneer in computer literacy” confirms this notion, saying, “...the fastest way to achieve the integration of information technology into the curriculum...was through a strong faculty development program in the uses of information technology” (Fazfar, 2008). In a study about the integration of technology at the SUNY Oswego School of Education, researchers attempted to mitigate this issue by setting implementation guidelines from the beginning of their research. They began by instigating a task force to assess the school’s current technology use, as well as to create a long-term plan for technology integration (Vannatta, 2000). The task force, comprised of faculty members at the SUNY School of Education, set out to define the technology in question, determine the school’s current level of technology use, review previous literature on the topic, and recommend methods for the way the school would implement to fulfill their goals of technology integration (Vanatta, 2000). Eventually, recommendations were sent out and the technology was successful integrated at the SUNY School of Education.

Yet another issue facing technology integration in higher education is concerns regarding the technology itself. Based on previous literature it appears that many educators were expecting numerous previous technologies to represent paradigm shifts in education, yet the technologies fell short, perhaps as a result of slow integration times, or perhaps due to other factors. In the 1950s, television was viewed as an “educational panacea” meant to drastically alter the state of education (Armstrong and Franklin, 2008). In the 1990s, there was advocacy for the use of mobile phones in teaching, suggesting that educators should “allow students to write their essays in text speak” (Armstrong and Franklin, 2008). As with television, the limitations of using mobile phones for teaching were realized to be unsuitable as a teaching format. Similarly, TV and videoconferencing was supposed to “render most ordinary lectures redundant” as every student would have access to great lectures, without even needing to leave home (Mason and Walsh, 2008). Furthermore computer conferencing was going to support a global education where students from around the world could learn in unison. There was even hope that artificial intelligence would provide a “responsive tutor who would understand student’s learning difficulties and respond appropriately” (Mason and Walsh, 2008).

When studying technology integration in schools, colleges, and departments of education, Lessen and Sorensen (2006) found that the dean of the institution of higher education played a key role in the technology adoption process (Lessen & Sorensen, 2006). It is crucial that the dean is “not merely a promoter of the technology, but a user as well (Lessen & Sorensen, 2006). For example, if the technology in question addresses and fulfills a school’s desire to create a stronger presence online, the dean must be knowledgeable about the technology itself, rather than simply pushing for its use. It is also necessary for

the dean to create an “environment where the integration of technology is possible” (Lessen & Sorensen, 2006). Such an environment entails that the university faculty, staff, and students all have adequate access to the necessary technological tools. It is also important that everyone associated with the university receive appropriate training and support to ensure that they are able to be both “successful and effective users of the technology” (Lessen & Sorensen, 2006). Further elaborating on the dean’s role in technology adoption, Lessen & Sorensen say:

The dean must ensure that the technology initiatives within education are aligned with university initiatives and that infrastructure developments are compatible with the university infrastructure (Lessen & Sorensen, 2006).

Therefore if the technology initiative in question is increased online presence, the school would have to have Internet access and computers before the initiative could even begin. It is clear from this research that the dean plays a crucial role in the successful adoption of technology in higher education. It is important to note that in today’s university infrastructure the President, provost, and other administrators play a key role in technology adoption as well.

As there is already evidence, however, of a paradigm shift in the way social networking is being used in official university communication methods, it is plausible this technology integration will occur much quicker than previous integrations, as well as have a lasting effect (Rogers, D., 2000). Citing the 1998 National Survey of Information Technology in Higher Education, Rogers notes that, “...technology competencies for higher education must be implemented” (Rogers, D., 2000). Yet, she notes that it is not enough to implement technology capabilities, although this may be a “catalyst” in the process. In order for the full paradigm shift to occur, “adequate training in technology...and technical

support” are necessary” (Rogers, D., 2000). This is consistent with previous literature, which suggests that successful technology implementation in higher education requires a manual or guide to demonstrate proper use and full implementation. In order for the true paradigm shift occur, steps need to be taken quickly so that the technology can be implemented to its full potential. Continues Rogers, “in order for universities to be competitive in the new millennium they must develop cohesive training programs...that will assist...in integrating technology” (Rogers, D., 2000). Social media represents a crucial moment in university communication. This radical process paradigm has the potential to create a paradigm shift in university communication, if it is implemented correctly.

Communicative Affordances

According to Ling (2004) the affordances approach “describes how the physical characteristics of an object interplay with the way in which we perceive and interpret the use of the object...affordances are characteristics that are more or less directly available to the perceiver”. Basically this approach describes how all the properties of an object, intrinsic or not, “determine the possibilities for action” (Ling, 2004). For example, when applying this approach to the social networking site Myspace, a variety of communicative affordances were identified. These affordances were divided into the categories of membership, personal expression, and connection (Parks, 2008). The affordances of membership describes the perks of engaging in Myspace’s community: “users can post to their own profile pages, see more of what others have posted publicly, and communicate with others in Myspace” (Parks, 2008). Affordances of personal expression include the ability to customize your profile page, post pictures, join groups, and express allegiance in

fan pages. Finally, there are affordances of connection in Myspace. The site enables users to establish connections with one another using a variety of tools—direct messages, creation of groups, “friending,” instant messaging, bulletins, and comments posted on the recipient’s site.” (Parks, 2008). According to Parks, it is the “ease and durability of membership in Myspace” that constitutes its chief communicative affordance (Parks, 2008).

The communicative affordances of other social networks, such as Facebook, vary and must be taken into careful consideration prior to technology adoption. Based on the framework established by Ling and Parks, similar communicative affordances can be identified in Facebook. The affordances of membership, personal expression, and connection all exist within Facebook, though in slightly different forms. The affordances of membership are evident through joining Facebook, as well as by joining groups. Personal expression can be seen through wall posts, posting pictures, joining groups and fan pages, and installing Facebook applications onto your profile. The affordance of connection exists in the intrinsic nature of Facebook, by its ability to connect you to acquaintances all over the world. What is important to note about communicative affordances is that they vary by user, meaning everyone can view a technology differently. There are therefore differences that exist between a university’s institutional use of the technology and an individual’s personal use that must be considered prior to adoption.

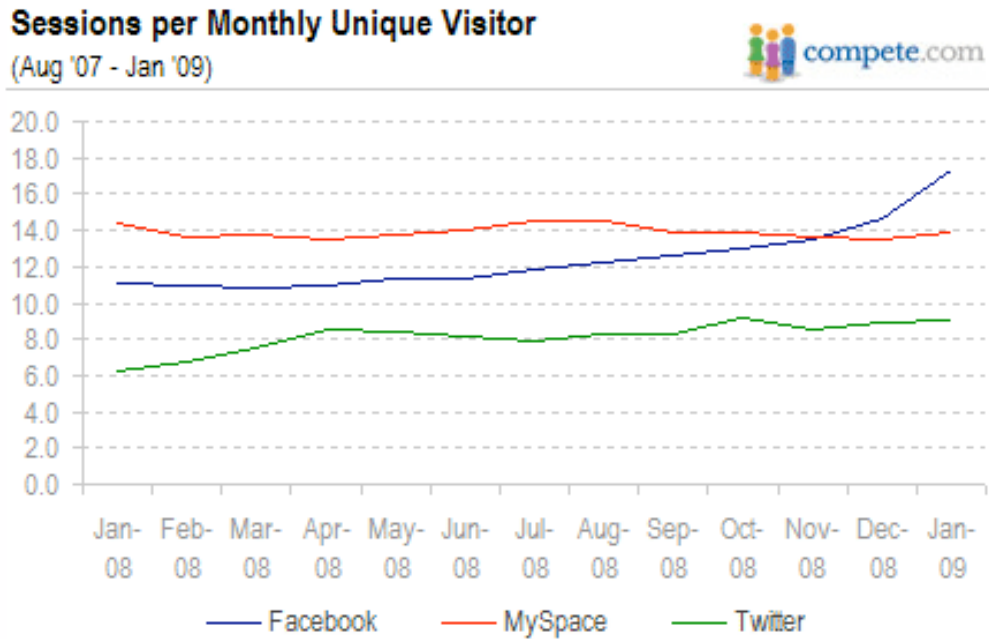
3. A Brief History of Facebook and the Rise of Social Media

A social network constitutes any “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and

those made by others within the system” (Boyd and Ellison, 2009). For the purpose of this study, the social networks in question will be university use of Facebook. This detailed analysis will focus specifically on official communication that is coming from the University on social networks such as Facebook, as opposed to unofficial messages. For example, although there are numerous groups devoted to the University of Michigan and its various programs on Facebook, only those updated by the University itself will be studied.

Facebook is a social network that helps people stay connected through the sharing of online profiles, messages, pictures, and other forms of online interaction. It was founded in 2004 by Mark Zuckerman to be a “social utility that helps people communicate more effectively” (Facebook). Although the site was originally designed solely to connect college students, the site was opened for registration to anyone with an email address in 2006 (Facebook). Facebook also added Facebook Pages, which are a “public profile that enables you to share your business with Facebook users” around the same time (Facebook). The pages platform is very popular among businesses, and as of January 2010 there were more than 1.6 million active pages on Facebook, with a combined total of more than 5.3 billion fans (Facebook). The pages platform is especially useful among institutions of higher education, and this is the main way universities interact with their fans on Facebook. When Facebook users join a fan page, the company’s icon appears on the user’s personal profile, and therefore pledging allegiance to a page is a very public act on Facebook.

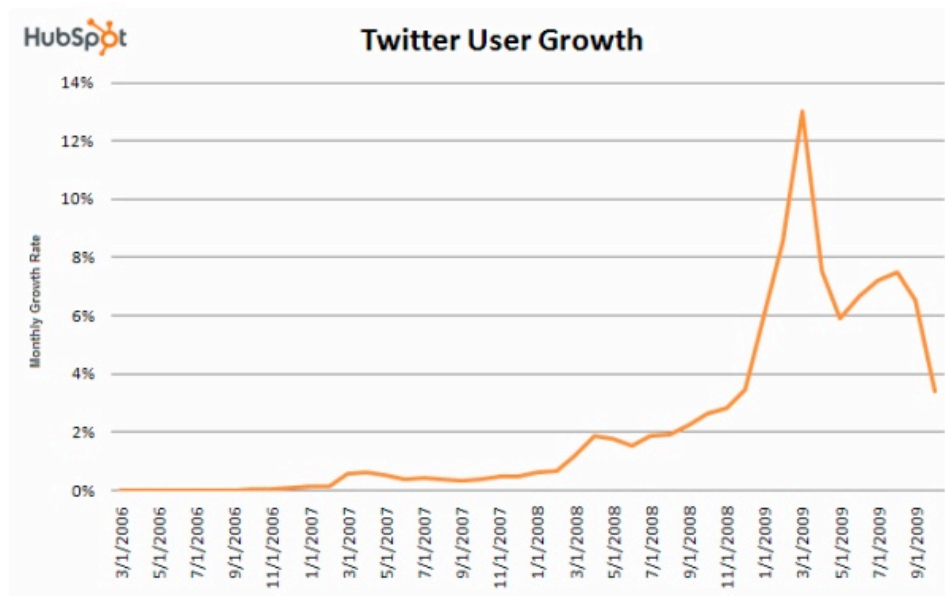
Figure 2: Facebook growth, compared to Myspace and Twitter



This free online service is available to anyone with an email address and boasts over 350 million users, as of December 2009 (Wauters, 2009). To put this figure in perspective, in May 2009 MSN.com received 97.5 million unique views, Yahoo received 135.5 million unique views, and Google received 145.5 million unique visitors (Wauters, 2009). Although Facebook has only been around since 2004, it has already surpassed MSN in terms of monthly unique visitors, and is rapidly approaching the number of views from two other Internet juggernauts (Wauters, 2009). In fact, during the week of March 8, 2010, Facebook did just that, and became the most visited US website, surpassing Google, among other websites (Pepitone, 2010). Although they only won by a narrow margin – Facebook accounted for 7.07% of all website traffic, and Google accounted for 7.03% - it still represents a pivotal shift in Internet use, and social media in particular. Whereas Google is arguably one of the most, if not the most influential and innovative sites online, it only saw

a 9% growth of traffic during the same period from 2009 – 2010 (Pepitone, 2010). While this is impressive, in the same time period, Facebook experienced a staggering 185% “spike in visitors” (Pepitone, 2010).

Figure 3: Twitter User Growth (www.hubspot.com)



Facebook is also the social networking site that boasts the largest number of sessions per unique monthly visitors, compared to Myspace and Twitter (Figure 2) (Kazeniak, 2009). There has also been a substantial increase in the amount of time spent on Facebook. A Nielson Company report indicated that between April 2008 and 2009 there was an “explosive” 699% increase in total minutes spent on Facebook (Sibson, 2010). Furthermore, Facebook is not just a phenomenon in the United States; it has a large international presence as well. In fact, in January 2009, over 95 million of the registered users on Facebook were international (Wauters, 2009). To put this figure further into

perspective, it took Facebook less than nine months to reach 50 million users (Social, 2009). In a stark contrast to this rapid growth, take a look at how long it took other innovations to catch on: it took 38 years for radio to have the same amount of users, 13 for television, 4 years for the internet, 3 for the ipod to garner the same amount of attention (Social, 2009). Although the speed in technology adoption for new innovations such as the ipod and Facebook can be attributed to the population growth that occurred in the United States between the 1930s and today², the rapid adoption of Facebook still demonstrates the revolutionary nature of the social media platform. Only three years stand between the onslaught of the ipod and Facebook, yet the social media platform managed to accomplish the ipod's growth in a matter of months, instead of years. Social media is therefore not, as some suggest, a trend. The longevity of Facebook's popularity is inherently clear.

Other Social Networks: Twitter & Myspace

Although the university recently (early 2010) began updating a Twitter page, this microblogging service will not be studied. I feel Twitter's usefulness to U-M's social media efforts is very limited. Twitter allows its users to send short, 140 character messages ("tweets") to an author's subscribers, or "followers" (About, 2010). What makes Twitter unique to other social networking platforms is that all correspondence occurs in real time. Although Twitter grew explosively throughout 2009 and had millions of users, its growth flattened at the end of the year (Figure 3) (Twitter, 2009). Not only is Twitter losing speed as a growing social network, it is also harder to grow and develop a group of loyal followers. The nature of Twitter is such that followers look for meaningful correspondence.

² US population was 122,775,046 in 1930, 308,400,408 in 2010, according to the US Census

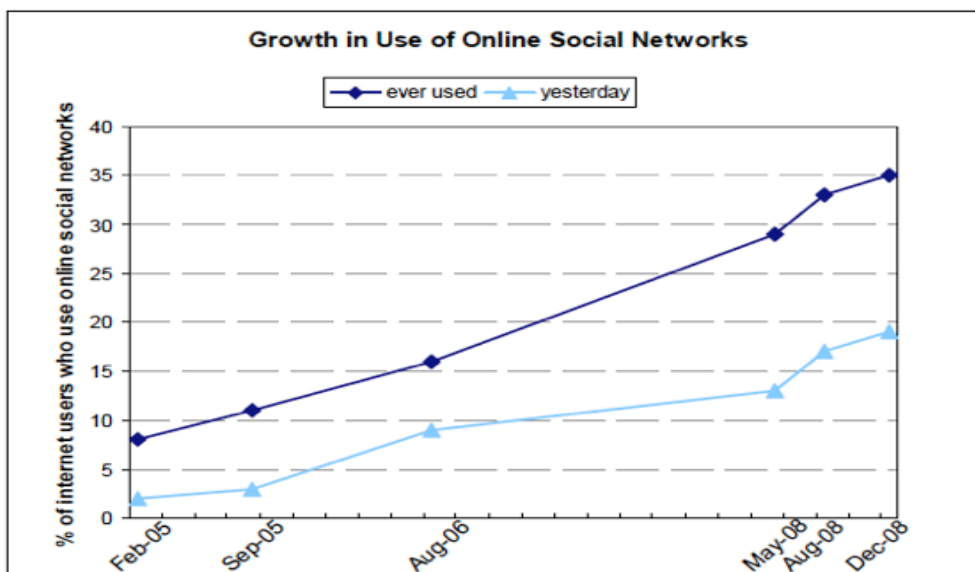
Whereas on the Facebook platform, it is possible to comment on your page and reach many viewers, Twitter works best when you respond to individual comments. This level of involvement would be very hard to accomplish. Furthermore, it would be challenging to diminish university news to 140 characters or less. In its current state, the U-M Twitter page has only 169 followers, and this miniscule number is not being effectively communicated with. The same posts that the university puts on Twitter also appear on U-M's Facebook page, and this platform reaches a more diverse and influential crowd. The Facebook page is also maintained better than the Twitter page, which is in its infancy. In the case of Twitter, it appears to be an area of social media the university delved into because they felt they had too, and not a case of a useful platform to employ.

Figure 4: Adult Use of Social Networks (PEW Data)

More than a third of adults visit SNS sites daily	
<i>How often do you visit your primary online social network profile?</i>	
	% Profile owners
Every day	37%
Every few days	23
Once a week	15
Less often	23

Source: Pew Internet & American Life Project May 2008 Tracking Survey. N=328 social network users and the margin of error is ±6%.

Figure 5: Growth in Use of Online Social Networks (PEW Data)



Myspace is another social network that, although popular, will not be studied. Myspace began in 1998 as a way for people to connect online, although it did not gain popularity until the mid-2000s (Facebook, 2009). With its unique customizable profiles and its emphasis on music, Myspace stood out in the social networking crowd and quickly gained popularity. In January 2009, there were 125 million registered users on Myspace (Facebook, 2009). Around this same time, however, Myspace began losing share to Facebook, and the Internet behemoth took over as leader of the social networking sites (Facebook, 2009). Although it was initially designed to focus on connecting friends, Myspace's emphasis on music makes it an unlikely fit with an institution of higher education. There is virtually no overlap between Myspace's demographic and that of an institution of higher education. In fact, Hargittai and Hinnant (2008) suggested that individuals with higher levels of education use social media differently than those with lower levels of education. Boyd elaborates on this theory, calling Myspace a "digital ghetto" and noting that "Myspace users are more likely to be barely educated" and that Facebook users are significantly "more cultured" than their Myspace counterparts. (Boyd, 2009). One higher education professional even went as far as to say, "We [Wofford College] have a Myspace page...we do not however actively promote or link to it...the main purpose of this presence is to direct people to our services...including Facebook" (James, 2008). For these reasons, Myspace will not be included in the analysis of university communication in an age of social media as its demographic users do not match up with those U-M is targeting.

Figure 6: Demographics of Social Network Users (PEW Data)

Demographics of Social Network Users	
<i>The percentage of online Americans in each demographic category who have a profile on a social network website:</i>	
All adults	35%
Sex	
Men	35
Women	35
Age	
18-24	75*
25-34	57*
35-44	30*
45-54	19*
55-64	10
65+	7
Race	
White, non-Hispanic	31*
Black, non-Hispanic	43
Hispanic	48
Annual Household Income	
Less than \$30,000	45*
\$30,000 - \$49,999	38
\$50,000 - \$74,999	30
\$75,000 +	31
Education	
Less than HS	43
HS grad	31
Some college	41*
College grad	33
Locale	
Urban	34*
Suburban	26
Rural	23

Source: Pew Internet & American Life Project Survey December 2008 Survey, n=2,253, with an n of 1,650 internet users. For internet users the margin of error is ±3%.

* These groups are significantly different from the other groups in the section.

Rise of Social Media Use

According to PEW Internet research, the number of adult users who have a profile on an online social network has more than quadrupled from 2005 to 2008, with 35% of adults involved in an online social network (Figure 4) (Internet, 2008). While this figure is impressive, “younger online adults are much more likely than their older counterparts to use social networks” (Internet, 2008). 75% of adults aged 18 – 24 have a profile on an

online social network, and 57% of adults 25-34 have a profile on a social network (Figure 6) (Internet, 2008). The first figure is especially impressive as this is the demographic that the majority of college aged students fall into. Furthermore, while 35% may not seem like an impressive amount of adult users, “adults make up a larger portion of the US population than teens, so the 35% actually represents a larger number of users...than the 65% of online teens who use online social networks” (Internet, 2008). Online social networking use is a trend that is not only rapidly growing, but also reaches people of various demographics (Figure 5). In fact, in April 2009 a report from the Nielsen Company indicated that, “there was a 73% increase in time spent on social networking sites over the previous 12 months and use of social networks has exceeded web email” (Sibson, 2010).

Social Networking in Higher Education

Although the majority of students are creating an online profile on social networking sites such as Facebook, universities have been slow getting into the game. Many institutions are wary of the user-generated content that makes up these sites. On a typical Facebook page, it is possible for users to post comments, pictures, and even videos to someone else’s wall for them to see. On an official university fan page, for example, anyone from students to those who are fans of the institution have the ability to post content to the institution’s page. Ron Morris, of the National Research Center for College University Admissions notes:

For boards of trustees and presidents, many of whom come from the corporate world, the inability to control the message freaks them out. They are talking about the image of their institution, and it makes them very nervous to rely on an 18-year-old who may be homesick or have a professor they don’t like” (Raths, 2009).

Yet since such a large, interested audience is already using Facebook, and effectively reaching them can truly help the university's connection to their constituents – whether they are faculty, staff, students, alumni, or simply fans of the institution – it is crucial for universities to get involved in this medium. For example, a university would not only be able to “intimately connect” to their students while they are at the university, but it can also add to “lifetime engagement by helping alumni stay close to their alma maters and potentially boost alumni giving” (Kolowich, 2009).

An article in the *Chronicle of Higher Education* provides a perfect example of the necessity for increased use of Facebook in institutions of higher education:

Michael Tracey, a journalism professor at the University of Colorado, recounts a class discussion during which he asked how many people had seen the previous night's *NewsHour* on PBS or read that day's *New York Times*. "A couple of hands went up out of about 140 students who were present," he recalls. "One student chirped: 'Ask them how many use Facebook.' I did. Every hand in the room went up. She then said: 'Ask them how many used it today.' I did. Every hand in the room went up. I was amazed." (Bugeja, 2006).

And while a common argument from those advocating against a university presence on social networks is that students don't want to interact with their university via social networking sites, Noel-Levitz, a Colorado based higher education consultant found that “70% [of students] said colleges should create some presence on social media sites” (Walker, 2009). Adds Neesha Rahim, of the Orborne Group, “...as an institution of higher learning, you want to go where the audiences are” and the audiences are embracing social media (Villano, 2009).

The Winter 2010 *Survey of Personel and Institutional Use of Electronic Communication and Social Media Use at Colleges and Universities* from Sibson Consulting discusses why universities are so resistant to embracing social media. One respondent noted, “...we [institution of higher education] had the opportunities to utilize a social

networking software free of charge, but we turned it down because we were afraid of the liability it could create” (Sibson, 2010). Yet despite of the potential liabilities presented with social media, seventy-percent of the respondents of the survey indicated that they saw the business potential for social media strategy. Furthermore, almost half of the respondents said that their institutions “have a strategy for using social media, are developing such a strategy, *or* need a social media strategy” (Sibson, 2010). Although there is widespread knowledge that social networking is both a widely used platform, and a beneficial means of communication, some respondents noted, “the potential is great...[we] have not yet figured out how to utilize it” (Sibson, 2010). Other respondents showed dismay over their institutions lack of social media use, one even went as far as to say, “the institutions are really missing the boat on this one” (Sibson, 2010).

Stanford University: Facebook’s early adopter

There is, however, one institution that is excelling with social media use. Stanford University is both an early adopter of the technology, and is also widely considered to have one of the best Facebook pages among institutions of higher education. With their proximity to Facebook headquarters in Palo Alto, CA, Stanford actually got to work with Facebook to design their fan page (Parry, 2009). Using various metrics tools, they were able to analyze which tools fit best with their needs. Perhaps the most innovative and popular aspect of Stanford’s Facebook page is their “Open Office Hours” feature. These videos, open to anyone on Facebook who is a fan of the university, give faculty a forum to discuss their research and other issues. The faculty introduce themselves in a video posted to the fan page, users post their comments in response to the video, and then the faculty

records a new video where they answer fan's questions. Says Ian Hsu, Stanford's director of Internet Media Outreach, "this project is a natural evolution of the university's existing efforts to make its discoveries and knowledge easily and widely accessible online" (Parry 2009). Another great aspect of Stanford's Facebook page is the variety in their updates. They implement campus updates, student news, sports updates, alumni news, research, and general campus news into their Facebook page. They update frequently, and most importantly, they respond to fan's questions and comments, facilitating an easy and open conversation. Stanford's use of social media is especially important as they heavily influenced U-M's efforts in the social media realm. Stanford is widely created as the inspiration for U-M's endeavors with Facebook and their Facebook page has served as benchmark for U-M's as well.

U-M, on the other hand, began updating a Facebook page in August 2009 and as of March 2010 had grown to have 100,545 fans on Facebook (Figures 7 and 8)(Top, 2010). U-M ranks as number three in a list of schools on Facebook and how many fans they have (Top, 2010). Since the university began regularly updating their Facebook page, they have seen steady growth and interest from their audience. In fact, U-M was recently ranked number one in terms of "social media buzz" by the Global Language Monitor (Serwach, 2009). The study ranked universities for the amount of public interest in them, measured by media coverage, Internet traffic, and social media mentions (Serwach, 2009). Although U-M outranks other schools in terms of social media buzz, it is important to note that using Facebook as a "one way channel for pushing out formal notifications and news releases to the general audience doesn't resonate with many" (Kolowich, 2009). Communication via Facebook is only effective if it presents a forum for meaningful interaction among

interested parties, which the current U-M Facebook page has yet to accomplish.

Furthermore, the fact that the university only recently began using this technology proves that it is not fully integrated yet. U-M is in the very early stages of technology adoption.

Figure 7: U-M Facebook Fan Growth, February 2009 (varsityoutreach.com)

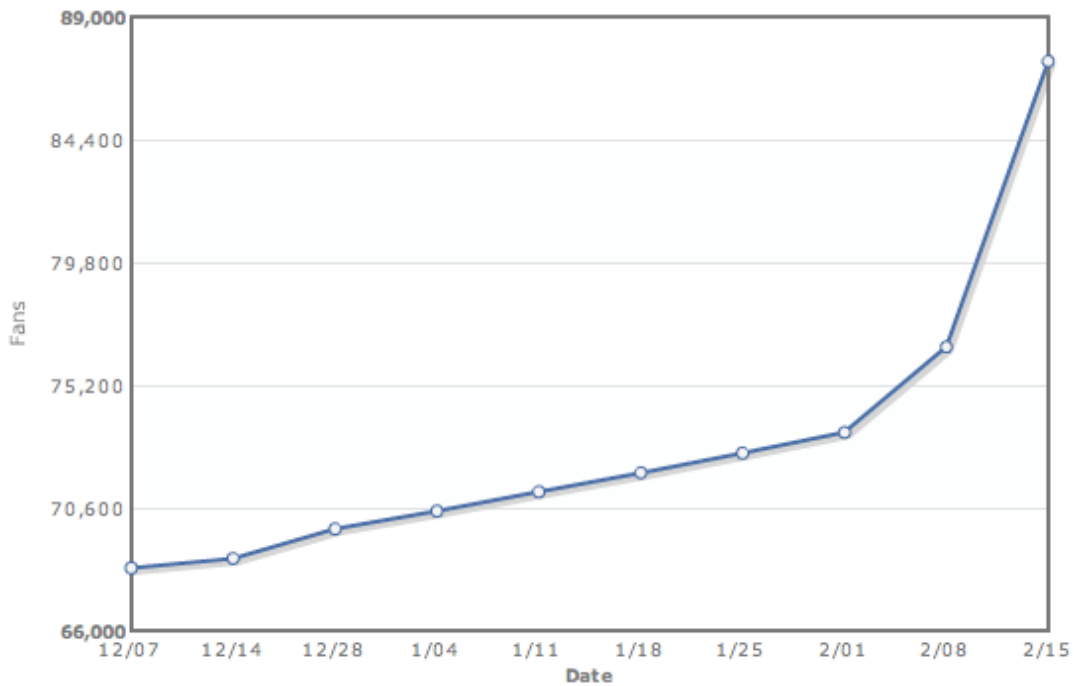


Figure 8: U-M Fan Growth on Facebook (Facebook.com)

Date	# of Fans
March 8, 2010	99,644
March 1, 2010	96,902
February 22, 2010	93,039
February 15, 2010	87,342
February 8, 2010	76,644
February 1, 2010	73,435
January 25, 2010	72,663
January 18, 2010	71,929
January 11, 2010	71,218
January 4, 2010	70,492

4. Previous Moments of Technology Integration at U-M

Using technology to strategically communicate with the rest of the University is not a new concept for U-M. Although there are many previous moments of technology implementation that could be studied, the university's gradual email integration is not only a more recent technology than some, but it is also a technology integration that radically changed the way the University communicates with students, staff, faculty, alumni, and the general public. The historical perspective is often lacking from the practitioner's perspective, and it is therefore crucial to examine previous moments of technology integration at U-M and compare them to the current social media adoption process. Today U-M sends a plethora of "official" emails every single day, and the technology has truly created an ease of communication between the University itself and its various constituents, or interested parties. Messages can be crafted and sent in a matter of minutes, and the messages have the potential to reach millions of interested people, with one simple click of the "send" button. Email integration changed the way the university communicates, and social media integration will hopefully provide the same type of radical communication transformation.

U-M's email integration process began in January 1981. At this time, U-M's *Computing Center Newsletter* sent out a notice welcoming the University community to the Michigan Terminal System (MTS). The notice invited readers to attend a lecture series called "Introduction to MTS," which would present an "informal introduction to computing at the University of Michigan" (*Computing*, Vol. 11, No.1). In July of that same year, the *Computing Center Newsletter* again sent out a notice to their readers, only this time it was to announce that the MESSAGE system had been installed on the MTS. The note announced

that the “message system may be used to send messages from one user to another” (*Computing*, Vol. 11, No. 14). Although a precursor to email, the MESSAGE system was a much more crude version where users had to enter “commands to compose and send messages, and to display the status of existing messages” (*Computing*, Vol. 11, No. 14). There were various other notices in the *Computing Center Newsletter* in 1981, although most of these notices were about small system upgrades that allowed for a simpler string of commands to send a message.

In September 1983, the headline in the *Computing Center Newsletter* proclaimed, “Network Electronic Mail Service Now Available” (*Computing*, Vol. 13, No. 16). The service, Mailnet, was hosted by the Massachusetts Institute of Technology (MIT) and used MIT’s computing system to “place calls” to each of the Mailnet sites. Fifteen other institutions including U-M participated in the pilot to create a “technically sound, intercampus electronic mail system for use by scholars, researchers, faculty, and administrators” (*Computing*, Vol. 12, No. 20). Unlike today’s email, the Mailnet system did not allow for an instantaneous exchange between the institutions, instead a computer at MIT would call the member institutions four times a day to exchange messages. The Mailnet system used many of the same commands as the previous MESSAGE system. By May 1986, the Mailnet system had evolved at U-M to include accounts for all staff, faculty, and students (*Computing*, Vol. 16, No. 10). Mailnet and other MTS services were used until July 1, 1996, when it was announced that the service would end (MTS, 1995). At this point, the technology had evolved into the modern email interface we are familiar with today.

There were, of course, many steps that had to be taken before the email interface could evolve to today’s standards. One of the major components in this evolution occurred

when the Information Technology Division (ITD) was formed in 1985. Information Technology includes all activities in which “computing plays a role in supporting the University’s scholarly, educational, research, and educational tasks” (Information). Douglas Van Houweling led the all-encompassing IT division. In the beginning, the ITD “oversaw the shift away from MTS,” but soon their work consisted of so much more. Departments were created within the division including the Computer Center, which managed computer use on campus and provided tutorial support to users; the Office of Administrative Systems, which worked with “providing information systems containing university data;” the Center for Information Technology Integration; Consulting and Support Services; Network Systems; Research Systems; Resource Administration; and University Information Systems (Information).

The ITD published a strategic plan in 1985, which listed the current situation as well as technology forecasts for the future of technology use at U-M (U-M ITD, 1985). The paper notes that, “the quality of information technology at U-M has a strong impact on the perceived quality of the institutions of a whole” (U-M ITD, 1985). The paper also forecasts how technology will be used in the future, observing that at that point, computing technology was used for more than simply numeric computation, and predicting that the role would continue to evolve in the future. The strategic plan, they reasoned, must therefore support the University’s missions (“creation and transmission of knowledge through research and teaching, public service, and research”) as well as play its part in creating the “university of the future in the *near* future” (U-M ITD, 1985). The paper cites electronic mail as “critical to the future” and notes that technology “is and will change at a breakneck rate” (U-M ITD, 1985). It is repeatedly reiterated that U-M will not be considered

a great university without continued and improved progress in information technology throughout the report.

Douglas Van Houweling, the head of the IT Division, was appointed the first Vice Provost for Information Technology at U-M in October 1984. The initial job description lists the positions main challenge as:

The U-M has set the goal of ranking first among public universities and in the top five of private universities in the use of information technology for research, administration, and public service. The goal is to be reached for technology leadership, incentives for decentralized but coherent investment in information technology, substantial external visibility and support, and a major commitment of institutional services. The Vice Provost for Information Technology will provide leadership for information technology and services across the full spectrum of such activities at the University of Michigan... (U-M ITD Job, 1984).

U-M consistently links the university's reputation as a whole with their use of technology across the University. Van Houweling was very vocal about his belief in furthering U-M's IT use, and was an extremely visionary Vice Provost. In one speech, Van Houweling noted, "it turns out that if the universities of this country, the higher education segment of the country, don't begin to understand how to use technology effectively, we will lose the competitive battle for the best minds and greatest potential among the students out there" (U-M ITD, Keynote, 1988). The following excerpts from his speeches and various reports provide some insight into his knowledge and beliefs about the importance of using cutting edge IT technology in higher education:

At the University of Michigan, one of the interesting things that is happening is that an increasingly large number, larger every year, of our graduating students maintain their computing account after they leave campus. Why? Because they want to remain tied to their colleagues and to the knowledge base they have become accustomed to using while they are on the University of Michigan Campus...

Universities haven't understood much about continuing campus, but we now have a technology that will enable us to do it if we up to the challenge. This communication means our universities can feel smaller and more compact because it is easier for people to reach

one another and collaboration can be enhanced... What does this [technology adoption] have to do with higher education? Our mission is processing information, whether it is teaching, research, or public service. We are charged with disseminating information.

Higher education leads the world and should in the new forms of information. It doesn't simply follow behind. We need to do that partly because of what it is costing us, but partly also because we need to be able to reach beyond the boundaries of our campus.

- Remarks from Van Houweling's keynote address at the Association of College and University Telecommunication Administrators, 1988

As new technologies are developed, one of the first usages to which they are pressed is communication and this has especially been true of information technology. Electronics were used very early to support the development of mass communications such as radio and television...As computers have become steadily more cost effective and powerful, it has become possible to use them for an increasingly wide variety of communication purposes. Electronic mail is becoming a substitute for letters.

- Remarks from The Information Technology of Higher Education, Van Houweling, 1986.

In addition to email integration and developing the Information Technology Division, the University was also focused on expanding their telecommunications capabilities in other realms. In 1984 for example, U-M completed the installation of their 27,000 telephone line telecommunications system (*Computing*, Vol. 14, No. 11). This massive installation was designed to provide a "medium for voice, data, and video communication" (*Computing*, Vol. 14, No. 11). Continuing the trend of supporting information technology on campus, U-M piloted the ResComp program in September 1985. This program, now a staple in the dorms at U-M, was originally designed to "identify students' computing needs" (University). Today ResComp serves as a computer lab in the basement of most University dorms. Another milestone in the U-M's history of connectivity occurred in 1994 when they implemented the Wolverine Access program online, a site that allows student access to grades, class schedules, scheduling information, account statements, and so much more (University). Through the continued evolution of their

technology use, U-M has strived to remain at the forefront of communication in higher education. Successfully and completely implementing social media is the next step that needs to be taken in order to ensure U-M's continued technological and communicative success.

5. Social Media at U-M

The following narrative timeline was compiled using information from interviews with five key mediating personas of U-M's OVPC, News Service, and Michigan Marketing & Design. All names have been changed. Although five seems like a small sample size, all the interviews were with the people who are actually designing and implementing U-M's social media strategy and their interviews provide a thorough and complete depiction of U-M's social media adoption (Appendix Exhibit 1).

Around five years ago, U-M began thinking about using social media for their official communication purposes, although in the beginning they were only thinking about blogging. Melissa, of the News Service, explains, "I had a personal blog in 2005 and was shocked to see how many people followed me. There would be days when I wouldn't post and I would get comments saying, 'I'm addicted to your blog, come back!'. From this interest, I began to think about ways to use blogging at U-M. We used to have MBlog, but that sort of died." Although MBlog is no longer used as a platform at U-M, there are still blogs being created at the University. The problem, says Melissa, is there are many great U-M blogs out there, but we don't have a way to link them to U-M, and we should."

Blogging was a small step in U-M's social media initiative, but the first thing that was "on the horizon big time" was iTunesU, starting in 2007. iTunesU is a special section of Apple's iTunes service that allows universities to distribute their information, from lectures to lessons, using the iTunes platform. Karyn (MM&D) says, "about three years we decided that the university should be putting a presence out there [on social media]. I was watching other universities, Stanford particularly, and they led the iTunesU movement. We actually met with them a couple of years ago and that helped start things off." For Rachel (OVPC) the driving factor for starting to use iTunesU was video distribution. "What I had seen was a lot of video being created with no real audience, or with a limited one. And the question that had been out there for a long time was 'how can we make this content more widely available?' iTunesU was the answer to that question." In order to begin using iTunesU, key members of the OVPC and MM&D met over the course of a few months. They devised a plan and searched for content, and eventually began successfully using the platform.

The U-M Health System also began looking at social media platforms three years ago. Says Brittany (OVPC), "I had heard a presentation about social media and thought that we needed to jump into it. I pulled together a team and even talked to some young people, and we just began learning about social media. We were just trying things out, and from that we built a program for actually using social media in a more consistent manner." According to Brittany, in the beginning the health service was only "trying things out". Rather than matching the medium with the message, "we were doing what other schools were doing...there was a certain amount of just trying things out." They would push press releases out to the media or target certain audiences based on their interest in a topic. "A year later we sat down and decided that although there are a million things we can do with

social media, we needed to figure out what we could actually do, what would work best for us". As the UMHS was still figuring out their social media policy, Brittany transferred to the OVPC and began to implement the same sorts of programs into their communications.

Social media was beginning to gather steam at the university.

In the fall of 2008, U-M's Central Development Department created a Facebook fan page under the name "Umich" for a fundraising campaign. Once the campaign ended, they abandoned the page. "Once again, we were watching Stanford and they were doing fabulous things with facebook, which spurred me into thinking that we needed to create our own presence on there," explains Karyn. "When I looked though, I found out that 'Umich' was already taken." The OVPC contacted the Development Department to see about taking over the Facebook page. They began regularly updating the U-M Facebook in August 2009, after it had been sitting untouched for months without any interaction. "In the beginning, we were just posting a mish mash of uncontroversial content on the page. We didn't really interact with anyone, and we also took a hands off approach to deleting comments," says Elizabeth (MM&D). By December 2008, U-M's fan page had over 50,000 fans.

Meanwhile, social media was beginning to take place elsewhere in the University. In late 2008, the News Service began putting icons to link to Facebook, Twitter, digg, and other sharing platforms on their press releases to add to ease of sharing them. U-M's communicator's forum, a group of communicators on campus, began working on the issue. "We knew there was a lot of institutional knowledge going around the university, we just wanted to find a way to hone it in," says Brittany. They brought in Fara Warner, a professor of communication studies, to talk to the communicators about social media. Once the topic

had been introduced to the communicators, they formed task forces to explore various areas of social media. The group let anyone join who wanted to, and set off to explore five key areas of social media: blogging, video, crisis management, university presence, and technology trends. “We sort of guessed at it, and decided these were the things we should be looking at in these task forces designed to be taming institutional knowledge, “ says Brittany. The university also approached Fara Warner’s class to see if they could critique the Facebook page. “They felt it should be more student oriented,” adds Karyn.

Although the task forces are doing a great job, they weren’t implementing many of their plans as of yet. “What needs to be understood is that the people on these committees are doing so on top of their other jobs. It’s all new, and social media is always changing so once you learn something it can become obsolete. We are pleased with where they are right now,” says Brittany. This isn’t to say that the task forces don’t have innovative ideas: “one idea we’ve had is to have different voices on the Facebook page. We’d have an administrative voice (“University has cancelled class today, it’s a snow day”), and then there would be the student voice (“come to the diag for this event”) and there would be an academic and research voice that would have press releases. We would create characters who become the voice of the campus. It’s a great idea, it’s just a question of staffing issues and implementation,” adds Karyn. Other groups have been charged with creating guidelines for social media use at the university, or creating classes so that communicators across campus can learn how to use Facebook strategically for their jobs. “We are just now beginning to approach the classes from a strategic manner, which is really how we should be looking at all communication,” says Rachel.

The university is also interested in creating a template so that all blogs can be branded by U-M. “Blogs are a really easy way to disseminate information across the university. Take the U-M students who were at the Vancouver Olympics [ice dancers Meryl Davis, Charlie White, Emily Samuelson, and Evan Bates]. We contacted them to set up a blog so they could document their time there. It ended up that we just linked to their Twitter pages, but it was a quick way to update everyone, and it was really popular,” says Melissa. The blogging task force is another example of a group that has “lots of great ideas, but issues with staffing and implementation”. Other task forces, such as the official university presence one, have only met a few times due to scheduling issues. The tech and trends group meets regularly, although there are some that feel they aren’t accomplishing as much as they could. “This is not a criticism by any means, but a lot of people on tech and trends are essentially exchanging professional information. ‘Oh I just used Yammer and I loved it’. That’s professionally oriented, but it’s not building the reputation of U-M. We need to get the communicators to understand the difference between getting excited about a social media platform because you like it, versus doing it to build reputation, or meet admissions goals, or those sorts of things,” says Rachel.

By March 2010, the university Facebook fan page had climbed to having over 103,000 fans. Although the fan base is there – they are currently the third highest ranked Facebook fan page, by number of fans – the university is not doing enough with social media. Without commenting to their fans or fostering conversation, the fan page becomes just another place to push out the media message. It also important to note the demographics of the fan page: 30% of the fans are between the ages of 25 -35, and the next largest age group is 35 -45. This indicates a large proportion of alumni fans; the percentage

of fans under the age of 25, the students, is very small. Only 4% of the fans are 45 years and over. Although the university has many audiences they could potentially reach, the largest one they are currently reaching is that of recent alumni. Karyn confirms this, noting “the indication from the ages is that most of them are probably recently graduated, or they are graduate students.”

The importance of social media at U-M

Although the university is in the early stages of delving into social media, the importance of the technology is inherently important. “Our office [the OVPC] is all about building reputations and enhancing relationships. We see social media as a tool – we have an audience that is attuned to social media, and if that gives us a new way to reach them, well we need to go where the people are,” explains Rachel. Furthermore, adds Brittany, “traditional media is drying up, and the future is social media.” The university also sees social media as a pivotal method to keeping in contact with future alumni. “Right now, current and perspective students are a huge part of our social media audience. And they eventually become our alumni who become our donors and biggest supporters, so in terms of reputation building, it’s very important,” notes Karyn. Rachel also reiterates this point: “We have 70-80,000 alumni on the Facebook page and we can expose them to university news they otherwise would need to be geographically close to the university to see. It creates a great deal of visibility, and the fact that on Facebook anyone can comment on a post and put their two cents worth in, well in terms of our relationship with these people, it gets a little closer.” U-M sees their Facebook page as a crucial place of interaction with alumni, as well as a growing medium for communication purposes.

Targeting Audiences

With one of the largest alumni bases in the world, a campus with 40,000 students, a plethora of faculty and staff, a vocal sports fan base, and a slew of interested prospective students, the U-M Facebook pages has a variety of audiences to reach. This vast array of audiences to target has proven to be a challenge for the university. “When we think of what to post on the Facebook page, we try to reach everyone but it’s hard at times. Sometimes there is something pertinent to students – you know, drop add deadline tomorrow – and others it is more general. We don’t have a central communication track yet, we’re learning and juggling audiences,” says Elizabeth. To help understand the audience divide, the university asked Fara Warner’s communication studies course to examine the official university page. When the results came back the students were split in the middle between “feeling that the Michigan page should show U-M at its most outrageous, featuring students and how they live, all the funny things on campus. And then the other half felt that the official page should feature official announcements of the university,” explains Karyn of the dilemma. It’s a challenge that the university is just “trying to straddle” at this early point in their communication strategy. Adds Rachel, “the Facebook page has real value, we just need to understand what our goals are...what is the specific issue or area of interest right now, and how can the social media be engaging?” Continues Brittany, “with so many different audiences, we have to be strategic with where the messages go. We send out some to this spot some to another, it’s all about which audience we want to reach and how we think the message will be the most widely accepted.”

In order to reach such a broad audience base, the university has some tactics in place to determine the content for their Facebook page. “I created an editorial calendar that

lists key university events and I always add to it,” explains Elizabeth. They take content from a variety of places: departmental websites, press releases, and university news. “We created guidelines so departments can maintain their own pages, and sometimes we look there for information,” says Elizabeth. “I see a lot of material on my personal Facebook and Twitter feeds from U-M departments, so I look there. It’s more important for me to find a balance between the kinds of posts that go out, instead of a balance in the sources. So some are for students, some are for alums, some are for a broader audience,” adds Karyn of U-M’s selection criteria. One thing the university refrains from is posting “too much about sports”, although this is a topic that often comes up in the comments, says Elizabeth. “It’s not that we refrain from posting about sports, we just needed to find a balance. When we first began updating the Facebook page, it was in the heart of football season, so we couldn’t post much. But we post about sports if we win a big game or go to a bowl game. Besides, it always comes back to the subject, anyways,” adds Karyn.

Fostering Communication

Although the University only mentions athletics a small percentage of the time, the comments section of their Facebook page is often overrun with comments about sports. No matter what the story is, it always comes back to the football team’s record and coach Richard Rodriguez, in particular (figure 9). Although the comments get off topic, the university will not delete them unless they are obscene. Notes Karyn, “the hardest part is deciding what to delete and what not to. It’s easy to say that you are going to delete anything that is obscene, but there is all that murky stuff in between that that as a public institution we almost have to allow.”

The posts on U-M's Facebook page that received the most comments were the ones about U-M offering relief after the devastating earthquake in Haiti in February 2010, and the announcement that President Obama would be the 2010 commencement speaker. Right after the Obama announcement was posted, "there were a couple of days where I had to get on Facebook every two hours to check comments and take down obscene ones" says Karyn. The university has also had issues where people felt their deleting of comments was censorship. "A few years ago we posted a Youtube video and it was generating some obscene comments that we ended up deleting. And then the comments were all about censorship, so we were really worse off," says Melissa. At a public institution, there is a fine line between censorship and deleting obscene comments, and U-M needs to find a balance between that. Although negative commenters tend to be "more vocal" it is important to note that positive comments shouldn't be ignored either, notes Karyn. In order to actually foster a conversation and create a sense of community on their Facebook page, U-M needs to be commenting and engaging with all of their fans

Although a main component of effective social media use is fostering communication between group members, the university is not yet engaging in this practice. They rarely, if ever, respond to people's comments, and the institution's sole presence on their Facebook page is posting stories. Explains Karyn, "the places where you want to comment are on the most are the controversial stories, but my tendency would be say 'stop talking about football, this post is about Haiti!' and that is going to upset people." Jokingly, she continues, "I'm going to wait until a year before I retire in case I say something that would be a CLM – that's a career limiting move". Elizabeth also refrains from commenting on the Facebook page. "It's hard to find a voice that speaks to the whole university, so

although I know I am supposed to, it hasn't happened yet." Although various university members have expressed a desire for those on the Facebook page to "have a great conversation about what we post" this is a practice that has not yet been implemented into their social media strategy, despite the importance of fostering communication through social media.

In the end, issues about the university's Facebook use all stem from communicative affordances. It is clear from the aforementioned examples that there is a serious mismatch between the affordances of Facebook and the university's mission. U-M is engaging in social media as a way to effectively and strategically communicate with interested parties, yet in order to expose all the affordances of Facebook the university needs to make changes with how it is currently engaging the social medium. Maintaining U-M's public profile requires more effort than the OVPC is currently placing into Facebook. If the university wants to be effectively fostering communication with their fans, they need to be putting in time and effort to comment on posts and create a conversation. U-M also needs to be cognizant of the fact the Facebook is not a "one size fits all" medium. It is not enough to simply have a Facebook page and attempt to reach all the university's various demographic audiences through one platform. Rather, the university should strive to create multiple Facebook pages, each with a different voice, to target the various university audiences, ranging from students to alumni. The communicative affordances of Facebook cannot be exposed without an increase in effort from the university, and at this point in time a serious mismatch exists between U-M's mission and Facebook's affordances due to the lack of investment in adoption of the social medium. The mismatch between affordances and the university's mission can be easily eradicated through a more effective adoption and use of

the medium that would allow for strategic communication between the university and their many Facebook fans.

Figure 9: Unrelated comments on U-M's Facebook page (Facebook.com)



The screenshot shows a Facebook post from the University of Michigan. The post is titled "University of Michigan President Coleman's list of three things to fix the state" and features a profile picture of Mary Sue Coleman. The post text reads: "Mary Sue Coleman | Three Things threethings.michiganradio.org All this year, Michigan Radio's Morning Edition host Christina Shockley has been speaking with people from across the state about the three things they think we can all do to help the state. For this edition ...". Below the post, there are four comments from users: Philip Coleman, Erick M. Wrestler, Tim Sheppard, and Kevin Olszewski. Each comment is a critique of a person named Rich Rod, with some calling for his firing and others expressing disapproval of his actions.

University of Michigan President Coleman's list of three things to fix the state

Mary Sue Coleman | Three Things
threethings.michiganradio.org
All this year, Michigan Radio's Morning Edition host Christina Shockley has been speaking with people from across the state about the three things they think we can all do to help the state. For this edition ...

March 8 at 5:15pm · Comment · Like · Share · Report

46 people like this.

Philip Coleman Keep up the good work Mary Sue, I love you.
March 8 at 5:22pm · Report

Erick M. Wrestler Fire Rich Rod! He's single handedly destroying the greatest football program in college sports. Not to mention he brings shame and dishonor to the University's name!
March 8 at 5:41pm · Report

Tim Sheppard Fire Rich Rod... Now there is a great idea... NOT... How shallow... Lets fire Rich and start over again... Please .. these are the same fools that thought we should fire Carr..
March 8 at 5:41pm · Report

Kevin Olszewski Many of us never wanted Rich Rod. After he misses a bowl again and finishes his destruction of the program we will be rid of him. It will take a decade to recover from him.
March 8 at 5:45pm · Report

Losing Control of the Message

Although a common fear among institutions on Facebook is loosing control of the message that they post, this is one area where U-M is doing well with in their social media strategy. Notes Rachel, "I saw a presentation about the pros and cons of social media once,

and the pro was that you get to put yourself out there and engage people, and the con was the same thing.” Exercising a loss of control over a portion of the message exists in the inherent nature of social media, and it is important that U-M is already familiar with the concept. “I think at the beginning a lot of people were nervous about that, but now, you just have to let go. What you can do is be more vigilant about watching what is being said about you, not being afraid to jump in and correct or comment where needed. It’s nerve wracking that people are going to judge what we’re saying and doing all the time, but at the same time isn’t that what we want,” says Brittany. Adds Melissa, “yes, the loss of control is scary, but it’s part of the game.” Continues Rachel, “true, all large institutions are concerned about reputation and image, but there’s also a good sense that if you’re going to get into the game, you need to play the game, by the rules of the game.”

Future plans

Although U-M is only just beginning to implement social media use into their official communication strategy, they have big plans for where they hope to see their social media use evolve in the future. “I hope social media is used in every single area where we are communicating now in a year, even six months from now. That is definitely a goal, social media should be one more tool we use to get the message out,” says Brittany. Adds Karyn, “we have some really good ideas about the future, it’s just a question of staffing issues”. One thing the university would like to do on their Facebook page is implement something similar to Stanford University’s office hours. This would involve a collaboration between various university departments. Explains Karyn, “say for instance we post a story from the News Service that features a research scientist. I would like to be able to let that research

scientist be aware that we were posting this to the Facebook page, so he would be able to go in there and comment on the story and interact with the users.” U-M would also like to add a video component to this feature, and let the expert post videos responding to comments, just like in Stanford’s office hour segments on Facebook. If they were to implement such a practice, however, “it would have to be with someone we really trusted who could handle live TV,” notes Melissa. The university’s plans for future social media use reiterate a common barrier to adoption: time. Due to the fact that the staff currently implementing social media at U-M are doing so on top of their current workload, they will need more time in their workday to devote to social media if the changes are to be implemented. This could happen in a multitude of ways, but perhaps the simplest solution is to hire more workers who could completely dedicate their day to social media. Of course, increased staff hires would require more money from the university’s budget, but it would be an easy way to increase U-M’s social media use.

Another area where the university would like to implement social media use is with the admissions department. “Our goal is to set up something specifically for students. Of course they are welcome on our main page, but we are hearing from them that we are not meeting their needs. We want to target them specifically, so we are focusing on admissions, and next it will be general communications,” says Karyn. “Using social media on the admissions page, where you have someone who can answer prospective student messages and form a group of informed incoming students...the strategic benefit behind that seems very apparent to me,” adds Rachel. Of course there are concerns – “who is going to reply to all the comments and questions, how do you deal with the parent of a student that hasn’t been admitted who lashes out on Facebook, etc” adds Karyn, but overall this endeavor is

seen as exciting new way to reach a targeted audience through social media. Once again, this future social media goal reiterates the university's need to hire more staff that can invest more time into social media. A key implementation issue is that the current OVPC staff focused on social media are doing so on top of their present duties, and they simply cannot devote enough of their workday to social media to successfully implement the medium in a way that would allow the university to fully utilize all of Facebook's communicative affordances.

The university will also most likely hire a social media specialist whose sole job will be maintaining and implementing social media strategy at U-M. Calling this hire "critical," Brittany also notes that, "social media will also become a key part of every media person's job, so there will be multiple people involved with this." Adds Brittany, who plays a key role in currently updating the university's Facebook page, "I don't think it's possible to do this by yourself, and when you add it to your other duties it is too much work. They are going to have to hire someone to tackle social media full time." If the university were to hire someone to strategically use social media full time, it would go a long way in increasing their involvement with the medium. The hire could comment on posts, interact with fans, and foster conversation. There would also be the potential to implement many of their future plans if there were someone devoting their whole day to social media use. Of course, were the university to actual hire new "social media experts," there would be a conflict between the technology and skill of the younger works, and the personal resistance of some of the elder workers who may not see the importance of some of the ideas the young staff is suggesting. Regardless, hiring full time social media workers is a crucial barrier to adoption that can easily and quickly be eliminated if the university so chooses.

6. Analysis

Differences in diffusion of innovations models

When analyzing social media under the criteria of Rogers' diffusion of innovations model, it is clear that social media represents an innovation that is diffusing through higher education. The comparisons between this model, and any of the other models end here, however. Rogers list the stages in the Decision Innovation Process as knowledge, persuasion, decision, implementation, and confirmation (Rogers, E., 1983). At this point in their diffusion process, U-M has only completed four of these steps, leaving others out in the process. As evidenced from the above interviews, key members of U-M's staff have been thinking about U-M for the past three years, cultivating knowledge along the way. They have also completed the persuasion stage as they become aware of the benefits of social media and worked to convince the university to begin implementation. Eventually, they decided to begin using social media such as iTunesU and Facebook, thus accomplishing the decision stage. Yet from here, U-M seems to have skipped the implementation stage and moved right into confirmation. If you ask staff at U-M, they point to their use of Facebook as validation of their foray into social media. Although those interviewed indicated they see the potential for increasing their use in the future, it seems as though they feel they are the confirmation stage, where they are looking to using the innovation in the future. While it is ideal that the university plans to continue to use the innovation, it would be more ideal were they to fully implement the technology first.

If you apply U-M's social media adoption to Cooper and Zmud's (1990) model, it is evident that U-M is missing steps in this variation of the adoption process as well. Cooper and Zmud list the steps in the implementation process as initiation, adoption, adaptation,

acceptance, routinization, and infusion (Cooper and Zmud, 1990). The initiation stage, when the innovation is first talked about occurred three years ago when U-M first delved into iTunesU, and continued as they took the steps to obtain the “umich” Facebook page. They conquered the adoption stage as they gained “organizational backing” (Cooper and Zmud, 1990). As the OVPC, an organizational branch of U-M’s administration is the primary backer for social media use at the university, it is apparent that they have obtained organizational approval. The next stage occurs as the innovation is “developed, installed, and maintained for widespread use” (Cooper and Zmud, 1990). This is the stage U-M is currently involved in. From their task forces on key social media topics including blogging, tech trends, audio visual, crisis management, and university image, to their innovative ideas for future use, the university is looking towards the future.

U-M has already developed social media guidelines detailing how to engage in social media as a “visual representative of U-M” (Communicators, 2009)³. Intended for all the various departmental pages that exist within the university community, these guidelines list hints such as “be accurate” and “be timely” as well as posting tips for how use Facebook and twitter. These tip pages detail site lingo, how to brand as U-M (“University of Michigan” is most searched term, so you are encouraged to use that) and different ways you can utilize the platform (Communicators, 2009). While a guide such as this demonstrates that the university is getting ready for widespread use, they are simply not there yet. They have to fully implement and use social media to it’s full potential themselves, so it is premature to think the medium is ready for widespread use within the university community.

³ To view the current U-M social media guidelines, visit http://mmd.umich.edu/forum/resources_socialguide.php

In the next stage of Cooper and Zmud's model, routinization, the innovation is seen as novel (Cooper and Zmud, 1990). Yet social media has only been a part of U-M's official university communications for a few short years, and it therefore cannot be viewed as normal throughout the university. In fact, many of the Facebook pages that exist in the U-M community but are not U-M owned may not be aware that the university has social media guidelines in place. Although the university social media task forces are working on creating classes to further institutional knowledge, the courses are only available to members of the communicators' forum, an organization sponsored by the OVPC for university communicators. Therefore, unless you designated yourself a member (anyone can join) these tools are not available to you. A biology professor who is not in the communicators' forum could not take a class to further their Facebook knowledge, nor would they be aware that the university even has social media guidelines in place. The final step in the model is infusion where the innovation has been implemented to its fullest potential (Cooper and Zmud, 1990). It is evident that university is far from implementing social media to its fullest potential, as they have yet to foster communication on their official page, let alone diffuse the innovation throughout the university at large.

Perhaps the model that most closely resembles the steps U-M has taken so far in their social media implementation process is that of Thong (1999). In his diffusion model, "implementation occurs after the decision has been made to adopt" (Thong, 1999). The process begins by cultivating information about the innovation, then the decision is made about whether or not to adopt, and finally the innovation is implemented. The steps in Thong's model are the ones U-M has taken so far, but in comparing this to other diffusion models, it is clear that U-M's use of social media has not been fully integrated. In fact, it can

be argued that the implementation is in its infancy. In the three years since they began contemplating social media integration, U-M has accomplished a lot, but there is still much that needs to be implemented. It is important that they began regularly updating their Facebook fan page in fall 2009, but if they are not interacting with their fans and creating meaningful communication, the medium loses its effectiveness. Furthermore, the university has innovative plans for the future, such as integrating a feature similar to Stanford's "office hours" segment, but plans for this have not yet been laid. Although U-M has begun to use social media, it is not yet fully implemented, and furthermore the social media is not being used in a strategic manner. When you communicate strategically, every message is targeted towards a specific audience and every message has a meaning. You cannot achieve this level of communication when simply disseminating links and press releases out on a site.

Barriers to Adoption:

One of the main issues surrounding U-M's adoption of social media is the various barriers hindering their adoption efforts. Thong (1999) lists the barriers to adoption of an innovation as knowledge about the innovation, "skills, time, and staff necessary to plan for adoption barriers," and also counts "advantage, compatibility, and complexity...as impediments to the adoption process" (Thong, 1999). The barriers to adoption that U-M is encountering in their social media efforts are consistent with his model. One of the most apparent barriers, based on the above interviews, is staffing issues. As of right now, the members of the OVPC, MM&D, and News Service who are implementing U-M's social media strategy are doing so on top of their other jobs. Those interviewed indicated that they spent

“very little” or “not enough” time devoted to implementing social media at the university. Excluding times of crisis, the highest figure given for how much time these people dedicate of their work week to social media was between five and eight hours. Given the nature of social media – the necessity for interaction and conversation – as well as the scope of U-M’s social media efforts, they should be devoting more time to engaging in the medium. Whether it is communicating via the Facebook page, researching up-and-coming platforms, creating viral marketing campaigns, or some other reputation building activity, social media requires a great deal of time and effort if it is to be used effectively to strategically reach and communicate with audiences.

It is apparent that social media presents an irony of sorts: there are many communicative affordances that the university has yet to begin to grasp because they are not using the medium in an effective way that fosters communication, but in order to enable said affordances, a great deal of time and effort is necessary on the university’s part. All respondents who were interviewed indicated the need to hire one or more full time workers to manage U-M’s social media efforts. This is an idea that is crucial if U-M wants to take the next step with their social media implementation. Not only would the university be present on social media platforms, but also they would be able to engage with their audience and create meaningful interactions. Furthermore, U-M would be able to reach out to underrepresented audiences in their social media network, such as students, if there were a full time representative devoted to cultivating such relationships. Not only is hiring a full time social media representative crucial, it is also something that needs to occur in a timely manner. Staffing issues present a huge barrier to U-M’s social media adoption, and this is a barrier that could be easily eradicated with a simple staff hire.

Although U-M has begun the implementation process, they are far from fully implementing the medium to its full potential. They are therefore also inherently behind the curve when it comes to social media. The intrinsic nature of social media is that is always changing, so if you cannot grasp it on one level, you will certainly not be able to maintain the platform's needs in the future. This represents another barrier to U-M's social media adoption, the fact that the medium is always evolving. As soon as you think you've grasped the medium, it will inevitably change, or a new platform will pop up that threatens to become the "next new thing". The university is aware of this challenge, but they need to act on it and hire someone who can stay current with social media. In her interview, Brittany noted that, "social media is always changing, so once you learn something it can become obsolete." Not only is this true, it is something that U-M needs to adopt in their communication strategy if that want to effectively use the medium.

Although the university is attempting to stay on top of new technology trends with their "tech and trends" social media task force, the fact remains that this task force is not successful. For one thing, it only meets once a month, due to committee members' busy schedules. When reviewing what is actually accomplished at the task force meetings, the results are not encouraging. The task force is part of the communicator's forum, and therefore has some obligations to them, but the main job of the group should be to further the university's official use of social media. At the moment, the group is focused on developing a class to educate university communicators at large, which will be challenging due to the rapidly changing nature of the technology. Furthermore, time might be better spent ensuring the official university communicators are up to par with their social media knowledge, and then letting the information disseminate from there. Also the technologies

discussed most recently at the meetings, such as Google Buzz, do not fit in with the academic world. Obviously not all social media platforms are capable of being utilized by every audience, but devoting a large period of time to discussing these platforms is not a productive use of time.

In order to stay on top of the constantly changing medium, the university should be focused on furthering their own institutional knowledge about social media. It should be a priority to effectively engage the university's official communicators in the OVPC, News Service and MM&D, before moving on to the university at large. In terms of diffusion models, the university skips steps by focusing on university-wide adoption in their task forces. The innovation must be fully implemented at the institutional level, before it can trickle down into the whole university. Obviously the university as a whole will ideally be using social media throughout their communications in the future, but for the innovation to be effectively and fully implemented it does not make sense to move on to the university at large when the institution's communicators do not yet have a grasp on the medium. At this point, the university is not taking advantage of all the communicative affordances that Facebook offers them, and therefore expanding social media use throughout the university as a whole will be neither effective nor beneficial. A solution to their problem would be to hire someone, or a group of people, whose sole job is to engage in social media at the official institutional level. This person could not only stay on top of trends, but by effectively implementing the innovation on a higher level, they could become a vital resource when the university is ready to take the implementation to a whole new level of diffusion to U-M as a whole.

Of course, hiring more full time staff would require money, which may or may not be available in U-M's current budget. This represents another barrier to adoption. Yet perhaps the biggest barrier U-M faces is that of age. The demographic that works at the OVPC, MM&D, and News Service is not the demographic that is the most familiar with social media. Although the group that is implementing the medium is familiar with it on some level, "younger online adults are much more likely than their older counterparts to use social networks" (Internet, 2008). With this knowledge, there is no way the current implementers would be able to reach the level of familiarity that is present in a younger demographic who grew up using the medium. Younger demographics of social media users therefore have an advantage because of their familiarity and compatibility with the social medium platform. This fact isn't meant to be discouraging to the staff at U-M, rather it should serve as an inspiration for where they look to hire their "social media guru".

Brittany indicated in her interview that she had this mindset when beginning to research social media platforms and turned to young people to learn about how social media works, and this is a trend that needs to continue beyond the initial research stage. The age barrier is something that must be eliminated if U-M wants to fully and effectively implement social media. Although even hiring a young social media expert would present problems – elder staff member's with a personal resistance to social media might not be able to comprehend what the young staff wants to accomplish – it would still be step in the right direction that could easily eradicate a barrier.

A Barrier Eliminated

There is a common barrier to adoption that U-M has already accounted for, even this early in their integration process. For example, although Rogers (2000) notes that implementation of technology in higher education can be a long process because “there is no set of established institution norms” U-M has already begun to alleviate this barrier (Rogers, D., 2000). Through their task forces, the university is working on creating a guide to social media use that will eventually be able to permeate throughout the institution and offer extensive guidance. The university also has a “communicators’ forum guide to social media” which is the beginning of a set of guidelines for university social media use. Fazfar (2008) speaks of the importance of creating a faculty development program, and it is encouraging to see the groundwork already being laid for this at U-M. A faculty development program will help ensure that the innovation is effectively implemented throughout the entire organization. While it is commendable that these guides already exist, it is important to note that progress still needs to be made. The guidelines are not perfect, and changes need to be made until they adequately cover this information. The fact that these guides exist, however, is still an example of a barrier that is being removed. U-M is in the process of creating a guide to institutional expectations for social media that will be helpful in both the official university communications as well as in university department and school use of social media technology.

Erroneous Concerns about Barriers to Adoption

When discussing previous issues with technology adoption in institutions of higher education, Armstrong and Franklin (2008) expressed concerns about technology adoption.

Whereas technologies such as the television and cell phone were supposed to dramatically change the educational landscape by “drastically alter[ing] the state of education,” the fact remains that these technologies fell short of such major paradigm shifts (Armstrong and Franklin, 2008). Social media will not face the same fate, however. Facebook, a main social media platform, reached 50 million users in only 9 months, compared to the 13 years it took television to reach that magnitude of use (Social, 2009). Social media as a whole is rapidly growing, and in 2009 there was a “73% increase in time spent on social networking sites over the previous 12 months and the use of social networks has exceeded web email” (Sibson, 2010). Social networks are not only radically changing communication online, but they will continue to infiltrate the education sector as well. The fact that leading educators such as Stanford are already adopting the technology speaks volumes about where social media use will go in the future. More and more schools will adopt it, and social media will take on an even larger role. This is one technological innovation that will leave a lasting impact on education, unlike some of its’ predecessors.

Communicative Affordances

Before adopting an innovation it is important to consider the communicative affordances, “the characteristics [of the innovation] that are more or less directly available to the perceiver” (Ling, 2004). According to Parks’ (2008) study on the communicative affordances, the following affordances can be extracted from Facebook: membership, by joining groups and fan pages, as well as being a member of the Facebook community; personal expression, through joining groups and fan pages, as well as personalizing your profile with pictures and interests; and connection, to other members, allegiance in groups.

While these affordances are all extremely beneficial, it is important to note that affordances vary by user. Therefore, an institution is going to get different uses out of a tool than an individual, and this must be considered prior to adoption. Due to its large student and alumni population, Facebook offers a strong communicative affordance of connection for institutions. By linking a school with its current and former students, Facebook not only creates an open line of communication, but also allows for a strong connection to exist even long after a student has graduated and left the institution.

While it can be argued that a majority of social networks offer the same communicative affordances as Facebook, specifically connectivity and community, each social network is also unique. LinkedIn, for example, is a community for business professionals, whereas Facebook targets a variety of demographics. Because communicative affordances vary based on personal user experience, your audience must be considered before you delve into a social media platform. Due to its popularity and wide demographic of users, Facebook is a logical choice for U-M to use. If they continue with the implementation process and create an engaging involved community, Facebook's array of communicative affordances will become even more apparent and effective for U-M.

In order to determine the communicative affordances of a communication tool, a trial period is necessary. According to Brittany, the university did just this before begin to adopt social media. "We spent the first year just trying things: so pushing things out to the media or targeting certain types of audiences based on a topic, and then the following year we sat down and said, 'well we can do a million things with social media, but what are the things that are going to work best for us?'" says Brittany. Despite their trial period, the university has not uncovered all the communicative affordances of the social media

platforms they are engaged in, such as Facebook. The university needs to be creating a conversation and engaging with their fans if they want to fully implement the connection affordance, and this has yet to happen. There is no mention of U-M trying to use social media platforms strategically during this time, and a strategic use is imperative for effective implementation. U-M is “just now beginning to approach [social media]... from a strategic manner,” says Rachel.

Using Facebook and other social media platforms to communicate strategically with interested parties is a crucial affordance that the university is currently not engaged in. Regardless of their endeavors into other social media platforms, the most important aspect of U-M’s social media plan is that all communication must be engaging and strategic. Ideally, U-M should create targeted Facebook pages that each reach a separate demographic. In addition to their current Facebook page, the university could create a page specifically for students, one for alumni, admissions, etc. The most important part of these pages would be a clear, targeted voice that would be able to foster communication. By doing this, the university would ensure that they weren’t using Facebook as a “one size fits all” medium as they currently are. Targeting multiple audiences through multiple Facebook venues would be a very strategic and effective use of the social media platform. In order to fully experience the array of communicative affordances associated with Facebook, they need to devote a significant amount of time and effort to their social media efforts. Staffing and time issues are the main barriers that stand in their way of complete implementation and full use of communicative affordances. U-M needs to increase their social media efforts if they want to be successful and create meaningful and engaging conversations with their multitude of audiences.

Conclusion

In 1988, former Vice Provost for Information Technology Douglas Van Houweling remarked that, “if the universities of this country, the higher education segment of the country, don’t begin to understand how to use technology effectively, we will lose the competitive battle for the best minds and greatest potential among the students out there” (U-M ITD, Keynote, 1988). Twenty-two years later, this logic still rings true. It is crucial for universities to remain current with information technology, not just for the sake of their students, but also for their faculty, staff, alumni, and interested community. Social media is a rapidly growing medium, which reached 50 million users in a matter of months, significantly faster than other revolutionary mediums such as the television (Social, 2009). Furthermore, social media is a medium where the university’s current audience is; there are a plethora of students and alumni currently using the social networking site. Although U-M has begun to use Facebook in late 2009, and have been very successful in generating fan interest (they are currently ranked third in terms of all college fan pages) they have yet to effectively implement and use the innovation.

Not only has the university not fully implemented the social media platform, but they also are not engaging in it correctly. One of the main communicative affordances of Facebook is that of connectivity. In order to foster connectivity, there needs to be a sense of community on the Facebook page where both U-M and fans alike can engage in a conversation. U-M has not yet reached this level in their adoption process; in fact, they are not commenting on their Facebook page at all which detracts from the meaning of their social media use. U-M is currently disseminating information and letting the fans absorb it, rather than creating a meaningful presence online. U-M has differed from classic diffusion

of innovation models during their adoption of the innovation, which has resulted in an incomplete implementation process. The university has also encountered various barriers to adoption, including a lack of staffing and time to devote to Facebook, unfamiliarity with the medium, and treating Facebook as a “one size fits all” social media platform. U-M needs to approach social media differently and utilize the platform to target their various audiences through different venues, rather than just through one single page. Currently, there is a central contradiction between U-M’s mission and the uses of Facebook. Additionally, if the university wants to access all the communicative affordances of Facebook, they need to hire more staff who can devote their time to the social media platform. It is crucial for U-M to continue and improve upon their implementation of the social media innovation in order to stay current with technology and continue the tradition Van Houweling established of excellence in technological communication.

In order to offer this detailed analysis, a theoretical framework of the diffusion of innovation and communicative affordances was established to provide a basis for the study. This information was combined with a history of social media, as well as an archival analysis of previous moments of technology integration at U-M. The historical perspective is often lacking in analysis, and this provided a crucial background for analyzing university communication through social media. Finally, a case study of five key mediating personas from U-M provided insight into the university’s current social media efforts. Detailed analysis followed to synthesize themes and generate conclusions. Research on university communication through social media has not been exhausted through this thesis, there still remain many questions that are unanswered. As social media is a medium that is inherently evolving, the question remains as to where the platform will be in the future,

and what new uses for higher education use will have developed out of it. Additionally, this research only examined institutional use of Facebook, although there are other social media platforms that could pertain to higher education use; an analysis of these could provide important information on the subject matter. Finally, the question remains as to what additional steps U-M will take in their implementation process, and when the innovation will be fully diffused and effectively used on all levels of the university. Although U-M has begun the implementation process, there is still a great deal that needs to be accomplished before the medium is used effectively to expose all communicative affordances. Eventually, your Facebook newsfeed could greet you with the alert that the “University of Michigan has accepted your friend request,” but U-M has to overcome their barriers of adoption and fully implement the innovation before that point can be reached.

Appendix

Exhibit 1: Interview Questions

1. When did you first begin thinking about using social media in U-M's official communication strategies?
2. Who did you meet with, or discuss anything with, when beginning this process?
3. What context was social media use presented in when U-M initially became interested in social media?
4. What are the main reasons, in your opinion, that U-M become involved with social media?
5. How did you go about making the social media communication strategy?
6. When were the various university task forces for social media use created?
7. What has their progress been so far?
8. Where do you see social media use within the university going in the future?
9. How much time do you devote currently to U-M's social presence online?
10. How much time is the OVPC as a whole currently dedicating to establishing U-M's presence online?
11. How much do you think U-M is in control of their online image? Are you afraid of how much user-generated content there is on Facebook?
12. Does U-M have the intention of hiring someone to maintain their online presence full time? If so, what department would they work in?
13. What criteria are currently in place to determine what gets posted to U-M's Facebook page?
14. How does this technology integration compare with previous moments of technology integration? Is it faster, slower?
15. Is there another university that you admire for their presence online?

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