An Affordance Lens Perspective of Information Sharing via Enterprise Micro-Blogging Platform

Raymond Martinez Ensono LLP Ray.Martinez@ensono.com

Abstract

This paper presents research on how adherence to enterprise micro-blogging is influenced by affordances of social media. We conceptualize our research model through an affordance lens, which includes network informed associating, triggered attendance, generative role taking, and recognition. A web-based survey was conducted with over 400 employees of a multinational organization. We find that the adherence to enterprise micro-blogging platform is influenced by triggered attendance, generative role taking, and paucity of recognition. Our finding provides empirical support to the positive influences of generative role taking, triggered attendance, and recognition on adherence to enterprise micro-blogging for sharing information. We also find that network informed associating influences generative role taking.

1. Introduction

The development and implementation of new social media technologies has brought many important changes regarding the access of information and social interaction in organizations. In the last 25 years, with the introduction of networked communication, specifically electronic mail, it has become possible to disperse information more effortlessly among people. Communities of practice have been found to provide an excellent setting for sharing knowledge and finding novel solutions to problems (Hildreth, Kimble, and Wright, 2000) and tackling hierarchical barriers to knowledge sharing (Donnelly, 2019). The ubiquity of the internet and its ever-increasing bandwidth has led to an explosion of virtual communities of practice in which members can collaborate and share knowledge with globally diverse colleagues (Fang, Wade, and Delios, 2013). With more organizations looking to implement participatory Enterprise 2.0 (E2) information sharing and content-creating technologies, the potential for harnessing the power of organizational knowledge sharing can increase further Souren Paul Northern Kentucky University Souren.paul@gmail.com

(Kwahk and Park, 2016). Enterprise social media may enable knowledge sharing by affording different user behaviors propelled by artifacts used, individual goals and organizational context (Sun, Zhou, Jeyaraj, Shang, and Hu, 2019).

Microblogging is a lightweight form of communication in which users can share a limited sized posts about their personal thoughts, stories, and items of interest (Stocker, Richter, and Reimer, 2012). When employed in enterprises, microblogging offers a simple mode to share information among knowledge workers. The limited size of posts reduces information overload that may happen with other forms of communication, such as email. In addition, microblogging facilitates spontaneity of response as it offers simple forms of information sharing (Stocker, Richter, and Reimer, 2012). Enterprise micro-blog can allow its users to exchange information passively and actively with other co-workers regardless of geographical boundaries, while simultaneously enabling them to filter information. Many organizations have been using this tool for communication purposes. Chatter, for example, can claim that more than 210,000 active networks are on their micro-blogging service, and micro-blogging within this enterprise has important advantages. Some of the multi-national organizations using Chatter have reported that they have experienced increased benefits in terms of innovation, efficiency, and increased interunit collaboration (Anderson and Mohan, 2011; Townsend, 2012). Researchers have argued that this tool fosters community building by connecting staff who work virtually or in different offices (Grace, Zhao, and Boyd, 2010). In a study on user and marketer generated content on movie box office revenue prediction, Song, Huang, Tan, and Yu (2019) find that the volume of enterprise microblogs predicts box office revenue.

Based on the current literature, it can be reasoned that the early adopters of enterprise micro-blogs can achieve a competitive advantage over their opponents by building relationship with customers (Karunaratna and Lü, 2011), developing products (Evans, Gao, Martin, and Simmonds, 2015), predicting revenue (Song et al., 2019), developing brand through formulation of appropriate microblog marketing strategies (Yifang and Zhiqiang, 2020).

There has been discussion on how social networking platforms are used in business for communicating with customers and other stakeholders (Curran, O'Hara, and O'Brien, 2011). Organizations can use these platforms for incident management (as in Twitter), collaborate and communicate within an organization to share knowledge (as in Yammer), increase traffic to a retail business by engaging customers to check in to a venue using a mobile application or a website (as in Foursquare), offering versatilities to post blogs, follow other bloggers and share their posts (as in Tumblr). Business organizations, thus, have multiple options on using microblogging platforms. The key question is what this environment is perceived to provide or furnish to its users. Organizations will use a social networking environment if it is perceived to be suitable to meet the intention and capabilities of its users. While other forms of electronic communications, such as email, instant messaging, and video conferencing have been quite prevalent in business organizations, the use of blogs is relatively new. Blogs can be very beneficial if used effectively. It is worthwhile to understand what microblogging-based communication environment affords to its users and examining the use of blogs through the affordance lens.

An affordance refers to "what is offered, provided, or furnished to someone or something by an object" (Volkoff and Strong, 2013, pg. 822). We rely on the prior work on social media affordances that affect the way employees get engaged in conversations in online communities at workplace (Majchrzak, Faraj, Kane, and Azad, 2013; Sun, Zhou, Jeyaraj, Shang, and Hu, 2019; Sun, Fang, and Zhang, 2021) and focus on four social media affordances (e.g. network informed associating, generative role taking, triggered attendance, and recognition) that are likely to influence employees' tendency to use enterprise microblogging to share information and knowledge. Thus, in this study, we attempt address the following research question:

• Do social media affordances (e.g., network informed associating, generative role taking, triggered attendance, and recognition) influence employees' tendency to adhere to enterprise microblogging to share information?

We have conducted a survey to test our research question. Our results suggest that generative role taking, triggered attendance, and recognition impact employees' adherence to microblogging platforms. In the next section, we discuss the theoretical background of our study and present our research hypotheses. Next, we discuss the research method, which is followed by the results. We end the paper with a discussion on the findings, limitations, and conclusions.

2. Literature Review and Theory Development

2.1. Micro-Blog and Enterprise Micro-Blog

A micro-blog can be viewed as a type of hybrid medium that combines the characteristics of a wide set of different ICTs. First, it is a social network technology like Facebook. Generally, micro-blogging is a form of blogging that typically has less content than the traditional form, where it is usually restricted to 140–160 characters. They are like Instant Messaging applications (IM), in which the user can negotiate availability and have some characteristics in common with the traditional blog in that the posts do not have any specific recipient. Instead, the user has to be engaged in order to receive updates. Users can send and receive these updates from a variety of platforms ranging from web browsers to smartphones, desktop applications, text messages, and email.

While the potential readers of the messages posted on Twitter and the text written in traditional blogs are required to be active, the degree and type of activeness of the potential blog readers are quite varied. A reader of a blog has to locate the blog entry he/she wants to read. However, a micro-blog reader subscribes to a source from which he/she wants to receive updates. This subscription feature has been found to have a strong effect on the communication pattern in a public micro-blog.

Twitter is non-reciprocal. User A can follow user B, but user B does not have to follow user A, unless B chooses to do so. The non-reciprocity feature is also embodied in the hashtags (#) on Twitter. If a poster tweets about a certain theme, she/he can signal this by ending the post with the hash symbol (#) followed by a relevant theme. A user can access his/her news feed and write posts in many ways, including web browsers, text messages, smartphones, and desktop applications.

As a consequence of the non-reciprocal follower feature, three vastly different user types have emerged in the public micro-blog medium. Based on information gathered from close to 70,000 Twitter users, Java, Song, Finin, and Tseng., (2007) identified three broad groups based on the number of users that each user follows and the number of users they are followed in turn: broadcasters, acquaintances, and miscreants/evangelists. Broadcasters are categorized as having a larger number of followers than they follow. They are media outlets that generate headlines, such as the New York Times and ABC News. This group also produces the greatest number of posts. Acquaintances are users who are inclined to exhibit reciprocity in their relationships; the number of users followed, and the followers are equally distributed, which is typical in online social networks. Finally, the miscreants or evangelists are users who follow a much larger number of people than they have followers. Miscreants are typically spammers or stalkers, and evangelists are people who contact everyone they can in the hope that someone will follow them.

Research on the communication patterns of Twitter reveals that a relatively small group of tweeters is responsible for most tweets, an observation which suggests that Twitter is not so much an application that is used for equal two-way communication. In examining a random sample of 300,000 Twitter users in May 2009, Blake, Agarwal, Wigand, and Wood (2010) found that the top 10 per cent of prolific users accounted for over 90 per cent of the tweets or posts.

Enterprise micro-blogging allows fellow colleagues to share knowledge and experiences in a secure internal format. In this social network, regardless of geographic boundaries, micro-blog users can synchronously and asynchronously share short messages, bond with colleagues sharing similar interests, feel the organizational pulse, share news, and avoid information overload through filtering mechanisms. In addition, the mechanisms in microblogging have proved to be useful in helping its users with solving problems and discovering what their colleagues have been working on (Zhang, Qu, and Hanson, 2010). When these factors are considered, it could easily be argued that using enterprise microblogging has a significant and positive impact on knowledge sharing between the business units of international organizations. With enterprise microblogging, knowledge sharing may become more efficient, and the organization could stay competitive and innovative by removing the time and distance between the business units, allowing for new connections and directions of information flow between the employees.

Increased access to colleagues, brevity of messages, and non-reciprocity of communication may be considered as a potential advantage. Jackson, Yates, and Orlikowski (2007) identified Twitter as a tool that could, paradoxically enough, both alleviate and complicate the process of finding information, because some users post too frequently. Subsequently, if too many enterprise micro-blog users routinely post too many messages, the lowered ceiling for knowledge sharing may expand the knowledge base even further. Instead of helping people find the information they search for, using enterprise micro-blogs in the organization may lead to obscuring the search process even more (Zhang, Qu, and Hanson, 2010).

With its capability of being non-reciprocal, there may emerge an altogether new communication pattern in organizations which entails the use of enterprise micro-blogs. Users can choose the people from whom they receive updates, while there is no formal requirement to follow the person who is making the request to follow the posts. However, for the system to have any value, its users have to contribute with content. In addition, the micro-blog system may also promote a one-to-many communication pattern, where only a few of the users contribute the majority of content. This could weaken its ability to connect colleagues from all around the world.

2.2. Information Exchange via the Enterprise Micro-blog

Following the development of new ICTs, some have argued that attention has become a scarce resource in organizations (Eppler and Mengis, 2004). Here, attention is defined as the amount of time and energy that employees in an organization allocate to identifying, evaluating, and acquiring documents from digital information sources in the organization (Haas, 2006). As pointed out by Eppler and Megis (2004) while referring to Grant (1996), people with limited attention, who need information, are likely to perform sequential search queries. For example, they begin by exploring a small set of knowledge sources and expand their search until the needed information has been acquired. If their search is not successful, at some point they would conclude that the information cannot be uncovered. Exercising this type of search could result in a state where the suppliers of the required knowledge will not have been consulted; the searcher is, instead, likely to only consult a narrow selection of credible suppliers (Perloff, 1993; O'Reilly, Chatman, and Anderson, 1987). Based on the above review, enterprise micro-blogging may allow for a different type of search strategy.

Recent research has shown that social network tools such as enterprise microblogs may assist its users in looking for the information they need in a swift manner. By conducting social search queries and asking colleagues present in the network for help, as opposed to semantically searching for information in the organizations' databases, employees can obtain access to information that they would not have had without the tool, thereby avoiding the problem of having access to excessive information (Evans and Chi, 2008; Evans, Kairam, and Piroli, 2010). By promoting easy access to people outside the internal network, the corporate micro-blog makes it possible for its users, while they search for information, to contact people outside of their internal network. When searching with the help of a traditional search engine, the user has to cross a linguistic barrier. In other words, he/she has to formulate the query, so that the keywords match the words used by the website that contains the "correct" information. The intriguing aspect of social search is that it avoids using the search engine as a mediator of information. Linguistic barriers become less important in social search. As pointed out by Evans and Chi (2008), the user can use their natural language, and the person who holds the pertinent information is able to interpret the situation or the described problem without having to depend on being "prompted" by the correct keywords.

Exploratory research has shown that when people openly ask their peers about a topic, they tend to solicit subjective meanings such as opinions or recommendations (Evans, Kairam, and Piroli, 2010). Some of the benefits identified among users in particular organizations clearly illustrate that they solicit such information from their peers. Users argue that the enterprise micro-blog is a useful tool that could be used to reach out and ask questions. Jackson, Yates, and Orlikowski (2007) found that it could help users receive and provide feedback, while the employees in an organization using Twitter, amongst other things, highlighted that they are able seek help and share the knowledge with others in an efficient Thus. social networks. especially manner. microblogging environments are perceived to enable different actions relating to social search depending on the intention and capabilities of the users. This phenomenon can be explained through the affordance lens of social networks.

2.3. Affordance Lens

The concept of affordance was introduced in ecopsychology. "The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill.." (Gibson, 1977, pg. 67). Gibson (1977) differentiates the abstract physical properties of an environment from the perception of what it affords. It is related to the "values" and "meaning" of things in the environment that can be directly perceived (Gibson, 1977). For example, a seat (i.e., a surface of support that is knee-high above the ground) may have the affordance, for an adult", of being a place to sit on; or, for a child, of being nothing but a place to go

underneath. Again, "knee-high" for an adult is different from that of a child. Thus, a seat designed for a child has no affordance (except that of being an object to bump into) for an adult. The concept of affordance was introduced in information system by Hutchby (2001) who described affordance as the "functional and relational aspects which frame, while not determining the possibilities of agentic action in relation to an object" (pg. 444). While conceptualizing social media affordances, Majchrzak et al (2013) define technology affordance "as the mutuality of actor intentions and technology capabilities that provide the potential for a particular action" (pg. 39). Various categories of affordances of social media have been highlighted by researchers (Majchrzak, Faraj, Kane, and Azad, 2013; Sun, Zhou, Jeyaraj, Shang, and Hu, 2019; Sun, Fang, and Zhang, 2021). Majchrzak et. al. (2013) highlighted four categories affordances of social media, which are metavoicing, triggered attending, networked-informed associating, and generative role-taking. Sun et. al. (2019) identifies reviewability, editability, association, notified attention, and pervasiveness as the affordances of enterprise social media platforms. Leidner, Gonzalez, and Koch (2018) offer an affordance perspective of social includes media which networking, organizational visibility, information gathering, and innovation. There is some overlap among the affordances of social media suggested in the literature, such as triggered attending and network informed associating. We include these affordances in our study. In addition, we also include visibility which we consider to be relevant in the context of enterprise social media.

2.4. Research Model

Our research model is based on the concept of social media affordance. Affordances present functional aspects of employees' use of microblogging platforms. Affordances offer enabling as well as constraining factors in individual's attempt to perform an activity (Hutchby, 2001). We propose that the affordance of enterprise microblogging, for an employee, of being able to share information effectively. In answering what effective information sharing means in microblogging environment, we dig into what the environment affords to its users. It offers a platform to get alerted for and hence engaged in online conversations on a topic of interest; it affords the employees in taking up community-sustaining roles to maintain dialogues. We attempt to assess how these affordances influence adherence to enterprise micro-blogging for sharing information. Based on the affordance lens of social media, we propose our

theoretical model that depicts the effects of affordances on adherence to enterprise micro-blogging for sharing information. (Figure 1Table 1 defines the constructs presented in the model.

Table 1 Construct Definition

Construct	Definition
Adherence to Micro- blogging	The level of commitment to using technology. One must embrace the technology and continue to use it actively (Ozkan, 2011)
Network Informed Associating	Engaging in online knowledge conversations informed by relational and content ties (Majchrzak, Faraj, Kane, and Azad, 2013)
Triggered Attendance	Becoming involved in an online conversation when alerted to a change in content, one shows interest in following. It is triggered by the automated alert of such a change (Majchrzak, Faraj, Kane, and Azad, 2013)
Generative Role-Taking	Participating in online knowledge conversations by enacting patterned actions and taking on community-nurturing roles to sustain a productive dialogue among participants. (Faraj, Jarvenpaa, and Majchrzak 2011)
Recognition	Without some level of recognition, participants resorting to online knowledge sharing will begin to withdraw from actively posting

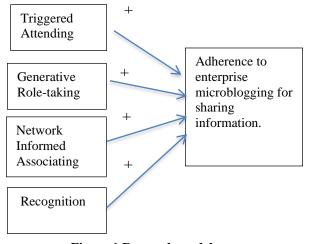


Figure 1 Research model

2.5 Hypotheses

Platforms such as Twitter, from the public perspective, and Yammer or Chatter, from the enterprise perspective, have enabled people to rapidly share pertinent information and allowed them to form groups or follow individuals whom they are interested in hearing from (Anderson and Mohan, 2011). Social media enables users to form groups with the people whom they know as well as with those who are connected with others in the group. Social media enables users to see how people are connected to content and contents are connected to other contents (Majchrzak et. al, 2013). This provides the ability to remain engaged in conversation to share information and knowledge via enterprise micro-blogging platform. Hence:

H1: Network informed associating will have a positive influence on adherence to enterprise microblogging for sharing information.

The affordance of Triggered Attendance provides technical assistance to knowledge workers, who can engage in the ongoing online knowledge conversation in the workplace. Triggered Attendance can foster productive knowledge conversations by motivating more people to engage because of the minimal effort that is involved (Hsu and Liao, 2014). People thrive on recognition as it makes their value in the organization known to others. With little or no recognition, there is little incentive to share one's knowledge (Kankanhalli, Tan, and Wei, 2005).

H2: Triggered attendance will have a positive influence on adherence to enterprise micro-blogging for sharing information.

The affordance of Generative Role-taking paves a way in which employees can engage in the ongoing online knowledge conversation in their workplaces. Generative Role-taking can foster productive conversations by reflectively reframing them to remove the temporary barriers that emerge during the conversation (Treem and Leonardi, 2012). Hence:

H3: Generative Role-taking will have a positive influence on adherence to enterprise micro-blogging for sharing information.

People thrive on recognition as it makes their value in the organization known to others. With little or no recognition, there is little incentive to share one's knowledge (Kankanhalli, Tan, and Wei, 2005). Prior research highlights how organizational visibility motivates new hires to engage in enterprise social media-based events (Leidner et. al, 2018). Hence:

H4: Recognition has a positive influence on adherence to enterprise micro-blogging for sharing information.

3. Research Method

The data collected and analyzed in this study was from a large multi-national tech industry company. Randomly selected members of the technical sales staff were invited to participate in this study via a webbased survey instrument. The survey instrument was used to measure individuals' propensity to leverage micro-blogs as a source of organizational and technical knowledge.

With the technical savviness of the participants, a web-based survey seemed the ideal instrument to gather the required data. Web-based surveys are, by their nature, easier to administer, more accurate, and have an equal or a higher quality than their print-based varieties (Sills and Song, 2002). Participants were presented the surveys in a convenient, easily accessible format that they can complete in privacy and in their own timeframe, which are all advantages of the web-based format (Hewson and Stewart, 2016). With the participants being employed full-time as engineers by this major tech company, some of the disadvantages of web-based surveys could be avoided. A major concern with web-based surveys is selfselection bias (Sills & Song, 2002). In this study the participants were selected from a pool of pre-qualified individuals rather than the selection of random people from the internet.

3.1. Operationalization of Variables

We designed a survey instrument (six-point Likert scale) to measure the constructs of this study. Table 2 presents the constructs together with source of indicator items.

Indicator Items				
Construct	Number of Indicator Items	Source		
Adherence to enterprise microblogging	6	Hsu and Liao, 2014; Evans, Kairam, and Picolli, 2010		
Triggered attendance	3	Papadopoulos, Stamati, and Nopparuch, 2013		
Network informed associating	3	Majchrzak, Faraj, Kane and Azad, 2013		
Generative role-taking	3	Ehrlich and Shami, 2010		
Recognition	3	Bartol and Srivastava, 2002		

Table 2. Constructs and Source of Indicator Items

4. Results

4.1. Reliability and Validity

We calculated reliability of the instrument using Cronbach's Alpha coefficient for each of the variables in the study. An alpha of 0.870 was found for adherence to micro-blogging, 0.805 for triggered attending, 0.769 for network informed associating, 0.782 for generative role-taking, and 0.791 for recognition. This analysis established that all the items were reliable as the estimates for reliability for all constructs were above the recommended threshold of 0.7 (Nunally, 1978).

In order to validate the constructs, we conducted exploratory factor analysis using Varimax orthogonal rotation for the instrument. The factor analysis of six items representing adherence to micro-blogging loaded on a single factor and resulted in factor loadings ranging from 0.694 to 0. 843. The factor analysis of three items representing triggered attending loaded on a single factor and resulted in factor loadings ranging from 0.674 to 0.935. The factor analysis of three items representing generative role taking loaded on a single factor and resulted in factor loadings ranging from 0.770 to 0.907. The factor analysis of three items representing network informed associating loaded on a single factor and resulted in factor loadings ranging from 0.724 to 0.884. The factor analysis of three items representing recognition loaded on a single factor and resulted in factor loadings ranging from 0.805 to 0.907.

4.2. Hypotheses Testing

Given the multivariate context of the relationships among the study variables reflected in the theoretical model (figure 1), structural equation modeling with maximum likelihood estimation technique (using the CALIS Procedure in SAS) rather than the traditional multiple regression analyses was considered as the most appropriate technique to test the hypotheses developed earlier (Jörskog and Sörbom 1996).

Table 4 provides the estimates of the structural coefficients for each path and their significance levels. The overall statistical support for the model is encouraging (SRMR = 0.08). For maximum-likelihood fit indices, cutoff values greater than 0.95 for CFI and around 0.08 for SRMR is considered a good fit (Hu and Bentler, 1999). In this study, SRMR indicates a good fit for our model. However, CFI was not satisfactory. Hu and Bentler (1998) suggest that

SRMR is most sensitive to simple model misspecification while CFI is moderately sensitive to simple model misspecification. Our research model is simple and the SRMR in our study was acceptable. Thus, we can use the findings of this study as indications of support for hypotheses. As reported in Table 3, three hypotheses were supported in this study. We found that social media affordances of triggered attendance, generative role taking, and recognition influence users' adherence to enterprise microblogging. Network informed associating does seem to afford adherence to microblogging.

In order to ensure that findings were valid for each hypothesized relationship, we also conducted multiple regression analysis. The results were like what we found in SEM.

 Table 3. Results of the Structural Equation

 Model (Standardized Effect)

Research	Structural	Т	Hypothe	
Model	Path	Value	sis	
Relationship	Coefficient	(Sig.	Supporte	
		Level)	d	
H1: Network	0.102	1.399	No	
informed		(0.162		
associating ->)		
Adherence to				
enterprise				
micro-blogging				
H2: Triggered	0.306	5.483	Yes	
attendance ->		(<0.00		
Adherence to		01)		
enterprise				
micro-blogging				
H3: Generative	0.296	2.955	Yes	
role taking ->		(<0.00		
Adherence to		3)		
enterprise				
micro-blogging				
H4: Recognition	0.216	2.763	Yes	
-> Adherence to		(0.006		
enterprise)		
micro-blogging				
Model Fit:				
SRMR: 0.08; Comp	parative Fit Ind	ex: 0.81		

5. Discussion

As hypothesized, triggered attendance, generative role taking, and recognition had positive influences on adherence to microblogging for sharing information. If employees use the technology to alert them to new content, they are more likely to stay engaged and contribute to the existing discussion in the online

platform. When it came to generative role taking, there was support for the hypothesis that employees would follow through and take ownership of the discussion questions to provide answers to the community. We also found that employees who share information frequently in enterprise social media to enhance organizational visibility and recognition tend to adhere to microblogging platforms. However, we did not find support for hypothesis 1. Networked informed associating does not seem to ensure adherence to enterprise microblogging. Majchrzak, Faraj, Kane, and Azad (2013) suggest that network informed associating causes increased social capital, which in turn facilitates knowledge exchange. In view of this, we revised our research model to test if networked informed associating influences generative role taking. Other paths in the model remained unchanged. We find support for all paths in the revised model and the fit parameters remain unchanged. The result of the revised model is presented in table 5. Overall, we found that the affordances in enterprise social media do engage employees in information sharing. Thus, we propose a revised research model which is presented in figure 2.

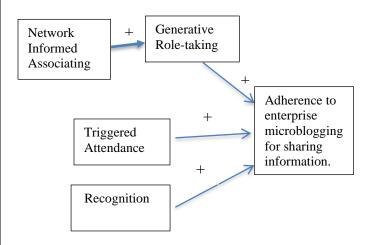


Figure 2 Revised Research model

This survey was conducted at a time when these tools were under a heightened use case due to the COVID-19 lockdowns when all the employees were working from the home, whereas in a normal situation, groups would be in their regional offices on a regular basis having some face-to-face interactions that might not have been transposed into computer mediated communications (CMC). So, in a sense CMCs were really put to the test. Employees had been on a 10week work from home directive with no admittance to the offices they normally visited. According to the CMC system, administrators' traffic and activity was up by more than 23% during this time period. This research supports the finding in previous studies, that enterprise social media are perceived as useful tools for sharing information. This research focused more narrowly on a highly technical population who were key functionaries in the sales organization of a major player in the technology industry.

	Structural	T	, i i i i i i i i i i i i i i i i i i i		
Research Model	Structural	-	Hypothesis		
	Path	Value	Supported		
Relationship	Coeff.	(Sig.			
		Level)			
H1 (Revised):	0.740	21.31	Yes		
Network		3			
informed		(<0.00			
associating ->		01)			
Generative role					
taking					
H2: Triggered	0.340	6.975	Yes		
attendance ->		(<0.00			
Adherence to		01)			
enterprise		-			
micro-blogging					
for sharing					
information					
H3: Generative	0.241	3.690	Yes		
role taking ->		(<0.00			
Adherence to		02)			
enterprise		-			
micro-blogging					
for sharing					
information					
H4:	0.247	4.045	Yes		
Recognition ->		(<0.00			
Adherence to		01)			
enterprise		,			
micro-blogging					
for sharing					
information					
Model Fit:					
SRMR: 0.08; Comparative Fit Index: 0.80					
Shink 0.00, comparative rit muck 0.00					

Table 4. Results of the Structural Equation
Model – Revised (Standardized Effect)

6. Implications

Previous research had examined some of the wider influences of computer mediated communication in less focused use cases for knowledge sharing (Evans & Chi, 2008; Evans, Kairam, & Piroli, 2010). This research furthers those studies by focusing on a group of subjects who require timely knowledge to perform their jobs effectively, which directly impacts the organization's profitability. The study reveals that employees perceive that enterprise microblogging environment enables them to share information and knowledge.

The findings of the study imply that employees engage in microblogging platforms to balance between time and attention at work. Automated alerts enable employees to engage in conversation only when they are notified that a topic of interest is being discussed. Employees do not have to monitor the contents of the online discussion forums on a continuous basis. As conversations in microblogging are intended as peer-to-peer, employees can step in and take up a role voluntarily to facilitate the dialogue. Our findings imply that knowing how people are connected to other people and/or to contents may not contribute directly to the use of microblogging platforms. However, it does influence the tendency of the employees to contribute voluntarily to facilitate a dialogue on topics of interest and make the conversations productive.

7. Limitations

Although all the survey participants were from a single organization, one of the world's largest technology companies, having participants from across the globe to participate in the survey still makes organizational culture an important factor that could affect the research model. This has both advantages and disadvantages. With a globally diverse population you could eliminate a particular region's cultural influence as a major factor. On the other hand, large organizations have their own internal culture, which could influence results (Fang, Wade, Delios, and Beamish, 2013). With a recent mega merger in this organization, this research can be considered as taking two organizations into account, with regard to participants. Future research should attempt to include other organizations, to avoid the effect of corporate cultural bias.

Web-based surveys have their limitations in terms of often low and selective participation (Cresswell, 1998). Survey fraud is also a common issue with webbased surveys, where the respondents answer just for the sake of the incentive. This was not the case in this survey, as it was an internal organizational survey sponsored by management.

Another limitation of the study was that it focused on pre-sales engineering only and not post-sales (support) or on the product engineers themselves. In looking at the overall engineering organization as opposed to a single area, future research might be able to examine how the different organizations can work together to share information that is valuable to all.

8. Conclusions

The findings of this research indicate that the employees find CMCs to be valuable tools for sharing and locating information. Overall, they use CMCs daily to post and retrieve information and are building active online communities that contribute to the overall success of the organization. The CMCs themselves have features that encourage participation through alerts and mobile apps. Also, good oldfashioned pride in one's work and recognition from peers drives participation as well. A virtual thumbs up or a clapping hands emoji seems to go a long way.

8.0. References

- Anderson, S., and Mohan, K. (2011). Social networking in knowledge management. *IT Professional*, 13(4), 24– 28.
- Bartol, K. M. and Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of leadership & organizational studies*, 9(1), 64-76.
- Blake, B. P., Agarwal, N., Wigand, R. T., and Wood, J. D. (2010, April). Twitter Quo Vadis: Is Twitter bitter or are tweets sweet?. In 2010 Seventh International Conference on Information Technology: New Generations (pp. 1257-1260). IEEE.
- Curran, K., O'Hara, K., & O'Brien, S. (2011). The role of Twitter in the world of business. *International Journal* of Business Data Communications and Networking (IJBDCN), 7(3), 1-15.
- Creswell, J. (1998). Qualitative inquiry and research design: Choosing among 5 traditions. Sage Publications, Inc.
- Donnelly, R. (2019). Aligning knowledge sharing interventions with the promotion of firm success: The need for SHRM to balance tensions and challenges. *Journal of Business Research*, 94, 344-352.
- Ehrlich, K., & Shami, N.S. (2010, May). Microblogging inside and outside the workplace. In *ICWSM*.
- Eppler, M.J. and Mengis, J. (2004). The concept of information overload: a review of literature from organization science, accounting, marketing, MIS, and related disciplines. *The Information Society*, 20(5), 325–44.
- Evans, B.M. and Chi, E.H. (2008). Towards a model of understanding social search. Proceedings of the ACM 2008 conference on Computer supported cooperative work - CSCW '08 (p. 485). New York, USA: ACM Press.
- Evans, R. D., Gao, J. X., Martin, N., and Simmonds, C. (2015). Exploring the benefits of using Enterprise 2.0 tools to facilitate collaboration during product development. International *Journal of Product Lifecycle Management*, 8(3), 233-252.
- Evans, B.M., Kairam, S., and Pirolli, P. (2010). Do your friends make you smarter? An analysis of social

strategies in online information seeking. *Information Processing & Management*, 46(6), 679–92.

- Fang, Y., Wade, M., Delios, A., and Beamish, P.W. (2013). An exploration of multinational enterprise knowledge resources and foreign subsidiary performance. *Journal* of World Business, 48(1), 30–38.
- Faraj, S., Jarvenpaa, S. L., and Majchrzak, A. (2011). Knowledge collaboration in online communities. Organization science, 22(5), 1224-1239.
- Finholt, T., & Sproull, L.S. (1990). Electronic groups at work. Organization Science, 1(1), 41–64.
- Gibson, J. J. (1977). The theory of affordances. *Hilldale*, *USA*, *1*(2), 67-82.
- Grace, J.H., Zhao, D., and Boyd, D. (2010). Microblogging. Proceedings from 28th of the international conference extended abstracts on Human factors in computing systems - CHI EA '10 (p. 4517). New York, U.S.A.: ACM Press.
- Grant, R.M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal*, 17(WINTER), 109–22. Retrieved from http://cat.inist.fr/?aModele=afficheN&cpsidt=2592599
- Haas, M.R. (2006). Knowledge gathering, team capabilities, and project performance in challenging work environments. *Management Science*, 52(8), 1170–84.
- Hewson, C. and Stewart, D.W. (2016). Internet research methods. John Wiley & Sons, Ltd.
- Hildreth, P., Kimble, C., and Wright, P. (2000). Communities of practice in the distributed international environment. *Journal of Knowledge Management*, 4(1), 27–38.
- Hsu, C.L. and Liao, Y.C. (2014). Exploring the linkages between perceived information accessibility and microblog stickiness: the moderating role of a sense of community. *Information & Management*, 51(7), 833– 44.
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological methods*, 3(4), 424.
- Hu, L.T. and Bentler, P. (1999)., Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives, *Structural Equation Modeling*, vol. 6, no. 1, pp. 1-55.
- Hutchby, I. (2001). Technologies, texts and affordances. *Sociology*, *35*(2), 441-456.
- Jackson, A., Yates, J., and Orlikowski, W. (2007). Corporate Blogging: Building community through persistent digital talk. Proceeding 2007 40th Annual Hawaii International Conference on System Sciences (HICSS'07) (pp. 80–80). IEEE.
- Java, A., Song, X., Finin, T., and Tseng, B. (2007). Why we twitter. Proceedings from the 9th WebKDD and 1st SNA-KDD 2007 workshop on Web mining and social network analysis - WebKDD/SNA-KDD '07 (pp. 56– 65). New York, U.S.A.: ACM Press.
- Jöreskog, K. G. and Sörbom, D. (1996). *LISREL 8: User's reference guide*. Scientific Software International.
- Kankanhalli, A., Tan, C.Y., and Wei, K.K. (2005). Contributing knowledge to electronic repositories: an empirical investigation. MIS Quarterly, 29(1).

- Karunaratna, C., and Lü, K. (2011). HOW TO MAKE PROFIT THROUGH MICRO BLOGGING? THE CASE OF DELL ON TWITTER. Journal of Marketing and Operations Management Research, 255.
- Kwahk, K. Y. and Park, D. H. (2016). The effects of network sharing on knowledge-sharing activities and job performance in enterprise social media environments. *Computers in Human Behavior*, 55, 826-839.
- Leidner, D. E., Gonzalez, E., and Koch, H. (2020). An affordance perspective of enterprise social media and organizational socialization. In *Strategic Information Management* (pp. 364-402). Routledge.
- Majchrzak, A., Cherbakov, L., and Ives, B. (2009). Social networking within corporations. *MIS Quarterly Executive*, 8(2), 103-108.
- Majchrzak, A., Faraj, S., Kane, G.C., and Azad, B. (2013). The contradictory influence of social media affordances on online communal knowledge sharing. *Journal of Computer-Mediated Communication*, 19(1), 38–55
- Nunnally, J.C. (1978)., *Psychometric Theory*. McGraw-Hill Book Company, New York, 1978
- O'Reilly, C. A., Chatman, J. A., and Anderson, J. C. (1987). Merging organizational communications and decision making: the acquisition and use of information in organizations. *Handbook of Organizational Communication. Beverly Hills, CA: Sage.*
- Ozkan, N. (2011). CEO compensation and firm performance: An empirical investigation of UK panel data. *European Financial Management*, 17(2), 260-285.
- Papadopoulos, T., Stamati, T., & Nopparuch, P. (2013). Exploring the determinants of knowledge sharing via employee weblogs. *International Journal of Information Management*, 33(1), 133–46.
- Perloff, R. M. (1993). Third-person effect research 1983– 1992: A review and synthesis. *International Journal of Public Opinion Research*, 5(2), 167-184.
- Sills, S.J. and Song, C. (2002). Innovations in survey research: an application of web-based surveys. *Social science computer review*, 20(1), 22–30.
- Song, T., Huang, J., Tan, Y., & Yu, Y. (2019). Using userand marketer-generated content for box office revenue prediction: Differences between microblogging and third-party platforms. *Information Systems Research*, 30(1), 191-203.
- Sun, Y., Fang, S., and Zhang, Z. J. (2021). Impression management strategies on enterprise social media platforms: An affordance perspective. *International Journal of Information Management*, 60, 102359.
- Sun, Y., Zhou, X., Jeyaraj, A., Shang, R. A., & Hu, F. (2019). The impact of enterprise social media platforms on knowledge sharing: An affordance lens perspective *Journal of Enterprise Information Management*.
- Treem, J.W. and Leonardi, P.M. (2012). Social media use in organizations: exploring the affordances of visibility, editability, persistence, and association. *Communication yearbook*, 36, 143–89.
- Townsend, S. (2012). What are you working on? *eLearn*, 2012(1), 1.

- Volkoff, O. and Strong, D. M. (2013). Critical realism and affordances: Theorizing IT-associated organizational change processes. *MIS Quarterly*, 819-834.
- Yifang, H., & Zhiqiang, L. (2020). Research on Enterprise Microblog Marketing Strategy under the Background of Mobile Internet. Academic Journal of Business & Management, 2(7), 41-44.
- Zhang, J., Qu, Y., and Hansen, D. (2010). User acceptance of micro-blogging in the enterprise. In *Proceedings of the International AAAI Conference on Web and Social Media* (Vol. 4, No. 1, pp. 371-374).