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Xiran Zhong

Auckland University of Technology, zhongxiran@hotmail.com

Felix B. Tan

Excelsia College - Sydney, felix.tan@excelsia.edu.au

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EMPLOYEES' INTENTION TO CONTINUE USING ORGANIZATIONAL MICROBLOGS: A USES & GRATIFICATION PERSPECTIVE

Xiran Zhong
Auckland University of Technology
New Zealand
zhongxiran@hotmail.com

Felix B Tan
Excelsia College - Sydney
Australia
felix.tan@excelsia.edu.au

Abstract

There is a growing stream of research into organizational microblogging in recent years. Whilst the extant literature has mainly focused on technology-related factors to examine initial microblogging use, few studies have investigated user needs and gratifications and even less on the post initial adoption stage. Hence, the purpose of this research is to explore the factors that affect employees' intention to continue using organizational microblogs, specifically Yammer, by employing the uses and gratifications model. The results of the survey of 111 participants using PLS-SEM methodology suggest that cognitive gratification, affective gratification, personal integrative gratification, social integrative gratification and entertainment gratification positively affect employees' intention to continue using organizational microblogs. This research therefore extends our understanding of what drives employees to continue using organizational microblogs, especially with various ways to increase employees' ongoing use of their organizations' microblogging platform.

Keywords

Organizational Microblogging; Uses and Gratifications Theory; Continuous Use

1. Introduction

Organizational microblogging is when users post less than 140 characters of information and is only accessible within the organization. It is a tool for making organizations more productive through the exchange of short, simple and frequent messages. This new broadcast medium is gaining popularity in the business world. Organizational microblogging helps knowledge sharing and is a faster mode of communication with short posts and hence time required to post. Being a fast communication channel, employees tend to post more frequently (Akshay et al., 2007). One such microblogging platform is Yammer which is currently widely used in organizations. It facilitates the organizing of meetings, organizational wide discussions, group announcements, and internal campaigns and activities (Zhang et al., 2010). It also improves work efficiency as people do not 'reply to emails very fast' hence impeding project speed (Vanderkam, 2016).

Although the use of general microblogging (e.g. Twitter) in business has been studied in the last few years, research into the use of organizational microblogging (e.g. Yammer) has lagged (Curran et al., 2011; Zhao et al., 2011). However, by the time these studies were done, the population of Yammer almost tripled such that the findings were limited to the early stage of Yammer adoption (Zhang et al., 2010). Despite the popularity of microblogging, there remain little research on the adoption of organizational microblogging and even less on the post initial adoption (continuous

use) stage. Hence, this study explores employees' intention to continue using this medium in organizations.

Further, both organizational and general microblogging literature to date have largely focused on technology/organizational-related enablers of use especially during initial adoption stage of the technology (Zhang et al., 2010; Zhao et al., 2011). Limiting to technology/organizational-related enablers at initial adoption restricts our understanding of why individuals continue to engage with organizational microblogging. As such, investigating user needs and how microblogging gratifies these needs will contribute new knowledge to the field. Consequently, this study employs the Uses and Gratifications Theory (UGT) (Mondi et al., 2008) as the underlying theoretical framework as it has been widely used to examine individual-related drivers of technology use. Unlike the Technology Acceptance Model, the emphasis of the UGT is on users choice of media to gratify specific needs, as such it is a much more motivational perspective is taken.

Yammer, which is the most widely adopted organizational microblogging platform has been selected as the specific study context. Specifically, the study will focus on determining the extent to which employee needs predict their intention to continue using Yammer to gratify these needs. The five needs in the UGT model will be examined: cognitive needs, personal integrative needs, social integrative needs, entertainment needs, and affective needs.

Therefore this study's overarching research question is: "What are the needs and gratifications that influence employees' intention to continue using organizational microblogging?".

2. Literature Review and Research Model

2.1. Prior Research on Organizational Microblogging Adoption

Early research into microblogging in organizations explored the potential impact of general microblogging at work and how microblogging supports informal communication in organizational context (Zhao et al., 2011; Riemer and Richter, 2010; Lovejoy and Saxton 2012). These studies developed an understanding of why people use microblogging and explored how the characteristics of their microblogging behaviours enable informal communication. Although, these studies investigated microblogging used within the work environment, they were based on general microblogging, i.e. Twitter rather than organizational microblogging, for instance, Yammer which has been designed for enterprise use as opposed to general use.

The first research on organizational microblogging (i.e. Yammer) adoption was conducted by Zhang et al. (2010), which was a case study about the early adoption and use of microblogging in a Fortune 500 company. The research used several data sources, including five months of empirical microblogging data, HR records, user demographic information, online survey, and targeted interviews. As the first detailed case study about Yammer, this research covered a broad range of issues including: microblogging use in an enterprise; similarity to the use of Twitter in social media; the kinds of users and their behaviours; the value of and the barriers to microblogging adoption. The results indicated that users vary in posting and posting behaviours.

2.2. Uses and Gratifications Theory (UGT)

Uses and Gratifications theory (UGT) was first developed in the research of effectiveness of radio communication in 1940s (Huang, 2008). U&G contends that media cannot influence an individual

unless that person has use for the media (Mondi et al., 2008). It is largely used to identify the needs that motivate the use of particular platform to gratify those needs (Ko. et al., 2005). In recent decades, U&G has been applied in research into online media such as e-mail (Dimmick et al., 2000), Internet use (Chen & Wells, 1999) and e-shopping (Huang, 2008).

According to Mondi et al. (2008), users expect and seek the media to gratify their (i) Cognitive needs, (ii) Affective needs, (iii) Personal Integrative needs, (iv) Social Integrative needs, and (v) Entertainment needs. Cognitive needs refer to needs to use the media in order to acquire information, knowledge and understanding to be creative and critical thinker. Affective needs refer to needs to use the media in order to seek emotional fulfilment in the process of knowledge construction. Personal Integrative needs refer to needs to seek creditability as self-regulated user. Social Integrative needs refer to needs to use the media that is able to assist them to interact with other fellow users. Entertainment needs refer to needs to use the media to seek fun and enjoyment.

2.3. Research Model

Based on the literature review, motivation has been identified as the main factor that affects the intention to use organizational microblogging. Hence base on the concepts of UGT, a research model was developed that accounts for the motivations of users adopting organizational microblogging. Figure 1 represents the proposed research model.

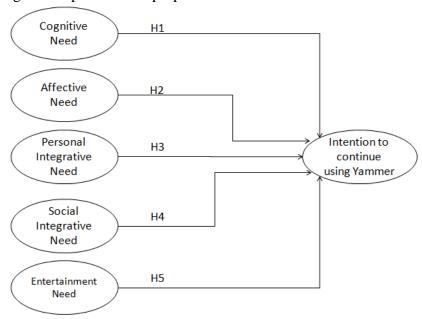


Figure 1: Research Model

2.4. Research Hypotheses

The hypotheses for this study are based on the UGT framework. In total five hypotheses are suggested and presented as follows:

a. Cognitive need refers to a user's gratification to use Yammer to acquire data, information and understanding in order to be creative and critical thinkers as they construct new knowledge (Mondi et al., 2008). According to Maddox (1998), the most important reason for people to go online is to

gather various kinds of information. Subsequently, Haq (2009) found that the quality of information on a company's website shows a direct influence on customers' perceptions of the company and products and services of the company. Yammer users are more likely to use Yammer if it is able to provide them with wide range of information with high quality and accuracy. Hence based on this we propose the following hypothesis:

Hypothesis 1: Yammer users' cognitive need has a positive influence on their intention to use Yammer

b. Affective need refers to a user's gratification to seek aesthetical value and emotional fulfilment (Mondi et al., 2008). Yammer users are more likely to use Yammer if it is able to provide them with personal fulfilment and a pleasant experience. Hence based on this we propose the following hypothesis:

Hypothesis 2: Yammer users' affective need has a positive influence on their intention to use Yammer.

c. Personal integrative need refers to a user's gratification to use Yammer in personal learning process (Mondi et al., 2008). Yammer users are more likely to use Yammer if it is able to provide them with platforms to internalise new interpretation, new knowledge, and new meanings as independent thinker and self-regulated users. Hence based on this we propose the following hypothesis:

Hypothesis 3: Yammer users' personal integrative need has a positive influence on their intention to use Yammer.

d. According to Zhao et al. (2011), the value of general microblogging at work environment lies in its informal communication ability that provides the platform to better communicate and collaborate with each other. Social integrative need refers to a user's gratification to interact and collaborate with other users (Mondi et al., 2008). Yammer users are more likely to use Yammer if it is able to provide them with platforms to interact and collaborate with other users. Hence based on this we propose the following hypothesis:

Hypothesis 4: Yammer users' social integrative need has a positive influence on their intention to use Yammer.

e. Entertainment need refers to A user's perception of the congruence between their expectation of Yammer use and its actual performance (Mondi et al., 2008). According to McQuail (1983), the value of media entertainment lies in its ability to fulfil users' needs for escapism, hedonistic pleasure, aesthetic enjoyment, and/or emotional release. Yammer users are more likely to use Yammer if it is able to provide them with fun and enjoyment. Hence based on this we propose the following hypothesis:

Hypothesis 5: Yammer users' entertainment need has a positive influence on their intention to use Yammer.

f. Control Variables

To better understand how the motivational aspects shape the way Yammer users' intention to use Yammer, we introduce demographic factors (age and gender) and user's Yammer experiences as control variables. Gender has shown to have an impact on IT adoption studies (Gefen, 2003). Age shows adopters of Yammer are relatively tech-savvy and are more open to new media (Zhang et al., 2010). Zhang et al. (2010) suggests that Yammer participation patterns are similar to many other communities where a relatively small number of users contribute to the majority of contents and usage.

3. Methodology

3.1. Instrument Design

Online questionnaires were employed in this study. This allowed us to target a wider audience and is very cost-effective. The measurement items were adopted from related literature (Mondi et al., 2008; Hoehle et al., 2011) and contextualised, as such the instrument is not newly developed. It was formulated as a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), which asks respondents to indicate the extent to which they agree or disagree with a series of statements about their needs and how these influence their intention to continue using Yammer.

3.2. Data Collection

As the target population of this study are employees who are Yammer users, the survey questionnaire was conducted in online Yammer user groups. Two online sources were approached ensuring that all respondents were existing Yammer users and have experience with using Yammer. An announcement was posted on the Yammer User Group discussion board of a large company that has deployed Yammer enterprise wide and Yammer Facebook page inviting interested participants. In the announcement, the objective of the research, expected benefits and what's expected from them were included. A link was also provided which directed respondents to the anonymous questionnaires on SurveyMonkey.

3.3. Data Analysis

Partial Least Square Structural Equation Modelling (PLS-SEM) was selected to analyse the dataset and test the hypotheses. According to Hair et al. (2011), PLS-SEM is a modelling approach which aims at maximizing the explained variance of dependent variables, and it is preferred for theory testing and for dealing with empirical research challenges including smaller sample sizes. Data was analysed using SPSS and Smart Partial Least Square (SmartPLS) software. The reasons to choose SmartPLS is that, first it is free for academic use. Second it gives the advantage of minimum demands in terms of sample size, measurement scales and residual distributions. Third, it also adds advantages of being more robust against data structural problems. SmartPLS was used to test the structural model and validate the study's measurements. We used the bootstrapping technique with 5,000 resamples to determine the significance levels for loadings, weights and path coefficients (Hair et al., 2011).

4. Results

4.1. Demographics of the Participants

In total, there are 111 valid responses were received from the two online sources mentioned above. The sample has a relatively equal split between male and female with 57 (51.82%) male and 53 (48.18%) female. The majority of participants were aged between 26-35 (44.55%), followed by participants aged between 36-45 (27.27%) and under 25 years made up 13.54% of the responses. There were only 14.55% participants aged over 46. Furthermore, most participants have used Yammer for 2-5 years (58.7%). While 34.9% of participants have used Yammer for less than one year, and 6.4% of participants have used Yammer for more than five years. Lastly, 35.78% participants used Yammer less than once per week, 49.54% used Yammer once to five times per week, and 14.7% participants adopted Yammer more than five times per week.

4.2. Measurement Model Validation

In this study, all nine variables are modelled as reflective constructs. To evaluate the measurement model, we followed Hair's (2011) Rules of Thumb for Model Evaluation. There were four type of validity and reliability tests followed to validate the reflective measurements: internal consistency reliability, indicator reliability, convergent validity and discriminant validity.

According to Hair et al. (2011), in the internal consistency reliability test composite reliability should be higher than 0.7. The composite reliability values ranged from 0.8916 to 0.9469, which are all above 0.7, implying that the study's measures are reliable. Indicator reliability was tested with a focus on each indicator's absolute standardized loading, which should be higher than 0.7. The values of loadings ranged from 0.8116 to 0.9361.

For convergent validity, we focused on examining the average variance extracted (AVE). According to Hair et al. (2011), an AVE above 0.5 indicates a sufficient degree of convergent validity, which means the variable explains more than half the variance of indicators. The values of AVE ranged from 0.7332 to 0.8807, which are all above the suggested threshold. For the assessment of discriminant validity, two measurements were applied – the Fornell-Larcker criterion and cross loading (Fornell&Larcker, 1981; Hair et al., 2011). Hence for discriminant validity, the square root of indicator's AVE should be greater than the values of any other indicator and the indicator's loading with its associated construct should be higher than its loading with any other constructs. Based on the results, the cross loading of each indicator is higher than all of the other loading. In addition, the results of Fornell-Larcker criterion suggest that the square root of AVE for each construct is higher than the off-diagonal correlation with any other constructs. Hence we conclude that the discriminant validity is well established.

4.3 Structural Model

Figure 2, shows the results of the structural model. The model explains a substantial amount of variance in the dependent variable (Intention to continue using Yammer) with R² of 0.732 that is, 73.2% of the variance can be explained by gratifications. This implies that employees' intention to adopt Yammer are significantly influenced by their gratifications. The results therefore provide empirical validation for this study's research model. Table 1 presents the results of the test of the study's research hypotheses.

Hypothesis	Path Coefficient	T-Statistics	R2	Supported?
H1: CG > INTENTION	0.280**	2.5	0.732	Yes
H2: AG > INTENTION	0.379***	3.55		Yes
H3: PIG > INTENTION	0.045*	2.27		Yes
H4: SIG > INTENTION	0.118***	3.67		Yes
H5: EG > INTENTION	0.193*	1.97		Yes
* p <0.05: ** p <0.01: *** p <0.001				

Table 1: Results of Hypotheses

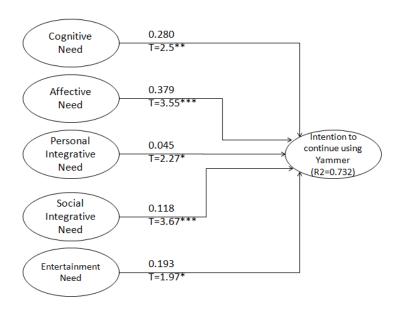


Figure 2: Results of Structural Model

5. Discussion

Based on the UGT, we contend that employees' intention to continue using organisational microblogging are influenced by cognitive, affective, personal integrative, social integrative and entertainment needs. Yammer was the organisational microblogging context examined.

The findings indicate that employee's intention to continue using Yammer is formed via the attainment of five needs / gratifications through microblogging: cognitive gratification, affective gratification, entertainment gratification, social integrative gratification and personal integrative gratification. This implies that employees are more likely to continue using Yammer when they think it can provide them with entertainment and enjoyment, personal fulfilment and a pleasant experience, the platform to interact and collaborate with other users and when they think Yammer can provide them the platform to form new interpretation, new knowledge, and new meanings as autonomous thinkers and self-reliant users. This finding is consistent with Zhao et al. (2011) in that people's intend to use microblogging because it can provide better platform for information sharing and learning due to its mobility and broadcast nature, and thus makes it easier for employees to obtain useful and trustworthy information by themselves.

The findings suggest that affective gratification is the most significant motivational determinant that builds intention to continue using Yammer. The path coefficient is 0.379 and t-statistic (see Table 1) is 3.55, in comparison the next most significant element, cognitive gratification with path coefficient = 0.280 and t-statistic = 2.5. This indicates that it is most likely employees will use Yammer if they think the platform can provide them with personal fulfillment and a pleasant experience when continuing to use it. The finding is consistent with Huy and Shipiloy's [23] study which found that for social media to succeed it is important for the platform to build up emotional capital and positive feeling. The results found that cognitive gratification was the next significant determinant influencing employees' decision and intention to continue using Yammer. This means employees' gratifications to use Yammer to acquire accurate and quality data and information in order to be innovative thinkers significantly influence their intention.

Social integrative gratification is another significant element influencing employees' intention to continue using Yammer by the ability of the platform to be able to support their social interaction needs. This finding is consistent with Zhao et al. (2011) that people's intention to use microblogging because the platform can provide with them common ground and the feeling of intimacy and connectedness, and hence provide a variety of benefit supporting social collaboration. In addition, entertainment gratification is a significant contributing factor that influences employees decision to continue using Yammer. This finding is in line with Hunt et al.'s (2012) study on the influence of computer-mediated communication apprehension on motives for social networking site use. Hunt et al.'s study found that entertainment is a powerful predictor on social networking site users' usage. This finding highlights that fun and entertainment are crucial for users to believe that they can have fun and be joyful when using Yammer.

Furthermore, personal integrative gratification has also been found to sway employees' decision whether to continue using Yammer. This means that Yammer should be able to provide the platform to seek information and knowledge as independent thinkers. The finding is consistent with Zhao et al. (2011) in that the mobility and broadcast nature of microblogging makes it easier and cheaper to gain useful information. Essentially, people intend to continue using microblogging at work environment in order to seek work relevant information and expertise.

6. Implications and Limitation of the study

6.1. Theoretical Implications

Theoretically, the main contribution of this study is that it extends the understanding of what motivates employees to continue using Yammer. Based on the results, employees will continue to use this organisational microblogging medium to gratify their cognitive need, affective need, social integrative need, entertainment need and personal integrative need. To date, little research has examined employees' intention to continue using organisational microblogging from a motivational (i.e. gratification of user needs) perspective. All 5 needs as espoused in the UGT have been found to be significant in determining employees' intention to continue using their organisation's microblogging platform. Interestingly, the results reveal that both affective and cognitive needs stand out as being more important and thereby playing a more influencing role.

6.2. Practical Implications

In practical term, this study can be helpful for organisations to motivate employees to continue using Yammer. Based on the results, we found that cognitive gratification, affective gratification, social integrative gratification, entertainment gratification and personal integrative gratification were the significant factors influencing Yammer users' continuous use intention. This indicates that organizational microblogging designers and practitioners should incorporate relevant technology and services to meet those gratifications so as to increase employees intention to continuously use Yammer. For example, employees' continuous use intention can be increased by designing the platform such that it allows employees: (1) to customise and personalise the platform so it can support different behaviours and preferences in order to meet their affective gratifications; (2) to communicate and work in groups more effectively to meet their social integrative gratifications, which can be done by embedding a variety of communication platforms (e.g., internal communication, Facebook and etc.); (3) to focus on the functions and conventions to make sure it is entertaining and interesting in order to meet more employees' entertainment gratifications;

(4) to more easily seek information and gain deep level of understanding in order to meet their personal integrative gratifications, for example, more interactive activities that increase employees' self-efficacy.

6.3. Limitations and Future Research

There are few limitations in this study. Firstly, there is a possibility of common method bias as this study was based on a self-reported survey instrument. Even though it has been tested and found that it was not a significant issue, there is always a potential problem related to common method bias (Vance et al., 2008). Hence readers should bear this in mind when interpreting the results. Secondly, data was primarily collected through a large company that deployed Yammer enterprise wide, which means most of the respondents were employees of a single large company. Therefore, this study was limited to this company's employees' behaviour towards Yammer. Hence, readers should exercise caution to the generalisability of the results (Vance et al., 2008).

Finally, Yammer was the only organizational microblogging platform studied. Study results would be strengthened by a wider range of organization microblogging platforms (e.g., Salesforce.com's Chatter, Tibbr and etc.) and wider range of respondents. Additionally, future studies could focus on one specific demographic subgroup. As Hargittai (2008) suggests, the choice of social networking site that an individual use is often based on their background and cultural influences.

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