Dual-Adoption Behaviors of Social Media in Workplace: The views from UGT and TAM

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Abstract: Social media has become an emerging trend in the work of enterprises and organizations, but few studies have explored the specific behavior and its influence mechanism of social media adoption in the workplace. This paper divides the social media use behavior in the work context into two types: reinforced use and varied use. Based on the technology acceptance model, this paper combines TAM and motivation theory to build a research model on the motivation of using social media in work and its influence on the use behavior. Through empirical analysis of questionnaire data in practical work, the research results show that the three motivations positively influence adoption intention through the mediation of perceived usefulness, and the intention is positively correlated with the two behaviors.

Keyword: social media**,** reinforced use, varied use, TAM, workplace

1. INTRODUCTION

As a medium of information dissemination, social media has become an important way to search and understand information in the new media era. The application field of social media has shifted from entertainment, shopping, social life to workplace, such as document processing, information acquisition, decision making and experience sharing. That means, the use of social media has been transferred to the workplace. But there is little research on the social media use at workplace. The Internet resources undertaken by social media can be rationally utilized by enterprise organizations to the greatest extent and become the magic weapon for efficient work of employees and even the management. However, few empirical studies have investigated the influence mechanism between the motivation, intention of employees and their behaviors. Considering the particularity of workplace, the social media usage includes two different behaviors, reinforced use (RIF) and varied use (VRD). Social media is a special information technology in nature. Therefore, in order to research the users' behaviors of social media, technology acceptance model (TAM) is an appropriate choice to build the research framework of two different usage behaviors. Although the applications of TAM are various in different areas, the research of the antecedent of perceived usefulness (PU) in TAM is not sufficient. Hence, based on the use and gratification theory, the antecedent variables of PU are discussed from the perspective of use motivation in workplace.

Before the task starts, due to the joint action of external pressure and internal needs, employees could form use motivation under the guidance of the existing social support and self-efficacy of individuals or organizations. Driven by this motivation, the detailed use behavior and the relevant behavior results will be emerged. In this paper, we choose personal relevance demands, information seeking demands and work salience demands as the motivations to use social media for work, and assume these three motivations would affect perceived usefulness and then affect the intention to use social media. The influence of intention on various usage behaviors is also discussed. According to the Uses and Gratifications theory and TAM, intention will be transformed into usage

behavior: reinforced use under daily work and varied use under innovative work. Structural equation model (SEM) method was used to analyze the data.

2. THEORETICAL BACKGROUND AND HYPOTHESES

2.1 Two different usage behaviors: Reinforced Use and Varied Use

Using social media in workplace could be divided into two different types according to users' using characteristics: reinforced use and varied use. The concept and division of reinforced use and varied use stems from two types of strategies for social media providers to maintain community stability: leveraging existing capabilities while remaining innovative [1, 2].When the original function is not to meet the needs of users, change will be occurred in the using process. The previous researches on the variety-seeking and reinforcement orientations mainly focus on the consumer behavior such as brand switching, product usage, and promotional preferences[3].At present, the research on reinforced use and varied use has been extended to the users behavior of community participation members[4]. In this paper, enterprises are understood as communities under the participation of users of entities, so these two using behaviors will both exist when users adopt social media in work environment.

Reinforced use refers to the use of social media in repetitive, conventional and enhanced ways, such as using QQ to receive instant work messages, the enterprise will import the employee information into the Ding Talk organizational structure, employees can use the platform to clock in and out of work and view the work content, this behavior is the reinforced use of the basic functions of the Ding Talk. While varied use refers to the use of various new functions of social media or social media in innovative ways, such as TIM for online document editing and multi-person video dialogue[3]. Ding Talk released a new version of the voice is improved, the employees can use this new feature for voice dialogue with your boss and colleagues, let users can manually control voice broadcast schedule, to avoid the didn't hear clearly without having to start all over again, you can always locate to want to listen to the location, employees use this feature to use office is diversity, because this behavior has broken the Ding Talk the original thinking of the limitations of using basic function, to use the new function to reduce unnecessary trouble in the work. In the past, most enterprises communicated orders and internal information through emails. After the popularity of WeChat, WeChat was not only a private and timely communication tool, but also a comprehensive online office channel between enterprises. Each department of the enterprise will set up its own WeChat group to convey some trivial work information, vote and other work activities, or carry out online group building games. These are all manifestations of varied use. The two kinds of behaviors are divided according to the use characteristics of employees. Reinforced use is a behavior generated by daily office processing, but varied use is a behavior generated by innovative work. Only by measuring employees' behavior separately, can we better study the influence mechanism of social media use intention on it. .At present, few studies focus on the formation mechanism of social media usage behavior in the context of work. Therefore, this paper divides the use of social media in the workplace into reinforced use and varied use, which corresponding to the daily work processing and innovative research and development under the working situation respectively, and tries to explain the formation mechanisms of such two behaviors.

When using a social media tool in workplace at the beginning, the employees often use the simple and the familiar functions to finish their work repeatedly. This using manner is the reinforced use of social media, which often involves the daily use of individuals, lead to more efficient work with the increase of proficiency. However, after the accumulation of social media's reinforced use to a certain degree that the basic function could not meet the requirement of the users, the employees would look for the new function and chase for the new using manner. And then the varied use is occurred.

2.2 The impacts of PU and using intention on usage behavior

TAM uses belief-attention-intention-behavior as a causal chain relationship to explain and predict the process by which individuals accept a new information system or technology. Social media is the product of the information technology, and its essence is also a new type of information technology. The research background of this article - work situation, is the application of this new information technology to a new situation. Therefore, it is very appropriate to choose the TAM as the theoretical framework of this paper.

Based on TAM, the stronger the recipient's intention to adopt social media, the more willingness to spend time and energy to contact or frequently use, it is more possible to result in the adoption behavior. Roca and Gagné proposed an extended TAM, Perceived usefulness as extrinsic motivation has been proved to have positive influence on e-learning continuance intention [5]. The intention to continue using directly affects the behavior of mobile social media users, and the perceived usefulness after use has a significant positive impact on the intention to continue using [6].Reinforced use and varied use are two different forms of user adoption behaviors, and both of them could be affected by the intention use of social media. Based on the above discussion, this paper proposes the following hypothesis:

Hypothesis 1a (H1a): User's intention to use social media in the workplace (AI) has a positive and significant impact on its reinforced use behavior.

Hypothesis 1b (H1b): User's intention to use social media in the workplace (AI) has a positive and significant impact on its varied use behavior.

PU is an important variable in TAM which is defined as the user's belief that social media is useful for them to improve work efficiency and quality. And lots of papers confirm the significant relationship between PU and the intention of use. The greater the perceived usefulness is, the more positive the attitude will be, and the stronger the intention will be. Santhanam and Hartono studied the motivation of using the Internet and found that "local Internet users use the Internet mainly because they think the Internet is more useful to their work tasks [7]. Koh and Saad concluded that both PU and PE strongly influence intention to use computers in the workplace [8]. Wu and Lu compared the use of two different systems: utilitarian systems and hedonic systems ,They found that in the context of utilitarian systems, perceived usefulness as an extrinsic motivator is more important than intrisic motivators[9].Most of the systems in the work situation are the utilitarian systems，hence we believes that perceived usefulness as the motivation will be the most important variable affecting intent of using social media.

Hypothesis 2(H2): perceived usefulness has a positive and significant impact on the user's intention to use social media in a workplace.

2.3 Uses and gratifications perspectives of using motivation

PU is an important variable when users apply a new technology or a tool. But it pays little attention to research the antecedents of PU. In order to cover the research gap, we choose the standpoint from the uses and gratifications theory (UGT) which indicates that the reason users are willing to use social media at workplace is because of the requirements fulfillment. UGT is a famous theory which is often used to research the behavior of media use. By applying uses and gratifications theory, Whiting and Williams helps organizations to understand the reasons consumers use social media and the gratifications they get from it [10]. UGT could explain users' basic needs for using social media, which provides a research framework to investigate users' motivations and the antecedents of PU when using social media at workplace. Lee et al. proved that relevance, salience, knowledge, empathy and emotional connectedness all promote individuals' willingness to engage in supportive behaviors to a social media issue campaign [11]. Considering the working task accomplishment, personal demands fulfillment and the information seeking nature of using social media, we choose the gratification of

personal relevant demands, information seeking demands, and work salience demand as the motivation of using social media to work. When the users consider that these three motivations could be satisfied by using social media, they may think the social media is useful when working.

Personal relevance generally refers to the extent to which an issue or a topic has important personal consequences and/or intrinsic importance[12]. Some studies found that the more relevant the problem is to the individual, the closer they feel to the problem[13]. Therefore, the smaller the psychological distance between social media and work, the stronger the cognition of social media and the higher the degree of support. In the working area, when people subjectively judge that work is highly related to individuals, previous experience of using social media will believe that work can be better completed with the help of social media and users' perceived usefulness can be aroused. Therefore, the following hypothesis is proposed:

Hypothesis 3a (H3a): Personal relevance demands (PR) have a positive impact on perceived usefulness

Current study revealed that most social media tools were often used as media sharing and information seeking platforms[14].Kim et al. studied that most social media platforms are used for the purpose of information seeking[15]. People can use social media tools to search or view content generated by others or to ask questions about specific topics to find useful information or solutions. In the work situation, the requirements for the quantity, accuracy and timeliness of information needs of users far exceed the living and entertainment situations. Social media, because of the providing a fast and accurate way to get information, could stimulate the user's perceived usefulness. Based on the above analysis, this paper proposes the following assumptions:

Hypothesis 3b (H3b): Information seeking demands (IS) has a positive impact on perceived usefulness.

Work salience is defined as the urgency and importance of a task. When a problem is considered urgent and critical, people will experience a more purposeful cognitive process[16].The deep cognitive process helps users clearly grasp the essence of tasks, and make it easier to distinguish which parts of the work could be completed through social media tools. At this time, previous experience of using social media to help them solve problems will accelerate the transformation of pressure into the formation of users' perceived usefulness. Scholars have confirmed that the salience of social problems will increase the cognitive proximity of social media users to the problem, thus increasing the intention of participation [17]. Therefore, this paper considers that the work salience demands will increase the formation of perceived usefulness through cognitive level, and thus increase the use intention. Based on the above discussion, the following hypotheses are proposed:

Hypothesis 3c (H3c): Work salience (WS) demands has a positive impact on perceived usefulness.

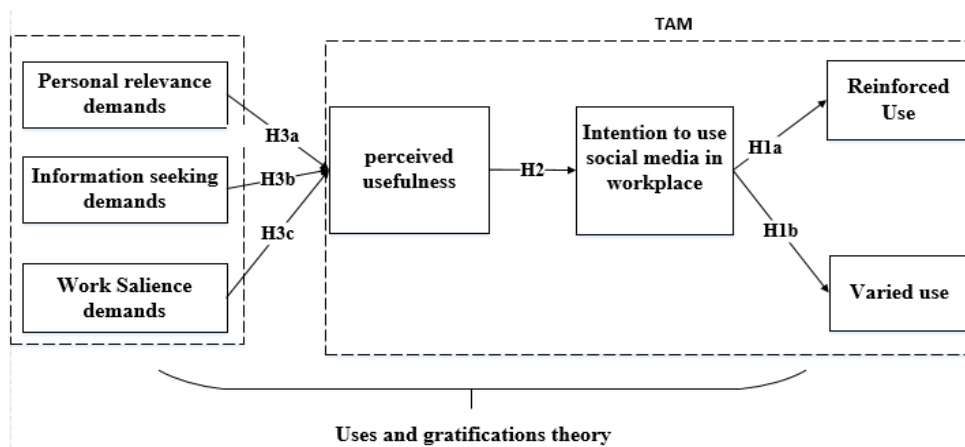The detailed research model is shown in figure 1 as following:

Figure 1. The detailed research model

3. RESEARCH METHODOLOGY

3.1 Sample

In order to more accurately analyze the adoption behavior and use motivation of social media in the work situation, before the questionnaire was issued, we invited 50 qualified users to fill in the questionnaire, and asked them to give corresponding Suggestions on the sentences and understanding contents. After receiving the corresponding Suggestions, we modified the questionnaire, and then submitted the modified questionnaire to the corresponding domestic teachers for review. We revised and improved the preliminary questionnaire measurement indicators.

In this paper, questionnaires were issued through the questionnaire star platform. With the help of the enterprise version service on the platform, questionnaires were invited through WeChat and QQ and other mainstream media channels. Most of our clients are experienced users who have used social media for work .A total of 560 questionnaires were collected and valid questionnaires were selected according to the following criteria :(1) sample users would use social media in the work environment; (2) complete the questionnaire; (3) the data are not the same in a wide range (more than 80%). After eliminating invalid questionnaires, 535 valid questionnaires were obtained, with an effective rate of 95.3%. The sample feature information is shown in table 1.

3.2 Instrument development

We developed the scales based on the extant literature whenever possible to ensure the content validity and used seven-point Likert scales, whose anchors ranged from one (strongly disagree) to seven (strongly agree), to measure the constructs.

We used the constructs of Pan et al. to measure the structural reinforced use, varied use [3] and adapted the items of personal relevance demands (PR) and work salience demands (WS) from Lee et al.[11]. And we used the items from Gallego et al. to value the information seeking demands (IS)[18]. PU and intention to use social media in workplace (AI) were measured by the constructs from Zhao et al. [19].

Table 1 Sample demographic characteristics

Sample characteristics	Classification	Number of samples	Proportion (%)
Gender	Male	265	49.5
	Female	270	50.5
Age	18~25	280	52.3
	25~30	92	17.2
	30~35	75	14
	35~40	75	14
	≥40	13	2.4
Education	High school and below	1	0.2
	College degree	33	6.2
	Bachelor's degree	268	50.1
	Postgraduate degree	175	32.7
	Doctor degree or higher	58	10.8
Jobs	unemployed	30	5.6
	Civil servants	31	5.8
	Enterprise staff	299	55.9

Sample characteristics	Classification	Number of samples	Proportion (%)
	University scientific research institutes	114	21.3
	Other	61	11.4
Experience with social media	<1 year	34	6.4
	1~3	116	21.7
	3~5	167	31.2
	≥5 years	218	40.7
Experience using social media at work	<1 year	149	27.9
	1~3	150	28
	3~5	121	22.6
	≥5 years	115	21.5
Average frequency of social media use in the context of work	At least once a day	378	70.7
	2-3 days a week	100	18.7
	Three to four days a week	38	7.1
	Once a week	5	0.9
	Less than once a week	14	2.6

4. RESEARCH RESULTS

4.1 Analysis of reliability and validity

In the data analysis process, SMART PLS 2.0（Partial Least Squares）and SPSS 19.0 software were used to analyze and process the data, aiming at verifying the research model. The research model test includes two parts: measurement model test and structural model test. The measurement model mainly evaluates the reliability and validity of the questionnaire, and the structural model mainly tests the hypothesis relationship proposed in this study through path analysis and T test. This paper uses confirmatory factor analysis to test the reliability and validity of the model. The KMO value of the overall model is 0.962, so further factor analysis can be performed. The results are shown in Table 2. From the data in the table, it can be seen that the Cronbach's alpha coefficient (ie, alpha value) and the composite reliability (CR value) of the measure of each variable were over 0.7, indicating that each latent variable has good reliability[20]. At the same time, the AVE value of each factor is 0.5, which indicates that the measurement index of the factor has good convergence validity[20]. It can also be seen from the data in Table 2 that the AVE square root (diagonal black data) of all factors is greater than the correlation coefficient with other factors, so the data has good discriminant validity.

Table 2 . Results of reliability and validity analysis

Factor	CR	AVE	Alpha	The correlation coefficient						
				IS	VRD	RIF	AI	PU	WS	PR
IS	0.87	0.68	0.77	0.82						
VRD	0.87	0.69	0.77	0.41	0.83					
RIF	0.84	0.64	0.76	0.48	0.58	0.80				
AI	0.86	0.67	0.72	0.62	0.41	0.45	0.82			
PU	0.84	0.64	0.82	0.61	0.37	0.50	0.64	0.80		
WS	0.88	0.65	0.82	0.64	0.50	0.52	0.55	0.53	0.81	
PR	0.84	0.64	0.72	0.55	0.55	0.47	0.58	0.50	0.61	0.80

4.2 Hypothesis testing results

Figure 2 shows the hypothesis test results of the full model, which includes the relationship between three motivations and perceived usefulness, the influence of perceived usefulness on usage intention, and the relationship between the intention to use social media at work and the two usage behaviors. All seven of these assumptions are significant and supported. Three motives explained 65.8% of perceived usefulness, 63.9% of intention is explained, and 44.9% of reinforced use, 61.2% of varied use are explained.
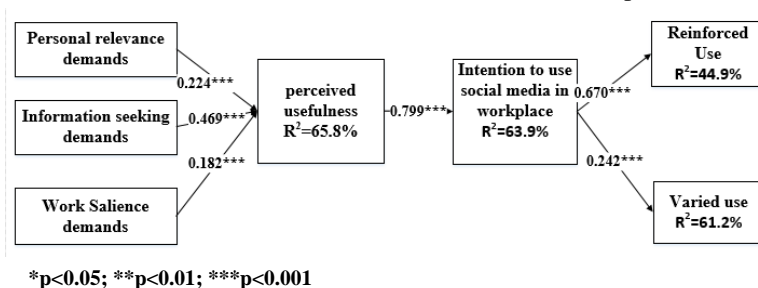

*p<0.05; **p<0.01; ***p<0.001

Figure 2. Full model test result

5. DISCUSSION

This paper investigates the two different use behaviors when adopting social media at work, analyzes why employees are to use social media to accomplish their working tasks based on TAM, and researches the antecedents of PU from the view of UGT.

Hypothesis 3a, hypothesis 3b and hypothesis 3c show the significant relationship between personal relevance demands, information seeking demands, work salience demands and perceived usefulness. If the tasks formulated by the team or enterprise can stimulate users' motivation from these three aspects, they will improve the perceived usefulness of social media. We explore which is the driving force at the individual level or the task level. From the results, we can see that Information seeking demands is more valuable than the other two important driving forces, which is to prove that users use social media mostly for information acquisition in the workplace. This provides a perspective for enterprise teams to choose the right type of social media when choosing social media for their work. The significance of H2 indicates that employees will be driven by external and internal incentives within the enterprise or the team, and how to drive them to use social media in the workplace. This paper provides a good reference for organizers to improve their intentions by improving their perceived usefulness of social media. The significance of H1a and H1b indicates that the higher the intention to use social media in the workplace, the more likely it is to promote specific intensive use and variable use behaviors. High efficiency work in real life cannot be separated from the promotion of intention to use social media, so the intention to use social media can influence two kinds of behaviors. And they are two use behaviors when use social media at work. Reinforced Use is the user's handling of routine use, and varied use is the handling of innovative work. Managers should pay attention to the behavior of users using social media in the work situation. They should match the tasks and employees according to the nature of the tasks and the characteristics of the employees, in order to maximize advantages of different employees and the working results.

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