
The Managers' Social Media Usage Behavior: An Application of the Theory of Planned Behavior

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Abstract

Given the widespread popularity of social media, such as Facebook and Twitter, social media is considered as a core business communication tool like the mobile phone and email are today. Hence, it is time to be aware of the importance of its impact at work, and how to use it effectively in order to develop the organization and promote business performance. Most of the researches conducted on using social media focused primarily on the individuals' motivations and the organizations' benefits. In fact, minimal amount of research has been conducted regarding the managers' behavior towards using social media in their internal communication. Therefore, this research applied the theory of planned behavior (TPB) to identify and examine the factors that promote or discourage the behavior of managers regarding the usage of social media in the internal organizational context. The theoretical model was validated in a single cross-sectional empirical study of 204 participants. The data was analyzed using structural equation modeling to test the five hypotheses derived from the TPB on the sector level. Of the 5 hypotheses, only 4 were supported. The results add further evidence that the TPB can be applied in the field of organizational research in order to understand the factors that influence and determine the managers' social media usage behavior.

Keywords: Social media, Theory of Planned Behavior, Managers

1. Introduction

With the onset of the technological revolution, today's business environment experienced many radical changes. Perhaps, the most tremendous of changes in the context of business environment was brought about by the social media which is changing the way we exchange knowledge, opinions, and ideas. Martin et al. (2013) argue that social media represents a fundamental shift in the way we want to communicate. Organizations are increasingly recognizing that social media has the potential to enhance the ways in which employees work, learn, communicate, and lead (CIPD, 2012).

Empirically, many researchers were curious to discover the features of social media. McKinsey (2009) reports that 65% of corporations have adopted social media for several different purposes, up from 53% in 2007. In fact, 39% of companies report that they used it to foster collaboration while 34% to enhance company culture. In addition, 53% of companies intend to increase future investment in social media technologies over the next three years, while 26% plan to make a comparable investment and only 6% of companies plan to decrease it.

Moreover, a number of studies suggest that there is a clear demand from employees for social media to be used more as an internal channel in order to support employee voice and corporate communications. Wade (2013) reports that UK employees want more communication with senior managers via social media channels: 42% of people would be happy to interact with their managers on Facebook and 20% would like to tweet the head of department or senior managers. Similarly, Watson (2012) shows that nearly fifth of the UK employees use internal social media tools in a work context at least once a week (for example blogs, discussion forums or internal social networking platforms). Gose (2013) argues that it is not unreasonable to propose that by 2020 many organizations will be wholly reliant on their internal social network (whether that be a 'Facebook-like' or something different). Hence, the social media stands to become a core business communication tool as the mobile phone and email are today.

Yet, most of the researches conducted on social media focused primarily on the individuals' motivations for using social media

(e.g., Hollenbeck and Kaikati, 2012) and the organizations' use of social media (e.g., Lovejoy et al., 2012). In fact, minimal amount of research has been conducted regarding the managers' behavior towards using social media in their internal communication. Although today's managers may have acknowledged the importance of incorporating social media platforms in networking and communication, particularly in complex global organizations, few actually put any effort into implementing, assessing and supporting these connections (CIPD, 2012).

In this context, it could be argued that it is time for both academics and practitioners to be aware of the importance of social media's impact at work, and think about how to take the advantage of using it effectively in order to develop the organization and promote business performance.

The objective of this research study is to identify and examine the factors that promote or discourage the behavior of managers regarding the usage of social media in the internal organizational context. Drawing from multiple streams of research including social psychology, organizational behavior, and so forth, this research develops an integrated theoretical model and unveils three sets of critical factors: psychological, organizational, and technological that are believed to affect the usage of social media for work-related purposes. Therefore, this study attempts to fill the research gap by incorporating the Theory of Planned Behavior (TPB) (Ajzen, 1991) in order to understand the behavior of the managers towards using social media in the context of Egyptian organizations. The choice of a developing country (Egypt) is justified, since most researches have been conducted in the context of developed countries where circumstances are quite different from those of the developing ones.

2. Literature Review

Social Media

The Internet has transformed many aspects of our lives, at home and work. Over the last decade, social media has been at the heart of this, as a people-powered communication, by allowing

people to connect and interact with each other through creating and sharing information.

Historically, the first generation of web development, Web 1.0, is predominantly defined as an era where Internet usage is primarily for gathering information created by closed systems (Alexander and Levine, 2008). It was based on a fairly primitive technology and involved the creation of a read-only web content, which can be viewed or downloaded by Internet users with no ability to alter (Pavlik, 2007). When adding the "social" characteristic to all dominating Internet communication technologies, the Web 2.0 era, a term coined by Dale Dougherty in 2004, began (Madden and Fox, 2006). This era has democratized control of Web content by enabling Internet users to create their own, share it and alter the existing one. It enabled them to do more than passively receive information (McAfee, 2009). Web 2.0 technologies are a group of online media tools that allow people to interact easily by sharing ideas, opinions, knowledge, and experiences through messages, comments, room chats, and photos. Therefore, the main aim of Web 2.0 was socialization (O'reilly, 2005).

Social media, which lacks a formal definition, is generally described as a preferable term to Web 2.0 according to McCann (2008), since it captures the emphasis on interaction, community, collaboration, and sharing.

Recently, social media has become one of the most important communication means and has attracted the attention of over one billion people throughout the world (Murray and Waller, 2007). For many people, social media is directly associated with public Social Networking Sites (SNS) which, according to McCorvey (2010), are categorized into three basic types: (1) 'free-for-all' social websites, such as Facebook; (2) professional websites, like LinkedIn; and (3) industry-specific websites such as ResearchGate. Nielsen (2009) reports that the time spent on SNS is growing at more than three times the rate of overall Internet growth.

In the light of the business world, social media has evolved from a personal interest to a professional one. It cannot be ignored anymore in the workplace. Thus, many corporations are increasingly experimenting with the use of social media to

improve business operations (Swartz, 2008). Business use of social media doubled from 11% to 22% between 2008 and 2009 (Sarrel, 2010). Part of the reason social media is fast becoming established as a business communication tool is that it is supported by developments in mobile technology, along with being relatively an easy way to communicate (CIPD, 2014). Figure 1 presents a broader picture of the expected benefits of using social media at work.

Figure 1.
Benefits of Using Social Media at Work



Source: CIPD (2014)

For the sake of this study, more attention will be paid to the internal corporate communication. According to Wilkinson and Fay (2011), the benefits of internal corporate communication fall into three areas: (1) improved employee attitudes, behaviors, loyalty and more co-operative employment relations; (2) improved organizational effectiveness, including increases in productivity and individual performance; and (3) improved systems by tapping into employees' ideas, knowledge and experience and promoting greater diffusion of information.

Social media is, however, changing the patterns of communication within organizations. Communication is no longer a monologue, but rather a two-way, or in some cases, multi-directional conversation, over which the organization has

less control, between people who could not normally collaborate with each other.

Social media which is an open, discursive and dynamic channel, draws employees into online discussions about their organizations through posting work-related messages via personal social media platforms such as Twitter, Facebook, or LinkedIn. It provides more engaging ways for employees to express their opinions about various work-related issues. It also prevents employees from giving feedback in isolation and provides a space where employees, from all levels of the organization, can shout out their comments (CIPD, 2013).

As social media has matured, the ability of the employees to voice their opinions and influence perceptions have also grown. In turn, this has also raised people's expectations of how they should be heard inside organizations. In this way, it is not just the upper levels that get to listen to employee voice, but everyone in the organization.

On the other hand, Silverman and Newhouse (2012) identify four main interrelated barriers to social media adoption in organizations: (1) a lack of knowledge and understanding about the wider uses of social media and what can be done in practical terms to facilitate implementation; (2) fear and apprehension caused by uncertainty, an inability to control the communication process and dealing with the increased transparency that comes with transitioning power away from managers to employees; (3) absence of a well-grounded business case or rationale for implementing social technologies and difficulty in measuring return on investment; and (4) senior management lacking skills and awareness about social media that stifle their view of tangible organisational benefits, prevent leaders from driving change and make them dismissive and distrusting.

In this context, several theories can be used to understand the managers' behavior towards using social media in the internal corporate communication. This research applies the TPB because it is a comprehensive theory in understanding human behavior (Cheng et al., 2006). Furthermore, the accumulated evidence shows that TPB model was proven successful in predicting and explaining human behavior across a wide variety of domains such as social psychology (e.g., Chang, 1998),

marketing (e.g., Shim et al., 2001), and information systems (e.g., Taylor and Todd, 1995). Recently, TPB was applied to social media area: Baker and White (2010) employed it to predict adolescents' use of social networking; and Cameron (2010) applied it to the use of social networking by college students.

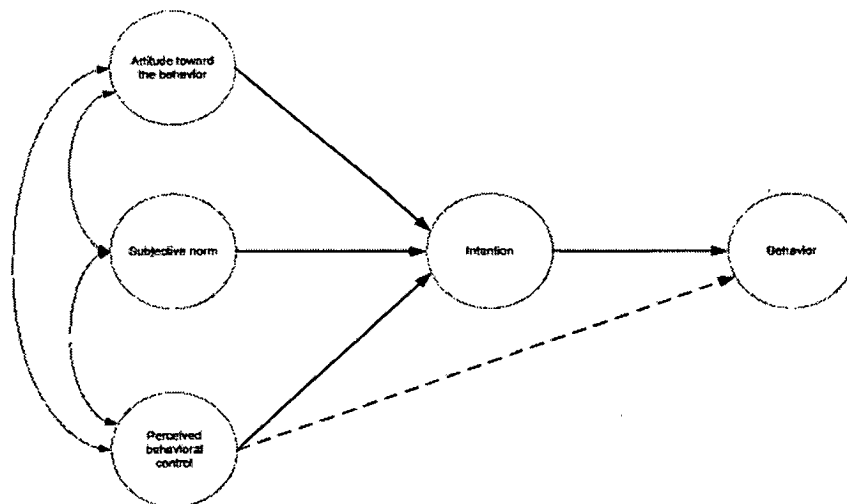
Theoretical Framework

Theory of Planned Behavior (TPB)

The TPB of Ajzen (1991) is perhaps the most influential and popular social-psychological model for understanding human behavior in specific contexts (Ajzen, 2001). The TPB is an extension of the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980). Both the TRA and TPB assume that behavior is determined by the individual's intention to perform the behavior in question. According to Ajzen (1991, p. 181), "intentions are indications of how hard people are willing to try and how much of an effort they are planning to exert, in order to perform the behavior". Hence, intention is determined by two independent variables, the individual's attitude towards the behavior and the subjective norms. The attitude towards the behavior refers to a person's general feelings of favorableness or unfavorableness about performing that behavior. The subjective norms, the second factor of the intention, presents the person's perception of the social pressures to perform or not to perform the behavior. The extension was a result of a finding that behavior appeared to be not 100% voluntary and under control. This resulted in the introduction of a new construct to the TPB: Perceived Behavioral Control (PBC). PBC reflects an individual's perceptions of how easy or difficult the performance of the behavior is likely to be.

As shown in Figure 2, Ajzen's model proposes a particular causal flow from a set of exogenous variables (attitude, subjective norms, and perceived behavioral control) through an intervening variable (intention) to an outcome variable (behavior).

Figure 2.
Theory of Planned Behavior



Source: Ajzen (1991)

Based on the TPB, five hypotheses can be stated as follows:

H1: There is a significant and positive relationship between the attitude towards social media and the behavioral intention to use social media for internal communications.

H2: There is a significant and positive relationship between the subjective norms regarding social media and the behavioral intention to use social media for internal communications.

H3: There is a significant and positive relationship between the perceived behavioral control and the behavioral intention to use social media for internal communications.

H4: There is a significant and positive relationship between the behavioral intention to use social media and the behavior towards using social media for internal communications.

H5: There is a significant and positive relationship between the perceived behavioral control and the behavior towards using social media for internal communications.

3. Research Method

Following Sekaran (2003), whenever possible and appropriate, the measures used in this questionnaire were adapted from existing scales drawn from management literature. This research

measured five constructs: (1) attitude towards using social media; (2) subjective norms; (3) perceived behavioral control; (4) behavioral intention; and (5) behavior of using social media. The measures used to operationalize constructs were generated based upon previously validated instruments (Ajzen, 1991; Taylor and Todd, 1995). According to Bontis (1999), Likert-type scale, which relies on individual perceptions, is very useful in measuring organizational characteristics. Therefore, a seven-point Likert-type scale is used to operationalize the constructs of this study. An 18-statement was used in the study survey ranging from 1 = strongly disagree to 7 = strongly agree, hence it was an ordinal scale.

In general, three characteristics are desirable in the findings of a research study: simplicity, accuracy, and generalizability. Thorngate (1976) and Weick (1979) argue that it is not possible for a single social behavioral theory to be simple, accurate, and generalizable at the same time. They point out that in most cases, a research study can only achieve two of the three characteristics. Therefore, to be as simple and accurate as possible, this research selects the samples from a single sector. Even though selecting a single sector might limit the generalizability of the findings, but it improves the internal validity of the study (Conant et al., 1990).

The Egyptian mobile network sector was selected for the purpose of this study for three reasons: (1) this sector is more accessible to the researcher; (2) this sector is very mature, which enhances the reliability of data; and (3) employees in this sector are familiar with English language, therefore, the participants have complete comprehension of the questionnaire used in this study.

Rousseau (1985) argues that ideally, organization-level phenomena should be observed at the organizational-level. However, an organization, as an entity, cannot respond to surveys. Therefore, it is acceptable to measure the organizational-level concept by evaluating individual perceptions (Bontis, 1999). This method is used widely since organizations are typically a reflection of their top management. Thus, in order to get a broader and richer perspective, the

respondents were randomly selected from three managerial levels: senior, middle, and supervisor across all functional areas.

4. Results and Data Analysis

Response Rate and Non-Response Bias

The response rate for the survey analyzed here is 68%, 300 surveys were distributed and 204 valid surveys returned. A further 9 surveys were discarded since too many items were substantially incomplete. A preliminary analysis showed that the responses in these 9 surveys were not substantially different from those in the valid ones. McMillan and Schumacher (1989, p. 296) argue that in surveys that attain a 60% return rate or better, the non-respondents will probably not affect the results appreciably. So, it is reasonable to assume that any non-response bias is small enough to be ignored.

Descriptive Statistics

Table 1 provides the respondents' demographic profile. This profile reveals that the males represent about 59 percent of the sample. The distribution of the participants according to their job function is as follows: 40% work in human resources, 19% in finance, 35% in marketing, and 6% in other departments. The majority of the respondents hold supervisory roles representing 66 percent of the total respondents. Among the social media platforms, Facebook was the most popular and frequently used in the Egyptian mobile network sector with 97% of the respondents.

Table 1.
Demographic Profile

Variable	Category	Frequency	Percent
Gender	Male	120	59%
	Female	84	41%
Job Function	Human Resource	81	40%
	Finance	39	19%
	Marketing	72	35%
	Other	12	6%
Managerial Level	Senior	15	7%
	Middle	55	27%
	Supervisor	134	66%

Reliability and Validity of Constructs

The measurements were subjected to reliability and validity analyses prior to the research model testing and path analysis. Reliability and validity were applied in this study through internal reliability, convergent validity and unidimensionality in order to evaluate the quality of the measurement items (Hair et al., 2006).

Table 2.
Cronbach's α , Composite Reliability, and AVE

Variable Name	Number of Items	Cronbach's Alpha	CR	AVE
Attitude	4	0.959	0.993	0.965
Subjective Norms	3	0.963	0.929	0.733
PBC	3	0.954	0.895	0.704
Intention	4	0.991	0.799	0.537
Behavior	4	0.986	0.987	0.950

According to Nunnally and Berstein (1994), internal reliability can be achieved when the Cronbach's Alpha value is 0.7 or higher. In this study, reliabilities in Table 2 exceed the recommended value of 0.70, providing support for the reliability of the measures used in this study. Convergent validity is accessed through Composite Reliability (CR) and Average Variance Extracted (AVE). As shown in the table below, the testing results of CR and AVE values have also exceeded the recommended value 0.7 for CR and 0.5 for AVE as suggested by Hair et al. (2006).

In addition, a principal component analysis with Varimax rotation was performed. Inspection of the correlation matrix showed that all coefficients are more than 0.6. The Kaiser-Meyer-Oklin (KMO) value is 0.976 which is higher than the recommended minimum of 0.6 for measuring the sampling adequacy (Kaiser, 1974). Barlett's test of sphericity was significant (0.000), supporting the factorability of the correlation matrix (Bartlett, 1954). As shown in Table 3, the unidimensionality of the measurement items are achieved since the factor loadings for all items exceeds the recommended level of 0.7 (Bagozzi and Yi, 1988) which is another indication that all the constructs conform to the validity test.

Table 3.
Factor Loadings (λ)

	Attributes	Factor Loadings
ATT	To me, using social media in my job is good.	.914
	To me, using social media in my job is beneficial.	.917
	To me, using social media in my job is wise.	.911
	To me, using social media in my job is effective.	.933
SN	People who influence my behavior at work think that I should use social media in my job.	.923
	People whose opinions I value would prefer me to use social media in my job.	.904
	The seniors in my company accept the use of social media in my job.	.894
PBC	I have enough time available to use social media in my job.	.956
	I have the necessary tools to use social media in my job.	.955
	I have the ability to use social media in my job.	.875
INT	In the future, I plan to communicate more with others at work using social media.	.974
	Next year, I intend to use social media in my job more than I did this year.	.979
	In the future, I intend to share more work-focused posts on social media.	.971
	In the future, I intend to keep using social media in my job.	.984
BEH	I use social media for sharing ideas within my department.	.962
	I use social media as a voice for my opinions at work.	.959
	I use social media for giving praise or recognition of achievement at work.	.958
	I use social media for sharing information within the company.	.973

Evaluating Model Estimates and Goodness-of-Fit

The estimation of the structural model was constructed through the Analysis of MOment Structures (AMOS) version 21.0 using Maximum Likelihood Estimate (MLE). The overall model fit can be assessed by several indicators namely absolute fit measures which assess the overall model fit; incremental fit measures which compare the proposed model to another model; and parsimonious fit measures which compare models with differing numbers of estimated coefficients (Hair et al., 2006). The test of overall fit of the model produced a chi square (χ^2) value of 2.440 with 2 degrees of freedom. In addition, insignificant p-value (0.295) suggests that the model has a good fit. The table below shows that all the fit indices were within acceptable range.

Table 4.
Measurement Model Fit Indices

Goodness-of-Fit Measures	Recommended Value	Estimates
CMIN/DF	≤ 2	1.220
Root Mean Square Error of Approximation (RMSEA)	≤ 0.08	0.033
Adjusted Goodness-of-Fit Index (AGFI)	≥ 0.80	0.964
Comparative Fit Index (CFI)	≥ 0.90	1.000
Tucker-Lewis fit index (TLI), also known as the Non-Normed Fit Index (NNFI)	≥ 0.90	0.999

Hypotheses Testing

As displayed in Table 5, the analytical results supported the research model based on Ajzen's theory of planned behavior. H1 predicts a positive relationship between managers' attitude towards social media and intentions to use social media. The social media usage attitudes variable produced a path coefficient of 0.40 ($p < 0.01$), supporting H1. Among the three exogenous variables, the attitudes towards social media has the strongest effect on the behavioral intention to use social media. H2 predicts a positive relationship between managers' subjective norms regarding social media and intentions to use social media. The analytical results supported H2. The relationship between

managers' subjective norms for social media and intentions to use social media generated a significant path coefficient of 0.39 ($p < 0.01$). This finding indicates that Egyptian managers did perceive social pressure from people to use social media in their companies which, in turn, influenced their intention to use social media. H3 predicts that, as managers' perceived behavioral control increases, usage of social media intention also increases. The analytical results supported H3, with a significant path coefficient of 0.29 ($p < 0.01$). This finding indicates that using social media for internal communications is not totally under the manager's volitional control. In other words, resources and abilities to use social media are required in internal communications. Moreover, H4 predicts a positive relationship between the managers' behavioral intention to use social media and the behavior towards using social media for internal communications. The analytical results supported H4, with a significant path coefficient of 0.89 ($p < 0.01$). On the other hand, the hypothesis H5 which examined the relationship between the perceived behavioral control and the behavior towards using social media for internal communications was not supported. This finding, however, was not too surprising, given the mixed results from previous studies regarding the relationship between PBC and behavior. It should be noted that this finding is consistent with previous social media research (e.g., Baker and White, 2010). According to Ajzen (1991), the strength of PBC in directly determining behavior is dependent on perceptions of control being reflective of actual control and, given the extant literature on "illusions of control" (Langer, 1975), specifically as applied to Internet use (e.g., Matute et al., 2007), it is unlikely that PBC will reflect actual control accurately.

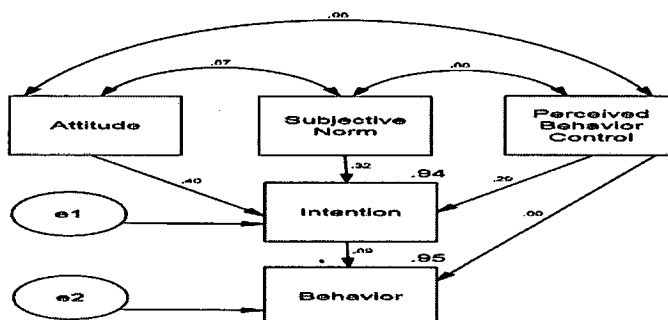
Table 5.
Structural Model Results

Path Description	Hypothesis	Unstandardized Path Estimates	Result
Int <--- Att	H1	0.522***	Supported
Int <--- SN	H2	0.337***	Supported
Int <--- PBC	H3	0.338***	Supported
Beh <--- Intent	H4	0.823***	Supported
Beh <--- PBC	H5	0.094	Not Supported

Notes: *** p-value < 0.001

Furthermore, Figure 3 schematically represents the structural model, including the path coefficients.

Figure 3.
Path Analysis of Ajzen's Theory of Planned Behavior



5. Conclusion

The main aim of this study is to assess the applicability of social psychological theories, specifically the theory of planned behavior, for predicting the managers' social media usage behavior. In this study, a research model identifies cognitive predictors of managers' intentions and behaviors related to the use of social media from their attitudes, subjective norms, and perceived behavioral control. In other words, managers with a positive attitude towards social media, who feel social support for using social media, and who perceive behavioral control,

will be likely to intend using social media in their work-related communication and actually use it in their internal organizational context. The five hypotheses derived from the TPB were tested on the sector level. It was hypothesized that behavior could be predicted from perceived behavioral control and intention, and that intentions would correlate with attitudes, subjective norms, and perceived behavioral control.

The results of the present study are consistent with the TPB as (1) the three variables of intentions: attitude, subjective norms, and perceived behavior control are correlated with each other; (2) these three variables contributes each to the prediction of intentions to use social media. Of these, attitude had the strongest effect on the behavioral intention; and (3) the behavioral intention significantly impacts the social media usage behavior.

The results add further evidence that the TPB can be applied in the field of organizational research in order to understand the factors that influence and determine the managers' social media usage behavior.

This study, however, is not without limitations. Several limitations should be mentioned, which call for future research.

First, the research design uses cross-sectional design data, rather than longitudinal data. Future research will certainly benefit from longitudinal design approach which provides the in-depth description and evidence that are necessary to capture the actual behavior of using social media. Therefore, a longitudinal investigation would make the findings more robust.

Second, the present study has been conducted by considering mainly those constructs which were part of the theory of planned behavior. Future studies need to investigate the role of many other important constructs like trust and experience which might act as moderators or mediators to the various constructs of the model.

Third, the empirical study in this study solely focuses on the mobile network firms. This is another limitation, reducing the ability of generalization. However, the findings of this study are in agreement and basically consistent with previous studies and the theoretical predictions. Therefore, the generalizability of the findings of this study is supported.

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