How Does Knowledge Workers’ Social Technology Readiness Affect Their Innovative Work Behavior?

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Abstract
Experts in enterprise social technologies believe that these new tools require new skills and attitudes from business professionals. Against this background, the present study examines the impact knowledge workers’ social technology readiness has on their innovative work behavior. Specifically, we investigate how social technology motivators (i.e., optimism and innovativeness) and inhibitors (i.e., discomfort and insecurity) affect innovative behaviors at work. Relying on the theories of planned behavior and social support, we argue that a higher readiness to use social technology encourages explorative behaviors with regard to new social technology, which in turn increases employees’ innovative work behavior. Data from 301 knowledge workers support our hypotheses of the two motivators (i.e., optimism and innovativeness) and insecurity as the inhibitor. Interestingly, contrary to our expectations, discomfort positively affects employees’ social technology exploration. We discuss the implications of this result for research and practice.

1. Introduction

Social technologies, defined as “a genre of information and communication technology (ICT) that manifests as a viable platform upon which social interactions among individuals can be built” [13, p. 162], have dramatically altered how people communicate with one another. According to a recent report of the Pew Research Center, as of September 2014 in the United States, 52% of online adults now use two or more social media sites in their personal lives [6]. In the workplace, however, e-mails remain the most popular form of business communication. Therefore, research implies that firms fail to tap the innovation-related potential of such ICT (e.g., [14]). This is because most employees do not take advantage of their technologies’ full capabilities as they operate at low levels of feature use and rarely initiate task-related extensions of the available features [14, 42]. Thus, increasing employees’ openness toward applying social technology at work has become a major challenge for many firms.

In addition to more traditional communication channels, social technology has become an increasingly important channel for business communication for several reasons: First, social technologies are an important driver for open innovation as they enable firms to draw insights from diverse knowledge pools that can be applied to organizational innovation [9]. Second, social technologies facilitate social and interpersonal relationships within the firm, and therefore increase knowledge sharing among coworkers, which in turn drives innovation outcomes [17]. Third, social technologies have radically changed working patterns. Especially for knowledge workers whose jobs “involve the creation, distribution, or application of knowledge” [4, p. 11], social technologies provide various opportunities for new work modes (e.g., working remotely) that might offer a competitive advantage [35].

In order to leverage this potential, firms heavily invest in social technologies at work [27]. According to a current Gartner forecast [10], worldwide IT-spending will amount to approximately 3.8 trillion dollars in 2015 and thereby continue to account for a significant proportion of spending in firms. However, firms’ investments are useless without the readiness of organizational members to apply these technologies. Extant research captures this readiness through the phenomenon of technology readiness (TR), which refers to “people’s propensity to embrace and use new technologies” [31, p. 308]. Although this concept has its roots in marketing research and has been explored for the purpose of profiling customers according how likely they are to apply a new technology (e.g., [41]), it may provide valuable insights for a better understanding of organizational members’ social technology readiness. Despite the apparent relevance of social technologies in the workplace, little effort has
been made to examine knowledge workers’ social technology readiness so far. Only a few studies have investigated the role of readiness in service employees’ technology acceptance [42] and travel agency workers’ adoption of instant messaging [37]. Moreover, a limited set of studies applied the general TR-construct for workforce segmentation (e.g., [34]). Extant marketing research further indicates that consumers’ general technology readiness correlates with various behaviors, such as more intense and broader technology usage or higher rates of cutting-edge technology adoption (e.g., [25, 37]). To our knowledge, there is no study on how employees’ propensity to embrace and use new social technologies affects their own work performance. Thus, this study examines the impact of social technology readiness (STR) on knowledge workers’ innovative work behavior, defined as “the intentional creation, introduction and application of new ideas within a work role, group or organization, in order to benefit role performance, the group, or the organization” [12, p. 288]. For this purpose, we adapt the marketing-related concept of TR, which refers to technology readiness in general, to particularly capture employees’ social technology readiness. Consistent with extant literature, we distinguish between manifestations, reflecting an individual’s affinity for social technology use (i.e., social technology motivators) and those reflecting an individual’s reluctance to use social technologies (i.e., social technology inhibitors) [31]. Accordingly, our research question is: How do social technology motivators (i.e., optimism and innovativeness) and inhibitors (i.e., discomfort and insecurity) affect knowledge workers’ innovative work behavior?

From a theoretical perspective, we integrate the concept of STR with the theories of planned behavior [TPB; 1] and social support [SST; 11]. We develop a conceptual framework that links knowledge workers’ social technology readiness with their innovative work behaviors. As an important transmitter of the relationship between social technology readiness and innovative work behavior we suggest social technology exploration, defined as the extent to which an employee engages in sustained exploration of social technology to find potential work uses [29]. In order to answer our research question, we empirically test our research model using data from 301 knowledge workers. This study contributes to both research and managerial practice. From the point of view of practice, by adapting the general TR-concept to particularly capture social technology readiness we provide managers with a tool that helps them to identify employees who are likely to explore social technology innovations. From a theoretical perspective, we offer a fine-grained analysis of the effects of different STR-dimensions on employees’ social technology exploration and thus innovative work behavior. Specifically, the disaggregated examination of the social technology readiness dimensions provides valuable insights on the different influences that social technology motivators and inhibitors have on social technology exploration. Furthermore, this study reveals the mechanism by which STR translates into innovative work behavior. By examining STR as a key predictor and innovative work behavior as an important outcome of social technology exploration, we are able to extend the post-adoption literature in an organizational context in two important ways.

The structure of this paper is organized as follows. In section 2, theoretical background is presented as a foundation for our research model that has subsequently been developed (section 3). We illustrate our methodological approach in section 4. The study’s results are presented afterwards (section 5). Section 6 concludes with a discussion of the theoretical and practical implications of the findings.

2. Theoretical background

This research draws on two theoretical foundations, i.e., TPB and SST, to support the study framework and specify the hypothesized causal relationships. To develop our research model, we proceed as follows: First, we briefly introduce the above-mentioned theories and put them into the context of our study (sections 2.1 and 2.2). Second, we mark out the special features of post-adoption behaviors in comparison to pre-adoption behaviors. Based on this distinction, we argue that we integrate the concept of social technology readiness into TPB to explain social technology exploration (section 2.3). Third, we distinguish social technology from other work-related information systems, such as enterprise resource planning (ERP), to point out why we draw on the social support perspective to explain the relationship of social technology exploration and innovative work behavior (section 2.4).

2.1. Theory of Planned Behavior (TPB)

As an extension of Fishbein and Ajzen’s [7] theory of reasoned action, Ajzen [1] introduced TPB, which links beliefs and behavior. According to TPB, an individual’s attitude affects his or her behavioral intention, which in turn affects actual behavior. The theory details three determinants of an individual’s decision to enact a particular behavior: An attitude to behavior is defined as the overall evaluations of the
behavior by the individual [1]. Subjective norms refer to a person’s beliefs about whether significant others think he or she should engage in the behavior [1]. Perceived behavioral control is defined as an individual’s perception of the extent to which performance of the behavior is easy or difficult [1]. According to Ajzen [1], TPB is open to further elaboration if further important proximal determinants are identified. Following Shih and Han [37], we believe that integrating the theoretical constructs of TR with TPB can increase the accuracy of an integrated model to predict employee behavior in the context of social technology. Specifically, we propose that social technology motivators, i.e., optimism and innovativeness, put attitude to behavior in concrete terms and social technology inhibitors, i.e., discomfort and insecurity, substantiate perceived behavioral control. Furthermore, we conceptualized subjective norms by empowering leadership and innovation-oriented culture. These act as control variables in our research model. Thus, TPB offers a valuable framework to explain the link between social technology readiness and social technology exploration.

2.2. Social Support Theory (SST)

Social support theory qualifies the manner in which social relationships can be useful to people [11]. Social support, defined as “an individual’s experience of being cared for, responded to, and being helped by people in that individual’s social group” [19, p. 71], is supposed to bring in warmth and understanding to an individual and to satisfy one’s social needs. Social support is mostly conceptualized as a multidimensional construct involving four different types of support, namely emotional, instrumental, informational, and appraisal support [11]. These types of support can be differentiated in intangible (e.g., emotional and informational) as well as tangible support (e.g., instrumental). As social interactions realized via social technologies are virtual in nature, online social support is apparently limited to intangible support dimensions. Therefore, we focus on informational support, defined as “any knowledge, hints or perspectives, provided by others, that may help the employee in generating ideas” [22, p. 86], and emotional support, referring to “providing messages that involve emotional concerns such as caring, understanding, or empathy” [19, p. 72], to explain the relationship between social technology exploration and innovative work behavior. These two types of support have been shown to be beneficial for employee creativity [22]. Hence, we suggest that SST provides valuable insights on how social technology exploration affects innovative work behavior.

2.3. Social Technology Readiness in the Context of Post-Adoptive Behavior

Post-adoptive behaviors refer to “the myriad feature adoption decisions, feature use behaviors, and feature extension behaviors made by an individual user after an IT application has been installed, made accessible to the user, and applied by the user in accomplishing his/her work activities” [14, p. 531]. According to Thatcher et al. post-adoptive behaviors may be clustered into two main groups – routine and infusion [40]. While routine refers “to when information systems (IS) use is no longer novel and becomes part of one’s regular work” [40, p. 57], infusion “is associated with users learning to use systems to their full potential and identifying new ways for IT to enable work processes” [40, p. 57]. In recent research, especially infusion behavior has increasingly gained attention as it is the stage in which a social technology’s value is being increased (e.g., [14, 40]).

So far, information systems research has primarily focused on the determinants of technology adoption rather than examining the antecedents of post-adoptive behavior. Beginning with Rogers’ theory of the diffusion of innovations [36], various researchers have developed and advanced different theoretical models, such as theory of planned behavior (TPB) [1], technology acceptance model (TAM) [5], or the concept of personal innovativeness [2], to explain technology acceptance and initial use. Although these theoretical perspectives differ in their conceptualization, they all share the basic notion of an attitude-behavior theory, suggesting that attitudinal components (i.e., traits or behavioral beliefs) influence pre-adoptive behavior. While these approaches have been frequently applied to investigate the antecedents of technology acceptance and initial use, empirical studies on the role of attitudinal constructs in post-adoptive behaviors are scarce (e.g., [40]).

Prior research suggests that determinants of pre-adoptive and post-adoptive behaviors may be different (e.g., [14, 15, 32]). For example, it is proposed that post-adoption behavior might be better explained by learning models, while pre-adaption behavior is better explained by task-technology fit models [14, 15]. Research further indicates that normative components, such as top management support, dominate prediction of pre-adoption behaviors, whereas attitudinal components predominate post-adoption behaviors [15]. We agree with this perspective that attitudinal components are key predictors of post-adoptive behavior. Therefore, we strongly believe that marketing-related research on the concept of TR should enrich our understanding of social technology exploration. In particular, drawing on the concept of
readiness, we conceptualize STR dimensions [30], i.e., 
optimism, innovativeness, discomfort, and insecurity, 
as technology-related traits, which comprehensively 
predict social technology exploration. Keeping with 
previous research, we suggest that these traits are 
relatively stable over time, differ across individuals, 
and influence behavior (e.g., [2, 31]). Therefore, we 
rely on TPB to explain the linkages between STR 
dimensions and social technology exploration. In line 
with the call for a better understanding of the impact of 
different attitudinal components on post-adoptive 
behaviors (e.g., [14, 40]), we believe TPB to be of 
great value for explaining the different effects of the 
underlying dimensions of social technology readiness. 
Specifically, we suggest that two of the three 
determinants (i.e., attitude to behavior and perceived 
behavioral control) proposed by TPB might give 
reasonable explanation on how social technology 
motivators or inhibitors affect social technology 
exploration.

2.4. Social Support Perspective in the 
Relationship between Social Technology 
Exploration and Innovative Work Behaviors

Social technologies differ significantly from other 
information technology, such as enterprise resource 
planning (ERP) systems, which are implemented to 
support work processes. While the main purpose of 
traditional IT-enabled work systems is to collect, store, 
and manage data from various business activities in 
order to provide an integrated view of core business 
processes, social technologies refer to tools that enable 
social interactions among individuals [13]. By 
facilitating interpersonal relationships, social 
technologies offer various opportunities for employees 
to exchange support with each other. For example, in a 
corporate social networking site employees may 
emotionally support each other by pushing the like-
button to approve their ideas. Or, in a corporate wiki, 
employees collaboratively generate content that may 
help others in generating ideas or mobilizing support 
for specific proposals.

As social technologies are an important driver for 
social interactions, we believe that attitude-behavior 
thories as well as individual-centered learning models 
might be of limited value in explaining the relationship 
between social technology exploration and innovative 
work behavior. Therefore, we propose SST to give 
reasons for the relationship between social technology 
exploration and innovative work behavior. From a 
social support perspective, exploring social 
technologies helps employees to gain access to support 
from their coworkers. Since extant research suggests 
that innovative behaviors are more likely to occur 
when a person perceives a work environment to be 
supportive [22], we believe that the exploration of 
social technologies, with its support enabling facet, 
will drive innovative work behavior.

2.5. Summary

Drawing on TPB, we have proposed social 
technology readiness to be a key predictor of social 
technology exploration. Furthermore, relying on SST, 
it was shown that social technology exploration, in 
turn, serves as a determinant of innovative work 
behaviors. Thus, our research model combines aspects 
of TPB with aspects of SST in a complimentary 
manner. In a next step, we will put these notions 
together to explain our research model.

3. Research model

3.1. Conceptual Framework of the Study

Our framework links knowledge workers’ social 
technology readiness to innovative work behavior 
through the mediating construct of social technology 
exploration. The concept of readiness explains an 
individual’s adoption-behavior based on two 
motivators (i.e., optimism and innovativeness) and two 
inhibitors (i.e., discomfort and insecurity) as personal 
traits [31]. According to Parasuraman and Colby [30], 
an individual with high levels of optimism and 
innovativeness and low levels of discomfort and 
insecurity is particularly likely to use new 
technologies. Prior research has mostly used 
aggregated measures of readiness (e.g., [18, 31]). 
According to Son and Han [38], these approaches may 
be restricted because the four dimensions clearly have 
different meanings and relate to different psychological 
processes. Therefore, we investigate the influence of 
these readiness constructs separately.

To analyze the implications of social technology 
readiness constructs in a knowledge-working context, 
we draw on social technology exploration as a specific 
post-adoptive behavior. Relying on TPB [1], we argue 
that social technology readiness, as a key predictor for 
behavioral intention, has a significant influence on how 
employees engage in exploratory activities with social 
technologies.

In the next stage of our proposed framework, we 
link social technology exploration with innovative 
work behavior. Drawing on SST as well as previous 
research on post-adoption behavior (e.g., [24, 40]), we 
suggest that the exploration of social technology 
supports knowledge workers to unleash their 
innovative potential.
3.2. Research Hypotheses

As mentioned previously, the concept of readiness includes four traits: optimism, innovativeness, discomfort, and insecurity. Optimism refers to a positive view of technology and a belief that it offers people increased control, flexibility, and efficiency in their lives [31]. Previous research on technology adoption shows that optimistic people deal with new technology more openly than pessimists [42]. Furthermore, marketing research suggests that optimistic customers try to use a variety of innovative functions of a new technology as opposed to limiting their use to basic functions [38]. Based on these findings, we believe that employees who are optimistic regarding social technology will engage more in social technology exploration than pessimistic employees.

Innovativeness describes the tendency to be a technology pioneer and thought leader [31]. According to Argawal & Prasad [2], the construct of personal innovativeness helps identify individuals who are likely to adopt a certain information technology and who might serve as opinion leaders to facilitate further diffusion of a new technology. Marketing research found that innovativeness has a negative effect on the use of basic functions but a positive influence on the exploration of innovative functions [38]. Thus, in turn, we suggest innovativeness to be a driver of explorative behaviors in the context of social technologies.

In terms of TPB, optimism and innovativeness can be regarded as employees’ positive attitudes towards behavior. Ajzen [1] suggests that an attitude component is a function of a person’s salient behavioral beliefs, which represent perceived outcomes or attributes of the behavior. Drawing on the expectancy-value concept, TPB quantifies outcomes as the multiplicative combination of the perceived likelihood that performance of the behavior will lead to a particular outcome and the evaluation of that outcome. Since the two motivators (i.e., optimism and innovativeness) represent the conviction that the use of social technology will lead to more control and flexibility at work, it seems likely that these positive attitudes enhance the behavioral intention to try out new work-related applications of social technology, which in turn drives explorative behaviors. Thus, we argue that:

H1a: Optimism positively affects social technology exploration.
H1b: Innovativeness positively affects social technology exploration.

Discomfort, in turn, refers to a perceived lack of control over technology and a feeling of being overwhelmed by it [31]. Related to social technology, employees might be scared by the large variety of features offered by a particular system, such as social networking sites. In a consumer-related context, discomfort captures the degree to which consumers generally fear using technology-related products or services because of the resulting learning costs [28]. Research found that consumers with high levels of discomfort tend to use only basic functions of a system rather than additional features due to the perceived complexity of a system [38]. Hence, we suggest that an employee’s discomfort regarding social technology will be an important inhibitor for social technology exploration.

Insecurity captures “safety concerns, concerns about other negative consequences of technology, and a need for assurance” [30, p. 4]. For example, in the context of social technology, employees might feel insecure because they believe that social technologies lower the quality of relationships by reducing personal interaction. Previous research on technology anxiety suggests that a high level of insecurity with regard to a particular technology leads to a significant reduction in the amount of time customers spend using this technology and might even lead them to avoid using the technology altogether [26]. Thus, a highly insecure employee might be skeptical and feel uncomfortable exploring social technology features at work.

From a TPB perspective, discomfort, described as a perceived lack of control, and insecurity, described as distrust of technology, can be considered as control beliefs. These control beliefs refer to the perception of factors, which are likely to inhibit performance of a certain behavior [1]. In this context, TPB suggests that people are more likely to engage in behaviors they have control over and are discouraged from carrying out behaviors over which they have no control [1]. Therefore, we argue that the two inhibitors, i.e., discomfort and insecurity, inhibit social technology exploration due to a lack of perceived behavioral control:

H2a: Discomfort negatively affects social technology exploration.
H2b: Insecurity negatively affects social technology exploration.

To explain the relationship between social technology exploration and innovative work behavior, we rely on SST. The nature of social technology exploration is the desire to engage in active thinking about how to incorporate social technology features into one’s work in order to be innovative [40]. From a social support perspective, social technologies are platforms where users can exchange support with each other. Therefore, we believe that the exploration of
such technologies opens up new opportunities for access to informational and emotional support, which, in turn, are important drivers of innovative work behavior. In the virtual environment, informational support can be considered as a major source of inspiration. Extant research has suggested that informational support from coworkers increases employee creativity [22]. For example, in the context of social technologies, employees might be encouraged to express their ideas in order to obtain feedback from others when they explore online idea exchange communities. Furthermore, emotional support also plays a key role in innovative behavior. Since engaging in innovative behaviors entails certain risks because it might be uncertain whether a new idea will be accepted or rejected, it is suggested that employees must feel supported in their workplaces to be innovative [22]. Thus, social technology exploration might be a valuable source of emotional support, for example, when peers use the like-button to approve their post or their ideas. Moreover, due to the virtual nature of social technologies, employees are no longer constrained by space and time in their search for support. This advantage can be especially beneficial for remote knowledge workers. Thus, through the lens of social support, we derive a positive linkage between social technology exploration and innovative work behaviors:

H3: Social technology exploration positively affects innovative work behavior.

4. Research Methodology

In our study, we seek to determine the influence of knowledge workers’ social technology readiness on their innovative work behavior. Knowledge workers, are increasingly dependent on social technology to carry out their duties as this kind of technology supports quick information recall, purposeful sharing of ideas with co-workers and customers, and easy localization of specific expertise. Thus, in order to gather our data, we identified knowledge workers who at least from time to time use social technology at work. In total, we contacted 843 knowledge workers contracted at a global financial service provider and asked them to fill out an online questionnaire. In our final sample (n=301; response rate=36%), 47% of the respondents were women and 20% had managerial responsibility. The average age of the participants was about 40 years. At the time of data collection, one third (66%) of the respondents had been working for the firm for more than 10 years. We collected data during March and April 2015.

To design our questionnaire, we relied solely on existing scales. Based on a comprehensive literature review, we identified the following scales to measure our constructs. The four dimensions of social technology readiness were measured with scales adjusted from Parasuraman and Colby [30]. Optimism and innovativeness were measured using four items respectively. To measure discomfort and insecurity, we used three items, respectively. Social technology exploration was captured using three items, adapted from Nambisan et al. [29]. In contrast to prior studies on technology exploration, we adapted the items to measure the actual behavior instead of capturing the intention to explore social technology. To assess innovative work behavior, we used three items developed by Janssen [12]. The selected items reflect the three underlying dimensions of employee innovativeness, i.e., creating new ideas, mobilizing support for new ideas, and realizing new ideas.

Control variables. Finally, our framework encompassed various control variables that might affect employees’ exploration of social technology and innovative work behavior, respectively. First, drawing on TPB, which suggests that subjective norms have an influence on behavior, we controlled for innovation-oriented corporate culture defined as “the degree to which cultural values, norms, and artifacts support the company’s innovativeness” [39, p. 285] and empowering leadership, which captures the extent to which leaders lead their employees to lead themselves [23]. We measured innovation-orientation of culture by three items of a scale developed by Stock et al. [39] and empowering leadership by a simplified four-item-scale based on the self-leadership questionnaire developed by Manz and Sims [23]. Second, to prove that technology acceptance of the particular firm-related social technology is not an exclusive predictor of social technology exploration, we controlled for perceived usefulness and ease of use regarding firm-related social technology. Perceived usefulness regarding firm-related social technology was measured using a five item-scale, originally developed by David et al. [5], which was adapted slightly to the context of social technology. For assessing perceived ease of use of firm-related social technology, we also adapted three items from the existing scale of David et al. [5]. Third, we controlled for job experience, tenure in firm, and tenure in position since they may also affect social technology exploration or innovative work behavior.

In order to minimize common method variance ex ante we used a different response scale to assess innovative work behavior as the dependent variable. While all other scales were anchored with strongly agree or strongly disagree, we asked respondents to evaluate their innovative work behavior by comparing
themselves with their co-workers. To confirm, ex post, that common method variance was not a major concern, our analysis includes well-established tests. First, Harman’s single-factor test was conducted as suggested by Podsakoff et al. [33]. The test indicates common method variance only if one general factor accounts for the majority of the variance in a factor analysis. This was not the case in this study. Second, a marker variable test was conducted according to Lindell and Whitney [20]. All correlations of the main effects remained significant after controlling for the marker variable’s effect. Taken together, both tests indicated that common method bias did not have a strong influence on the results. Furthermore, we tested the reliability and validity of the reflective multi-item scales with exploratory and confirmatory factor analyses. The scales displayed a high degree of internal consistency for all constructs (Cronbach’s alpha > .7) [3], except for the discomfort scale (alpha = .63). In further support of internal consistency, the composite reliability measures were greater than the recommended value of .6 [3]. Furthermore, we relied on Fornell and Larcker’s [8] rigorous criterion to ensure discriminant validity. The square roots of the average variance extracted (AVE) were greater than the respective interscale correlations (see main diagonal in Table 1). Thus, discriminant validity did not appear to be an issue for this study.

5. Results

To test our hypothesis, we relied on full information maximum likelihood structural equation modeling (SEM), using MPLUS 7.2. Our baseline model shows satisfactory results on the global fit measures (χ²/df = 1.98; RMSEA = 0.06; SRMR = 0.07; CFI = 0.94; TLI = 0.93). The results in Figure 1 reveal that the different STR dimensions have distinct effects on social technology exploration and thus on innovative work behavior. As H1a predicted, optimism had a positive effect on exploration of social technology. In line with H1b, innovativeness also positively affected exploration of social technology. Surprisingly, contrary to our H2a, discomfort had a positive influence on social technology exploration. The negative effect of insecurity supports H2b. Social technology exploration is positively and significantly associated with innovative work behavior, supporting H3. Of the control variables, none had a significant influence on social technology exploration. However, empowering leadership and job experience had a positive significant effect on innovative work behavior, whereas tenure in firm had a significant negative effect on innovative work behavior.

6. Discussion

In recent research, different antecedents of post-adoptive behavior have been examined [14]. Most of these efforts focused on normative beliefs [15], interpersonal influence [32], trust in IT [40], or prior use [14]. However, one of the most promising predictors for enhancing social technology exploration has been neglected, namely social technology readiness. By addressing this gap, this study offers several important implications for researchers and practitioners.

6.1. Research Implications

The main goal of our study was to examine the impact of knowledge workers’ social technology readiness on their innovative work behavior. By integrating the concept of STR into the theories of planned behavior and social support, we offer an integrative framework that could pave the way for a more comprehensive post-adoption research in an innovation-related context. Hence, our research advances the information systems literature in two important ways. First, our results show that the four dimensions of readiness (i.e., optimism, innovativeness, discomfort, and insecurity) serve well as predictors of social technology exploration. Thus, our study contributes to research by offering conceptualization and operational measures of social technology motivators and inhibitors. As expected, the two motivators (i.e., optimism and innovativeness) positively affect social technology exploration, while insecurity inhibits it.

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<th>Table 1. Correlations between latent variables</th>
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<tr>
<td>1. Social technology optimism</td>
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<td>0.93</td>
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<tr>
<td>2. Social technology innovativeness</td>
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<tr>
<td>0.62**</td>
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<tr>
<td>0.81</td>
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<td>3. Social technology discomfort</td>
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<tr>
<td>0.32**</td>
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<tr>
<td>0.05</td>
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<td>0.62</td>
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<td>4. Social technology insecurity</td>
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<tr>
<td>-0.24**</td>
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<td>-0.12**</td>
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<td>0.38**</td>
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<tr>
<td>0.79</td>
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<td>5. Exploration of social technology</td>
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<tr>
<td>0.74**</td>
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<td>0.70**</td>
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<td>0.13**</td>
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<tr>
<td>-0.24**</td>
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<tr>
<td>0.86</td>
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<td>6. Innovative work behavior</td>
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<td>0.30**</td>
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<td>0.41**</td>
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<td>-0.01</td>
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<td>0.30**</td>
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<td>0.83</td>
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<td>Mean</td>
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<td>3.57</td>
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<td>(Standard Deviation)</td>
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<td>0.96</td>
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<td>Composite Reliability</td>
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*p < 0.05; **p < 0.01; The main diagonal shows the square root of AVE for each construct.
This result is consistent with extant marketing research on general technology readiness that suggests that people with high levels of optimism and innovativeness and low levels of insecurity are more likely to adopt a new technology (e.g., [25, 37]). Regarding the unexpected positive effect of discomfort on social technology exploration we assume the following: Discomfort involves the feelings of being overwhelmed by social technology and being embarrassed when having trouble with it while others are watching [30]. From a TPB perspective, it could be assumed that employees believe they can overcome the feeling of discomfort by engaging in behaviors, which help them regain control. Drawing on the concept of problem-solving coping strategies, defined as “active efforts oriented toward confronting the problem” [21, p. 185], we suggest that employees with high levels of discomfort try to make themselves comfortable with social technology in order not to be embarrassed when they need to use these technologies in the presence of others. By revealing that discomfort has a positive effect on social technology exploration, we underline the importance of investigating STR on a disaggregated level. Therefore, researchers should use these results as a starting point to provide more detailed explanations of the role of STR in post-adoptive behavior. Second, by explaining how social technology exploration relates to innovative work behavior, this study increases understanding of the translation of post-adoptive behavior into employee innovativeness.

Although prior research has shown that post-adoptive behaviors are an important driver of task performance (e.g., [16]), little is known about the influence of post-adoptive behavior on employees’ innovative work behavior. Drawing on SST, this study provides theoretical support for the mediating effect of social technology exploration. In turn, this study demonstrates how concepts (i.e., technology readiness) or theories (i.e., TPB and SST) rooted in other fields can spark information systems research, link it to other fields, and broaden its design.

6.2. Managerial Implications

This research also provides valuable insights for managers. First, managers should recognize that employee’s technology-related traits in the gestalt of social technology readiness have a strong influence on his or her explorative behaviors, which in turn translates into innovative work behavior. In consequence, managers should be trained to identify different employee types with regard to STR in order to be able to individually encourage their subordinates to explore additional technology features. To do so, the taxonomy developed by Parasuraman [30] could be used for manager training.

Second, executives who are responsible for the organization of employee trainings should also consider the concept of STR to design targeted group-specific training contents. For example, employees with high levels of STR could be trained in more
advanced technology features, while trainings for employees with low levels of STR could mainly focus on removing concerns regarding the use of these technologies at work.

Third, HR managers should take candidates’ STR into account when selecting staff. Especially when innovation-oriented behavior is required in a particular position, social technology readiness may serve as a key selection criterion.

Fourth, managers should mitigate the negative effect of insecurity regarding social technology. To do so, managers might enhance employees’ trust in the firm by ensuring that the firm does not misuse social technology data. In addition, managers should act as role models by using social technology at work themselves to reduce fears and reservations.

6.3. Future Research and Limitations

Our study has several limitations that have to be regarded, leaving areas for future research. In particular, we used cross-sectional data to empirically test our research model. Therefore, future research should apply longitudinal data to confirm our results.

Another limitation of our study is the use of single-source data. Hence, objective and/or multi-source data should be used to confirm our findings.

Furthermore, innovative work behavior was the only performance variable in our study. A more comprehensive framework should include other essential work-related variables, such as job role performance or organizational citizenship behavior.

Finally, further research on buffering effects of the negative influence of insecurity on social technology exploration would be valuable. To help managers mitigate this negative effect, researchers should examine different moderators that buffer the detrimental effect of insecurity. For example, investigation into the moderation effect of trust in the firm could be a suitable starting point for future research.

7. References


[38] M. Son and K. Han, “Beyond the technology adoption: Technology readiness effects on post-adoption behavior”, Journal of Business Research (64), 2011, pp. 1178–1182.


