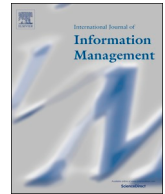




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## Spillover of workplace IT satisfaction onto job satisfaction: The roles of job fit and professional fit

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## ABSTRACT

With information technology (IT) increasingly penetrating in workplaces, employee satisfaction with workplace IT becomes an integral part of work and significantly influences work-related outcomes. Scant attention, however, has been paid to whether and how employees' IT satisfaction plays a role in generating job-related attitudinal changes among employees. Drawing upon satisfaction spillover theory, we developed and empirically tested a model to examine the relationship between individual satisfaction with workplace IT and job satisfaction. Specifically, we introduced two elements of user-task-technology fit—namely, job fit and professional fit—to examine the transition in employees' satisfaction from the technological domain to overall satisfaction with work. We found that job fit not only mediated but also strengthened the effect of workplace IT satisfaction on job satisfaction, whereas professional fit did not play a moderating role in the relationship between workplace IT satisfaction and job satisfaction. The findings suggest that practitioners should emphasize workplace IT as a crucial ingredient of the work context and improve employee experiences with using IT. More importantly, the fit of IT with employees' job and professional requirements is critical for this transition in satisfaction.

## 1. Introduction

The use of information technology (IT) in the workplace has become an integral part of employees' daily work routines, and it significantly affects their work outcomes. Companies have extensively implemented IT to empower employees and generate desirable outcomes. As new technologies constantly emerge and alter the ways employees do their work, the experience and perception of using IT continue to be a central issue. Academic studies also demonstrated the critical role of employees' perceptions of deployed IT in benefiting employees themselves as well as companies (e.g., Hsieh, Sharma, Rai, & Parasuraman, 2013). However, the idea of improving employees' IT-related experience has not been embraced by all practitioners. One industry survey found that only 9% of respondents were interested in enhancing employees' IT usage experience (Leonard, 2016). Such inconsistencies in practices suggest a need for further investigation of the implications of employees' perceptions of using IT in the workplace.

*IT satisfaction*, which reflects the overall affective perception of experience with using IT, has been widely examined in information systems (IS) research (e.g., Petter, DeLone, & McLean, 2008; Vaezi, Mills, Chin, & Zafar, 2016; Hou, 2012; Dwivedi, Kapoor, Williams, &

Williams, 2013). Extant studies primarily focus on the effects of IT satisfaction on individual behavioral outcomes, including decision making quality, task productivity, job performance, and job commitment (e.g., Hsieh, Rai, Petter, & Zhang, 2012; Igbaria & Tan, 1997; Rai, Lang, & Welker, 2002; Santos & Sussman, 2000). However, with few exceptions (e.g., Elias, Smith, & Barney, 2012), scant attention has been paid to how employees' attitudes toward IT influence their job-related attitudes. Directly linking IT satisfaction with behavioral outcomes might obscure possible IT-related cognitive and attitudinal changes in the workplace (Bhattacharjee & Premkumar, 2004), and miss an opportunity to explore the psychological mechanism of IT-enabled transformation. Thus, investigating the effects of IT satisfaction on job-related attitudes can complement existing studies on IT effects from a behavioral perspective.

To address this gap in the literature, this study aimed to examine the influence of employees' satisfaction with workplace IT on their job satisfaction, one of the most critical workplace outcomes associated with IT use (Cheney & Scarpello, 1985). Extending previous studies on the relationship between IT-related attitudes and overall job satisfaction (e.g., Elias et al., 2012), this study explicitly focused on the mechanism and circumstance of how this particular IT-related attitude

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influences job satisfaction. Specifically, the current work aimed to delineate the spillover effect of IT satisfaction onto job satisfaction among employees. Further, we approached this satisfaction spillover effect by using the user-task-technology fit (UTTF) framework. The core thesis of the UTTF framework is that the correspondence between elements in the IT use context, rather than IT by itself, is a critical determinant of individual outcomes (Liu, Lee, & Chen, 2011; Parkes, 2013). Thus, research should focus on achieving a thorough understanding of how IT satisfaction influences the job satisfaction of users at the intersection of user, task, and technology.

This study contributes to the literature in several ways. First, we complement the literature on IT satisfaction by examining the mechanism underlying the spillover effect of IT satisfaction onto job satisfaction. This work enriches the understanding of the effects of IT satisfaction on job-related subjective well-being among users, which has been underscored by prior research. Further, this work contributes to the literature on user-task-technology fit by exploring the dual effects of job fit and professional fit. Finally, by bringing together the literature on IT use and organizational psychology research on workplace satisfaction, this work provides a multidisciplinary understanding of IT's effects on employees. In practice, this study can enhance managers' understanding of whether and how satisfaction with workplace IT contributes to positive job-related attitudes among employees. In this way, the study's findings can help to resolve conflicts related to efforts to improve work experiences by leveraging IT.

## 2. Theory and hypotheses

As shown in Fig. 1, this study is theoretically grounded in the literature on general satisfaction and IT satisfaction in particular, as well as the extant IT use research that focuses on the interrelationships between user, task, and technology. The UTTF framework suggests that specific satisfaction with one object is determined by the interactions between subjects and the particular object (Liu et al., 2011; Parkes, 2013). This triad is composed of three interrelated elements: user (subject), task (one object), and technology (the other object). IT satisfaction and job satisfaction are viewed as indicators of user-technology interaction and user-task interaction, respectively.

To reveal the mechanism by which IT satisfaction influences job satisfaction, we have proposed a research model describing the relationship between workplace IT satisfaction and job satisfaction (Fig. 2). UTTF consists of two dimensions: job fit and professional fit (Speier & Venkatesh, 2002)<sup>1</sup>. These two dimensions of UTTF serve as the moderators and mediators between IT satisfaction and job satisfaction. The following section will elaborate on how the UTTF triad framework relates to our proposed hypotheses.

### 2.1. Spillover effect of IT satisfaction onto job satisfaction

Satisfaction is essentially an individual's attitude toward specific objects or experiences in specific domains. Theory on attitude posits that attitudes have both affective and cognitive (belief) bases (e.g., Petty & Wegener, 1997). Weiss (2002) argued that the concept of satisfaction should be deconstructed into three different constructs: i.e., overall evaluative judgment, affective experience, and belief. This study frames IT satisfaction as an affective state and job satisfaction as an overall evaluation. Prior research on satisfaction has distinguished generalized affect from evaluation based on disconfirmation-induced attribution judgments (e.g., Mano & Oliver, 1993). Following other studies (e.g., Osatuyi & Qin, 2018), we choose this affective connotation

<sup>1</sup> Despite prior research on TTF views the concept of fit as an objective quantity and independent of a user's perceptions (Goodhue, 1997), this study focuses on users' perceptions of job fit and professional fit to uncover the psychological foundation of spillover satisfaction effect in IT use.

of IT satisfaction, rather than framing IT satisfaction as a cognitive judgment. By doing so, we can make IT satisfaction conceptually distinct from cognitive attitudes at work and avoid confounding of results (Briggs, Reinig, & Vreede, 2008). Conceptualizing IT satisfaction as an affect state also allows us to examine the cognitive consequences of IT satisfaction since it is naturally reasonable to look at affective influences on cognition rather than vice versa (Forgas, 2012).

Satisfaction spillover theory mainly argues that satisfaction with one object can cause the same feeling toward other relevant objects (Brady, 1980; Ilies, Wilson, & Wagner, 2009). Prior studies argued that this satisfaction in one domain can be influenced by satisfaction within its subdomains and other neighboring domains (Choi, Lee, Im, & Kim, 2007; Sirgy, 2002). This theory has been used to examine the relationship between satisfaction in a specific domain and other relevant domains. For example, Sirgy, Lee, and Bae (2006) found that satisfaction with Internet-enabled social activities increased satisfaction with social life, thereby enhancing overall life satisfaction. Similarly, Brady (1980) found evidence of a spillover from job satisfaction onto career satisfaction among physician assistants.

We argue that the satisfaction spillover effect applies to current research on the relationship between IT satisfaction and job satisfaction for two reasons. First, the experience of using IT, which penetrates almost all fabrics of the entire work domain, becomes a crucial part of employees' overall work experience. Satisfied with IT, a user may sense strong IT self-efficacy, representing a belief in fulfilling difficult tasks by using IT (Wang, Li, & Hsieh, 2013). This strong self-confidence in IT use can accordingly increase employees' overall evaluation of their work. For example, employees with high satisfaction toward IT-enabled decision making often perceive greater independence, authority, and discretion in determining their task schedules and work methods (Igarria & Tan, 1997). Satisfied with the efficiency of IT in tackling routine work, employees can also perceive meaningfulness in daily work by avoiding repetitive and tedious tasks. Further, IT satisfaction can increase users' perceived control over work with the help of IT-related access to information, resources, and connections (Robert & Karasek, 1979). Ultimately, the strengthened and generated positive psychological states can accumulate into employees' overall positive attitudes toward their work (Jung & Yoon, 2015).

Second, IT plays a notable transformational role in the workplace and extensively alters various aspects of work (Brynjolfsson & Hitt, 2000; Davis & Hufnagel, 2007). Employees are required to adapt to IT-enabled transformation in the work context. With high IT satisfaction, employees can leverage their deep understanding of IT to effectively adjust their behaviors and easily fit into the IT-transformed work environment. More importantly, employees with high-level satisfaction with IT in use can step out of routine-based IT use and engage in innovative use of IT (Wang et al., 2013). When users are satisfied with IT, they are likely to explore IT at work, achieving a sense of accomplishment aligned with favorable perceptions of the job. Consistent with Aral, Brynjolfsson, and Wu (2006)'s logic, a positive feedback loop between IT use and perceived IT benefits can further emerge among highly satisfied employees. The more satisfaction users feel in using IT, the more likely they experiment with IT, and the more positively they conceive their work supported by IT. Employees with IT satisfaction can then competently, confidently, and successfully adapt to the constantly changing work context and eventually enhance their job satisfaction. Therefore, we argue that IT satisfaction may spill over onto overall job satisfaction and propose the following:

**Hypothesis 1.** *Users' workplace IT satisfaction is positively related to their job satisfaction.*

### 2.2. User-task-technology fit

The concept of UTTF reflects the correspondence between IT and individual users' task-related and career-related requirements or needs

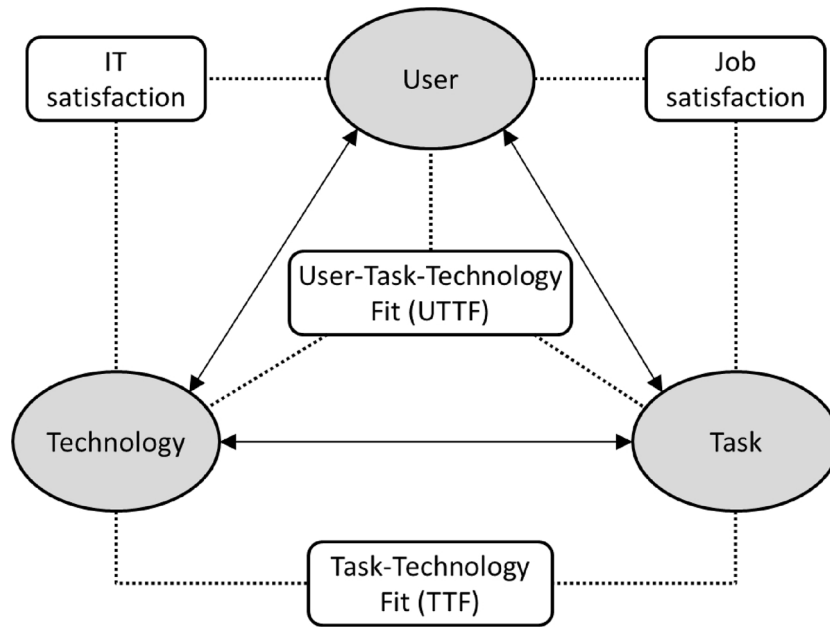


Fig. 1. The User-Task-Technology Framework. (Source: Adapted from Liu et al. (2011)).

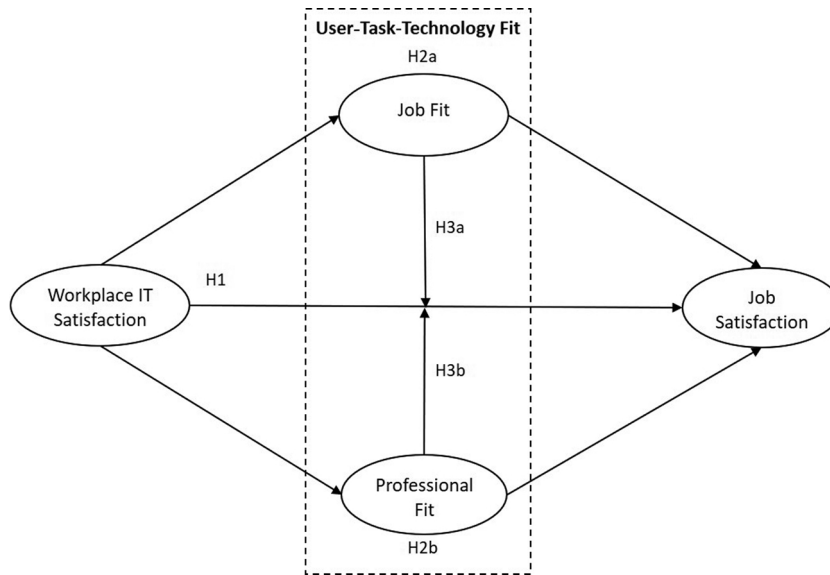


Fig. 2. Proposed Conceptual Model.

(Liu et al., 2011; Parkes, 2013). Extending the concept of task-technology fit (TTF) emphasizing the fit between IT and near-term task requirements (Goodhue & Thompson, 1995), UTTF not only looks at employees’ needs to fulfill near-term tasks, but also reflects their demands for long-term professional development. Beyond focusing on the correspondence between IT and the characteristics of tasks IT is used to fulfill, UTTF additionally emphasizes that individuals’ needs for long-term professional development play an essential role in the context of IT use. By recognizing the possible individuals’ needs to fulfill near-term tasks and achieve long-term career development by using IT, the UTTF perspective allows for a more profound exploration of complex interrelationships between individual users (assuming multiple roles and having various requirements) and IT (used in different contexts and for different purposes).

Previous literature has identified professional fit and job fit as two dimensions of UTTF (e.g., Speier & Venkatesh, 2002). An employee

typically considers himself or herself as having multiple work-related roles, such as a professional role (what kind of work do I do) and an organizational member role (what job do I take charge of in my position) (Stets & Burke, 2000). This taking of multiple roles determines that employees simultaneously assess the corresponding benefits of IT for these two roles. In other words, employees may evaluate the extent to which workplace IT increases both long-term career opportunities (professional fit) and near-term job performance (job fit).

Job fit refers to the extent to which users believe IT can enhance their job performance (Thompson, Higgins, & Howell, 1994; Thompson, Higgins, & Howell, 1991). When a user feels that IT fits his or her job, the user generally holds on to the belief that IT is compatible with his or her job responsibilities or suitable for facilitating core tasks. In this sense, the concept of job fit shares with TTF the connotation of focusing on IT support for tasks. Job fit is viewed as playing a critical role in influencing IT use and IT-enabled individual performance. For example,

Cooper and Zmud (1990) found that compatibility between the job and IT was a critical impact factor for IT adoption. Further, studies have indicated that the fit between IT and job is imperative for users to fully actualize the benefits of IT in workplaces (e.g., Lee, Cheng, & Cheng, 2007).

Addressing the user-technology interaction of the user-task-technology triad framework, professional fit, as the other dimension of UTTF, focuses on how IT fits users' professional roles and career-related needs. The conceptualization of professional fit allows a distinction between IT's fit with long-term user needs for career development and with short-term task requirements. Prior studies have conceptually and empirically supported this distinction by emphasizing users' perceptions of using IT for job tasks and long-term professional growth (e.g., Speier & Venkatesh, 2002; Thompson et al., 1991, 1994). For example, Thompson et al. (1991) argued that IT use can have long-term consequences for users, such as increasing their flexibility in changing jobs or finding more meaningful work. In a study of health care organizations, Scheepers, Scheepers, and Ngwenyama (2006) suggested that the implementation of mobile technology was associated with user professionalism. That study also found that perceptions of user satisfaction with technology were conflated with those of extra-organizational professional influence. These findings suggest that, apart from assessing the extent to which IT fits their current job, users emphasize how IT fits their needs for professional development (Scheepers et al., 2006; Thompson et al., 1991). This concern with professional fit likely influences user behaviors and attitudes in the context of IT use.

Job fit and professional fit are argued to act simultaneously as moderators and mediators of the relationship between workplace IT satisfaction and job satisfaction. Previous methodological studies view the dual effects of a single variable as both a mediator and moderator as a particular case of moderated mediation (e.g., Baron & Kenny, 1986; Judd, Kenny, & McClelland, 2001; Preacher, Rucker, & Hayes, 2007). Baron and Kenny (1986) argued the possibility of the combined moderator-mediator model wherein a single variable simultaneously mediates and moderates the same effect. Judd et al. (2001) provided a theoretical foundation explaining the logic behind this model. Despite some contradictory opinions from studies adopting the MacArthur approach to mediation and moderation analysis (e.g., Kraemer, Kiernan, Essex, & Kupfer, 2008), more studies suggest that it is conceptually and statistically possible to propose the dual effects of a single variable as both a moderator and mediator (e.g., Hayes, 2013; Judd et al., 2001; MacKinnon, 2012; 2001; Preacher et al., 2007). This moderation-mediation model has been extensively accepted and empirically testified by extant studies in IS research (e.g., Gan, Lee, & Li, 2017; Venkatesh, Thong, Chan, & Hu, 2016) and various fields in marketing, human resource, psychology and others (e.g., Comello & Farman, 2016; Creed & Bartrum, 2008; Dunkley, Blankstein, Halsall, Williams, & Winkworth, 2000; Kuvaas, 2006; Luca & Atuahene-Gima, 2007; Speier & Frese, 1997; Wei, Mallinckrodt, Russell, & Abraham, 2004), suggesting that researchers are comfortable with this dual effect model.

In this study, the complex roles of job fit and professional fit are critical for understanding the mechanism of how IT satisfaction influences job satisfaction. Prior studies have empirically examined the diverse roles of user-technology fit as an antecedent (e.g., Goodhue & Thompson, 1995; Liu et al., 2011), a mediator (e.g., Lee et al., 2007), and a moderator (e.g., Chiasson, Kelley, & Downey, 2015). Combining and extending the findings from extant literature, this study explicitly examines the dual effects of job fit and professional fit to explore the dynamic roles of these two fit-related constructs, which cannot be understood by merely theorizing moderation or mediation models separately. Introducing job fit and professional fit as moderators involves a relatively static perspective by viewing job fit and professional fit as some extrinsic factors and sets up a partition of employees into subgroups of those more or less likely to perceive the fit between IT and their job or professional requirements. On the other hand, linking fit-satisfaction relation to a specific mediating mechanism implies that

variations in perceived job/professional fit elicit employees to become more or less likely to spillover their satisfaction toward IT to job satisfaction. This allows us to discover a more dynamic conception of how job fit and professional fit operate. The following section will elaborate the dual effects of job fit and professional fit as both mediators and moderators.

### 2.3. Mediating effects of job fit and professional fit

In addition to the direct effect, IT satisfaction can indirectly influence job satisfaction via the mediation effects of job fit and professional fit. Proposing the mediation effect of fit implies that the positive work impacts of IT depend on the fit between IT and job tasks, uncovering the complex mechanism underlying IT effects in workplaces. Prior studies have confirmed that task-technology fit mediated the impacts of technologies on employees' job outcomes (e.g., Rapp & Forbes, 2008). For example, Rapp and Forbes (2008) found that IT impacts on jobs were mediated by the fit between the particular technology and the type of task. Similarly, Lee et al. (2007) demonstrated that task-technology fit mediated the relationship of individual differences and task performance. Following this logic, UTTF (i.e., job fit and professional fit) will mediate the relationship between IT satisfaction and job satisfaction.

Job fit reflects user belief that workplace IT is compatible with job responsibilities and task requirements. Users with high level IT satisfaction often feel confident in IT abilities to help conduct various activities, such as collecting data, processing information, and making decisions, imperative for task fulfillment and job performance (Thompson et al., 1991). For example, satisfied users can easily reach high-quality information for decision making, efficiently complete routine tasks, and tackle problems with the help of IT. Thus, affective satisfaction with IT in daily work accumulates and serves as seeds for the belief in IT compatibility with work practices.

Job fit determines the extent to which employees believe that workplace IT as a whole is valuable to support specific tasks and overall job performance. When IT is viewed supportive for tasks, employees likely develop positive feelings toward their work processes and managerial environment (Zuboff, 1988). Further, employees with high-level perceived job fit can actualize the benefits of using IT in terms of superior work performance. For example, cognitive fit, a particular form of job fit indicating the match between information representation and task requirement, is found to increase individual decision-making performance (Vessey, 1991). When IT is viewed to provide support and functions matching job requirements, employees' overall job satisfaction will eventually arise (Goodhue & Thompson, 1995; Hsieh et al., 2012). We suggest that although IT satisfaction is expected to directly affect job satisfaction (as proposed in H1), its effect on job satisfaction will also be mediated through job fit by strengthening confidence in IT value and facilitating the appreciation of tangible IT benefits. Given the above discussion for mediation, together with H1, we propose as follows:

**Hypothesis 2a.** *Users' job fit partially mediates the relationship between workplace IT satisfaction and job satisfaction.*

Professional fit implies that employees can perceive congruence between technology affordances and long-term personal demands while experiencing low technostress. When employees are satisfied with the implemented IT, they may have strong self-efficacy in using IT and feel more competent and professional among their peers (Speier & Venkatesh, 2002). For instance, with the help of timely and accurate information provided by IT, employees can expand their decision authority in exercising professional skills (Ash et al., 2003). Scheepers et al. (2006) found evidence that nurses conceived the implementation of mobile technology as a part of being professional. Further, users with higher IT satisfaction can easily adapt to new technologies and cope with learning requirements, and then have more opportunities to use IT for professional development (Speier & Venkatesh, 2002). That is,



employees perceiving IT satisfaction can feel empowered and professionally supported by using IT.

Professional fit reflects that users concern the long-term consequences of using IT. Nowadays, employee relation to work shifts from purely economic to containing a personal attachment to work (Asaro, 2000). Beyond performing tasks, employees tend to turn their identities into enterprising agents seeking personal fulfillment (Asaro, 2000). In IT use context, employees leverage IT not only for daily productivity but also for career prospects (Chau, 1996). Due to emerging IT and business-process reengineering caused by IT implementation, professional fit is critical for motivating users in adapting to new applications, updated functionalities, and changed work processes. Thus, professional fit can enable employees to cognitively generate favorable attitudes toward their job. Despite IT satisfaction is expected to directly affect job satisfaction (as proposed in H1), professional fit mediates its effect on job satisfaction by enhancing empowerment and perceived personal fulfillment. Accordingly, we propose the following partial mediation of professional fit:

**Hypothesis 2b.** *Users' professional fit partially mediates the relationship between workplace IT satisfaction and job satisfaction.*

#### 2.4. Moderating effects of job fit and professional fit

IT satisfaction refers to employees' positive affective evaluations of implemented IT in terms of ease of use, information content, accuracy, format, and timeliness (Doll, Deng, Raghunathan, Torkzadeh, & Xia, 2004). The concept of IT satisfaction is mostly related to users' perceptions of the current IT. IT changes rapidly, and the ever-changing functionalities of workplace IT can create ambiguity regarding job demands (Love, Simpson, & Walker, 1989). In the context of IT-related changes and uncertainty, the perceived fit between IT and job requirements, as well as the fit between IT and professional development, is vital to the cognitive security of employees.

Given the possible cognitive and behavioral influences of UTTF in IT use and value appropriation, we argue that job fit moderates the effects of IT satisfaction on job satisfaction. First, workplace IT is a critical component of the work context, which can significantly influence and even shape employees' perceptions of various aspects of work. For example, the implementation of enterprise systems has largely changed employees' perceptions of work elements, such as tasks, processes, and roles (Davis & Hufnagel, 2007). In an organization where IT is perceived fit with job requirements, employees tend to believe the company values their work experience and engages in investing IT to support their work. Such a belief among employees can turn into a positive attribution related to the company's IT practice and enhance positive evaluations of their job situations. Further, job fit influences employees' perceptions of work and affects their behaviors and work engagement (Humphrey, Nahrgang, & Morgeson, 2007). Employees with higher-level perceived job fit can more easily understand the company's efforts to leverage IT to improve processes and activities. Generally, job fit makes employees more capable of using and appropriating the benefits of IT in supporting tasks (Speier & Venkatesh, 2002). Additionally, employees with high perceptions of job fit tend to assign more weight to their evaluations of workplace IT, which means they are prone to form a positive evaluation on the job because of their positive feelings about IT in use. Thus, we posit the following:

**Hypothesis 3a.** *Job fit positively moderates the effect of users' workplace IT satisfaction on job satisfaction.*

Professional fit also moderates the effects of IT satisfaction on job satisfaction. Employees with the perception of professional fit tend to believe in their company's savvy and intention in providing IT to support their work and long-term career development. Both this cognitive belief in organizational IT savvy and this positive attribution will strongly stimulate the psychological spillover of IT satisfaction onto job

satisfaction. Also, employees with high professional fit are capable of coping with the stress from IT-related changes and transformation. Clearly envisioning the use of IT for their long-term career development, they can easily understand the value of IT, whatever challenges and changes are caused by these existing and emerging technologies. This insight of IT value helps them effectively overcome the possible job insecurity related to IT and transfer positive IT experience to job satisfaction. Further, perceiving higher-level professional fit, employees are more willing to explore the features and functionalities of IT. In such a circumstance, employees can be more likely to improve their behaviors to adapt to IT-enabled changes and achieve better outcomes at work. In this way, satisfaction with IT can more readily spillover onto overall job evaluation. Correspondingly, we propose the following:

**Hypothesis 3b.** *Professional fit positively moderates the effect of users' workplace IT satisfaction on job satisfaction.*

### 3. Research method

#### 3.1. Sample and data collection

With IT extensively implemented by companies to support various business activities, both managers and operational-level employees have rich experience in using IT for work purposes and are qualified to participate in this study. Considering that employees' attitudes toward IT and their jobs can vary across work contexts, we aimed to obtain a diverse sample. Data were collected in the Pearl River Delta region of southern China. We cooperated with a local university to collect data from participants in its management training programs targeting working adults. A total of 445 participants in these programs were invited to answer an online survey with guaranteed confidentiality. A total of 207 responses were returned and were suitable for data analysis, thereby yielding a valid response rate of 46.52%. The demographic profiles of the respondents show in Appendix A.

#### 3.2. Measures

We adapted measures from prior literature (see Appendix B). Workplace IT satisfaction was framed as an affect state and measured using four items adapted from Bhattacharjee (2001). Measures for job fit and professional fit were adapted from Speier and Venkatesh (2002). Items for job satisfaction were adapted from Janssen (2001) and Morris and Venkatesh (2010) to reflect the nature of this construct as an overall evaluation. All of the construct items were measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Gender, age, education, job level, business unit, and work experience were controlled for possible effects. The items were translated into Chinese and back-translated into English by two bilingual research assistants. Minor wording discrepancies were resolved through discussion.

### 4. Data analysis

#### 4.1. Measurement model

We examined the validity of all constructs by checking their reliability, convergent validity, and discriminant validity. Construct reliability was assessed by composite reliability, Cronbach's alpha, and individual item loadings. Table 1 shows the mean, standard deviation, Cronbach's alpha, composite reliability, average variance extracted (AVE), and correlations for all of the constructs. All of the values for composite reliability were higher than 0.8. The Cronbach's alpha scores for all of the constructs were higher than the criterion of 0.7 (Hair, Black, Babin, Anderson, & Tatham, 2006). Since all of the individual item loadings (see Table 2) were above the threshold of 0.60 (Hair et al., 2006), construct reliability was considered acceptable.

**Table 1**  
Descriptive Statistics and Correlation Matrix.

	Mean	SD	α	CR	AVE	1	2	3	4	5	6	7	8	9	10
<b>1. Workplace IT satisfaction</b>	4.98	0.93	0.89	0.92	0.75	<b>0.87</b>									
<b>2. Job fit</b>	4.88	0.82	0.81	0.87	0.63	0.78**	<b>0.80</b>								
<b>3. Professional fit</b>	4.83	0.84	0.86	0.89	0.58	0.75**	0.75**	<b>0.76</b>							
<b>4. Job satisfaction</b>	4.64	0.83	0.70	0.82	0.61	0.63**	0.62**	0.59**	<b>0.78</b>						
<b>5. Gender</b>	1.59	0.49	–	–	–	0.03	–0.11	–0.02	–0.12	–					
<b>6. Age</b>	1.74	0.75	–	–	–	–0.05	–0.03	–0.15*	0.03	–0.20**	–				
<b>7. Education</b>	1.90	0.61	–	–	–	–0.01	–0.01	0.02	0.00	0.01	–0.09	–			
<b>8. Business unit</b>	2.61	1.05	–	–	–	0.15*	0.12	0.01	0.01	–0.03	0.12	–0.05	–		
<b>9. Job level</b>	1.85	0.83	–	–	–	0.07	0.15*	0.17*	0.14*	–0.11	0.02	0.31**	0.01	–	
<b>10. Work experience</b>	2.33	1.20	–	–	–	0.11	0.13	0.04	0.17*	–0.24**	0.52**	–0.06	0.16*	0.09	–

Notes: Diagonal elements (in bold) in the correlation matrix are the square roots of AVEs. SD: standard deviation; α: Cronbach’s alpha; CR: composite reliability. \*  $p < 0.05$ , \*\*  $p < 0.01$ .

**Table 2**  
Loadings and Cross Loadings.

	Workplace IT satisfaction	Job fit	Professional fit	Job satisfaction
ISAT1	<b>0.84</b>	0.66	0.62	0.55
ISAT2	<b>0.88</b>	0.65	0.66	0.52
ISAT3	<b>0.87</b>	0.69	0.64	0.56
ISAT4	<b>0.88</b>	0.71	0.68	0.56
JFIT1	0.64	<b>0.77</b>	0.65	0.46
JFIT2	0.61	<b>0.81</b>	0.54	0.50
JFIT3	0.60	<b>0.79</b>	0.54	0.47
JFIT4	0.64	<b>0.82</b>	0.66	0.55
PFIT1	0.46	0.48	<b>0.63</b>	0.29
PFIT2	0.57	0.57	<b>0.77</b>	0.44
PFIT3	0.55	0.57	<b>0.76</b>	0.44
PFIT4	0.63	0.68	<b>0.83</b>	0.51
PFIT5	0.59	0.58	<b>0.81</b>	0.47
PFIT6	0.60	0.57	<b>0.75</b>	0.49
JSAT1	0.56	0.47	0.46	<b>0.84</b>
JSAT2	0.24	0.23	0.20	<b>0.61</b>
JSAT3	0.58	0.64	0.59	<b>0.87</b>

We then assessed convergent validity and discriminant validity through confirmatory factor analysis (CFA). As shown in Table 1, AVE scores were higher than 0.50 (Fornell & Larcker, 1981), indicating good inner-construct consistency (convergent validity) for each variable. Discriminant validity was checked by (1) whether the square root of the AVE of each construct was larger than all of the other cross-correlations and (2) whether the item loadings of each construct were larger than the cross-loadings on other constructs (Chin, 1998). The results shown in Table 1 and Table 2 verify the discriminate validity of all of the constructs in the research model.

4.2. Testing for common method bias

Common method bias could have been an issue since the data were from a single source. Two methods were used to verify whether common method bias was present. First, Harman’s single-factor test was conducted by performing exploratory factor analysis on the four conceptualized crucial variables, including workplace IT satisfaction, job fit, professional fit, and job satisfaction (Podsakoff & Organ, 1986). The results showed that no single factor accounted for the majority of the variance ( $49.83\% < 50\%$ ) (Teo, Tan, Ooi, & Lin, 2015). In addition, the correlation matrix did not indicate any highly correlated factors (highest correlation:  $r = 0.78$ ), whereas the presence of common method bias would have resulted in extremely high correlations ( $r > 0.90$ ) (Pavlou, Liang, & Xue, 2007). The concern over common method bias was further alleviated by the findings of significant interaction effects (Siemsen, Roth, & Oliveira, 2010).

4.3. Main effects

We conducted hierarchical regression analyses using SPSS 22 to test our hypotheses. The latent values for the constructs from CFA were used for the regression analysis. In Model 1, we entered the control variables (i.e., gender, age, education, business unit, job level, and work experience). In Model 2, we added workplace IT satisfaction. In Model 3, two mediators (i.e., job fit and professional fit) were added. Finally, in Model 4, we added two interaction items (i.e., workplace IT satisfaction × job fit; workplace IT satisfaction × professional fit). We centered the component variables used for the interactions to reduce possible problems of multicollinearity (Aiken & West, 1991). All of the variance inflation factor (VIF) values were below 4, suggesting that multicollinearity was not a major concern.

The results for Model 1 in Table 3 indicate that only work experience positively influenced job satisfaction. The variance explained by the control variables was 6%. The results for Model 2 show that workplace IT satisfaction was a significant, positive determinant of job satisfaction, thus supporting H1. Workplace IT satisfaction explained 38% additional variance in predicting job satisfaction. The results in Model 3 indicate that, although not hypothesized, job fit positively affected job satisfaction and, together with professional fit, explained 4% additional variance in job satisfaction.

4.4. Mediating effects

We conducted mediation analyses following the procedure in Baron

**Table 3**  
Hierarchical Regression Analysis.

	Model 1	Model 2	Model 3	Model 4
<b>Controls</b>				
Gender	–0.07	–0.11*	–0.07	–0.05
Age	–0.08	0.01	0.04	0.03
Education	–0.04	–0.02	–0.01	–0.02
Business unit	–0.02	–0.11*	–0.09	–0.11*
Job level	0.13	0.08	0.04	0.04
Work experience	0.19*	0.08	0.07	0.07
<b>Main effects</b>				
Workplace IT satisfaction (ISAT)		0.64**	0.35**	0.35**
Job fit (JFIT)			0.22*	0.16
Professional fit (PFIT)			0.15	0.16
<b>Interactions</b>				
ISAT × JFIT				0.24*
ISAT × PFIT				–0.10
R <sup>2</sup>	0.06	0.44	0.48	0.50
Adjusted R <sup>2</sup>	0.03	0.42	0.45	0.47
ΔR <sup>2</sup>		0.38	0.04	0.02
ΔF		136.89**	6.89**	4.23*

Note: standardized regression coefficients are shown. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; two-tailed test.

**Table 4**  
Regression Analysis of the Mediating Effects of Job Fit and Professional Fit.

	Job fit		Professional fit		Job satisfaction		
	Model A1	Model A2	Model B1	Model B2	Model C1	Model C2	Model C3
<b>Controls</b>							
Gender	-0.08	-0.13**	-0.02	-0.06	-0.07	-0.11*	-0.07
Age	-0.15	-0.03	-0.23**	-0.12*	-0.08	0.01	0.04
Education	-0.05	-0.02	-0.04	-0.02	-0.02	-0.02	-0.01
Business unit	0.11	0.00	0.01	-0.09*	-0.02	-0.11*	-0.09
Job level	0.14	0.08	0.18*	0.12*	0.13	0.08	0.04
Work experience	0.15	0.02	0.14	0.01	0.19*	0.08	0.07
<b>Main effects</b>							
Workplace IT satisfaction (ISAT)		0.78**		0.75**		0.64**	0.35**
Job fit (JFIT)							0.22*
Professional fit (PFIT)							0.15
R <sup>2</sup>	0.07	0.64	0.07	0.60	0.06	0.44	0.48
Adjusted R <sup>2</sup>	0.04	0.63	0.04	0.58	0.03	0.42	0.45
ΔR <sup>2</sup>		0.57		0.53		0.38	0.04(vs C2)
ΔF		316.11**		262.50**		136.89**	6.89**
sig ΔF		0.00		0.00		0.00	0.00

Note: standardized regression coefficients are shown.  
\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; two-tailed test.

and Kenny (1986). Table 4 reports the results. First, we regressed workplace IT satisfaction on job fit and professional fit, respectively. The results in Model A2 and B2 in Table 4 show that workplace IT satisfaction significantly and positively influenced job fit ( $\beta = 0.78, p < 0.01$ ) and professional fit ( $\beta = 0.75, p < 0.01$ ), respectively. Second, workplace IT satisfaction was regressed on job satisfaction. The result in Model C2 supports a significant and positive effect of workplace IT satisfaction on job satisfaction ( $\beta = 0.64, p < 0.01$ ). Finally, we regressed workplace IT satisfaction, job fit, and professional fit on job satisfaction to assess the parallel multiple mediation model where job fit and professional fit act simultaneously as mediators. The results in Model C3 show that in the presence of job fit and professional fit, the effect of workplace IT satisfaction on job satisfaction was reduced, although it was still significant. The effect of job fit on job satisfaction was significant, whereas the effect of professional fit on job satisfaction was not at the 0.05 level. The results suggest that job fit acted as a partial mediator, and the mediating effect of professional fit was not supported.

To further assess the direct and indirect effects of workplace IT satisfaction on job satisfaction, we used Preacher and Hayes’s bootstrapping techniques with 5000 bootstrap samples (Preacher & Hayes, 2008). This was done using Hayes’s PROCESS v. 3.0 macro for SPSS (Hayes, 2018). The point estimates of the indirect effects are statistically significant if the 95% confidence intervals (CIs) contain no zeros. We first conducted simple mediation analysis and then parallel multiple mediation analysis. While conducting mediation analysis, we also controlled for the effects of gender, age, education, business unit, job level, and work experience. First, we applied Hayes (2013) Model 4

separately for each of the mediators. Table 5 presents the results of the simple mediation analyses. As seen in the table, the mediation effects of job fit and professional fit were supported (point estimate of 0.20, CI: 0.07–0.35 for job fit; point estimate of 0.15, CI: 0.04–0.27 for professional fit). The direct effects of workplace IT satisfaction on job satisfaction were significant in the simple mediation models of job fit (point estimate of 0.37;  $p < 0.01$ ) and professional fit (point estimate of 0.42;  $p < 0.01$ ), suggesting job fit and professional fit partially mediated the association.

Second, we constructed a parallel multiple mediation model to examine whether mediation by job fit or professional fit remained significant after including the other mediator. We still applied Hayes (2013) Model 4, which allows for simultaneously incorporating multiple mediation relationships. The results in Table 5 show that, in the parallel multiple mediation model, the mediation effect of job fit was significant (point estimate of 0.16, CI: 0.01–0.33), whereas professional fit was not a significant mediator (point estimate of 0.10, CI: -0.04–0.23). Thus, H2a was supported, and H2b was not. Consistent with the regression analysis results, the results of simple mediation analyses and multiple mediation analyses indicate that job fit partially mediated the association between workplace IT satisfaction and job satisfaction.

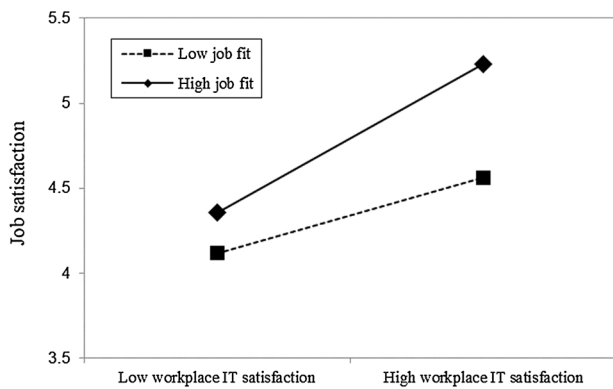
4.5. Moderating effects

The results in Model 4 of Table 3 indicate that the interaction term of workplace IT satisfaction and job fit was significant. Following Aiken and West (1991), we plotted interactions by deriving separate

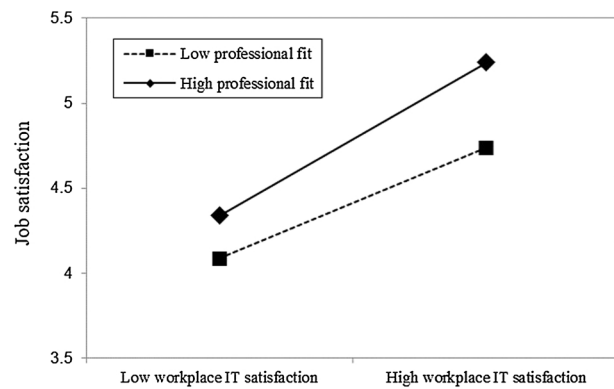
**Table 5**  
Results for the Mediation Models from PROCESS.

Mediator	IV on M (a)	M on DV (b)	Indirect effect (a × b)	BootSE	BootLLCI	BootULCI	Direct effect (c')	Total effect (c)
Simple mediation model 1 JFIT	0.69	0.29	0.20*	0.07	0.07	0.35	0.37	0.57
Simple mediation model 2 PFIT	0.68	0.23	0.15*	0.06	0.04	0.27	0.42	0.57
Multiple mediation model JFIT	0.69	0.23	0.16*	0.08	0.01	0.33	0.32	0.57
PFIT	0.68	0.14	0.10	0.07	-0.04	0.23		
Specific indirect effect contrast (JFIT-PFIT)	NA	NA	0.06	0.13	-0.19	0.34		

Notes: significant point estimates ( $p < 0.05$ ) determined by the bootstrapping technique of Preacher and Hayes (2008).  
<sup>a</sup>IV: independent variable; M: mediator; DV: dependent variable; JFIT: job fit; PFIT: professional fit.



(a) Interaction between job fit and workplace IT satisfaction



(b) Interaction between professional fit and workplace IT satisfaction

Fig. 3. Interaction Effects of Job Fit and Professional Fit.

equations for the high and low conditions of the predictors (one standard deviation above and below the mean) and testing the simple slope analysis for each of the interactions. Fig. 3 shows plots of the significant interactions between job fit, professional fit, and workplace IT satisfaction. First, for employees with high job fit, workplace IT satisfaction was positively related to job satisfaction ( $\beta = 0.44, p < 0.01$ ); for employees with low job fit, workplace IT satisfaction was positively related to job satisfaction ( $\beta = 0.22, p < 0.01$ ). Second, for employees with a high professional fit, workplace IT satisfaction was positively associated to job satisfaction ( $\beta = 0.45, p < 0.01$ ); for employees with low professional fit, workplace IT satisfaction was positively related to job satisfaction ( $\beta = 0.33, p < 0.01$ ).

These results demonstrated the moderating effect of job fit on the relationship between workplace IT satisfaction and job satisfaction, thus supporting H3a. However, the proposed moderating effect of professional fit was not significant, indicating that H3b was not supported. The interaction effect of job fit explained 2% additional variance in job satisfaction ( $\Delta F = 4.23, p < 0.05$ , as shown in Table 3), indicating a small effect size (Cohen, 1988). The results of the bootstrapping approach using PROCESS and applying Hayes (2013) Model 2 also supported the findings.

## 5. Discussion

### 5.1. Discussion of findings

This study mainly aimed to extend the IT performance literature by shifting the research focus beyond IT effectiveness to employees' job-related attitudinal outcomes. We drew upon the UTTF framework to examine the interrelationships between users, technology, and work, and explore the influence of UTTF on users' IT satisfaction and job satisfaction. We assessed UTTF and considered two variables (i.e., job fit and professional fit). The two fit-related variables represented the extent to which users perceived the implemented IT as supporting their job- or career-related needs; this allowed for examining UTTF's complexity and multidimensionality. Job fit and professional fit are critical in the spillover mechanism between IT satisfaction and job satisfaction.

The results indicated that workplace IT satisfaction significantly enhanced job satisfaction. Consistent with prior studies (e.g., Lee, Kim, & Lee, 1995), findings on the significant effect of IT satisfaction on job satisfaction in our research demonstrate the critical role of IT satisfaction in improving users' work outcomes. The present research theoretically proposed and empirically examined the satisfaction spillover effect of IT domain onto work domain, which has not been sufficiently examined in the literature. The findings of direct and indirect effects of IT satisfaction on job satisfaction offer a solid explanation of this satisfaction spillover effect.

The results further supported the mediating roles of job fit and professional fit between workplace IT satisfaction and job satisfaction. Consistent with the prior literature on fit (e.g., Goodhue & Thompson, 1995; Lee et al., 2007; Speier & Venkatesh, 2002), our findings highlighted the critical roles of job fit and professional fit in the satisfaction spillover mechanism. In addition, this study empirically probed the more complicated interrelationships among these variables. Specifically, we found that job fit and professional fit partially mediated the effects of workplace IT satisfaction on job satisfaction. This finding implies that despite the direct influence of IT satisfaction on job satisfaction, the satisfaction spillover mechanism also operates through the mediation of users' perceptions of the fit between technology, work, and long-term professional development.

Our results showed that job fit strengthened the relationship between workplace IT satisfaction and job satisfaction. However, we did not find a significant moderating effect of professional fit. This is likely attributable to the association between professional fit and perceived professional identities. The magnitude of the influence of professional fit varies with the extent to which an individual perceives his or her professional identity and the possible effects of IT on this identity (Barrett & Walsham, 1999). About 24.15% of the respondents came from general administration departments and might have weaker perceptions of their professional identities compared to employees from functional areas, such as financial and accounting units. Thus, we should be cautious in interpreting the present results and carefully address this issue in future research by conducting comparison studies.

### 5.2. Theoretical contributions

Consistent with prior research (e.g., Ang & Koh, 1997; Ang & Soh, 1997; Cheney & Scarpello, 1985), this study found that employees' job satisfaction is one of the desired outcomes of IT implementation and utilization. By exploring the mechanism of how IT satisfaction influences job satisfaction, this study makes several contributions to the literature on IT effects. In general, the present work aimed to respond to the call to focus on downstream consequences of technology use (e.g., Morris & Venkatesh, 2010; Venkatesh, Davis, & Morris, 2007). Even though IT satisfaction has been widely examined as a key measure of IS success (DeLone & McLean, 2003), insufficient attention has been paid to the consequences of IT satisfaction (Vaezi et al., 2016), especially its effects on individual job outcomes. Consistent with recent literature (e.g., Lal & Dwivedi, 2008, 2009, 2010; Cai, Huang, Liu, & Wang, 2018), the present study focused on IT-enabled attitudinal and cognitive changes, rather than associating IT satisfaction with distal behavioral consequences. Thereby, we examined the mechanism of how IT satisfaction impacts employees' job satisfaction. Thus, our work contributes to the knowledge on the individual impacts of IT by empirically



demonstrating the influences of IT satisfaction at work.

Specifically, our research extends existing IT satisfaction literature by focusing on cognition-related consequences. Prior studies have argued that cognitive states are associated with users' positive performance (e.g., Schmitz, Teng, & Webb, 2016). However, little effort has been made to understand how user satisfaction influences individual job-related cognitive attitudes, and the mechanism underlying this effect remains unclear. Different from extant studies mainly focusing on the behavioral consequents of IT satisfaction, our study empirically examined the roles of IT satisfaction in changing employees' job-related attitudes and cognition. In doing so, this study investigates the effects of IT satisfaction from a cognition-centric perspective, complementing the understanding of behavioral mechanisms.

Further, this study complements extant research focusing on the association between IT attitude and job satisfaction (e.g., Elias et al., 2012) by introducing a satisfaction spillover framework combined with UTTF theory. Our findings facilitate an understanding of the complex mechanism underlying the relationship between IT satisfaction and job satisfaction. The mediating and moderating effects of UTTF variables, i.e., job fit and professional fit, were empirically examined. A few prior studies have investigated the intermediating or moderating effects of these variables, but they did not examine these effects in an integrative way. Among the three interrelationships of the UTTF framework, the effects of professional fit have been largely ignored by prior research. Unlike prior studies taking TTF framework and only focusing on job fit, the UTTF perspective incorporated the interaction between IT and users' perceptions of professional identities. In our research, the conditional effects of job fit and professional fit were tested by combining the mediating and moderating effects, providing an improved understanding of the complex satisfaction spillover mechanism.

This work also has a contribution to the literature on job satisfaction in organizational behavior research by demonstrating the ability of IT to account for variance in job satisfaction beyond that accounted for by task/job characteristics. This study showed that IT satisfaction was significantly associated with job satisfaction, indicating that an individual's satisfaction with his or her job may be impacted by affective perceptions of the deployed IT. This study can serve as a preliminary effort to call for further research on workplace alterations and challenges caused by emerging digital technologies.

### 5.3. Managerial implications

This study has implications for practice. First, the proposed relationship between IT satisfaction and job satisfaction highlights that, besides the functionalities of IT, managers need to watch and emphasize employee attitude toward IT in use. Beyond merely acting as a task-oriented tool, IT shows an ability to substantially influence or shape employees' experience, cognition, beliefs, and mindsets at work. Managers need to delve deep into the era of the digitalized workplace by viewing IT as a critical component of work with promise in shaping employees' thoughts. In doing so, managers can deeply understand the complex interrelationship between IT and work, thereby enabling them to make appropriate decisions about policies and regulations regarding IT use in the workplace.

Second, given that IT satisfaction is critical for job satisfaction, IT managers need to understand the influential factors of IT use experience. Substantial efforts are required to enhance employee satisfaction by eliminating poor IT performance (Joshi & Rai, 2000), such as programming errors, poor documentation, and application crashes (Carayon-Sainfort, 1992). Adequate and timely IT support should also be available to enable users to cope with technological issues in work processes. More importantly, IT practitioners need to understand the psychological experiences employees have when they use IT. The

designers and developers of enterprise IT can learn from their counterparts of consumer IT in exploring user needs and improving user experiences.

Aside from IT quality, managers should also pay attention to the quality of employees' work life (e.g., job fit and professional fit). The IT implemented in workplaces alters existing work patterns and business processes. Constant developments in IT require employees to update their technical skills, which could increase work-related stress or burdens. IT staff should recognize the present and long-term job-related requirements of employees. Accumulated IT learning and utilization experience should enhance employees' competence in dealing with various tasks and challenges at present and in the future, helping them to realize the profession-related value of IT and thereby allowing them to develop positive perceptions of their jobs.

In summary, operational managers and IT managers should improve employees' affection for technology by providing satisfying IT applications in terms of qualified information, stable operation, and technical support. The development and implementation of IT should be consistent with employees' task requirements (job fit) and long-term professional needs (professional fit) to foster favorable job appraisals.

## 6. Conclusion

This study has some limitations. First, despite the multiple analyses conducted to check for common method bias, longitudinal research design or multiple informant data collection could eliminate possible bias. Second, this study collected data from the employees of companies in China's Pearl River Delta region. Even though the sample was selected to ensure diversity among the respondents in terms of industry, position, and functional area, this geographical limitation could reduce the generalizability of our findings. Future studies should validate the research model for other populations. Moreover, workplace IT develops rapidly, thereby resulting in a changing environment for employees. However, we did not consider the possible differences between users' attitudes toward traditional IT and new IT. To examine the effects of emerging IT on employee perceptions, future studies could focus on specific types of new workplace IT, such as mobile technologies and cloud computing. To this end, additional factors, say, the characteristics of IT (such as social versus impersonal, stand-alone versus embedded, and single-purpose versus general-purpose), need further consideration. Additionally, we did not compare user satisfaction with company-offered IT and personal IT because the use of personal IT for work is not prevailing despite some emerging changes. Moreover, separating personal IT from company-offered IT is difficult when company-offered applications are associated with employees' mobile phones. The boundary between organizational and personal technology is often blurry. Thus, we introduced and emphasized a broadly defined concept to highlight the emerging complexity of IT use in organizations. Future studies should differentiate user attitudes toward organizational and personal IT and examine the possible different effects of these two kinds of IT on individual and organizational outcomes.

This research built a theoretical framework for the satisfaction spillover effect combined with UTTF and showed how IT satisfaction contributes to individual users' job satisfaction. Consistent with the growing academic interest in exploring the subtle impacts of workplace IT, our study incorporated the mediating and moderating effects of job fit and professional fit to uncover the complex mechanism of satisfaction spillover. A notable contribution of this study is its integrative examination of these effects. This study helps to improve our understanding of the effects of individual users' IT satisfaction within organizations. This study's findings can help to open up new areas for future research on the effects of workplace IT.

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## Appendix A. Demographics of the Sample

	Category	Frequency	Percentage
Gender	Male	84	40.58%
	Female	123	59.42%
Age	Below or equal to 35 years old	92	44.44%
	36-45 years old	77	37.20%
	Equal to or above 46 years old	38	18.36%
Education	Diploma or below	48	23.19%
	Bachelor degree	134	64.73%
	Master degree	23	11.11%
	Doctor degree	2	0.97%
Business units	Finance or accounting	21	10.14%
	Engineering	100	48.31%
	Marketing or sales	30	14.49%
	Administration	50	24.15%
	Other	6	2.90%
Job level	First-line employee	88	42.51%
	First-line supervisor	63	30.43%
	Middle-level manager	55	26.57%
	Executive level manager	1	0.48%
Work experience	1-3 years	69	33.33%
	4-6 years	58	28.02%
	7-9 years	22	10.63%
	10 years or more	58	28.02%

## Appendix B. Measurement Items

Constructs	Items	Source
Workplace IT satisfaction (ISAT)	ISAT1: I am very satisfied with the use of workplace IT. ISAT2: I am very pleased with the use of workplace IT. ISAT3: I am very contented with the use of workplace IT. ISAT4: I am very delighted with the use of workplace IT.	Bhattacharjee (2001)
Job fit (JFIT)	JFIT1: IT can increase the quantity of output for the same amount of effort. JFIT2: Using IT decreases the time needed for my important job responsibilities. JFIT3: Using IT significantly increases the quality of output of my job. JFIT4: Using IT increases the effectiveness of performing job tasks.	Speier and Venkatesh (2002)
Professional fit (PFIT)	PFIT1: Using IT increases the level of challenge in my career. PFIT2: Using IT increases the flexibility of changing jobs. PFIT3: Using IT increases the amount of variety in my career. PFIT4: Using IT increases the opportunity for more meaningful work. PFIT5: Using IT increases the opportunity for preferred career assignments. PFIT6: Using IT increases the opportunity to gain job security.	Speier and Venkatesh (2002)
Job satisfaction (JSAT)	JSAT1: Overall, I am satisfied with my job. JSAT2: I would prefer another, more ideal job. JSAT3: I am satisfied with the important aspects of my job.	Janssen (2001) and Morris and Venkatesh (2010)

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