

## The Roles of Work-Related and Social-Related Social Media Usage in Facilitating Firm-Level Creative Capital and Innovative Job Performance

Xuemei Sun\*

*Received: August 30, 2023*

*Revised: June 08, 2024*

*Accepted: July 01, 2024*

### Abstract

The use of social media in the workplace has become increasingly prevalent in recent years. While social media platforms can offer a range of benefits to organizations, including increased communication and collaboration, their impact on employee creativity remains unclear and organizational sustainable development. This study was grounded in social information processing theory to investigate the effects of both work-related and social-related social media usage on firm-level creative capital and employees' innovative job performance. By applying a hybrid sampling design of snowball sampling method and convenience sampling method, 381 Chinese employees in mainland China were collected. The findings of the PLS-SEM analysis revealed that the proposed model has moderate explaining power on innovative job performance ( $R^2 = .59$ ) and firm-level creative capital ( $R^2 = .40$ ). This study provides empirical evidence supporting the social information processing theory from the social media perspective. Besides, the results suggest that managers should encourage and support the appropriate use of social media platforms by facilitating employees' participation in professional networks, providing access to collaboration tools, and recognizing innovative use of social media.

**Keywords:** Social Media Usage, Firm-Level Creative Capital, Innovative Job Performance, Social Information Processing Theory

\* International College, National Institute of Development Administration  
148 Serithai Road, Klong-Chan, Bangkok, Bangkok 10240, THAILAND.  
E-mail: xuemei.sun@nida.ac.th

## บทบาทของการใช้โซเชียลมีเดียที่เกี่ยวข้องกับงาน และสังคม เพื่อส่งเสริมการพัฒนาทุนสร้างสรรค์ ในระดับองค์กรและการปฏิบัติงานเชิงนวัตกรรม

เชียวมี ชุน\*

รับวันที่ 30 สิงหาคม 2566

ส่งแก้ไขวันที่ 08 มิถุนายน 2567

ตอบรับตีพิมพ์วันที่ 01 กรกฎาคม 2567

### บทคัดย่อ

การใช้โซเชียลมีเดียในที่ทำงานแพร่หลายมากขึ้นในช่วงไม่กี่ปีที่ผ่านมา แม้ว่าแพลตฟอร์มโซเชียลมีเดียส่งเสริมให้เกิดผลประโยชน์เชิงบวกต่อองค์กร ซึ่งรวมถึงการสื่อสารและการทำงานร่วมกันที่เพิ่มขึ้น แต่ผลกระทบเชิงบวกต่อความคิดสร้างสรรค์ของพนักงานยังไม่ชัดเจนซึ่งส่งผลต่อการพัฒนาที่ยั่งยืนขององค์กร การศึกษานี้มีพื้นฐานมาจากทฤษฎีการประมวลผลข้อมูลทางสังคม (Social information processing theory) เพื่อตรวจสอบผลกระทบของการใช้โซเชียลมีเดียทั้งที่เกี่ยวข้องกับงานและที่เกี่ยวข้องกับสังคมต่อทุนสร้างสรรค์ขององค์กรและประสิทธิภาพการทำงานเชิงนวัตกรรมของพนักงาน งานวิจัยนี้เก็บข้อมูลแบบสะดวก (convenient sampling) และการสุ่มแบบสโนว์บอล (snowball sampling) ทำให้สามารถรวบรวมพนักงานชาวจีนจำนวน 381 คนในจีนแผ่นดินใหญ่ และวิเคราะห์โดยโปรแกรม PLS-SEM ผลการศึกษาพบว่าแบบจำลองที่นำเสนอมีอำนาจในการอธิบายปานกลางเกี่ยวกับการปฏิบัติงานด้านนวัตกรรม ( $R^2 = .59$ ) และทุนสร้างสรรค์ระดับบริษัท ( $R^2 = .40$ ) การศึกษานี้ให้หลักฐานเชิงประจักษ์ที่สนับสนุนทฤษฎีการประมวลผลข้อมูลทางสังคมจากมุมมองของโซเชียลมีเดีย นอกจากนี้ ผลการศึกษายังชี้ให้เห็นว่าหัวหน้า/ผู้บริหารองค์กรควรสนับสนุนและสนับสนุนการใช้แพลตฟอร์มโซเชียลมีเดียอย่างเหมาะสม โดยอำนวยความสะดวกในการมีส่วนร่วมของพนักงานในเครือข่ายมืออาชีพ (Professional network) จัดให้มีการเข้าถึงเครื่องมือที่ส่งเสริมการทำงานร่วมกัน (Collaboration tools) และตระหนักถึงการใช้โซเชียลมีเดียในเชิงสร้างสรรค์เพื่อก่อให้เกิดนวัตกรรมการทำงาน

**คำสำคัญ:** การใช้โซเชียลมีเดีย ต้นทุนเชิงสร้างสรรค์ระดับองค์กร นวัตกรรมการทำงาน ทฤษฎีการประมวลผลข้อมูลทางสังคม

\* วิทยาลัยนานาชาติ สถาบันบัณฑิตพัฒนบริหารศาสตร์  
เลขที่ 148 ถนนเสรีไทย แขวงคลองจั่น เขตบางกะปิ กรุงเทพฯ 10240  
อีเมล: xuemei.sun@nida.ac.th

## Introduction

The social media have become a major source of information and ideas for people all over the world. As of April 2023, there were 5.18 billion internet consumers globally, representing 64.6% of the world's population. There were 4.8 billion social media users, or 59.9 percent of the world's population (Petrosyan, 2023). Moreover, Chinese citizens had a significant online presence, with approximately 1.03 billion active social media users as of January 2023, followed by India and Indonesia, which had 467 million and 167 million active social media users, respectively (Statista Research Department, 2023). In the meanwhile, social media has altered the manner in which individuals interact and communicate within organizations (Tajudeen et al., 2018). According to Nduhuru and Prieler (2017), social media usage in organizations can promote internal knowledge management, social interaction, and firm performance. As an increasing number of scholars have paid attention to social media usage in the workplace, this phenomenon has undergone systematic categorization into distinct dimensions, such as social-related and work-related social media usage (Chen et al., 2022; Song et al., 2019; Zhang et al., 2019), social use, cognitive use and hedonic use (Ali-Hassan et al., 2015), or informational and socializing social media usage (Hu et al., 2017). Simultaneously, by concerning the particular types of social media usage, scholars have investigated its effects on various consequences, such as psychological outcome of commitment (Luo et al., 2018), exhaustion (Luqman et al., 2021), job satisfaction (Zhang et al., 2019), work engagement (Oksa et al., 2021), and working outcomes of job performance (Ali-Hassan et al., 2015; Chen et al., 2022), and employee creativity (Luqman et al., 2021).

In addition to its impact on organizations, social media use has a unique effect on human creativity. According to Hu et al. (2017), the prevalence of social media not only alters how people create new and maintain old social networks, but also offers opportunities and challenges in information acquisition, cultural intelligence development, and creativity growth. Social media establishes a free market for ideas accessible to anyone with Internet access. Individuals with novel ideas can publish them for little or no cost, and they are able to readily view, access, and/or build upon the ideas of others (Acar et al., 2021). Performance is significantly enhanced by creative thought. The impact of the generation of new ideas may be manifested in novel and successful innovations, which in turn can enhance performance (Ferreira et al., 2020). Individual creativity can be viewed as creative capital at the level

of the firm. Because firm-level creative capital, like urban-level creative capital, is ingrained in employees (Veenendaal & Kearney, 2014). Creative capital can produce new employment opportunities. To develop, manufacture, and market their goods or services, innovative businesses and industries frequently require a skilled and inventive workforce. By encouraging creativity, economies and organizations can generate new employment chances, which is in line with the Sustainable Development Goals (SDGs, United Nations, 2015) objective of respectable work and economic development.

In previous studies, the effects of social media usage in the workplace have produced a variety of outcomes. However, the specific effects of social media usage for various purposes on job performance, particularly innovative job performance and employees' creativity, remain limited. In addition, there is a limited number of studies have empirical studies on firm-level creative capital since most of the existence of studies on creative capital are in the regional economics and urban-level literature (Boschma & Fritsch, 2009; Qian, 2013).

To address these gaps, this study adopts social information processing theory (Salancik & Pfeffer, 1978) to explore the interplay between work-related and social-related social media usage and their respective associations with innovative job performance and individual creative capital within organizational contexts. The findings extend social information process theory by addressing the emergence of social media platforms, which involve a much broader spectrum of communication modalities (text, images, and videos). From a practical standpoint, this research provides recommendations for how management can improve employee creativity, innovative job performance, and talent management within organizations by promoting the proper usage of social media platforms.

## Literature Review

### Social Information Processing Theory

According to the theory of social information processing, employees do not exist in a vacuum; their activities are typically influenced by the complex and ambiguous social contexts of the workplace (Salancik and Pfeffer, 1978). This theory asserts that employees interpret their work environment and understand their own requirements based on the social information available in the workplace, and then modify their behavior accordingly (Zhang et al., 2022). An important tenet of this theory is that interpersonal interactions

can offer information that impacts the attitudes and behaviors of employees at work (Yang & Treadway, 2018). Given that team members' communication and interactions on social media generate a multitude of social information (Chen & Wei, 2019), social media is viewed as a tool for influencing employees' perceptions and abilities in the workplace. Because social media platforms can communicate information that reflects task interdependence and provides clues for social comparisons (Zhang et al., 2022). For instance, businesses use popular, public, and personal social media platforms such as Facebook, Twitter, and LinkedIn to improve talent recruitment knowledge sharing, customer service, marketing, innovation, and employee engagement (Song et al., 2019). Therefore, in the context of social media usage in the workplace, this study assumes that the social information processing theory can serve as a suitable research framework to guide the investigation into the relationship between social media usage, employees' creative capital and innovative job performance.

### **Social Media Usage**

Social media usage can be divided into different aspects. Ali-Hassan et al. (2015) categorized three dimensions of social media uses, which are social use, hedonic use, and cognitive use. Specifically, Ali-Hassan et al. (2015) defined social use as applying social media to create new social relationships, recognize individuals with common interests, and keep in touch with current friends and acquaintances; hedonic use related to use social media for fun, passing the time, relaxing and escaping, and entertainment; and cognitive use focuses on creating and sharing content and accessing content produced by other individuals, in order to gain knowledge. Hu et al. (2017) adopted the two-dimensional social media usage of Hughes et al. (2012), who classified individual social media usage as informational usage and socializing usage. Informational social media usage emphasizes accessing relevant and timely information in solving particular problems, reflecting users' cognitive needs, whereas socializing social media usage emphasizes establishing and maintaining interpersonal relationships, reflecting users' emotional needs (Hu et al., 2017).

Nevertheless, many scholars divided social medias usage into work- and social-related aspects (Chen et al., 2022; Song et al., 2019; Zhang et al., 2019). Work-related social media usage includes accessing and sharing content created by others (Chen et al., 2022). This type of social media in the workplace related to the usage of emerging social software platforms by companies in pursuance of their goals and business activities, and it is viewed

as not only advantageous to employees but also promising for superior firm performance (Song et al., 2019). To apply social media to develop and maintain relationships with others is referred to as social-related social media usage (Chen & Wei, 2019). It is possible to use social media for a variety of social purposes, such as discovering colleagues with similar interests and values and establishing acquaintances within an organization (Chen et al., 2022).

In China, the way individual or business communicate and connect has been changed by the social media, such as WeChat, QQ and Micro-blog (Zhang et al., 2019). WeChat and QQ are widely applied social media with a strong capability for connection, allows personal association among individuals (Song et al., 2019). Micro-blog is widely used to share the instant information among individuals and publics (Luo et al., 2018). Thus, categorizing social media usage into work-related and social usage is necessary for the following reasons. First, Zhang et al. (2019) asserted that the professional and social aspects of social media use are distinct. Second, previous research suggests that these two distinct purposes of social media usage can result in various antecedents and outcomes (Chen & Wei, 2019; Chen et al., 2019). Thirdly, failure to distinguish between these two forms of social media usage may result in contradictory research results (Odoom et al., 2017). Thus, this study considers social media uses for both work and social purposes and investigates the results derived from these two different purposes of social media use in the workplace.

## Hypotheses Development

### **Social Media Usage and Firm-Level Creative Capital**

Employees incorporate the firm's creative capital. In other words, firm-level creative capital emphasizes creative aptitude (Straatman et al., 2012). Individual creative ability can be defined as an individual's relevant skills or competencies for creative performance, including the ability to generate new ideas and adopt a unique perspective on problems (Veenendaal & Kearney, 2014). Creative ability refers to an individual's innate capacity to demonstrate creativity via the collection of original problem-solving approaches and innovative ideas (Carmeli et al., 2013). Specifically, employee creativity refers to the capacity of employees to discover and implement inventive solutions to increase the organization's profitability (Ding et al., 2019; Pee, 2018). Prior research has determined that knowledge exchange is the most important factor influencing employee creativity (Dong et al., 2017; Rhee & Choi, 2017).

According to the social information processing theory, social media provides a platform for employees to debate their challenging tasks and propose potential innovative solutions, which improves their creativity (Luqman et al., 2021); thereby producing a plethora of social information (Chen & Wei, 2019). In addition, social media enable individuals to aggregate, share, store, and synthesize knowledge from various sources for the purpose of creating new meta-knowledge; to identify and join social networks in order to remain professionally informed and participate in collective knowledge generation processes by sharing experiences, criticizing theories, and presenting findings within various communities of practice; and to manage their own meaning making and knowledge management processes (Sigala & Chalkiti, 2015).

Wagner and Majchrzak (2007) mentioned that social media allows for previously developed and released content visible and perpetually accessible in the workplace, ensuring message transparency within the team. Simply put, work-related social media usage allows employees to acquire sufficient work-related information to make creative decisions about how to complete tasks (Wang et al., 2021). Social media is also used for social purposes, such as arranging social events with colleagues, creating acquaintances within the organization, and identifying individuals with common interests (Zhang et al., 2019). Engaging in heterogeneous communities additionally presents opportunities, prompting individuals to proactively utilize their social networks and investigate novel pathways creatively (Kim et al., 2016). Therefore, this study proposed:

H1 : Work-related social media usage positively enhances firm-level creative capital.

H2 : Social-related social media usage positively enhances firm-level creative capital.

### **Social Media Usage and Innovative Job Performance**

Katz (1964) provided a conceptualization of individual job performance, defining it as consisting of two elements: daily tasks that need to be carried out consistently and dependably, and innovative tasks that expand beyond routine specifications to produce novel and useful results. The first element, sometimes referred to as routine job performance, refers to the execution of mandatory job-related duties, tasks, and obligations that are scheduled and compensated by the organization (Janssen & Van Yperen, 2004). Innovative job performance is referred to the creation or execution of creative and beneficial ideas that are implemented

in the workplace (Amabile et al., 1996; Scott & Bruce, 1994). It includes, among other things, the genesis and adoption of ideas, the formation of coalitions, and the acquisition of the authority required to successfully implement new innovations (Kanter, 1988). These duties, which are executed concurrently or sequentially by individuals, constitute the center of organizational innovation.

Through the technological advancements of the present day, social media are viewed as the instruments that facilitate the transmission of information and the generation of knowledge between individuals and organizations, particularly when knowledge spreads among various stakeholders (Scuotto et al., 2017). Bhimani et al. (2019) found that the utilization of social media to communicate and interact within and outside the firm has been the main determinant of innovation performance, helping firms to interact with multiple stakeholders readily and at reduced costs. As stated by Ali-Hassan et al. (2015), the use of social media enhances employees' abilities to acquire, create, and exchange knowledge, thereby boosting their performance. On one hand, Cui et al. (2020) assert that social media use enhances routine or in-role performance. Work-related social media usage has the possibility to enhance employees' abilities, which is crucial for improving job performance (Chen et al., 2021). In addition, Bodhi et al. (2022) revealed that work-related social media usage has a positive and direct effect on innovative job performance.

On the other hand, Ma et al. (2021) discovered that social media usage for social purposes has an advantageous effect on the information exchange among employees. When individuals are involved in interactive discussions, idea-sharing, and knowledge exchange among employees, can potentially enhance innovative job performance by fostering a collaborative and creative work environment. Besides, social information processing theory suggests that social media interactions provide opportunities for individuals to develop relationships, form impressions, and exchange valuable information, which may contribute to the generation and implementation of innovative ideas within organizational contexts (Olaniran et al., 2011). Therefore, below hypotheses are presented:

H3 : Work-related social media usage positively improves innovative job performance.

H4 : Social-related social media usage positively improves innovative job performance.



### **Firm-level Creative Capital and Innovative Job Performance**

Veenendaal et al. (2014) clarify creative capital as the diverse expertise and abilities that are accessible and readily available to the organization for the purpose of creating value for its primary activities. Social information processing theory states that people use social signals as well as knowledge in computer-mediated communication (such as social media) to generate perceptions and develop connections (Olaniran et al., 2011). In the context of firm-level creative capital, employees are exposed to a social environment that promotes creativity and innovation. Through interactions with colleagues, mentors, and leaders who value and nurture creativity, employees develop favorable social norms and expectations that encourage them to engage in creative problem-solving and idea generation. The resulting positive social feedback and reinforcement further motivate employees to exhibit innovative job performance, as they perceive their creativity as valued and recognized within the organization. Therefore, this study proposed:

H5 : Firm-level creative capital increases individual's innovative job performance.

### **Research Methodology**

A quantitative methodology was applied to examine the proposed framework in this study. Two distinct sections of a self-administered questionnaire were utilized for data collection. The first section consisted of demographic information, and the following part includes a 7-point Likert scale employed to evaluate respondents' degree of agreement and frequency regarding twenty-five items. The scale for measuring firm-level creative capital was adapted from the self-rating of creativity from Zhou and George (2001), Zampetakis et al. (2010) and Golden and Shriner (2019), which contains twelve items. The work-related social media usage was derived from Zhang et al. (2019) and Ali-Hassan et al. (2015), comprising eleven items. The social-related social media usage was derived from Hu et al.(2017), which involves three items. Innovative job performance was adapted from Ali-Hassan et al. (2015), which contains five items. Given that the participants in the present research were Chinese, the questionnaire was translated into Chinese using the back-translation method (Behr, 2017). In addition, a pilot study was carried out to evaluate the reliability and validity of the questionnaire. The findings present that Cronbach's  $\alpha$  of the questionnaire is above the minimum requirement of 0.7 (Hair et al., 2019), that verifies that all constructs satisfied the threshold.

## Participants and Data Collection

A self-administered survey written in Chinese was disseminated to capture the primary data for this quantitative cross-sectional study. Participants in this research were Chinese nationals with full- or part-time employment in the Chinese mainland. This study was aimed to investigate the employees' innovative job performance within an organization; therefore, few exclusion criteria were outlined: 1) Chinese personnel under the age of 18; 2) retired Chinese employees; and 3) business owners.

Within the 18<sup>th</sup> and 30<sup>th</sup> of May 2023, a convenience sample was collected via WeChat (a multidimensional and widely used social networking application in China). The recruitment procedure utilized the snowball sampling technique, in which the researcher utilized professional and personal networks and disseminated invitations with the request that they be passed along. This hybrid sampling strategy was implemented for two purposes. Initially, as of March 2023, WeChat had beyond 1.3 billion monthly active users with a diverse age range (Lin, 2023a, 2023b). Secondly, by applying a convenient sampling method, the study can be promoted among the family members, associates, and acquaintances of senior individuals. WeChat users in China spend a minimum of two hours per day on the application, with 25 percent of users spending over four hours per day as of July 2021 (Lin, 2022a). For the purpose of determining the compatibility of prospective participants, one pre-screening question inquired about their current employment status. Only active employees who completed the survey were given access to the questionnaire.

The total number of questionnaires received was 495. By excluding respondents under the age of 18, those who completed the questionnaire in less than 120 seconds, and those who provided consistent answers throughout, 114 questionnaires containing potentially unreliable responses were eliminated. As a consequence, a total of 381 valid questionnaires were acceptable for data analysis, reaching the requirement of having at least 201 respondents in order to achieve a confidence level of 93% when the population size exceeds 15,000, based on the Taro Yamane formula (Taro, 1967). Besides, Hair et al. (2021) point out that the sample size for partial least squares structural equation modelling (PLS-SEM) should exceed ten times the greatest number of links connecting any latent variable in the inner or outer models. In this study, there are eleven indicators for the latent variable of social media utilization; therefore, the minimum sample size of 110 is met. Table 1 provides a summary of the demographic characteristics of the survey respondents.

**Table 1:** Demographic Profiles of the Survey Participants

Demographic Factors	Descriptive Statistics
<i>Working Industry</i>	
Education/Training/Research/Institutions	142 (37.3%)
IT / hardware and software services/e-commerce/Internet operations	23 (6%)
Clothing/Textile/Leather	22 (5.8%)
FMCG (food/beverage/cosmetics)	19 (5%)
Accounting/Auditing	18 (4.7%)
Communication/Telecommunication Operation/Network Equipment/ Value-Added Services	17 (4.5%)
Wholesale/Retail	15 (3.9%)
Manufacturing	13 (3.4%)
Furniture/Crafts/Toys	12 (3.1%)
Others	11 (2.9%)
Agency/Consulting/Headhunting/Certification	10 (2.6%)
Banking/insurance/securities/investment banking/venture funds	8 (2.1%)
Real estate development/construction/decoration/design	7 (1.8%)
Property Management/Commercial Center	7 (1.8%)
Automotive & Parts	7 (1.8%)
Dining/Entertainment/Travel/Hotels/Living Services	7 (1.8%)
Office supplies and equipment	6 (1.6%)
Trade/Import/Export	6 (1.6%)
Traffic/Transportation/Logistics	6 (1.6%)
Pharmaceutical/biological engineering/medical equipment/equipment	4 (1%)
Medical/Nursing/Health/Hygiene	4 (1%)
Home Appliances	4 (1%)
Aerospace/Aviation/Energy/Chemical	3 (0.8%)
Legal	2 (0.5%)
Electronic technology/semiconductor/integrated circuit	2 (0.5%)
Machinery/Equipment/Heavy Industry	2 (0.5%)
Publishing/printing/packaging	2 (0.5%)

**Table 1:** Demographic Profiles of the Survey Participants (cont.)

Demographic Factors	Descriptive Statistics
Advertising/PR/media/art	1 (0.3%)
Agriculture/Fishery/Forestry	1 (0.3%)
<i>Working status</i>	
Full-time	363(95.3%)
Part-time	18(4.7%)
<i>Position</i>	
Management	126(33.1%)
Employee	255(66.9%)
<i>Gender</i>	
Female	209(54.9%)
Male	172(45.1%)
<i>Age</i>	Mean: 30.93 (S.D.: 5.41)

### Data Analysis

In this research, the proposed model was evaluated using PLS-SEM. The proposed model comprised fifteen hypotheses and was of a complex nature. PLS-SEM was selected because it permits the analysis of extremely complex models. Besides, PLS-SEM is well-suited for theory development and exploratory research, which is consistent with the novel character of the model proposed in this study. Consequently, SmartPLS (Ringle et al., 2022) was utilized to analyze the model.

## Results

### Measurement Model Analysis

Before evaluating the structural model, it is necessary to confirm that all specified criteria are met (Hair et al., 2019). Several indicators were utilized to evaluate the reliability and validity of the measurement model, including factor loadings, average variance extracted (AVE), discriminant validity composite reliability (CR), and Cronbach's alpha (CA).

The factor loadings were evaluated to guarantee the validity of the indicators as illustrated in Table 2. The loadings were analyzed to determine their level of significance, with values exceeding .708 and approaching significance at the .05 level (Hair et al., 2019). Concurrently, cross-loadings were analyzed, revealing that each indicator had a greater loading for its designated construct than for any other constructs (Urbach & Ahlemann, 2010). Thus, the results confirmed both the indicators' dependability and their discriminant validity.

**Table 2:** Factor Loadings and Cross Loadings for the Indicators

	CR	JP_I	SMU_social	SMU_work
CR1	<b>.76</b>	.57	.26	.44
CR2	<b>.74</b>	.59	.26	.47
CR3	<b>.77</b>	.52	.23	.43
CR4	<b>.74</b>	.50	.26	.43
CR5	<b>.79</b>	.60	.43	.52
CR6	<b>.78</b>	.52	.37	.51
CR7	<b>.80</b>	.51	.34	.47
CR8	<b>.76</b>	.55	.31	.51
CR9	<b>.81</b>	.58	.37	.49
CR10	<b>.81</b>	.60	.38	.48
CR11	<b>.77</b>	.57	.28	.46
CR12	<b>.80</b>	.61	.31	.49
JP_I1	.63	<b>.86</b>	.36	.55
JP_I2	.59	<b>.83</b>	.35	.54
JP_I3	.61	<b>.84</b>	.31	.56
JP_I4	.61	<b>.85</b>	.29	.51
JP_I5	.63	<b>.87</b>	.34	.56
SMU_social 1	.30	.21	.73	.37
SMU_social 2	.35	.35	<b>.85</b>	.44
SMU_social 3	.37	.38	<b>.89</b>	.46
SMU_work 1	.49	.47	.45	<b>.76</b>
SMU_work 2	.47	.50	.41	<b>.81</b>
SMU_work 3	.52	.48	.34	<b>.82</b>

**Table 2:** Factor Loadings and Cross Loadings for the Indicators (cont.)

	CR	JP_I	SMU_social	SMU_work
SMU_work 4	.50	.53	.35	<b>.80</b>
SMU_work 5	.44	.49	.48	<b>.78</b>
SMU_work 6	.42	.55	.47	<b>.79</b>
SMU_work 7	.39	.45	.41	<b>.71</b>
SMU_work 8	.40	.45	.45	<b>.73</b>
SMU_work 9	.54	.53	.40	<b>.78</b>
SMU_work 10	.54	.52	.32	<b>.77</b>
SMU_work 11	.48	.46	.32	<b>.76</b>

*Note:* CR = firm-level creative capital, JP\_I = innovative job performance, SMU\_social = social-related social media usage, SMU\_work = work-related social media usage. Bold items are factor loadings.

Secondly, composite reliability (CR) and Cronbach's alpha (CA) were employed to assess the constructs' internal consistency reliability. Table 3 demonstrates that all metrics exceeded the minimum threshold of 0.70 (Hair et al., 2019), indicating internal consistency reliability that is satisfactory. The Average Variance Extracted (AVE) values were all above the prescribed threshold of .5 (Hair et al., 2019), indicating adequate convergent validity.

Due to the possibility of overestimation of indicator loadings and underestimation of structural model relationships by the Fornell-Larcker criterion in PLS (Henseler et al., 2014), a stronger criterion, the Heterotrait-Monotrait (HTMT) ratio of correlation, was used to assess discriminant validity. All HTMT ratio test results ranged between .41 and .79, which is below the threshold of .85 (Henseler et al., 2014), indicating that all constructs are independent of one another and confirming adequate discriminant validity.

**Table 3:** Reliabilities and Correlation of Constructs

Constructs	CA	CR	AVE	Correlation of Constructs and Heterotrait-Monotrait (HTMT) Ratio			
				CR	JP_I	SMU_Social	SMU_Work
CR	.94	.95	.60	<b>.78</b>			
JP_I	.90	.93	.72	.72 (.78)	<b>.85</b>		
SMU_Social	.77	.87	.68	.41 (.48)	.39 (.45)	.83	
SMU_Work	.93	.94	.60	.61 (.65)	.64 (.79)	.51 (.61)	.77

*Note:* CR = firm-level creative capital, JP\_I = innovative job performance, SMU\_social = social-related social media usage, SMU\_work = work-related social media usage. Square root of AVE is illustrated on the diagonal; value within () is the value of HTMT.

### Common Method Bias (CMB) Assessment and Multicollinearity

Two approaches were employed to resolve the common method bias (CMB) concern. Initially, Harman's single factor was utilized, which consisted of extracting a single component from a set of variables (Podsakoff et al., 2003). The unrotated principal components factor analysis resulted in a total variance of 46.27 %, indicating the absence of CMB (Sun et al., 2019). In addition, a marker variable was used as a control variable, and its insignificant effect on the proposed model confirmed the absence of CMB (Venkatesh et al., 2012). In addition, to assess multicollinearity, the comprehensive variance inflation factor (VIF) was evaluated. The results indicated that there were no multicollinearity issues, as the VIFs for latent variables ranged from 1.00 to 1.86, all of which were less than the threshold of 3 (Hair et al., 2019).

### Structural Model Analysis

To guarantee a stable consequence, the PLS algorithm was employed with 300 iterations and 5000 times bootstrapping to evaluate the path coefficients of the latent constructs and assess their significance accordingly (Hair et al., 2019). Figure 1 presents the measurement of the significance of the path coefficients,  $Q^2$ , and  $R^2$ . First, the results indicate that the model possesses a moderate level of explanatory power for innovative job performance ( $R^2 = .59$ ), while demonstrating a nearly moderate level for firm-level creative capital ( $R^2 = .40$ ). Then, the results demonstrate that the model has a moderate level of predictive accuracy with innovative job performance ( $Q^2 = .42$ ), and firm-level creative capital ( $Q^2 = .24$ ). Finally, the model reveals that innovative job performance is influenced by firm-level creative capital ( $\beta = .53, p < .00; f^2 = .40$ ), and work-related social media usage ( $\beta = .31, p < .00; f^2 = .12$ ). However, social-related social media usage has no significant relationship with innovative job performance ( $\beta = .01, p = .82; f^2 = .00$ ). In additions, both work-related ( $\beta = .54, p < .00; f^2 = .36$ ) and social-related social media usage ( $\beta = .05, p < .01; f^2 = .02$ ) significantly affect firm-level creative capital, along with a control variable of age ( $\beta = .11, p < .00; f^2 = .12$ ).

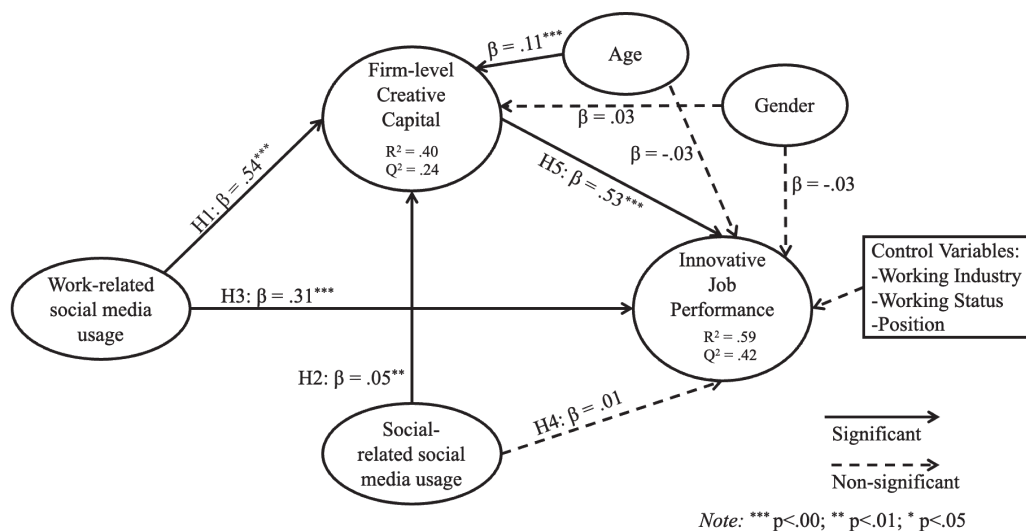


Figure 1: Structural Model Results



### Mediating Effects

To further investigate the mediating effects among the theoretical framework's constructs, a comprehensive analysis of these effects was conducted. Following the guidelines and procedures outlined by Zhou et al. (2021), the mediating effects were evaluated using 5000 replicates of bootstrap analysis. The evaluation consisted of investigating the total effects, indirect effects, and direct effects in order to determine the mediating relationships between the constructs. The presence of meaningful mediating effects is contingent on the significance of both the total effects and the indirect effects. If the direct effects are insignificant, the mediator is deemed a "full mediator"; otherwise, it is classified as a "partial mediator". Additionally, when both indirect and direct effects are significant, the mediation is termed "complementary mediation" if they align in the same direction, or "competitive mediation" if they indicate opposing orientations (Hair et al., 2021). Table 4 presents that firm-level creative capital plays a complementary partial mediating effects among work-related social media usage and innovative job performance. However, there is no mediation among social-related social media usage and innovative job performance.

**Table 4:** Mediating Effects on the Structural Model

Path	Effects	Estimate	Bootstrap 5000 Times			Percentile 95%		Conclusion
			S.E	T-Statistics	P-Value	Low	Upper	
SMU_work→CR→JP_I	Direct Effects	.31	.06	5.51	.00	.20	.42	Complementary Partial Mediation
	Indirect Effects	.29	.05	6.09	.00	.20	.39	
	Total Effects	.60	.05	10.71	.00	.48	.71	
SMU_social→CR→JP_I	Direct Effects	.01	.06	0.23	.82	-.09	.11	No Mediation
	Indirect Effects	.07		1.92	.06	.00	.14	
	Total Effects	.08		1.24	.22	-.05	.22	

*Note:* CR = firm-level creative capital, JP\_I = innovative job performance, SMU\_social = social-related social media usage, SMU\_work = work-related social media usage.

## Discussion and Conclusion

Grounded in social information processing theory, this study aimed to investigate the influence of social media usage of both work and social purposes on firm-level creative capital and individual innovative job performance. By analyzing 381 valid responses from mainland China using PLS-SEM, the study revealed significant findings among social media usage, job firm-level creative capital and routine job performance, aligning with the theoretical assumptions of the study.

First and foremost, this study offers empirical evidence supporting the positive and significant effects of work-related social media usage on firm-level creative capital, or so-called individual creativity, which is in line with a study of Chen et al. (2022). It indicates that engaging in professional interactions and knowledge exchange through social media platforms can foster and enhance creative thinking among individuals. Besides, work-related social capital also significantly influences individual's innovative job performance, which is consistent with a study of Bodhi et al. (2022). It underscores the positive impact of professional networking and collaboration on enhancing creative problem-solving and job performance outcomes. On the other hand, this finding is in line with social information processing theory, which posits that individuals adapt their behaviors and cognitions based on the social information they receive. Participating in professional interactions on social media platforms enables individuals to acquire varied knowledge, obtain fresh perspectives, and receive input, so augmenting their cognitive resources and fostering their creative problem-solving skills. The ongoing interchange of information and ideas cultivates a setting that is favorable to creativity, ultimately resulting in enhanced work performance.

Secondly, the finding shows that the firm-level creative capital acts as a complementary mediator in the relationship between work-related social media usage and innovative job performance. This means that while work-related social media usage directly improves innovative job performance, it also indirectly affects this outcome by creating an environment that supports the development of firm-level creative capital. Therefore, the creative capital of a firm plays a vital role in enhancing the favorable influence of using work-related social media on individual-level creativity.

In addition, this study revealed that social-related social media usage has the significantly positive relationship with firm-level creative capital, which is in line with the study of Kim et al. (2016). However, this study found there is no significant relationship among social-related social media usage and innovative job performance, which is contrary with a study of Ma et al. (2021). This might be because the specific organizational culture and norms surrounding social media usage may differ between the studies, affecting the impact of social media on innovative job performance. For example, in some organizations, social media usage may be actively encouraged and integrated into work processes, while in others, it may be perceived as a distraction.

Lastly, firm-level creative capital was found to be the strongest determinant for innovative job performance in this study, which is in line with a study of Ferreira et al. (2020). In other words, creative individuals possess the ability to think outside the box and generate novel solutions to complex problems. Their innovative thinking allows them to overcome challenges more effectively and devise new approaches to tasks, leading to improved efficiency and effectiveness in their job performance. Besides, firm-level creative capital had a partial mediating role between work-related social media usage and innovative job performance. It means that engaging in work-related social media usage contributes to fostering a creative environment within the organization, which, in turn, enhances individual innovative job performance.

### Theoretical Contribution

This study enhances the existing literature on social media usage by introducing a novel model that examines its impact on firm-level creative capital and innovative job performance specifically in the context of China. Particularly, the study offers several significant theoretical contributions. On one hand, this study expands the understanding of social information processing theory by investigating social media rather than computer-mediated communication. By focusing on social media usage, this study provides insights into how both work- and social-related social media usage enhance employees' creativity and job performance in organizations. On the other hand, this study fills a gap in the creative capital, which typically focuses on firm-level creative capital. The findings highlighted that firm-level creative capital is a vital determinant for employees' innovative job performance.

### **Managerial Implications**

Based on the findings of this study, several managerial implications can be drawn. On one hand, organizations should recognize the importance of work-related social media usage as a tool to enhance employees' creativity and job performance. This can be achieved by providing training and resources on effective social media usage, establishing guidelines for responsible use, and creating opportunities for knowledge sharing. On the other hand, managers should encourage and support the appropriate use of social media platforms by facilitating employees' participation in professional networks, providing access to collaboration tools, and recognizing innovative use of social media. In additions, professional social media interactions have two main advantages for companies. Firstly, they could enhance individual job performance and foster the growth of a creative company culture. Secondly, the presence of this inventive culture, in turn, amplifies job performance in a creative manner. To maximize the benefits of professional social media interactions, organizations should encourage collaboration by facilitating cross-departmental cooperation and the exchange of ideas through social media and internal communication platforms.

### **Limitations and Recommendations**

While this study has made valuable contributions, there are certain limitations that should be acknowledged. Firstly, the reliance on nonprobability sampling methods which limits the generalizability of the study's findings. Future research should consider using probability sampling techniques for a more representative sample. Additionally, this study focused solely on Chinese employees in mainland China, warranting the inclusion of participants from other countries to provide a cross-cultural comparison. In addition, by considering social media platforms in a general sense, this study overlooks potential variations in outcomes across different platforms. Future research could explore the specific functions and purposes of different social media platforms to gain a more nuanced understanding of their effects. Next, cultural differences among different countries or industrial type may have influences on the social media usage, in turns, results in various working outcome. Therefore, future research may consider a comparative study between different countries or industrial types. Finally, future research may consider the impact of individual differences on the link between social media use and creative outcomes.

## References

- Acar, S., Neumayer, M., & Burnett, C. (2021). Social media use and creativity: Exploring the influences on ideational behavior and creative activity. *The Journal of Creative Behavior*, 55(1), 39-52.
- Ali-Hassan, H., Nevo, D., & Wade, M. (2015). Linking dimensions of social media use to job performance: The role of social capital. *The Journal of Strategic Information Systems*, 24(2), 65-89.
- Amabile, T.M., Conti, R., Coon, H., Lazenby, J., Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154-1184.
- Bhimani, H., Mention, A. L., & Barlatier, P. J. (2019). Social media and innovation: A systematic literature review and future research directions. *Technological Forecasting and Social Change*, 144, 251-269.
- Bodhi, R., Lugman, A., Hina, M., & Papa, A. (2022). Work-related social media use and employee-related outcomes: a moderated mediation model. *International Journal of Emerging Markets*, Vol. ahead-of-print No. ahead-of-print.
- Boschma, R. A., & Fritsch, M. (2009). Creative class and regional growth: Empirical evidence from seven European countries. *Economic Geography*, 85(4), 391-423.
- Carmeli, A., Gelbard, R., & Reiter-Palmon, R. (2013). Leadership, creative problem-solving capacity, and creative performance: The importance of knowledge sharing. *Human resource management*, 52(1), 95-121.
- Chen, X., & Wei, S. (2019). Enterprise social media use and overload: A curvilinear relationship. *Journal of Information Technology*, 34(1), 22-38.
- Chen, X., Ou, C. X., & Davison, R. M. (2022). Internal or external social media? The effects of work-related and social-related use of social media on improving employee performance. *Internet Research*, 32(3), 680-707.
- Chen, X., Ou, C.X., & Davison, R.M. (2021). Internal or external social media? The effects of workrelated and social-related use of social media on improving employee performance. *Internet Research*, Vol. ahead-of-print No. ahead-of-print.

- Chen, X., Wei, S., Sun, C., & Liu, Y. (2019). How technology support for contextualization affects enterprise social media use: a media system dependency perspective. *IEEE Transactions on Professional Communication*, 62(3), 279-297.
- Cui, X., Huo, B., Lei, Y., & Zhou, Q. (2020). The influence of team social media usage on individual knowledge sharing and job performance from a cross-level perspective. *International Journal of Operations and Production Management*, 40(5), 553-573.
- Ding, G., Liu, H., Huang, Q., & Gu, J. (2019). Enterprise social networking usage as a moderator of the relationship between work stressors and employee creativity: A multilevel study. *Information & Management*, 56(8), 103165.
- Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of organizational behavior*, 38(3), 439-458.
- Ferreira, J., Coelho, A., & Moutinho, L. (2020). Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation. *Technovation*, 92, 102061.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P., Ray, S. (2021). Mediation Analysis. In: *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*. Classroom Companion: Business. Springer, Cham
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen, D. J., Hair, J. F., Hult, G. T. M., & Calantone, R. J. (2014). Common beliefs and reality about partial least squares: comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 17(2), 182-209.
- Hu, S., Gu, J., Liu, H., & Huang, Q. (2017). The moderating role of social media usage in the relationship among multicultural experiences, cultural intelligence, and individual creativity. *Information Technology & People*, 30(2), 265-281.
- Janssen, O., Van Yperen, N.W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal* 47(3), 368-384.

- Kanter, R.M. (1988). When a thousand flowers bloom: structural, collective, and social conditions for innovation in organizations. In: Staw, B.M., Cummings, L.L., (Eds.), *Research in Organizational Behavior*, 169-211.
- Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, 9, 131-133.
- Kim, S. K., Shin, S. J., Shin, J., & Miller, D. R. (2018). Social networks and individual creativity: the role of individual differences. *The Journal of Creative Behavior*, 52(4), 285-296.
- Lin, L. (2023a). *Number of active WeChat messenger accounts Q2 2011-Q1 2023*. Retrieved from <https://www.statista.com/statistics/255778/number-of-active-wechat-messenger-accounts/>
- Lin, L. (2022b). *WeChat user age distribution 2022*. Retrieved from <https://www.statista.com/statistics/387658/wechat-china-user-age/>
- Luqman, A., Talwar, S., Masood, A., & Dhir, A. (2021). Does enterprise social media use promote employee creativity and well-being?. *Journal of Business Research*, 131, 40-54.
- Ma, L., Zhang, X., Wang, G., & Zhang, G. (2021). How to build employees' relationship capital through different enterprise social media platform use: the moderating role of innovation culture. *Internet Research*, 31(5), 1823-1848.
- Nduhura, D., & Prieler, M. (2017). When I chat online, I feel relaxed and work better: Exploring the use of social media in the public sector workplace in Rwanda. *Telecommunications Policy*, 41(7-8), 708-716.
- Odoom, R., Anning-Dorson, T. and Acheampong, G. (2017). Antecedents of social media usage and performance benefits in small and medium-sized enterprises (SMEs). *Journal of Enterprise Information Management*, 30(3), 716-734.
- Olaniran, B.A., Rodriguez, N., & Williams, I.M. (2011). Social Information Processing Theory (SIPT): A Cultural Perspective for International Online Communication Environments. *Computer-Mediated Communication across Cultures: International Interactions in Online Environments*, 45-65.
- Pee, L. G. (2018). Affordances for sharing domain-specific and complex knowledge on enterprise social media. *International Journal of Information Management*, 43, 25-37.
- Petrosyan, A. (2023). *Worldwide digital population 2023*. Retrieved from <https://www.statista.com/statistics/617136/digital-population-worldwide/>

- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.
- Qian, H. (2013). Diversity versus tolerance: The social drivers of innovation and entrepreneurship in US cities. *Urban Studies, 50*(13), 2718-2735.
- Rhee, Y. W., & Choi, J. N. (2017). Knowledge management behavior and individual creativity: Goal orientations as antecedents and in-group social status as moderating contingency. *Journal of Organizational Behavior, 38*(6), 813-832.
- Ringle, Christian M., Wende, Sven, & Becker, Jan-Michael. (2022). *SmartPLS 4*. Oststeinbek: SmartPLS. Retrieved from <https://www.smartpls.com>
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative science quarterly, 22*4-253.
- Scott, S.G., Bruce, R.A., 1994. Determinants of innovative behavior: a path model of individual innovation in the workplace. *Academy of Management Journal, 37*(3), 580-607.
- Sigala, M., & Chalkiti, K. (2015). Knowledge management, social media and employee creativity. *International Journal of Hospitality Management, 45*, 44-58.
- Song, Q., Wang, Y., Chen, Y., Benitez, J., & Hu, J. (2019). Impact of the usage of social media in the workplace on team and employee performance. *Information & Management, 56*(8), 103160.
- Statista Research Department. (2023). *Number of active social media users APAC 2023, by country*. Retrieved from <https://www.statista.com/statistics/295606/social-media-mau-asia-pacific-countries/>
- Straatman, S. F. E., Veenendaal, A. A. R., & Van Velzen, M. J. T. (2012). Are we there yet? Towards a conceptualisation of organisational creative capital. In *Proceedings of the British Academy of Management 2012 Conference, Cardiff, UK*.
- Sun, Y., Shao, X., Li, X., Guo, Y., & Nie, K. (2019). How live streaming influences purchase intentions in social commerce: An IT affordance perspective. *Electronic Commerce Research and Applications, 37*, 100886.



- Tajudeen, F. P., Jaafar, N. I., & Ainin, S. (2018). Understanding the impact of social media usage among organizations. *Information & management*, 55(3), 308-321.
- United Nations. (2015). *Sustainable Development Goals: 17 Goals to Transform our World*. Retrieved from [https://unfoundation.org/what-we-do/issues/sustainable-development-goals/?gclid=Cj0KCQjw\\_O2lBhCFARIsAB0E8B94KJxSN16h5wZfXC98Kj8zJWLnQ6u0Bt\\_fDC9Z2r-vOw7xRG2xxcaAjqCEALw\\_wcB](https://unfoundation.org/what-we-do/issues/sustainable-development-goals/?gclid=Cj0KCQjw_O2lBhCFARIsAB0E8B94KJxSN16h5wZfXC98Kj8zJWLnQ6u0Bt_fDC9Z2r-vOw7xRG2xxcaAjqCEALw_wcB)
- Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information Technology Theory and Application (JITTA)*, 11(2), 5-40. <https://aisel.aisnet.org/jitta/vol11/iss2/2>
- Veenendaal, A. and Kearney, M. (2014). Firm-Level Creative Capital and the Role of External Labour. *Human Resource Management, Social Innovation and Technology (Advanced Series in Management, Vol. 14)*, Emerald Group Publishing Limited, Bingley, 73-97.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157-178.
- Wagner, C., and Majchrzak, A. (2007). Enabling customer-centricity using wikis and the wiki way. *Journal of management information systems*, 23(3), 17-43.
- Wang, H., Xiao, Y., Su, X., & Li, X. (2021). Team social media usage and team creativity: The role of team knowledge sharing and team-member exchange. *Frontiers in Psychology*, 12, 755208.
- Yang, J. and Treadway, D.C. (2018). A social influence interpretation of workplace ostracism and counterproductive work behavior. *Journal of Business Ethics*, 148(4), 879-891.
- Zhang, S., Huang, Q., Liu, H., & Wang, Y. (2022). Team social media usage and intra-team competition and cooperation: a social information processing perspective. *Information Technology & People*, 35(1), 410-434.
- Zhang, X., Ma, L., Xu, B., & Xu, F. (2019). How social media usage affects employees' job satisfaction and turnover intention: An empirical study in China. *Information & Management*, 56(6), 103136.