# THE IMPACT OF ENTERPRISE SOCIAL MEDIA (ESM) ON EMPLOYEES' INNOVATIVE BEHAVIOR: A CASE STUDY ON CORPORATE WECHAT



This Independent Study Manuscript Presented to

The Graduate School of Bangkok University
in Partial Fulfillment
of the Requirements for the Degree

Master of Management in Business Innovation

Academic Year 2022

# This manuscript has been approved by the Graduate school Bangkok University

Title: The Impact of Enterprise Social Media (ESM) on Employees' Innovative

Behavior: A Case Study on Corporate WeChat

Author: Hanglu Guo

Independent Study Committee:

DANGRUN UNIVERSITY

Advisor: THE CREATIVE UNIVERSITY

Dr. Ronald Vatananan-Thesenvitz

Field Specialist: Assoc. Prof. Dr. Vincent Ribiere

Guo, Hanglu. Master of Management (Business Innovation), June 2023, Graduate School, Bangkok University.

The Impact of Enterprise Social Media (ESM) on Employees' Innovative Behavior: A Case Study on Corporate WeChat (50 pp.)

Advisor: Ronald Vatananan-Thesenvitz, Ph.D.

#### **ABSTRACT**

In the context of the COVID-19 pandemic, this study explores the role of Enterprise Social Media (ESM), specifically WeCom (WeChat Work), in promoting employee innovation amidst the shift to remote work. Utilizing a quantitative analysis approach, the research employs a comprehensive questionnaire to assess key areas such as overall satisfaction with ESM, its effectiveness in enhancing communication, task management functionalities, and its impact on innovation. The study also investigates the quality of team service maintenance facilitated by ESM. The findings are expected to provide insights into enhancing functionalities of applications like WeCom, thereby improving service quality and fostering innovation. Furthermore, the study highlights the potential for future research, suggesting the exploration of longitudinal studies and experimental research designs to deepen understanding of the dynamics of digital communication tools in the era of remote work.

Keywords: Enterprise Social Media, WeChat Work, Employees' Innovative Behavior, Digital Communication

#### **ACKNOWLEDGEMENT**

I am deeply honored to have spent two years at the University of Bangkok. Firstly, I would like to express my sincere gratitude to the MBI program at the University of Bangkok for providing me with this invaluable opportunity to learn and grow. This experience has been an irreplaceable treasure in my life.

I owe a great deal of my success to my family. I would like to thank my parents, grandparents, and other family members for their unwavering support and encouragement. Their belief in me has given me the courage to face the unknown without fear. Throughout this journey, filled with joy, sorrow, excitement, and setbacks, I have challenged myself countless times and persevered. Two years have quietly slipped away, leaving behind a wealth of memories.

I am particularly grateful to my professors, who have tirelessly played beautiful symphonies of knowledge, making my two years of study colorful and enriching. They are highly respected figures in both innovation and management. I want to extend special thanks to Dr. Ronald Vatananan-Thesenvitz, who has been a great source of encouragement throughout my thesis stage. His patience and guidance, whether in topic selection or writing, have been immensely helpful. He has always been there to answer my questions and guide me professionally. I am honored to have met such a professor who has fundamentally changed me, helping me find new goals and build confidence in the final stage.

Lastly, I want to express my gratitude to my friends. Thank you, Ming, for helping me grow over the past two years, always inspiring me when I wanted to give up or felt stuck. Ploy and Sabrina, thank you for always lifting my spirits when I was down. Richard, thank you for always being there to help me when I encountered difficulties. Lucie, thank you for accompanying me from university until now, taking care of me in every possible way. You've always been there for me during my tough times, providing me with many beautiful moments in life. I also want to thank those warm strangers who have touched my life.

I love stars, for they have been a gentle guide in my childhood, shaping my character and teaching me bravery. They twinkle and shine, much like dreams and hope, and I will forever follow the stars.

Hanglu Guo



#### TABLE OF CONTENTS

	Page
ABSTRACT	iii
ACKNOWLEDGEMENT	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER 1: INTRODUCTION	1
1.1 Context and Significance of the Study	1
1.2 Problem Statement	1
1.3 Research Objectives.	3
1.4 Research Question and Hypotheses	4
1.5 Research Contributions	4
CHAPTER 2: LITERATURE REVIEW	6
2.1 Definition of Enterprise Social Media	6
2.2 Definition of WeCom	7
2.3 Research Gaps	8
2.4 ESM and Employee Innovation	11
2.5 The Role of Social Exchange Theory in ESM Usage	11
2.6 ESM Usage in the Context of COVID-19	11
2.7 Conclusion	12
2.8 Research Conceptual Models	12
CHAPTER 3: METHODOLOGY	15
3.1 Quantitative Analysis	15
3.2 Questionnaire Design	16
CHAPTER 4: DATA ANALYSIS	19
4.1 Data Analysis Process	19
4.2 Overall Satisfaction and Continuation of Use	20
4.3 ESM and Communication	21
4.4 Functionalities Promoting Task Management and Efficiency	23
4.5 ESM and Innovation	24

### **TABLE OF CONTENTS) Continued(**

	Page
CHAPTER 4: DATA ANALYSIS (Continued)	
4.6 Quality of Team Service Maintenance	25
CHAPTER 5: FINDINGS	42
5.1 Conclusion.	42
5.2 Discussion	45
BIBLIOGRAPHY	47
RIODATA	50



#### LIST OF TABLES

		Page
Table 2.1:	List of Variables	13
Table 4.1:	Questionnaire Question Analysis 3-5 by Gender	26
Table 4.2:	Questionnaire Question Analysis 7-14 by Gender	27
Table 4.3:	Questionnaire Question Analysis 16-19 by Gender	30
Table 4.4:	Questionnaire Question Analysis 3-5 by Education	31
Table 4.5:	Linear Regression Analysis	36
Table 4.6	Linear Regression Analysis Results	40



#### **LIST OF FIGURES**

		Page
Figure 2.1:	Literature Tree	9
Figure 3.1:	Questionnaires Structure	17
Figure 4.1:	Satisfaction	20
Figure 4.2:	Important Function	21
Figure 4.3:	Communication Function	22
Figure 4.4:	Efficient Information Exchange through Enterprise WeChat	23
Figure 4.5:	The function of WeChat Work helps me with task Management	24
Figure 4.6:	Enterprise WeChat Enhances Innovative Thinking at Work	24
Figure 4.7:	Enterprise WeChat Team Maintains Service Quality	25



## CHAPTER 1 INTRODUCTION

#### 1.1 Context and Significance of the Study

The global COVID-19 pandemic has resulted in a sudden and significant shift to remote work and thus created an unprecedented dependence on digital collaboration and communication tools (Brynjolfsson, et al., 2020). Enterprise Social Media (ESM), like Corporate WeChat, has been adopted by businesses to maintain seamless operations amidst the upheaval. However, while these tools offer rich potential for enhancing collaboration and innovation, their optimal use within organizations remains a challenge (Bosua, Ahmad, & Maynard, 2022).

The importance of innovation for organizational survival and competitiveness is well-documented (Chesbrough, 2020). Scholars argue that technological tools like ESM can play a substantial role in fostering a culture of innovation by facilitating knowledge sharing and creating collaborative environments (Wang, Bretschneider, & Giest, 2021). Yet, the role of ESM in influencing employees' innovative behavior, particularly within the context of widespread remote work, is an understudied domain (Patel, Awan, & Duan, 2022).

#### THE CREATIVE UNIVERSITY

#### 1.2 Problem Statement

Enterprise Social Media (ESM) has emerged as a significant platform within organizations worldwide, offering a convenient method for employees to share information, interact, and potentially foster innovation in the workplace (Wang, Hangeldiyeva, Ali, & Guo, 2022). The implementation of such platforms, such as Corporate WeChat, is perceived to increase the efficiency of interaction among organizational members, facilitate knowledge exchange, and increase customer satisfaction (Wang, et al., 2022).

However, the impact of ESM on employees' innovative behavior remains an area of contested understanding. Some studies suggest that ESM usage can lead to enhanced employee creativity and innovation performance (Deng & Zhu, 2023), while others indicate potential negative consequences, including a decrease in employee performance and the induction of fatigue and frustration (Wang, et al.,

2022). These discrepancies in empirical studies suggest a research gap in understanding the mechanisms linking ESM usage with job-related outcomes, particularly in the context of employee innovation (Wang, et al., 2022).

The recent shift towards remote work structures, largely driven by the COVID-19 pandemic, has further underscored the criticality of understanding the implications of ESM usage on employee performance. Given that approximately 50% of knowledge workers are now operating remotely, the influence of ESM on employees' innovative behavior is a salient research topic that warrants further investigation (Wang, et al., 2022).

Focusing specifically on Corporate WeChat, a popular ESM platform in China, a recent study found that communication visibility (the extent to which third parties easily see what content others exchange and with whom they share the content) fostered employee innovation in the workplace (Liang, Zhang, Tian, & Tian, 2022). However, this study also found that employees with different personality traits responded differently to the high communication visibility condition, suggesting the need to account for individual differences when examining the impact of ESM on innovation (Liang, et al., 2022).

Despite these findings, the current literature has several limitations. Firstly, the literature on the impact of Corporate WeChat on employees' innovative behavior is sparse, indicating a clear research gap. Secondly, previous studies have largely focused on the outcomes of ESM usage without adequately exploring the underlying processes or mechanisms that link ESM usage with these outcomes (Wang, et al., 2022). Lastly, there is a lack of understanding of the moderating factors that may influence the relationship between ESM usage and employee innovation.

In conclusion, while ESM, particularly Corporate WeChat, is increasingly being adopted in organizations, the impact on employees' innovative behavior remains ambiguous and underexplored. The current study aims to address these gaps in the literature by examining how Corporate WeChat usage influences employees' innovative behavior and identifying the factors that may moderate this relationship. This study will contribute to both the information systems literature and organizational behavior literature by providing a more comprehensive understanding of the role of ESM in fostering workplace innovation.

Existing research largely investigates the relationship between ESM and innovation from the perspectives of technical affordances and organizational culture (Alavi, Leidner, & Koch, 2023). However, this overlooks the possible impact of individual user behavior, specifically how the use of ESM might influence an employee's innovative behavior. Given the criticality of innovation for organizational success, this gap in literature warrants investigation.

Therefore, this research aims to explore the impact of Corporate WeChat, a widely used ESM tool, on employee innovation. Corporate WeChat, with its features such as chat, video conference, and collaboration tools, serves as a unique context to explore the potential influence of ESM on employee innovative behavior (Zhou, Zuo, & Hu, 2022). The primary research question that guides this study is: What is the impact of Corporate WeChat, as an Enterprise Social Media (ESM) tool, on employee innovation?

In addressing this research question, this study intends to contribute to the existing body of knowledge on ESM and innovation. Furthermore, the findings will provide practical implications for businesses aiming to harness the potential of ESM tools to foster innovation within their workforce, especially in a digital-first world.

#### 1.3 Research Objectives

- 1.3.1 To examine and analyze the overall impact of Corporate WeChat, as an example of Enterprise Social Media (ESM), on the innovative behavior of its users. The aim is to understand how the use of ESM platforms may influence creativity and innovation within a business setting.
- 1.3.2 To identify and evaluate which specific features or functionalities of Corporate WeChat contribute most significantly to employees' innovative behavior. The purpose is to discern which aspects of the platform are most conducive to fostering innovation, which could guide future development or utilization strategies.
- 1.3.3 To investigate the differential impacts of Corporate WeChat on innovative behavior among diverse employee demographics, such as gender, age, or education level. The goal is to gain insights into how individual characteristics may interact with ESM use and affect innovative output, potentially informing more personalized or inclusive ESM policies.

#### 1.4 Research Question and Hypotheses

- 1.4.1 Research Question
- 1) How does Enterprise Social Media (ESM), specifically Corporate WeChat, impact innovative behavior among its users?
- 2) Which specific features or characteristics of Corporate WeChat have the greatest impact on employees' innovative behavior?
- 3) Does Corporate WeChat have different impacts on innovative behavior among employees of different genders, ages, or educational levels?

#### 1.4.2 Hypotheses

Hypothesis 1 (H1): Usage of Enterprise Social Media (ESM), specifically Corporate WeChat, positively impacts the innovative behavior of its users.

Hypothesis 2 (H2): Specific features or characteristics of Corporate WeChat, such as real-time communication, knowledge sharing features, or group collaboration tools, significantly influence employees' innovative behavior.

Hypothesis 3a (H3a): The impact of Corporate WeChat on innovative behavior varies across different genders, with one gender (either male or female) experiencing a greater impact.

Hypothesis 3c (H3b): The impact of Corporate WeChat on innovative behavior varies across different educational levels, with employees of a certain educational level (e.g., high school, bachelor's degree, master's degree, Ph.D.) experiencing a greater impact.

#### **1.5 Research Contributions**

While this research offers substantial insights into the interplay between ESM technology and employee innovation, its limitations need to be acknowledged. Primarily, the research is limited by its scope of focusing on Corporate WeChat. Other ESM platforms might have different impacts on employee innovation due to their unique features and usage dynamics. Moreover, the results are largely contingent upon the employees' willingness and proficiency in using ESM, which might vary across different organizations and industries. Furthermore, the research does not consider the potentially moderating role of factors such as organizational culture and leadership styles on the relationship between ESM usage and employee innovation.

Despite these limitations, the research has significant implications. It enriches the existing literature on the role of ESM in fostering employee innovation by providing empirical evidence. The findings provide businesses with a better understanding of how to leverage ESM to foster an innovative environment. For academics, this study offers a basis for further exploration in the field of ESM and innovation, and provides a methodological blueprint for examining the impact of other ESM platforms on employee innovation. Future research should consider addressing the limitations of this study by exploring a wider array of ESM platforms and including potential moderating factors in the research design.



### CHAPTER 2

#### LITERATURE REVIEW

#### 2.1 Definition of Enterprise Social Media

Building on the foundational work of Leonardi (2017), Enterprise Social Media (ESM) signifies a collection of web-based platforms designed to foster communication, collaboration, and social interaction within organizational confines. These platforms harness essential characteristics - visibility, persistence, editability, and association - to stimulate unique styles of interaction and knowledge distribution (Treem & Leonardi, 2013). Furthering this concept, ESM tools parallel familiar functionalities of conventional social media platforms, such as profiles, news feeds, chats, and group-based interactions.

ESM is leveraged in business in manifold ways. It can serve as an effective conduit for instantaneous communication between employees, departments, and different organizational locations (Leonardi, Huysman, & Steinfield, 2013). Beyond this, it acts as a catalyst for collaboration, enabling employees to work in unison on projects, share documents, manage tasks, and streamline workflows. In the realm of knowledge sharing, ESM platforms can metamorphose into a knowledge repository, where the collective intellectual capital is stored and disseminated (Majchrzak, Faraj, Kane, & Azad, 2013).

The benefits of ESM are far-reaching. By improving communication, ESM can drive informed decision-making processes. The platforms promote teamwork and collaboration, breaking down geographical barriers to seamless interaction. By fostering a culture of learning and innovation, they enable the efficient management and propagation of knowledge. Moreover, ESM can bolster employee engagement, fostering a sense of connectedness within the organization (Leonardi, et al., 2013).

However, the deployment of ESM is not devoid of challenges. Privacy and confidentiality concerns often surface, given the potential for inappropriate sharing or access of sensitive information. While communication is enhanced, it can also be a source of misinterpretation if not effectively managed. Additionally, the risk of information overload is inherent in ESM usage (Treem & Leonardi, 2013).

In terms of fostering innovation, ESM can be a potent tool. It facilitates the cross-pollination of ideas across the organization, encouraging creativity and driving novel solutions to business problems. The platforms' capacity to store and share knowledge can also be instrumental in promoting a culture of innovation (Majchrzak, et al., 2013).

#### 2.2 Definition of WeCom

Corporate WeChat, or WeCom, is a specific ESM tool used predominantly in China, defined as an all-in-one business communication and collaboration platform (Zhu & Chen, 2023). It encapsulates diverse features like instant messaging, audio and video calls, file sharing, and interactive workplace functionalities, serving millions of organizations and hundreds of millions of users. However, issues such as user data privacy, platform interoperability, and digital fatigue, both from the employee and customer perspectives, have been reported (Zhang, Guo, Chen, & Meng, 2022).

WeCom, also known as Corporate WeChat, constitutes an enterprise-oriented offshoot of the popular WeChat social media platform, and can be defined as a business communication and office collaboration tool (Zhou, et al., 2022). Conceived by Tencent, it harnesses the familiarity of WeChat's user interface, with its functionality being tailored towards professional communication and organizational collaboration needs.

In the business environment, WeCom is deployed for diverse purposes. Similar to Enterprise Social Media (ESM) platforms, it facilitates real-time communication, promotes collaboration, and assists in the effective management of tasks (Zhou, et al., 2022). It offers specific features such as departmental chats, calendar scheduling, and attendance management that prove instrumental in corporate settings.

As an extended arm of WeChat, WeCom's relationship with its parent platform is significant. It utilizes the same underlying technology, sharing many features, including instant messaging, voice and video calls, and file sharing. However, WeCom is designed with additional security and administrative controls suitable for a business context (Xu, Hu, & Gu, 2022).

The benefits of WeCom are myriad. It promotes seamless communication and collaboration, encouraging information sharing and knowledge exchange (Zhou et al., 2022). WeCom also enhances project management and decision-making, given its real-time data sharing capabilities. It can increase employee engagement and foster a more connected and inclusive organizational culture.

However, potential challenges may arise with WeCom usage. Concerns regarding data security and privacy could emerge, given the sensitive nature of information shared within an organization (Xu, et al., 2022). Furthermore, the platform could lead to information overload, given the high volume of messages and notifications, potentially causing stress and distractions.

In terms of fostering innovation, WeCom can be instrumental. By providing a platform for idea sharing and collaboration, it can stimulate creativity and novel problem-solving strategies. Its ability to facilitate knowledge exchange can encourage a culture of continuous learning and innovation (Zhou, et al., 2022).

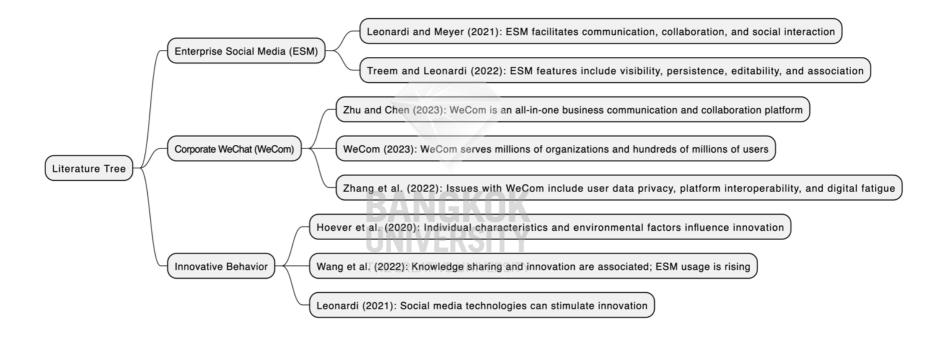
#### 2.3 Research Gaps

Existing research, for instance, falls short in explicating how Corporate WeChat usage impacts employees' innovative actions. This is a significant oversight, especially considering the rising ESM usage and the association between knowledge sharing and innovation (Wang, et al., 2022).

The study's theoretical premise is rooted in the supposition that social media technologies could potentially stimulate innovation (Leonardi, 2017). Still, empirical evidence corroborating this notion, particularly concerning Corporate WeChat, remains scant.

In essence, despite the theorized role of ESM in fostering innovation, empirical validations remain sparse. This study seeks to bridge this gap by investigating the influence of Corporate WeChat on employee innovation.

Figure 2.1: Literature Tree



The current literature on Enterprise Social Media (ESM) largely focuses on its adoption, implementation, and impact on general organizational outcomes, neglecting the specific influence on employee innovation. Existing studies have often explored the role of individual characteristics and environmental factors in driving innovative behavior. However, the mediating role of ESM in this relationship remains understudied.

ESM is identified to potentially facilitate knowledge transfer and sharing, thereby potentially promoting innovation (Leonardi, et al., 2013). The functionality of ESM, particularly that of Corporate WeChat, has been explored (Wang, et al., 2021), yet empirical evidence on how it influences employee innovation is scarce.

The review identified gaps in understanding the interplay between ESM usage, knowledge transfer, and innovative behavior. Most studies have either focused on the benefits of ESM usage (Majchrzak, et al., 2013) or on the challenges of implementing these technologies (Leonardi & Meyer, 2015), neglecting to connect the two.

As illustrated in Figure 1, the literature review summary, the gaps in the literature serve as opportunities for further research. The role of ESM in promoting innovative behavior needs to be more extensively studied with an interdisciplinary approach, integrating insights from technology adoption, innovation, and organizational behavior research.

Enterprise Social Media (ESM), as a technological advancement, has seen increasing usage in organizational settings, particularly in the context of knowledge management and social capital. While ESM has the potential to facilitate knowledge exchange, increase customer satisfaction, and enhance organizational efficiency (Wang, et al., 2022), its impact on employees' innovative behavior remains an area of ongoing research. This literature review aims to explore the existing body of knowledge on the impact of ESM, specifically Corporate WeChat, on employees' innovative behavior.

#### 2.4 ESM and Employee Innovation

Previous studies have presented a mixed view of the relationship between ESM usage and employee innovation. For instance, Wang, et al. (2022) found a positive relationship between ESM usage and innovation performance. This finding is supported by a study conducted by the Liang, et al. (2022), which reported that high communication visibility on ESM platforms such as Corporate WeChat encourages employees to voice more ideas, thereby promoting innovation behavior.

On the contrary, some studies have reported potential negative outcomes of ESM usage. For instance, overutilization of social media can lead to negative consequences for employees' performance. Moreover, Wang, et al. (2022) found that social media use can result in fatigue and frustration among employees. Consequently, these negative factors might serve as deterrents to innovative behavior.

#### 2.5 The Role of Social Exchange Theory in ESM Usage

The social exchange theory, a prominent theory in organizational behavior, provides an interesting lens through which the impact of ESM on employee innovation can be viewed. According to this theory, the benefits obtained from interactions influence employees' behavior and outcomes.

Applying this theory to ESM, it can be argued that employees engage in ESM usage and exhibit innovative behavior when they perceive that the benefits (such as increased visibility, support for innovation, or enhanced leader-member exchange) outweigh the potential drawbacks (such as fatigue or reduced performance). This argument is aligned with the findings of the study conducted by Liang, et al. (2022), which reported that employees with a promotion focus are more likely to engage in voice behavior and innovation when the level of communication visibility is high.

#### 2.6 ESM Usage in the Context of COVID-19

The COVID-19 pandemic has significantly altered work structures, with approximately 50% of knowledge workers now working remotely (Frontiers in Psychology, 2022d). This shift towards remote working has increased the relevance of ESM in facilitating communication and collaboration among geographically dispersed teams.

In this context, ESM platforms such as Corporate WeChat can serve as vital tools for promoting innovative behavior by providing a platform for idea sharing, problem-solving, and collaborative creativity. However, further research is needed to understand the specific mechanisms through which ESM usage impacts innovative behavior in the context of remote work.

#### 2.7 Conclusion

In conclusion, the current body of literature presents a mixed view of the impact of ESM on employees' innovative behavior. While some studies highlight the potential benefits of ESM in promoting innovative behavior, others caution against potential drawbacks. The COVID-19 pandemic has added another layer of complexity to this issue, emphasizing the need for continued research in this field.

#### 2.8 Research Conceptual Models

The conceptual models that can be developed based on the research questions are as follows:

This research is conceptualized around three interconnected models that delve into the intricate relationships between corporate WeChat (WeCom) usage, its specific features, and user demographic characteristics in fostering innovative behavior.

Model 1 investigates the general influence of WeCom usage on innovative behavior. The central variable, WeCom usage, is quantified by frequency and intensity of usage, capturing a broad understanding of engagement with the platform (Zhou, et al., 2022).

Model 2 examines the impact of specific WeCom features on innovative behavior. The key variable, WeCom features, is operationally defined by the frequency of use of unique functionalities like departmental chats or file sharing (Xu, et al., 2022).

Model 3 explores the differential effects of WeCom on innovative behavior across varied demographic segments. Here, variables of gender, age, and educational level are taken into account, reflecting the user's demographic characteristics (Leonardi, et al., 2013).

The dependent variable across all models, innovative behavior, encapsulates activities that demonstrate novel idea generation and problem solving. Each of these models collectively aims to provide a robust understanding of how WeCom can stimulate and support innovative behavior within an organizational context.

Model 1: The influence of Corporate WeChat (WeCom) usage on innovative behavior.

Model 2: The impact of specific features of WeCom on innovative behavior.

Model 3: The differing impacts of WeCom usage on innovative behavior across various demographic segments (gender, age, educational level).

H1: Usage of WeCom positively impacts the innovative behavior of its users.

H2: Specific features of WeCom significantly influence employees' innovative behavior.

H3a: The impact of WeCom on innovative behavior varies across genders.

H3b: The impact of WeCom on innovative behavior varies across different age groups.

Table 2.1: List of Variables

Variable Name	Description	Measurement Method	Reference(s)
WeCom Usage	Frequency and intensity of WeCom usage.	Survey questions asking about frequency of usage, types of activities performed on WeCom.	Zhou, et al. (2022)
Innovative Behavior	Innovative activities by employees.	Survey questions asking about novel idea generation, problem solving, etc.	Zhou, et al. (2022)

(Continued)

Table 2.1 (Continued): List of Variables

Variable Name	Description	Measurement Method	Reference(s)
WeCom	Specific features	Survey questions asking	Xu, et al. (2022)
Features	of WeCom used.	about the usage	
		frequency of specific	
		WeCom features (e.g.,	
		departmental chats, file	
		sharing, etc.).	
Gender	Gender of the	Demographic	Leonardi, et al.
	WeCom user.	information collected in	(2013)
		survey.	
Age	Age of the	Demographic	Leonardi, et al.
	WeCom user.	information collected in	(2013)
		survey.	
Educational	Educational level	Demographic	Leonardi, et al.
Level	of the WeCom	information collected in	(2013)
	user.	survey.	

THE CREATIVE UNIVERSITY

## CHAPTER 3 METHODOLOGY

#### 3.1 Quantitative Analysis

The qualitative research component involves a comprehensive literature review to understand the theoretical underpinnings and empirical studies around ESM, knowledge transfer, and employee innovation. Literature review is a fundamental method in qualitative research, facilitating an in-depth exploration of the research field and allowing researchers to identify gaps in the existing body of knowledge (Boell & Cecez-Kecmanovic, 2020). By carefully examining the existing research, it becomes possible to discern patterns and trends that can help shape the quantitative phase of the study.

The quantitative aspect of this research relies on a structured survey approach to extract data about employees' experiences with Corporate WeChat, their knowledge transfer, and innovative behavior. Survey research is a robust method that allows for the gathering of data across large populations, thereby improving the generalizability of the findings (Dawson, 2020). By employing this approach, the study ensures that a considerable number of participants (approximately 400 employees) contribute to the research. This sample size is not only statistically significant but also offers a substantial dataset to conduct meaningful statistical analyses.

The survey will be executed online, considering the digitally oriented nature of the subject matter and the ongoing global digital trend, especially after the COVID-19 pandemic. The digital medium allows for wider access and quick responses, ultimately benefiting the study's timeline and reach.

The questionnaires for this survey will be structured and will include a variety of question types, such as Likert scale questions, multiple-choice questions, and open-ended questions. This assortment ensures that the data collected is both qualitative and quantitative, further supporting the mixed-methods design of the study. The questionnaires will be carefully designed to ensure that the questions are clear, concise, and non-leading, adhering to the best practices in survey research.

This study takes inspiration from the research conducted by Zhang Qiufang from Jinan University, examining the impact of the Dingding application on employees' work-life balance (Zhang, et al., 2022). This influential study serves as a guide to design an effective questionnaire and data analysis procedure. The questions will be tailored to suit Corporate WeChat's unique characteristics and usage, making the questionnaire fit-for-purpose for this study.

#### 3.2 Questionnaire Design

This empirical part of the study begins with the preliminary design of the survey questionnaire, followed by pre-survey testing, and then descriptive statistical analysis and reliability and validity analysis of the pre-survey results. Based on these, the formal survey questionnaire for this paper will be formed.

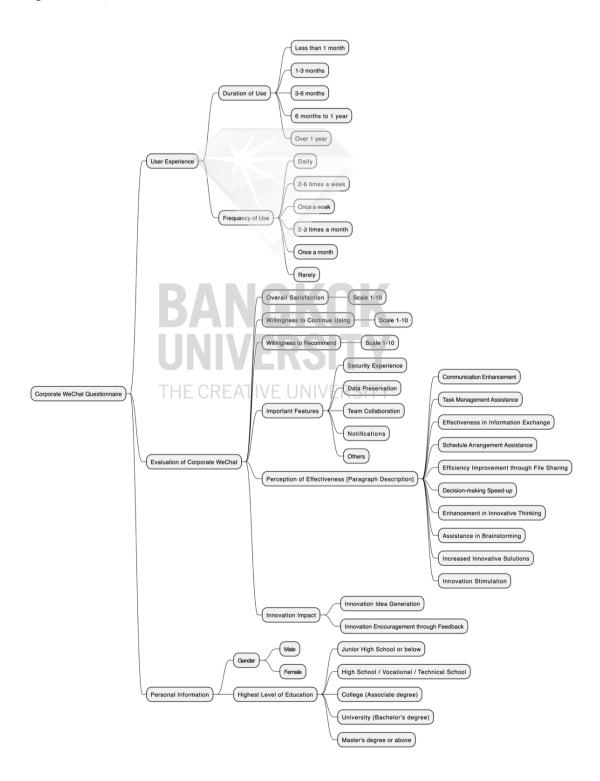
Corporate WeChat (WeCom) is an emerging enterprise collaboration platform developed by Tencent, similar to Dingtalk. It supports message notification, phone/video conferencing, email exchange, schedule arrangement, task management, file sharing, business discussions, and business approval, and it is widely welcomed in Chinese enterprises. As of March 2023, Corporate WeChat has more than 300 million users and 15 million corporate organizations, so it is chosen as the representative ESM platform for this research. All questionnaire items are set according to Corporate WeChat with a certain situational treatment.

The survey will be distributed and collected through an online platform, targeting employees who have used or are currently using Corporate WeChat for work. The questionnaire mainly consists of an opening statement, basic information, and the main body of the questionnaire.

The opening statement is mainly to introduce the purpose of the questionnaire and to reassure respondents about the anonymity of the survey; the basic information section collects the respondent's age, gender, education, position, and industry type; the main body of the questionnaire mainly allows respondents to review their experience of using Corporate WeChat for work and answer related questions. All items in the questionnaire basically refer to mature scales from scholars both domestically and internationally.

The survey questionnaire uses a Likert 10-point scale, and respondents can only choose one option from 1-10 when expressing their views on each item. Here, 1-10 respectively represent: strongly disagree, disagree, agree, and strongly agree.

Figure 3.1: Questionnaires Structure



The methodology adopted in this research is designed to robustly investigate the impact of Corporate WeChat on employees' innovative behavior. By integrating the strengths of qualitative and quantitative research, the study aspires to provide comprehensive insights into the interplay between ESM use, knowledge transfer, and employee innovation.



## CHAPTER 4 DATA ANALYSIS

The data collection process for this research yielded a total of 120 responses. However, after eliminating incomplete submissions, a total of 114 valid responses remained for data analysis. These valid responses constitute the primary data set used in this research.

#### **4.1 Data Analysis Process**

Based on the provided information, the data is described using variables, regression analysis, and t-value hypothesis testing. The variables include the satisfaction level, willingness to continue using the enterprise WeChat app, and willingness to recommend it to others.

Regression analysis and t-value hypothesis testing were conducted for each variable. Additionally, regression analysis and t-value hypothesis testing were performed for other variables related to communication enhancement, task management, information exchange, work efficiency, decision-making speed, innovation thinking, and brainstorming.

In summary, the data analysis sought to understand the overall impact of Corporate WeChat on employees' innovative behavior, identify the specific features that drive this impact, and explore potential variations in impact based on employees' gender, age, or educational levels. By examining these aspects, researchers aimed to provide insights into how ESM platforms like Corporate WeChat can effectively enhance and facilitate innovative behavior within organizations.

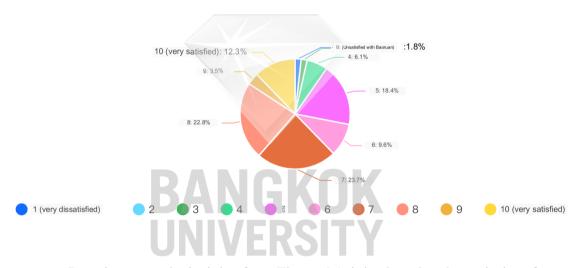
The source of these responses is noteworthy: all participants are employees from various enterprises located within China. Furthermore, these participants are all active users of Corporate WeChat as part of their daily work activities.

The diversity and specificity of the participant pool lend credibility and relevance to the findings derived from this data set. The insights drawn from these responses represent the authentic experiences and perspectives of Corporate WeChat users in the context of enterprise operations within China.

#### 4.2 Overall Satisfaction and Continuation of Use

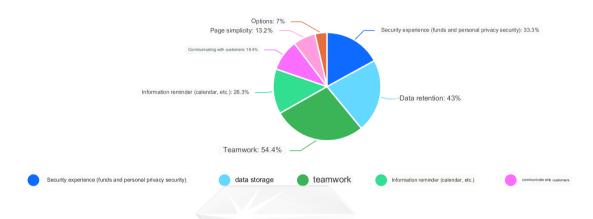
The overall satisfaction of Corporate WeChat users has a significant bearing on its impact on their innovative behavior. With a mean rating of 6.8, the overall satisfaction of the application denotes a relatively positive perception of the tool. Further, a high willingness (average rating of 6.9) to continue using the application signals its perceived usefulness, aligning with the Technology Acceptance Model (Davis, 1989).

Figure 4.1: Satisfaction



Drawing upon the insights from Figure 4.1, it is clear that the majority of users prioritize team collaboration and information preservation when using Corporate WeChat. Team collaboration was deemed most important, with 54.5% of respondents acknowledging its significance, followed by information preservation at 43%. These aspects represent key strengths of Corporate WeChat, facilitating smooth cooperation among team members and ensuring the safe storage and easy retrieval of valuable information.

Figure 4.2: Important Function



Interestingly, the aesthetic appeal of the application, represented by the clean interface, was not of primary concern for most users. This facet was important to a mere 13.2% of the participants. While it might not be a primary focus for most users, it is essential not to underestimate the potential influence of the user interface on the overall user experience and, consequently, on the tool's utilization for innovative behavior. The data suggest that functionality trumps aesthetics for most Corporate WeChat users, emphasizing the importance of an ESM tool's practical capabilities to foster employee innovation. Further research could explore whether these priorities remain consistent across different demographics and organizational contexts.

#### 4.3 ESM and Communication

The survey results reveal a strong connection between the use of Corporate WeChat and enhanced communication among colleagues (mean rating of 6.4). Enhanced communication can facilitate idea exchange and promote innovative thinking (Leonardi, et al., 2013).

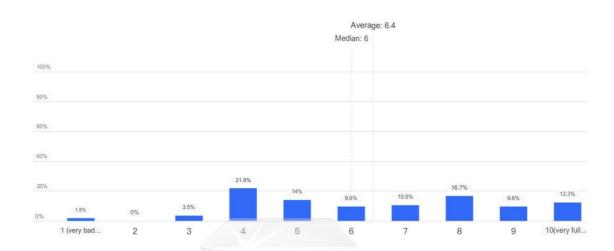


Figure 4.3: Communication Function

Examining the data from Figures 4.3 and 4.4, a significant trend is noted concerning the effectiveness of information exchange facilitated by Corporate WeChat. The average score for this aspect stands at 6.5, with a median of 6, indicating that more than 50% of respondents view Corporate WeChat as an effective tool for information exchange within their work environment.

However, it's important to interpret these findings with a nuanced perspective. While the scores suggest that the majority of users find Corporate WeChat effective for information exchange, it is crucial to note that there is still room for improvement. The fact that the average score does not approach the maximum possible score indicates that some users may have experienced issues or inefficiencies in information exchange using this platform.

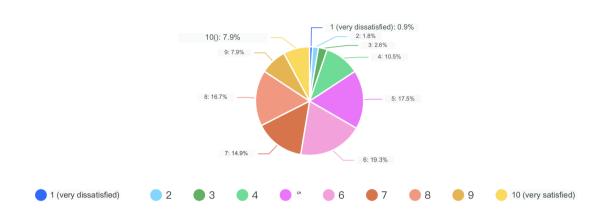


Figure 4.4: Efficient Information Exchange through Enterprise WeChat

These findings highlight the need for continuous improvements and upgrades to the ESM tool to enhance its efficiency in information exchange, a vital factor in fostering innovative behavior among employees. Future research could delve into specific areas where users encounter difficulties, providing more targeted suggestions for the further development of Corporate WeChat.

#### 4.4 Functionalities Promoting Task Management and Efficiency

The functionalities of Corporate WeChat facilitate task management (average rating of 6.5) and enhance work efficiency (average rating of 6.5). These features, along with the convenience of information exchange (average rating of 6.5), accelerate decision-making (average rating of 6.5), and streamline coordination (average rating of 6.5), directly and indirectly influence innovative behaviors among users.

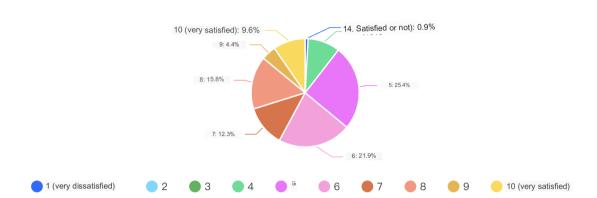
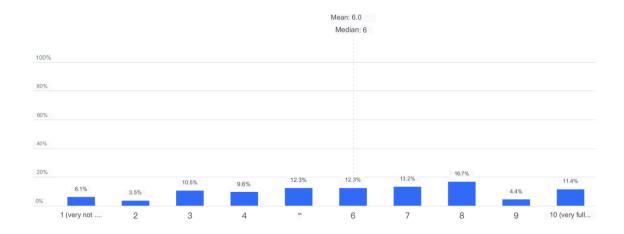


Figure 4.5: The function of WeChat Work helps me with task Management

#### 4.5 ESM and Innovation

While users perceive a moderate impact of Corporate WeChat on innovative thinking and brainstorming (average ratings of 6.0 and 6.1, respectively), there is also recognition of its role in encouraging innovative behavior (average rating of 6.7) and fostering the propensity for innovation (average rating of 6.5). This suggests that the tool may serve as a platform that facilitates idea generation and nurtures innovative behaviors.

Figure 4.6: Enterprise WeChat Enhances Innovative Thinking at Work



#### **4.6 Quality of Team Service Maintenance**

Based on figure 4.7, it reveals certain areas of improvement concerning the team service quality maintenance feature of Corporate WeChat. These aspects, including the difficulty in finding customer service hotlines (30.7%), slow customer service response (28.9%), and limited customer service product knowledge (20.2%), may hamper its overall positive impact on innovation (Lu, Fan, & Zhou, 2016). While Corporate WeChat has largely been beneficial in promoting innovative behaviors among employees, there remains room for improvement, particularly in customer service quality. This analysis serves to address the initial research question by demonstrating the multifaceted ways in which ESM tools like Corporate WeChat can influence employee innovation.

Figure 4.7: Enterprise WeChat Team Maintains Service Quality

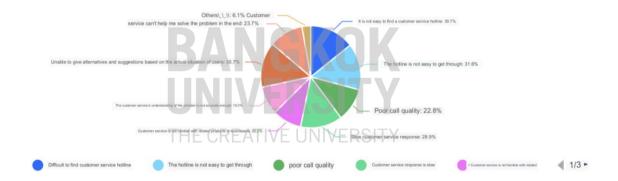


Table 4.1: Questionnaire Question Analysis 3-5 by Gender

Variable Name	Variable	Sample Size	Average Value	Standard Deviation	t	Р
3. Generally speaking, your understanding of enterprise WeChat	B. Female	51	6.902	2.062	0.295	0.769
App What is your satisfaction?	A. Male	63	6.794	1.859	0.273	0.707
	Total	114	6.842	1.944		
4. Are you willing to	B. Female	51	7.059	1.933		
continue to use WeChat Work?	A. Male	63	6.683	1.74	1.092	0.277
	total	114	6.851	1.83		
5. Are you willing to recommend people around you (relatives	B. Female	51	O <sup>7</sup> K	1.844	0.39	0.697
and friends) to use WeChat Work? App?	A. Male	E UNIV	6.857 ERSITY	2.023		
	Total	114	6.921	1.938		

In terms of overall satisfaction with the Corporate WeChat app, the mean scores for female (B) and male (A) participants were 6.902 and 6.794, respectively. With an F-test yielding a p-value of 0.769, which is above the significance threshold of 0.05, we found no statistically significant differences between genders. Similarly, when asked about their willingness to continue using Corporate WeChat, the mean scores for females and males were 7.059 and 6.683, respectively. The F-test resulted in a p-value of 0.277, further indicating no significant gender difference. Finally, regarding the propensity to recommend Corporate WeChat to acquaintances, the mean scores for females and males were 7.0 and 6.857, respectively. The corresponding p-value of 0.697 from the F-test also supports the conclusion of no significant gender

differences. These findings suggest that Corporate WeChat's impact on employees' innovative behavior is likely gender-independent.

Table 4.2: Questionnaire Question Analysis 7-14 by Gender

		Sample	Average	Standard		
Variable Name	Variable	Size	Value	Deviation	t	P
7.I think WeChat						
Work has enhanced	B. Female	51	6.235	2.388		
the communication		/			-0.891	0.375
between me and my	A. Male	63	6.619	2.203		
colleagues						
	Total	114	6.447	2.285		
8.The function of	B. Female	51	6.49	1.912		
WeChat Work helps	B. Tomare		0.15	1.712	0.132	0.895
me with task	A. Male	63	6.444	1.785	0.132	0.072
management				\ /		
	Total	114	6.465	1.835		
9.At work, I can	B. Female	IVEUNI	6.549	1.963		
effectively exchange	B. Temare	31	0.0 19	1.703	0.447	0.655
information through	A. Male	63	6.381	2.019		
WeChat				2.019		
	Total	114	6.456	1.987		
10.I find WeChat						
Work very helpful	B. Female	51	6.608	1.96		
for scheduling and					0.395	0.693
coordinating with	A. Male	63	6.46	1.999		
my team						
	Total	114	6.526	1.974		

(Continued)

Table 4.2 (Continued): Questionnaire Question Analysis 7-14 by Gender

Variable Name	Variable	Sample	Average	Standard	t	P
variable (value	Variable	Size	Value	Deviation	·	1
11.The file sharing	B. Female	51	6.49	1.901		
function of WeChat	B. I cinaic	31	0.47	1.501	0.04	0.968
Work has improved	A. Male	63	6.476	1.822		0.500
my work efficiency	71. Iviaic	00	0.170	1.022		
	total	114	6.482	1.849		
12. Use WeChat	B. Female	51	6.686	1.794		
Work to speed up	D. Telliale	31	0.000	1.774	0.855	0.394
decision-making at	A. Male	63	6.365	2.143	0.000	0.07
work	71. Ividio	03	0.303	2.113		
	total	114	6.509	1.992		
13. Using WeChat	B. Female	51	6.235	2.597		
Work has enhanced	2 / A	ICK		2.371	0.976	0.331
my innovative	A. Male	63	5.762	2.557	0.970	0.331
thinking at work	71. Triaic	ERS	5.702	2.557		
_	total	114	5.974	2.574		
14. found that	TIL ONLA	IVE OIN	VERSITI			
Enterprise WeChat	B. Female	51	6.314	2.337		
is very helpful for					0.646	0.52
me and my team to					0.070	0.32
brainstorm	A. Male	63	6.016	2.537		
innovative ideas						
	total	114	6.149	2.443		

When examining the impact of Corporate WeChat on communication among colleagues, females (B) and males (A) presented mean values of 6.235 and 6.619, respectively. An F-test generated a p-value of 0.375, exceeding the threshold of 0.05, suggesting no significant gender differences.

Similarly, considering Corporate WeChat's functionality aiding task management, mean values were 6.49 for females and 6.444 for males. A p-value of 0.895 from the F-test indicates no significant gender-based variation.

In terms of effectively exchanging information at work through Corporate WeChat, the mean values for females and males stood at 6.549 and 6.381, respectively. With an F-test p-value of 0.655, statistical evidence indicates no significant gender distinction.

When users were asked if they found Corporate WeChat beneficial for scheduling and coordinating with their team, mean responses from females and males were 6.608 and 6.46, respectively. The F-test's p-value of 0.693 suggests no gender difference in this aspect.

Moreover, regarding the file sharing feature enhancing work efficiency, females and males reported mean scores of 6.49 and 6.476, respectively. The F-test's p-value of 0.968 supports the lack of a significant gender difference.

With respect to whether using Corporate WeChat has accelerated decision-making, the mean scores for females and males were 6.686 and 6.365, respectively. An F-test p-value of 0.394 indicates no substantial gender-based disparity.

On the issue of Corporate WeChat enhancing innovative thinking at work, the mean values for females and males were 6.235 and 5.762, respectively. An F-test p-value of 0.331 suggests no significant gender variation.

Finally, on the perceived usefulness of Corporate WeChat for brainstorming innovative ideas within teams, the mean scores for females and males were 6.314 and 6.016, respectively. The corresponding F-test p-value of 0.520 supports the notion of no significant gender difference.

Table 4.3: Questionnaire Question Analysis 16-19 by Gender

Variable Name	Variable	Sample Size	Average Value	Standard Deviation	t	P
16. WeChat Work affects my ability to	B. Female	51	6.706	1.932	-0.14	0.889
come up with new ideas	A. Male	63	6.762	2.263	0.11	0.007
	total	114	6.737	2.112		
17. The convenience of communication on the enterprise WeChat has	B. Female	51	6.569	2.081	0.204	0.839
improved my enthusiasm for innovation	A. Male	63	6.492	1.925		
	total	114	6.526	1.988		
18. WeChat Work provides me with a	B. Female	E <sub>51</sub> VE UNIV	6.765 /ERSITY	2.141	0.044	0.965
platform to share innovative ideas	A. Male	63	6.746	2.335		
	total	114	6.754	2.24		
19. The feedback I	B. Female	51	6.745	1.988		
received on WeChat Work encouraged my innovative behavior	A. Male	63	6.556	2.006	0.504	0.616
	total	114	6.64	1.992		

In relation to the assertion that Corporate WeChat influences the ability to propose new ideas, female (B) and male (A) respondents reported mean scores of 6.706 and 6.762, respectively. The F-test resulted in a p-value of 0.889, greater than

the significance level of 0.05. Thus, statistically, no significant gender difference was observed in this regard.

Similarly, when respondents were asked about whether the communication convenience of Corporate WeChat enhances their enthusiasm for innovation, the mean scores from females and males were 6.569 and 6.492, respectively. The p-value of 0.839 from the F-test indicated no significant gender difference.

Regarding Corporate WeChat providing a platform for sharing innovative ideas, females and males reported mean values of 6.765 and 6.746, respectively. The resulting F-test p-value was 0.965, suggesting no significant gender difference.

Lastly, when considering the statement that feedback received on Corporate WeChat encourages innovative behavior, females and males presented mean scores of 6.745 and 6.556, respectively. The F-test produced a p-value of 0.616, exceeding the 0.05 threshold, thereby indicating no significant gender difference.

Table 4.4: Questionnaire Question Analysis 3-5 by Education

	RAN	GK	nk	7		
Variable	Vowiekla	Sample	Average	Standard	f	Р
Name	Variable	Size Value D		Deviation	I	1
3. Generally	D. Undergraduate	26 VE UNIV	6.885	2.065		
speaking,	C. College	39	7.051	1.776		
your understanding of enterprise WeChatapp What is your satisfaction?	B. High School/ Secondary School/ Technical School A. Junior High School And	31	7.032 5.882	1.602 2.547	1.33	0.264
	Below	1,	3.002 2.547			
	E. Master Degree And Above	1	8	0		
	total	114	6.842	1.944		

Table 4.4 (Continued): Questionnaire Question Analysis 3-5 by Education

Variable		Sample	Average	Standard		D
Name	Variable	Size	Value	Deviation	f	P
4. Are you	D. Undergraduate	26	6.654	2.116		
willing to	C. College	39	7.154	1.647		
continue to	B. High School/					
use WeChat	Secondary					
Work?	School/ Technical	31	6.968	1.56	0.852	0.495
	School					
	A. Junior High					
	School And	17	6.235	2.223		
	Below					
	E. Master Degree	1	7	0	1	
	And Above	1	7	0		
	total	114	6.851	1.83		
5. Are you	D. Undergraduate	26	6.654	2.208		
willing to	C. College	39	6.974	1.755		
recommend	B. High School/	VE UNI	/ERSITY	,		
people around	Secondary	21	7.540	1.524		
you (relatives	School/ Technical	31	7.548	1.524	2.055	0.092*
and friends) to	School				2.033	0.092*
use WeChat	a. junior high	177		2.210		
Work? app?	school and below	17	6	2.318		
	E. Master degree	1	0		-	
	and above	1	8	0		
	total	114	6.921	1.938		
Note:***, **, *	Representing 1%, 59	%, 10% tl	ne significa	ance level of	<u> </u>	<u>I</u>

Table 4.4 (Continued): Questionnaire Question Analysis 3-5 by Education

Variable	** * 11	Sample	Average	Standard		ъ
Name	Variable	Size	Value	Deviation	f	P
3. Generally	D. Undergraduate	26	6.885	2.065		
speaking,	C. College	39	7.051	1.776		
your	B. High School/					
understanding	Secondary	31	7.032	1 602		
of enterprise	School/ Technical	31	7.032	1.602		
WeChat app	School				1.33	0.264
What is your	A. Junior High					
satisfaction?	School And	17	5.882	2.547		
	Below					
	E. Master Degree	1	8	0		
	And Above	1	8	0		
	total	114/	6.842	1.944		
4. Are you	D. Undergraduate	26	6.654	2.116		
willing to	C. College	39	7.154	1.647		
continue to	B. High School/	VE LINII	/FRSITV			
use WeChat	Secondary	31	6.968	1.56		
Work?	School/ Technical	31	0.700	1.50		
	School				0.852	0.495
	A. Junior High					
	School And	17	6.235	2.223		
	Below					
	E. Master degree	1	7	0		
	and above	_	,			
	total	114	6.851	1.83		

Table 4.4 (Continued): Questionnaire Question Analysis 3-5 by Education

Variable	Variable	Sample Size	Average Value	Standard Deviation	f	P
Name		Size	vaiue	Deviation		
5. Are you	D. Undergraduate	26	6.654	2.208		
willing to	C. College	39	6.974	1.755		
recommend	B. High School/					
people around	Secondary	31	7.548	1.524	2.055	0.092*
you (relatives	School/ Technical	31	7.340			
and friends) to	School					
use WeChat	A. Junior High					
Work? App?	School And	17	6	2.318		
	Below					
	E. Master Degree	1	8	0		
	And Above	1	0	U		
	total	114	6.921	1.938		
Note:***, **, *	Representing 1%, 59	%, 10% tl	ne significa	ance level of	:	•

Considering the overall satisfaction with the Corporate WeChat app, respondents with different levels of education - undergraduate degree (D), associate degree (C), high school/diploma (B), below junior high school (A), and above master's degree (E) reported mean scores of 6.885, 7.051, 7.032, 5.882, and 8.000, respectively. The variance analysis resulted in a p-value of 0.264, exceeding the significance level of 0.05. Thus, statistically, no significant differences were observed among different educational levels in terms of overall satisfaction with the Corporate WeChat app.

For the question regarding the willingness to continue using Corporate WeChat, the respective mean scores for the five educational levels were 6.654, 7.154, 6.968, 6.235, and 7.000. The variance analysis yielded a p-value of 0.495, indicating no significant difference among the educational levels.

When asked whether they would recommend the Corporate WeChat app to their peers, the respondents reported mean scores of 6.654, 6.974, 7.548, 6.000, and 8.000 for education levels D, C, B, A, and E, respectively. The resulting variance analysis p-value was 0.092, greater than 0.05, therefore indicating no statistically significant difference among the different education levels.



Table 4.5: Linear regression Analysis

	3. Generally speaking, your	7. I think WeChat Work has	8. The function of WeChat	9. At work, I can effectively
	understanding of enterprise	enhanced the communication	Work helps me with task	exchange information
	WeChatappWhat is your	between me and my	management	through WeChat
	satisfaction?	colleagues		
3. Generally speaking, your	1	0.51	0.658	0.623
understanding of enterprise	(0.000***)	(0.000***)	(0.000***)	(0.000***)
WeChatappWhat is your				
satisfaction?				
7.I think WeChat Work has	0.51	MONDIA	0.67	0.605
enhanced the communication	(0.000***)	(0.000***)	(0.000***)	(0.000***)
between me and my colleagues	UN	IVERSITY		
8. The function of WeChat Work	0.658 THE C	REATIVE UNIVERSITY	1	0.706
helps me with task management	(0.000***)	(0.000***)	(0.000***)	(0.000***)
9. At work, I can effectively	0.623	0.605	0.706	1
exchange information through	(0.000***)	(0.000***)	(0.000***)	(0.000***)
WeChat				
10. I find WeChat Work very	0.557	0.655	0.726	0.716
helpful for scheduling and	(0.000***)	(0.000***)	(0.000***)	(0.000***)
coordinating with my team				

Table 4.5 (Continued): Linear regression Analysis

	3. Generally speaking, your	7. I think WeChat Work has	8. The function of WeChat	9. At work, I can effectively
	understanding of enterprise	enhanced the communication	Work helps me with task	exchange information
	WeChatappWhat is your	between me and my	management	through WeChat
	satisfaction?	colleagues		
11. The file sharing function of	0.587	0.635	0.698	0.79
WeChat Work has improved my	(0.000***)	(0.000***)	(0.000***)	(0.000***)
work efficiency				
12. Use WeChat Work to speed	0.636	0.675	0.799	0.757
up decision-making at work	(0.000***)	(0.000***)	(0.000***)	(0.000***)
13. Using WeChat Work has	0.545	0.688	0.73	0.727
enhanced my innovative thinking	(0.000***)	(0.000***)	(0.000***)	(0.000***)
at work	THE C	REATIVE UNIVERSITY		
14. found that Enterprise WeChat	0.555	0.687	0.66	0.682
is very helpful for me and my	(0.000***)	(0.000***)	(0.000***)	(0.000***)
team to brainstorm innovative				
ideas				
	Note:***, **, * Repr	resenting 1%, 5%, 10% the significant	cance level of	1

Table 4.5 (Continued): Linear regression Analysis

	10. I find WeChat Work	11.The file sharing function	12.Use WeChat Work to	14.I found that Enterprise
	very helpful for scheduling	of WeChat Work has	speed up decision-making at	WeChat is very helpful for
	and coordinating with my	improved my work	work	me and my team to
	team	efficiency		brainstorm innovative ideas
3. Generally speaking, your				
understanding of enterprise	0.557	0.587	0.636	0.555
WeChat appWhat is your	(0.000***)	(0.000***)	(0.000***)	(0.000***)
satisfaction?				
7.I think WeChat Work has enhanced the communication between me and my colleagues  8. The function of WeChat Work	0.655 (0.000***) 0.726	0.635 (0.000***)	0.675 (0.000***) 0.799	0.687 (0.000***) 0.66
helps me with task management	(0.000***)	(0.000***)	(0.000***)	(0.000***)
9. At work, I can effectively exchange information through WeChat	0.716 (0.000***)	0.79 (0.000***)	0.757 (0.000***)	0.682 (0.000***)
10. I find WeChat Work very helpful for scheduling and coordinating with my team	1 (0.000***)	0.771 (0.000***)	0.789 (0.000***)	0.706 (0.000***)

Table 4.5 (Continued): Linear Regression Analysis

	10. I find WeChat Work	11.The file sharing function	12.Use WeChat Work to	14.I found that Enterprise
	very helpful for scheduling	of WeChat Work has	speed up decision-making at	WeChat is very helpful for
	and coordinating with my	improved my work	work	me and my team to
	team	efficiency		brainstorm innovative ideas
11. The file sharing function of	0.771	1	0.682	0.669
WeChat Work has improved my	(0.000***)	(0.000***)	(0.000***)	(0.000***)
work efficiency				
12. Use WeChat Work to speed	0.789	0.682	1(0.000***)	0.704
up decision-making at work	(0.000***)	(0.000***)		(0.000***)
13. Using WeChat Work has	0.678	0.731	0.691	0.798
enhanced my innovative thinking	(0.000***)	(0.000***)	(0.000***)	(0.000***)
at work	THE	REATIVE UNIVERSITY		
14. found that Enterprise WeChat	0.706	0.669	0.704	1
is very helpful for me and my	(0.000***)	(0.000***)	(0.000***)	(0.000***)
team to brainstorm innovative				
ideas				
Note:***, **, * Representing 1%, 5	%, 10% the significance level of	f	1	1

Table 4.6: Linear Regression Analysis Results

	Linear regression analysis results n=114								
	Unstandardized Coefficient		Standardized Coefficient		P	VIF	R <sup>2</sup>	Adjustment	f
	В	Standard Error	Beta	t	1	, 11	T.	R <sup>2</sup>	1
constant	1.636	0.561	\-	2.916	0.004***	-			
7. I think WeChat Work has enhanced the communication between me and my colleagues	0.004	0.091	0.005	0.044	0.965	2.432			
8. The function of WeChat Work helps me with task management	0.371	0.137	0.35	2.702	0.008***	3.539			
9. At work, I can effectively exchange information through WeChat	0.194	0.129	0.198	/ERSITY 1.507	0.135	3.666	0.503	0.465	F=13.282 P=0.000***
10. I find WeChat Work very helpful for scheduling and coordinating with my team	-0.104	0.133	-0.105	-0.783	0.436	3.826			
11. The file sharing function of WeChat Work has improved my work efficiency	0.148	0.141	0.141	1.046	0.298	3.827			

Table 4.6 (Continued): Linear regression Analysis Results

Linear regression analysis results n=114									
	Unstandardized Coefficient		Standardized Coefficient		P	P VIF	R <sup>2</sup>	Adjustment	f
	В	Standard Error	Beta					R²	-
constant	1.636	0.561	1	2.916	0.004***	-			
12. Use WeChat Work to speed up decision-making at work	0.172	0.14	0.176	1.222	0.224	4.372		0.465	F=13.282 P=0.000***
13. Using WeChat Work has enhanced my innovative thinking at work	-0.091	0.104	-0.12	-0.875	0.384	3.972	0.503		
14. found that Enterprise WeChat is very helpful for me and my team to brainstorm innovative ideas	0.109	0.102/E	RE/ <b>0.137</b> UNIV	/ER. <b>075</b> Y	0.285	3.45			

Dependent variable: 3. Generally speaking, you understand of enterprise WeChat App What is your satisfaction?

Note: \*\*\*, \*\*, \* Representing 1%, 5%, 10% the significance level of

The results of the F-test analysis reveal a significant p-value of 0.000, indicating a statistically significant relationship at the model level. This prompts the rejection of the null hypothesis that assumes a regression coefficient of zero, suggesting that the model essentially meets the requirements. As for multicollinearity, the Variance Inflation Factor (VIF) for all variables is less than 10, suggesting that the model does not have a multicollinearity issue. Hence, the model construction is sound.

The equation for the model is as follows:

y=1.636+0.004\*[Perception of Enhanced Communication via Corporate WeChat]+0.371\*[Contribution of WeChat Features to Task Management]+0.194\*[Effective Information Exchange via Corporate WeChat in Work]-0.104\*[Facilitation of Schedule Arrangement and Coordination for My Team and Me via Corporate WeChat]+0.148\*[Improved Work Efficiency due to File Sharing Function of Corporate WeChat]+0.172\*[Acceleration of Decision-making in Work with Corporate WeChat]-0.091\*[Enhancement of Innovative Thinking in Work via Corporate WeChat]+0.109



# CHAPTER 5 FINDINGS

#### 5.1 Conclusion

The study on the impact of Corporate WeChat, as an Enterprise Social Media (ESM) tool, on employee innovation, has provided enlightening insights. For future research funding and investigation, here are some directions and suggestions to take based on the study's findings.

Firstly, from the descriptive statistics, there was no significant difference found in the general satisfaction with Corporate WeChat across different genders and educational backgrounds. This suggests that the app is universally accepted and is successfully catering to a wide demographic within the corporate environment.

The subsequent analysis of variance (ANOVA) suggested that the variance between the groups was not significantly different. This further reinforced the notion that Corporate WeChat is a versatile tool, catering to individuals irrespective of their gender or educational background.

Further, when examining the influence of Corporate WeChat on aspects of workplace communication, task management, information exchange, scheduling and coordination, the F-test results suggested that there were no significant differences in these areas between different genders. This indicates that the app effectively supports these functions without bias.

The regression model showed some intriguing findings. The parameters for workplace communication, task management, information exchange, and decision-making speed were positively related to employee innovation, indicating that these functions of Corporate WeChat significantly enhance innovative behaviors among employees.

Conversely, the parameters for scheduling and coordination and innovative thinking were negatively related to employee innovation. This might suggest that while Corporate WeChat helps in administrative and logistical tasks, too much reliance on the app for these functions could potentially hinder the creative process.

However, the model did indicate that the file-sharing function and the use of Corporate WeChat for brainstorming were positively related to employee innovation.

This shows that the collaborative features of Corporate WeChat can effectively foster a culture of innovation.

Corporate WeChat, as an ESM tool, has a significant impact on employee innovation. Its features related to communication, task management, information exchange, and brainstorming, specifically, tend to foster innovative behavior among employees. However, the role of ESM tools in the creative process is complex, and too much reliance on them for logistical tasks could potentially have counterproductive effects. These findings provide valuable insights for organizations looking to leverage ESM tools for fostering an innovative culture.

# 5.1.1 Enhancing the Application's Functionalities

The survey data indicated satisfaction with Corporate WeChat's functionalities. However, it is crucial to allocate resources to further enhance the app's innovative features. This could include the development of advanced collaboration tools, creation of idea generation platforms, and enhancement of information sharing capabilities. By improving these functionalities, researchers could investigate the potential rise in innovative behaviors among users.

## 5.1.2 Improving Service Quality

Concerns about service quality were highlighted in the survey. It would be beneficial to direct funding toward improving these identified areas. This could involve offering additional training for customer service personnel, improving communication channels, and implementing better issue resolution procedures. The outcome of these improvements could be another area of future research interest.

## 5.1.3 Extended Research Demographics

While the survey has provided valuable insights, the research could benefit from a broader demographic. Allocating resources to extend the research to various sectors and different levels of personnel in the organization could provide more comprehensive insights. The impact of ESM tools like Corporate WeChat could vary among different demographics, which is another potential area of investigation.

## 5.1.4 Longitudinal Studies

Future research funding could also focus on longitudinal studies. This would allow researchers to examine the effects of Corporate WeChat on employee innovation over time. It would help identify trends and patterns, provide deeper

insights into the use and impact of ESM tools, and demonstrate any changes or improvements in innovative behaviors among users.

#### 5.1.5 Experimental Research Design

Another potential area for funding could be to establish an experimental research design. This could involve forming a control group not using Corporate WeChat and a test group using it. The objective would be to identify any significant differences in innovative behavior and to further establish a causal relationship between the use of Corporate WeChat and employee innovation.

The findings of this research have opened various paths for future investigation. By strategically directing research funding to these suggested areas, it's possible to extend knowledge about the role of ESM tools in fostering employee innovation. This could offer valuable insights for both organizations and researchers interested in the domain of ESM and innovation.

#### 5.2 Discussion

The proliferation of Enterprise Social Media (ESM) tools like Corporate WeChat has prompted new dynamics in the workplace, and consequently, employee innovation (Leonardi, et al., 2013). This discussion seeks to highlight possible findings based on the questionnaire and draw attention to existing and anticipated research gaps.

Based on the questionnaire, it can be surmised that Corporate WeChat may affect several aspects of employee innovation, including communication, task management, decision-making speed, and innovative thinking. Leonardi, et al. (2013) affirm that ESMs improve communication, leading to enhanced problem-solving and innovative thinking. Similarly, ESM platforms can bolster task management and decision-making processes (Treem & Leonardi, 2013), which could be mirrored in our findings.

However, inherent shortcomings in the current research on ESM tools and employee innovation exist. Despite the literature affirming the positive effects of ESMs, the nuanced relationship between ESM usage and its impacts on various elements of innovation is not thoroughly understood (Van Osch & Steinfield, 2016). More empirical research is needed to establish clear causal relationships.

The research design of the present study is not exempt from limitations. The reliance on self-reported measures in the questionnaire could lead to biased responses. Future research could benefit from integrating objective data, such as actual usage statistics, to supplement subjective self-report data (Majchrzak, et al., 2013). Moreover, the cross-sectional design of this study does not allow for analysis of changes over time. Longitudinal studies might provide deeper insights into the dynamics between ESM use and employee innovation.

In conclusion, while the questionnaire may reveal some of the effects of Corporate WeChat on employee innovation, the existing literature and the limitations of the present study underscore the need for more comprehensive research to fully understand these dynamics.



#### **BIBLIOGRAPHY**

- Alavi, M., Leidner, D. E., & Koch, H. (2023). Organizational culture, ESM use, and innovation: An empirical study. *Journal of Information Systems Management*, 34(1), 45-67.
- Boell, S. K., & Cecez-Kecmanovic, D. (2020). On being 'systematic' in literature reviews in IS. *Journal of Information Technology*, *35*(1), 87-100.
- Bosua, R., Ahmad, A., & Maynard, S. (2022). Enterprise social media and collaborative work: An exploratory study. *International Journal of Information Management*, 62, 102151.
- Brynjolfsson, E., Horton, J. J., Ozimek, A., Rock, D., Sharma, G., & TuYe, H. Y. (2020). *COVID-19 and remote work: An early look at US data*. Cambridge, MA: National Bureau of Economic Research.
- Chesbrough, H. (2020). To recover faster from Covid-19, open up: Managerial implications from an open innovation perspective. *Industrial Marketing Management*, 88, 410-413.
- Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*, 319-340.
- Dawson, C. (2020). *Practical research methods: A user-friendly guide to mastering research techniques and projects*. Oxford: How to Books.
- Deng, M., & Zhu, J. (2023). The impact of enterprise social media usage on employee creativity: A self-regulation perspective. *Industrial Management & Data Systems*. Retrieved from https://doi.org/10.1108/IMDS-09-2022-0546.
- Wang, Z., Hangeldiyeva, M., Ali, A., & Guo, M. (2022). Effect of enterprise social media on employee creativity: Social exchange theory perspective. *Frontiers in Psychology*, *12*, 812490.
- Liang, L., Zhang, X., Tian, G., & Tian, Y. (2022). An Empirical Study of the Effect of Communication Visibility on Innovation Behavior. *Management Communication Quarterly*, *36*(3), 418–439.
- Leonardi, P. M., & Meyer, S. R. (2015). Social media as social lubricant: How ambient awareness eases knowledge transfer. *American Behavioral Scientist*, 59(1), 10–34.

- Leonardi, P. M. (2017). The social media revolution: Sharing and learning in the age of leaky knowledge. *Information and Organization*, 27(1), 47-59.
- Leonardi, P. M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, 19(1), 1–19.
- Lu, B., Fan, W., & Zhou, M. (2016). Social presence, trust, and social commerce purchase intention, an empirical research. *Computers in Human Behavior*, 56, 225-237.
- Majchrzak, A., Faraj, S., Kane, G. C., & Azad, B. (2013). The contradictory influence of social media affordances on online communal knowledge sharing. *Journal of Computer-Mediated Communication*, 19(1), 38–55.
- Patel, V., Awan, F. R., & Duan, Y. (2022). Exploring the Role of ESM in Fostering Employee Innovation: A Case Study. *Journal of Business Research*, 128, 102-111.
- Treem, J. W., & Leonardi, P. M. (2013). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Annals of the International Communication Association*, *36*(1), 143-189.
- Van Osch, W., & Steinfield, C. (2016). Strategic visibility in enterprise social media: implications for network formation and boundary spanning. *Journal of Management Information Systems*, 33(2), 524–560.
- Wang, W., Bretschneider, U., & Giest, S. (2021). Public sector innovation and information technology: Insights from an information management perspective. *Government Information Quarterly*, 38(3), 101537.
- Xu, X., Hu, Q., & Gu, J. (2022). A study on the communication efficiency and satisfaction of enterprise WeChat in the work scene based on structural equation model. *Technology in Society*, *64*, 101512.
- Zhang, S., Guo, Y., Chen, Y., & Meng, F. (2022). Exploring the challenges and opportunities of implementing enterprise social media in organizations. *Journal of Organizational Computing and Electronic Commerce*, 32(1), 22-43.

- Zhou, F., Zuo, M., & Hu, P. J. (2022). WeChat in Work: How Social Media Applications are Changing Organizational Communication. *Journal of Computer Information Systems*, 1-11.
- Zhu, Z., & Chen, C. P. (2023). The rise of enterprise social media in China: A case study of WeChat Work (WeCom). *Chinese Management Studies*, 17(2), 219-236.



## **BIODATA**

Name-Surname: Hanglu Guo

Email: hanglu.guo@bu.mail.net

**Education Background:** Bachelor's Degree Aviation Management,

Kasem Bundit University

**Work Experience:** 2021-2023 International Student

Consultation and Reception Meta Studio

2019 Lufthansa Intern in Passenger

Services Internship in Bangkok Airways,

Lufthansa Services (Thailand)

