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Social media for information sharing in an industrial setting: Evidence from the Chinese automotive industry.

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Abstract

Purpose – This study investigates how social media, specifically WeChat, became a major tool for information sharing in an industrial setting, particularly when traditional systems like ERPs failed.
Design/Methodology/Approach – Utilizing a qualitative case study approach, this investigation incorporates interviews, observation, and archival research conducted over a two-year period.
Findings – The findings indicate that failures in several ERP implementations have allowed WeChat to play a growing role in the information system processes of the company. This highlights the potential for social media to supplement official systems in workplace information sharing.
Contributions– The study provides empirical insights on how social media can be integrated with official systems for sharing information in the workplace. It also suggests directions for future research to further test and refine the proposed propositions.

KEYWORDS

Chinese management, ERP, Information sharing, Social media, WeChat

1 | INTRODUCTION

Information systems became a topic of interest in the field of industrial operations (Livolsi and Fabbe-Costes 2004) because they are a means to generate trust (Lissillour and Ruel 2023), enhance cooperation effectiveness (Marnissi et al. 2009), logistic capabilities (Molet 2000) and make organizations leaner (Chanegrih and Creusier 2015). Meanwhile, despite its widespread use in industrial settings, the use of social media has been less studied. Social media (SM), such as WeChat, offer new capabilities for organizations nowadays, it has massively attracted (and is still attracting) researchers' attention (Leonardi and Vaast 2016). SM platforms allow people to connect, communicate, and collaborate (Jue et al. 2009). Davison et al. (2014) explained that SM seems to influence positively an organization's performance and the creativity of employees (Yan et al. 2013). Other authors such as Treem and Leonardi (2012) and Boyd and Ellison (2007) showed that social media appear to be increasingly used at the workplace and that they offer new potentials for sharing information. The Chinese cultural context is quite specific when it comes to information sharing (Chen et al. 2019, Wang 2024). Since WeChat is now the most widely used social network in

China, it has attracted the attention of researchers in this specific context (Gao and Zhang 2013). Lien and Cao (2014) stressed out that prior studies investigated the impacts of sociality, entertainment, and psychological motivations explaining that this can promote the development of trust among WeChat users. Other research focused on the values that promote continuous use of WeChat and found out that social and hedonic values were more important than informational and emotional ones (Zhang et al. 2017). Likewise, other research studies questioned the satisfaction factors (Lien et al. 2017) in addition to usage behavior (Wu and Tang 2014, Gan 2017) of WeChat users referring to membership cascade (Qiu et al. 2016). Information sharing has also been addressed, but only from the part of individuals' motivation and gratification to publicly share content via "WeChat Moments" (Jin et al. 2017) or for measuring information diffusion (Li et al. 2016). So far, research on social practices connected with the professional use of WeChat in comparison with ERP usage has been relatively scarce, notably on the conflicting role of social media versus ERP. Moreover, the growing use of WeChat and its impact on professional information sharing have not been explored in the literature yet. Consequently, our primary aim is to address the following research question: can social media be more successful than corporate information systems (such as ERPs) for information sharing in organizations? More precisely, this research study will focus on a comparative

approach, we will study the behavior of employees while engaging the two types of existing systems within their workplace: WeChat and official ERPs. The research objective is to propose a theoretical model for the usage of social media for information sharing in industrial settings. Our paper is structured in four sections. First, we develop our theoretical propositions. The second section is dedicated to our methodological approach, collection of data, and analysis. In the third section, we present our results and discussion. We conclude on the limits and perspectives of this research.

2 | THEORY BACKGROUND AND HYPOTHESES

Considering the extensive use of social media by employees, firms started to ponder their potential (Gonzalez et al. 2015). Social media provides new ways to employees in expressing their "voice" and managers with new ways to moderate it (Miles and Mangold 2014). The outside-in diffusion mode concerns not only the technology itself, but also the related technological frames (Treem and Leonardi 2012). As per Orlikowski and Gash (1994), the technological frame encompasses the set of normative assumptions and expectations associated with a given technology. Indeed, the technological frame related to social media like WeChat is directly related to the way it is privately used outside the firm. Since individuals are familiar with the private use of WeChat which relates to all communication needs of social life, they can transfer this "communicational ambidexterity" to the workplace. Communicational ambidexterity being here defined as "the capability to simultaneously address different and often conflicting communication needs that exist in an organization's internal communication" (Huang et al. 2015). ERP's top-down diffusion originates from a formal decision of the management, and this contrasts with the bottom-up diffusion of WeChat. Indeed, the decision to implement this type of system comes from non-IT managers (El Ouirdi et al. 2015). The outside-in and bottom-up diffusion modes seem to be bypassing the acceptance barrier related to ERP. This argument will lead us to the following research proposal.

P1: The nature (outside in and bottom-up) of social media's diffusion into the organization makes WeChat more accepted for information sharing than ERPs at the workplace.

Moreover, ERP management is often centrally controlled by the IT department, which can generate organizational conflicts (Molet 2002). The infrastructure of social media is based on open platforms and open standards which allow economies of scale (Bebensee et al. 2012). Since social media is standardized, it does not necessitate central management in the company to be effective and adequate with individuals' needs. Accordingly, SM is somehow avoiding the official control of the IT managers (Groysberg and Slind 2012). This segment will lead us to our second research proposition.

P2: The difference in the controlling structure between WeChat and ERPs impacts collaborative Information Sharing in the workplace.

Furthermore, employees are generally using SM during their leisure time, and this will impact the way SM are used at the workplace (Fieseler et al., 2015). SM is directly experienced by users that are generally chasing hedonic gratification (Gan 2017) and a sense of companionship (Zhang et al. 2017). ERP system adoption is a costly and lengthy process that implies training and conflict management as the ERP implementation is not in the interest of all stakeholders (Lissillour 2021b). In comparison, there are no adoption issues with social media because they are already used by users outside the company. WeChat is primarily installed on private employees' mobile phones. Consequently, the company will not need to cover any eventual adoption costs as social media use spreads within the organization. This is consistent with the "bring your own device" (BYOD) concept of Luftman and Derksen (2012). Indeed, the use of WeChat at work is more often operated on employees' own devices. The affordance differential of everyday life technology versus corporate systems raises the question of adoption cost (Sahut and Lissillour 2023). Our third research proposition then could be:

P3: social media and ERP's adoption cost differential enhance organizational acceptance of WeChat.

3 | RESEARCH METHODOLOGY

3.1 | Context of research

We undertook a longitudinal case study of Qingdao Zhangshi Corporation, a Chinese automobile manufacturing company based in Qingdao, Shandong province. This market is very important as China is the first market for manufacturing in the automobile industry (Wang and Baptiste 2014). The company has been chosen because it has experienced a trial-and-error implementation of ERPs and at the same time, an intensive use of WeChat. The company can be described as a family business: the four chief managers are the father and his three sons who share the main responsibilities. The first is mainly responsible for the Sales and Marketing Department and oversees large purchases such as machines and materials. The second is responsible for the Financial Department and for the purchase of certain types of machines. The third oversees the Development Department and of daily purchasing, which sometimes includes machines. The Operation Department and the Purchase Department are jointly managed. The first author undertook direct observations to understand the internal structure and processes of the company. The lack of formal structure is illustrated by the absence of a standardized system. The procurement department is identified by most departments as central: it has built relationships with more employees from other departments. The production and Quality Control departments are also very influential. The workers of these traditional mechanical units benefit from high consideration from the other departments although they usually focus on a few technical processes and tend not to socialize with employees from other departments. Indeed, as a spare parts machinery company growing step by step from a little factory, most of its staff, even the managers, are local workmen

without higher educational backgrounds. Hence, they are much more familiar with traditional departments which have existed for long, even in a small factory. In contrast, three groups seem to be weaker: finance, RD, and systems. These departments are rather new, modern, and standardized units whose mission and functioning are less understood by the rest of the company. This fragmented social setting illustrates the lack of mutual understanding and recognition between different departments. For instance, all departments ignore that the trade department has to frequently communicate with the government to optimize the business. Despite the lack of interaction between its departments, the company could generate a common vision and uniform strategy thanks to embedded relationships between departments. Especially in rapidly developing small and middle-family businesses, such embedded relationships are very important. They are traditionally maintained through informal interpersonal interactions between staff and managers. These interactions occur during informal meetings and dinners. The company was evolving and getting bigger, and the CEO had been seeking to make their services and structure more scalable and normalized by applying ERP to optimize resources. After the partial failures of the first ERP implementation, namely that of YonYou, a tailored ERP called the Manufacturing Executive System (MES) was developed in 2014. This ERP led to better business results. The implementation of this ERP allowed the Business Process Reengineering (BPR) of 4 processes: production, logistics, purchasing, and sales. However, many business processes are not managed by this ERP, thus creating a void where social media such as WeChat has appeared and been used for management purposes.

3.2 | Research method

This study combines different research instruments during rounds including interviews, observation, and archives over a two-year investigation period that allowed a theoretical reconceptualization moving from a functionalist epistemology to a more dialogical one. This was collaborative research between an academic and practitioners, in which the researcher acted as a boundary spanner with a conscious effort of reflexivity (Beaulieu et al. 2023). While the orientation is qualitative, attempts to include some secondary data through archives were made to allow a variety of perceptions by using triangulation (Yin 2003). The steps of our methodology are highlighted in Table 1.

The data collection was part of a broader research program which results were published elsewhere (Lissillour and Sahut 2023). This theoretical reinterpretation is based on semi-constructed interviews with 15 department managers in the company for four days (see sample characteristics in Table 2). This phase was followed by in-depth interviews that were conducted during two afternoons with the CEO. Data were completed by informal interactions using email or phone and with internal documents and descriptions of processes. Participant observations were documented as field notes which were either handwritten or recorded. All collected data were then compiled into a case study database (Yin 2003) before analysis.
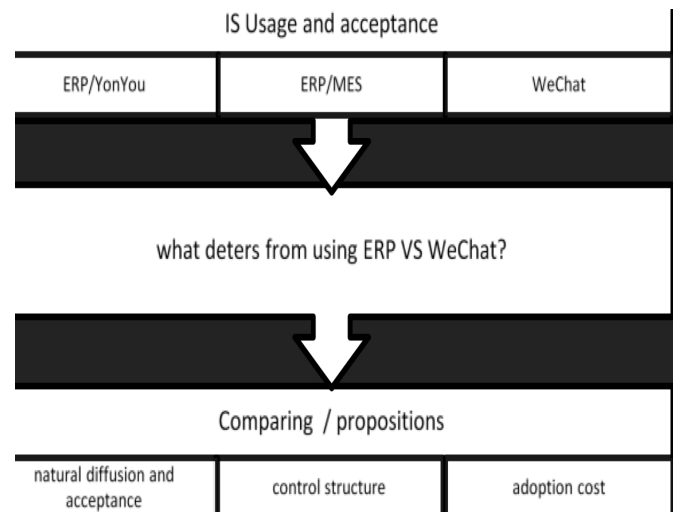

FIGURE 1 First level of coding categories

We analyzed the data using an emerging coding method to identify the main topics concerning our conceptual propositions (P1, P2, P3). The analysis has been achieved by using the software Nvivo12 (see coding categories in Figure 1). Our study is a chronological analysis of how the systems have been implemented during the 2 years of investigation. Indeed, to express the complexity of the context and make our process more comprehensible, we chose to present this study analysis chronologically rather than thematically. This enabled us to better understand how existing/implemented systems were interacting with WeChat and, in return, how WeChat was influencing their implementation.

4 | RESULTS

Our data analysis shows that several ISs have been implemented in the company successively. Some of them are considered by the interviewees (see Table 3) as a partial failure (YonYou), or as a success (MES and Wechat). WeChat is mainly used for daily communication between employees and groups of employees. This practice has been observed in all departments and is supported by the management. Since there is no enterprise social media in the company, WeChat is used extensively for different purposes.

4.1 | YonYou versus WeChat

YonYou (officially YonYou Software Co., Ltd., formerly UFIDA Software Co., Ltd.) was the first implemented system in 2009. YonYou is a large enterprise of software management in the Asian-Pacific region, supported by the Chinese government. Information confidentiality is considered as strong, and the company's priority is to protect its data, notably customers' information. YonYou has been implemented to cover three business processes, namely accounting, warehouse management, and

T A B L E 1 Research protocol

Phase	Activities	Outcome
Literature review	Identification of theories regarding formal and informal information sharing.	Literature review
First crafting of protocols and dimensions	Identification of the concepts in the literature of social media.	Priori dimensions of analysis
Literature review analysis	Clustering literature review around major concepts and defining the propositions	theoretical propositions
Data collection	Sampling and selection	7 departments selected and 15 persons identified
On site interviews	Interviews of 7 departments (15 persons)	In depth interviews
secondary data collection	Intranet analysis, PPT presentations, internal documents.	secondary data analysis
Data analysis and results	Comparison with conflicting literature and similar literature	Discussion

T A B L E 2 Table of sample characteristics

Respondent	Department	Title	Gender	Recruitment Year
R1	IT	IT manager	Female	2014
R2	Production	Master planer	Female	2018
R3	Sales	Sales Manager	Female	2009
R4	Production	Production Manager	Female	2013
R5	Production	Raw material and machine	Male	2013
R6	Production	Grinding	Male	2005
R7	Production	Heat treatment	Female	2018
R8	Quality	Quality manager	Male	2017
R9	Quality	Quality director	Female	2017
R10	Purchase	Purchase manager	Female	2010
R11	Sales	Customer quality engineer	Male	2018
R12	Sales	International order	Female	2018
R13	Sales	Logistic	Female	2014
R14	HR	HR specialist	Male	2017
R15	Warehouse	Warehouse charger	Male	2018

purchase. YonYou successfully covered the needs of the accounting department, because YonYou is approved by the Ministry of Finance, so it is highly performant for tax calculation and payment. But YonYou did not match the requirements for warehouse, logistics, and purchase management because the operations were difficult and time-consuming. Moreover, YonYou is expensive (P3) and does not cover production which is a core activity. One project manager recalled:

"The main problems with YonYou were first the cost, and then that it is time-consuming and included too many complicated operations. People don't want to press too many buttons or too many operating steps. With YonYou, we needed too many clicks and wrote down much information manually. If you fill up a long form and don't save it, then you may lose all information and must do it again, so we lost a lot of time" (R3).

The substantial differences in the evaluation of YonYou between IT and trade departments reveal serious problems of communication between departments. Different groups had conflicting views about the objectives and processes of YonYou, which led to a general failure of this ERP, except for the financial department that is still using it. One reason for failure commonly described by the interviewees was its lack of flexibility, and that it is arguably more adapted to big companies rather than to small family companies. Our analysis shows that YonYou appeared to be too rigid and complicated to use especially compared to using WeChat which helps being more reactive as it is not centralized (P2). A project manager was clear about the inappropriateness of ERP for his work:

"When customers ask for customer information. I can usually get the data from my colleagues very quickly by email or WeChat and

T A B L E 3 Success or failure perception of information systems by employees (S: success, F: failure)

IS type	IS	System	Procurement	IT	Trade	Production
CIS	MES	S	S	S	S	S
	YonYou			F	Only Financial Part is a Success	Success (Financial Accounting)
Social media	Wechat	S	S		S	

respond quickly to the customer. (...) But If I have questions concerning the information I get, I will contact colleagues by WeChat to make sense of the information" (R3).

As the company was facing communication problems with the ERP, WeChat appeared as an interesting tool to develop interactivity for employees from different departments. WeChat is described as a tool of high efficiency by the IT and procurement departments. One manager commented:

"We usually use WeChat with colleagues. (...) We prefer to use WeChat for quality issues or other issues that involve many colleagues. Issues that involve a diversity of users, operators, and managers are easier to solve with WeChat" (R3).

WeChat is also commonly used by the HR department to communicate across departments and to engage external stakeholders such as recruitment agencies:

"We use WeChat to communicate because WeChat has a high timeliness and wide application. Usually, we use WeChat to communicate with each other" (R14).

This practice occurred privately and was not centrally managed by the IT department (P2). Moreover, employees started to use WeChat at the workplace relatively late, as WeChat was in a mature stage of development. Consequently, the company could take advantage of its full functionalities since "WeChat is now available on almost everyone's mobile phone, that is, between our friends and family" (R2). Verbatim shows that employees use WeChat naturally as it is a system they already know and use in their private lives. WeChat seems to be already accepted and naturally spreading in the company (P1):

"I can use WeChat to discuss with my family members and I'll also use groups with my colleagues to discuss work issues at the office" (R3).

While facing problems because of the rigidity of the ERP (YonYou), the top management decided to develop a custom-fit ERP adapted to the company's needs. The support for this new ERP comes from the highest level of the company, as the CEO was not confident about the IT department's ability to develop such an ERP. This high-level support is also a reason for the success of this ERP. In 2014, an IT company created by a prior executive of YonYou was chosen to design and create the ERP, called Manufacturing Executive System (MES).

4.2 | MES versus WeChat

Four IT specialists were assigned to the MES project. Each of them was allocated to different departments: production, delivery, procurement, and finance. They all reported directly to the CEO. These four project

managers have been developing MES. The implementation started with a BPR (Business Process Reengineering) of three processes: purchase, logistics, and production. As production was considered the most pivotal function, the design of the software began from production. In 2015, MES became operational in the production and logistics department. The company implemented new modules to cover the needs of the purchasing department in 2017 and the sales department in 2018. However, WeChat continued to be used by the production department to increase work efficiency, notably team cooperation and interpersonal communication.

According to the IT director, the functions of MES cover the following processes: production data management, planning management, production scheduling management, stock management, quality management, personnel basic information management, equipment management, tools and fixtures management, procurement management, cost management, project board management, production process control, base data collection, and analysis. The Quality Management is now handled by MES while the quality Control Management is still using WeChat to improve problem-solving and communication with others. So far, the following processes are still not managed by MES: CRM, KM, SCM, and PLM (Product Lifecycle Management). But the implementation process is not linear, indeed additional modules have been recently implemented for the sales department:

"For sales, we have also used a special module on MES since 2019 although it is not convenient because there are many different types of clients, delivery operations, and prices. Before we started to use this module on MES, we only had the delivery records from YonYou and then also from MES since 2014" (R3).

MES is considered difficult to use without the required expertise. Training and coaching efforts are necessary to ensure successful adoption. These efforts require an investment in terms of human resources in the IT department, and a time investment of each department for realizing training sessions. In many circumstances, managers and the board of directors prefer to meet consensus behind closed doors and then hold the meeting, thus paradoxically combining off-record processes with a will to engage in process reengineering via ERP. In this context, WeChat required no organizational efforts and no investments to be adopted by the employees at large, ERP's adoption cost differential seems to enhance the organizational acceptance of WeChat (P3). Indeed, employees have mentioned that: "WeChat does not require any training. The adoption cost of MES is higher" (R3). Furthermore, as a formal ERP, MES includes process management and information recording, which allows to indicate the responsible manager for each process. Although its communication features are highly regarded, WeChat lacks such key features. Managers can create WeChat groups and then invite individuals to join to interact. The individuals will tacitly know who is in charge, but the system does not include a codified way to include the chain of responsibility. If there's a problem, it is possible to browse the history of communication of the group and look for the needed information but is time-consuming. Still, WeChat seems widely used to manage

joint-functional processes in practice. It is embedded in employees' lives:

> "When you open your cell phone, the first thing you see is WeChat. So, when you send a WeChat message, you can see it at first sight" (R14). "WeChat is now available on almost everyone's mobile phone" (R2).

Additionally, the exchange of information via MES was not easy, notably because of the inability to attach files and emails in communications. Social media such as WeChat provide a natural way to communicate in a more familiar environment, WeChat is then easier to accept (P1) from the perspective of many users.

> "We prefer to use WeChat because we can be relaxed with people to talk, discuss, and even joke with customers. They won't think we are being rude. But by email, we cannot. If we joke by email, people may think we are mad, not taking them seriously, not professional" (R14).

However, WeChat complicates other processes such as creating a database with the details of communication. At that time, the top management thought about the creation of an Enterprise Social Network (ESN) to enable record communication information. This project did not materialize because WeChat is already used by all employees and the development of ESN would imply additional investment in terms of training, software, and infrastructure. The company decided not to reengineer trade processes and the system did not include customer information. The input of all customer information into MES became a priority to enable advanced data analysis to support strategy-making. Meanwhile, the trade department continues to use WeChat seems to be a good tool to guarantee appropriate exchanges of information with the internal department and with customers. WeChat offered features such as the possibility to easily create a WeChat group for teamwork which were not included in MES. Due to their frequent contact with customers, suppliers, and co-workers, the procurement and trade department makes the most strategic use of WeChat. The trade department describes WeChat as intensively used. Once every customer's information is entered into MES, the trade department may lose its power of influence as the information will no longer be controlled by the service (P2). One project manager commented:

> "I think people prefer to use WeChat (…) because people are very familiar with the system (…) WeChat does not have an organizational framework so people feel it is safer and more relaxed (…). In WeChat, we have a relaxed communication style, almost informal, we can joke, it is not like an email" (R3).

These results show that employees are much more comfortable using WeChat because it is seen as informal compared to the other IS of the company. This shows that the difference in the controlling structure between WeChat and the internal structure has a positive impact on the openness and collaboration of the users (P2). One manager justified the use of WeChat as follows:

> "It feels more relaxed. It's not limited to work. It can be used in everyday life" (R2).

5 | DISCUSSION

WeChat has emerged as a central tool in work management as it is virtually used by all employees. This new tool is not used in a homogenous way, as in this case study its use varies in different departments. Our findings are in line with previous studies that show that WeChat is contrasting with other SMs as it connects individuals who are formerly linked offline (Zhao and Lu 2012). This matter of fact can partly explain the rapid development of WeChat in the company. At the same time, WeChat does not change the relative endowment in capital of employees versus the management, it rather provides an additional social platform for management purposes. Indeed, Zhang et al. (2017) argue that WeChat provides an artificial equivalence of social connections that can carry user's social capital. Since interrelational networks are facilitating performance amongst industrial supply chains (Fulconis et al. 2014), social media such as WeChat play an important role in information sharing in the frame of industrial cooperation, a role which has been ignored by prior studies. Our study shows that WeChat has been rather accepted at the workplace as a complement more than an alternative for the existing IS in place. The control structure appears to have an important effect on the openness and collaborating nature of employees, this is in line with our proposition (P2: the difference in the controlling structure between WeChat and ERPs impacts the collaborating nature of Information Sharing at the workplace). Practices seem to be evolving from formal and branded to informal and ubiquitous (Von Krogh 2012). Furthermore, our results show that the differential cost between ERP and social media appears significant. ERP is often technical and needs training and investment while social media are already (freely) available on employees' devices (Luftman and Derksen 2012). Therefore, we can assume that this is aligned with our third proposition (P3: social media and ERP's adoption cost differential enhance organizational acceptance of WeChat). Moreover, our results show that WeChat has naturally spread in the company, just as it did in society. People started using WeChat easily because they knew the system and they were already using it in their private lives. Unlike ERP systems, WeChat has not been designed for corporate needs in the first place (?) and employees have already directly experienced the system before using it at work. Our study shows that employees are increasingly using WeChat and that WeChat has then been widely accepted as a tool for information sharing at the workplace, and this lined up with our proposition P1: the natural diffusion of social media into the organization makes WeChat more accepted for information sharing than ERPs at the workplace. Our analysis has also shown emergent results that are not directly linked to our initial

theoretical propositions. Those results can be used to shape three additional propositions (called P4, P5, and P6). P4 is about WeChat usage, our analysis suggests that some employees seem to use WeChat by imitation as they see their colleagues using it. Indeed, employees refer to WeChat as follows:

"Now everybody uses WeChat, so we use WeChat" (R3). "Indeed, now everyone is using WeChat to communicate" (R1).

This can lead us to formulate the following proposition:

(P4): imitation behavior can enhance WeChat acceptance and usage in the company.

P5 is about the nature of the communication while using WeChat. Indeed, the use of WeChat appears to be also linked with the type of communication the employee wants, formal or informal. Employees seem to adapt their behavioral usage of WeChat depending on the context. Our results show that WeChat is used for informal, daily communication. Mails are considered too formal to cover this type of communication. The following quotation is a typical example of how employees described using IS at the workplace:

Email system covers all processes but mainly for internal and external customer relationship and communication. WeChat is used for daily communication (…) WeChat is more common. It's more convenient to use WeChat (…) I won't use Email because I think it's very general and formal (R4).

Previous findings have shown that the acceptance of WeChat is high and that it endorses informal groups more efficiently than a face-to-face environment. In fact, "the creation and use of instant group messaging occurs more frequently and habitually than another form of group-level social engagement in their daily life" (Qiu et al. 2016). This can lead us to the following propositions about WeChat usage.

P5: the informal type of communication enhances the usage of WeChat over the other media available in the company.

P6 refers to a rationale not to use WeChat. Indeed, some people appear to be reluctant to use WeChat for work as they believe it can lead to blurring lines between organizational and personal usage, thus enhancing the possibility of intrusive management. The following excerpt from our transcript illustrates this point:

We advocated using WeChat Groups to communicate, but later, we wanted to separate work from (private) life (…) it's better to separate as you say, but now I only have one cell phone (…), when we rest on Saturdays and Sundays, we often get calls even if it's not WeChat (…) they can call you anytime (R14).

Thus, a proposition could be defined as follows:

(P6): WeChat is perceived as intrusive, and this can deter its usage.

Accordingly, P4, P5, and P6 should be added to the four initially identified propositions (P1 to P3) to be integrated into a conceptual model that should be tested empirically. This could be the next step of our
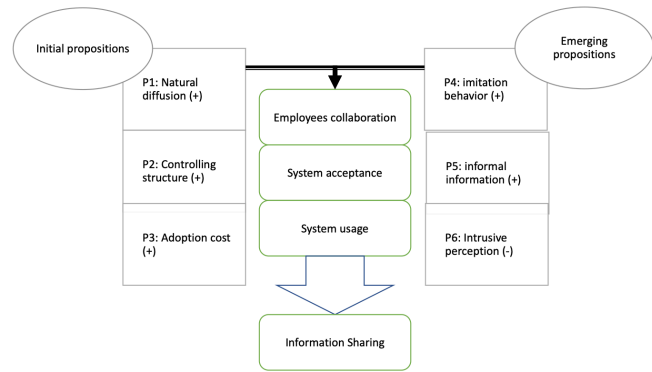

FIGURE 2 Conceptual model proposition

future research. Figure 2 explains our conceptual proposition model combining our initial and emergent propositions.

6 | CONCLUSION

The main studies regarding WeChat are positivist with mostly quantitative methodologies (Liu et al. 2018). For a better understanding of this phenomenon, we argue that more diverse methodologies are required. This case study refers to an interpretive field study (Klein and Myers 1999) and qualitative longitudinal case study methodology. This article highlighted how the lack of coverage of certain processes by MES and ERP allowed social media such as WeChat to play a growing role in the information-sharing processes of the company. At the same time, our results show that WeChat has been creating coordination issues between the different existing information systems. Our research study is in line with other studies (Quashigah and Amuzu 2024, Arhin and Cobblah 2024) that emphasize a dynamic employee-centric approach rather than a main focus on formal IS. Social media is no longer a tool exclusive to online businesses but is engrained in the professional life of all employees via instant messaging tools such as WeChat. This paper also contributes to prior studies on the Chinese automobile industry which ignored the importance of information systems (Wang and Baptiste 2014). Moreover, it contributes to the information-sharing literature by suggesting further theoretical propositions that may lead to future studies on how managers reach useful information (Monteiller et al. 2000) now that social media are so pervasive in industrial settings. Moreover, if knowledge distance positively influences the corporate performance of firms that are centrally positioned in a network (Lissillour et al. 2023), the role of WeChat in reducing knowledge distance between firms in a network should be further researched. This research includes several limitations, the first one is being a single case study, which means that results need to be confronted in other contexts to be reinforced. The second one concerns the timeline; indeed, a timeline of two years is very limited for describing the post-implementation effects that may take place over a decade. The smooth adoption of all these information systems, including social media would have required a much more

precise description of practices embedded in a conflicting social field (Lissillour 2021a), including their use for boundary spanning (Lissillour and Sahut 2022). In this case, unlike other social media, WeChat is not necessarily linked with 'mass communication' (Walther et al. 2011) or 'mass self-communication' (Castells 2009) but rather provides successful evidence of the merging of mass and interpersonal communication (Walther 2017). But this type of communication via microblogging is also possible with WeChat. This research did not include this dimension of WeChat at the workplace. In order to drill into this topic, future research may provide a complementary understanding of WeChat's micro-blogging function at the workplace. Furthermore, this research focused on the usual version of WeChat which is freely available to individuals. It does not include corporate social media such as Corporate WeChat, which has been specifically designed for corporate use. Future research may focus on this emergent phenomenon and enrich the understanding of its role in information sharing and sensemaking in critical situations (De Vittoris et al. 2023). A promising research direction in China seems to be, beyond the standardization allowed by the ERPs, the practice of social media by managers, especially WeChat, as a tool for business process management, such as information Management and Customer Relationship Management. Future research may address the case of DingDing which is also spreading very fast among Chinese executives.

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FINANCIAL DISCLOSURE

CONFLICT OF INTEREST

REFERENCES

Arhin, E.P. & Cobblah, C. (2024) Total quality management implementation practices and customer satisfaction: the role of innovative employee behavior and employee empowerment. *Management Research Quarterly*, 1(1), 26–41.

Beaulieu, M., Rebolledo, C. & Lissillour, R. (2023) Collaborative research competencies in supply chain management: the role of boundary spanning and reflexivity. *The International Journal of Logistics Management*, 35(2), 305–331. doi:10.1108/IJLM-07-2022-0277.

Bebensee, T., Helms, R. & Spruit, M. (2012) Exploring web 2.0 applications as a mean of bolstering up knowledge management. In: *Leading issues in social knowledge management*. Vol. 1p. 22.

Boyd, D. & Ellison, N.B. (2007) Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230. doi:10.1111/j.1083-6101.2007.00393.x.

Castells, M. (2009) *Communication power*. New York, USA: Oxford University Press.

Chanegrih, T. & Creusier, J. (2015) Le lean manufacturing dans l'industrie française : états des lieux et implications pratiques. *Revue Française De Gestion Industrielle*, 34(4), 59–71.

Chen, L., Zhang, X. & Li, Z. (2019) Understanding the chinese information culture and its impact on it perceptions. *Information Technology & People*, 33(1), 56–82. doi:10.1108/ITP-03-2018-0128.

Davison, R.M., Ou, C.X., Martinsons, M.G., Zhao, A.Y. & Du, R. (2014) The communicative ecology of web 2.0 at work: Social networking in the workspace. *Journal of the Association for Information Science and Technology*, 65(10), 2035–2047. doi:10.1002/asi.23112.

De Vittoris, R., Lissillour, R. & Bousquet, C. (2023) Sensemaking et qualité décisionnelle dans les cellules de crises : le cas de michelin. *Logistique & Management*, 31(4), 196–211. doi:10.1080/12507970.2023.2258127.
URL https://doi.org/10.1080/12507970.2023.2258127

Eisenhardt, K.M. & Graebner, M.E. (2007) Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32. doi:10.5465/amj.2007.24160888.

El Ouirdi, A., El Ouirdi, M., Segers, J. & Henderickx, E. (2015) Employees' use of social media technologies: a methodological and thematic review. *Behaviour & Information Technology*, 34(5), 454–464. doi:10.1080/0144929X.2015.1004647.

Fieseler, C., Meckel, M. & Ranzini, G. (2015) Professional personae- how organizational identification shapes online identity in the workplace. *Journal of Computer-Mediated Communication*, 20(2), 153–170.

Fulconis, F., Paché, G. & Solle, G. (2014) Évaluer la performance des réseaux inter-organisationnels : le contrôle de gestion au défi du collectif. *Revue Française de Gestion Industrielle*, 33(4), 45–63.

Gan, C. (2017) Understanding wechat users' liking behavior: an empirical study in china. *Computers in Human Behavior*, 68, 30–39. doi:10.1016/j.chb.2016.11.002.

Gao, F. & Zhang, Y. Analysis of wechat on iphone. In: *2nd international symposium on computer, communication, control, and automation, 2013*, pp. 278–281.

Gonzalez, E.S., Leidner, D.E. & Koch, H. The influence of social media on organizational socialization. In: *Proceedings of the 48th Hawaii International Conference on System Sciences. IEEE, 2015*, pp. 1899–1908.

Groysberg, B. & Slind, M. (2012) Leadership is a conversation. *Harvard Business Review*, 90(6), 76–84.

Huang, J., Baptista, J. & Newell, S. (2015) Communicational ambidexterity as a new capability to manage social media communication within organizations. *The Journal of Strategic Information Systems*, 24(2), 49–64. doi:10.1016/j.jsis.2015.03.002.

Jin, X., Feng, H. & Zhou, Z. (2017) An empirical study on healthcare information diffusion behavior in wechat moments. *Sustainability*, 12(7), 02–18. doi:10.3390/su12072710.

Jue, A.L., Marr, J.A. & Kassotakis, M.E. (2009) *Social media at work: How networking tools propel organizational performance*, 1st Edition. San Francisco, CA: Jossey-Bass.

Klein, H.K. & Myers, M.D. (1999) A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS Quarterly*, 67–93.

Leonardi, P. & Vaast, E. (2016) Social media and their affordances for organizing: A review and agenda for research. *Academy of Management Annals*, 11(1), 150–188. doi:10.5465/annals.2015.0144.

Li, Z., Chen, L., Bai, Y., Bian, K. & Zhou, P. On diffusion-restricted social network: A measurement study of wechat moments. In: *IEEE International Conference on Communications (ICC), 2016*, pp. 1–6.

Lien, C.H. & Cao, Y. (2014) Examining wechat users' motivations, trust, attitudes, and positive word-of-mouth: Evidence from china. *Computers in Human Behavior*, 41, 104–111. doi:10.1016/j.chb.2014.08.013.

Lien, C.H., Cao, Y. & Zhou, X. (2017) Service quality, satisfaction, stickiness, and usage intentions: An exploratory evaluation in the context of wechat services. *Computers in Human Behavior*, 68, 403–410. doi:10.1016/j.chb.2016.11.061.

Lissillour, R. (2021) Changement organisationnel et la pratique de déviance positive: cas d'une implantation d'outils de rationalisation productive (erp) en chine. *RIMHE: Revue Interdisciplinaire Management, Homme & Entreprise*, 42(10), 3–26. doi:10.3917/rimhe.042.0003.

Lissillour, R. (2021) Contradiction institutionnelle et catégories cognitives: un couplage mis à mal suite à la mise en place de progiciels de gestion intégrée. *Management & Prospective*, 38(5), 19–47. doi:10.3917/g2000.385.0019.

Lissillour, R., Cui, Y., Guesmi, K., Chen, W. & Chen, Q. (2023) Value network and firm performance: the role of knowledge distance and environmental uncertainty. *Journal of Knowledge Management*, 28(1), 44–68. doi:10.1108/JKM-10-2022-0822.

Lissillour, R. & Ruel, S. (2023) Chinese social media for informal knowledge sharing in the supply chain. *Supply Chain Forum: An International Journal*, 24(4), 443–461. doi:10.1080/16258312.2022.2130006.

Lissillour, R. & Sahut, J.M. (2022) Comment les plateformes peuvent-elles développer leurs collaborations avec des développeurs externes en quête de légitimité? *Management & Prospective*, 39(5), 109–155. doi:10.3917/g2000.395.0109.

Lissillour, R. & Sahut, J.M. (2023) Uses of information systems to develop trust in family firms. *Business & Information Systems Engineering*, 65(2), 127–141. doi:10.1007/s12599-022-00776-6.

Liu, L., Qu, B., Chen, B., Hanjalic, A. & Wang, H. (2018) Modeling of information diffusion on social networks with applications to wechat. *Physica A: Statistical Mechanics and its Applications*, 496, 318–329. doi:10.1016/j.physa.2017.12.026.

Livolsi, L. & Fabbe-Costes, N. (2004) La centralité des systèmes d'information dans la fonction logistique. *Revue francaise de gestion industrielle*, 23(4), 27–44.

Luftman, J. & Derksen, B. (2012) Key issues for it executives 2012: Doing more with less. *MIS Quarterly Executive*, 11(4), 207–218.

Marnissi, M., Thiel, D. & Lemarie, Y. (2009) Regards théoriques sur la mise en oeuvre d'un système d'information interorganisationnel dans une filière agro-alimentaire. *Revue Française de Gestion Industrielle*, 28(3), 81–98.

Miles, S.J. & Mangold, W.G. (2014) Employee voice: Untapped resource or social media time bomb? *Business Horizons*, 57(3), 401–411. doi:10.1016/J.BUSHOR.2013.12.011.

Molet, H. (2000) La logistique et les nouvelles technologie de l'information et de la communication. *Revue Française de Gestion Industrielle*, 19(4), 100–103.

Molet, H. (2002) Des chiffres clés sur les erp, résultats d'enquête-impacts industriels des erp aux etats-unis. *Revue Française de Gestion Industrielle*, 21(4), 21–28.

Monteiller, G., Mendoza, C. & Bescos, P.L. (2000) Manager cherche information utile désespérément. *Revue Française de Gestion Industrielle*, 19(1), 85–87.

Orlikowski, W.J. & Gash, D.C. (1994) Technological frames: Making sense of information technology in organizations. *ACM Transactions on Information Systems*, 12(2), 174–207. doi:10.1145/196734.196745.

Qiu, J., Li, Y., Tang, J., Lu, Z., Ye, H., Chen, B. et al. The lifecycle and cascade of wechat social messaging groups. In: *Proceedings of the World Wide Web Conference WWW'16, 2016*. Montréal, Québec, Canada: ACM.

Quashigah, S.F. & Amuzu, J. (2024) Innovation culture and millennial characteristics: determinants of millennial turnover intention in the banking sector. *Management Research Quarterly*, 1(1), 42–54.

Sahut, J.M. & Lissillour, R. (2023) The adoption of remote work platforms after the covid-19 lockdown: New approach, new evidence. *Journal of Business Research*, 154, 113345. doi:10.1016/j.jbusres.2022.113345.

Skeels, M.M. & Grudin, J. When social networks cross boundaries: a case study of workplace use of facebook and linkedin. In: *Proceedings of the 2009 ACM International Conference on Supporting Group Work, 2009*, pp. 95–104.

Treem, J.W. & Leonardi, P.M. (2012) Social media use in organizations. *Communication Yearbook*, 36, 143–189. doi:10.1080/23808985.2013.11679130.

Von Krogh, G. (2012) How does social software change knowledge management? toward a strategic research agenda. *The Journal of Strategic Information Systems*, 21(2), 154–164. doi:10.1016/j.jsis.2012.04.003.

Walther, J.B. (2017) The merger of mass and interpersonal communication via new media: Integrating metaconstructs. *Human Communication Research*, 43(4), 559–572. doi:10.1111/hcre.12122.

Walther, J.B., Tong, S.T., DeAndrea, D.C., Carr, C.T. & Van Der Heide, B. (2011) A juxtaposition of social influences: Web 2.0 and the interaction of mass, interpersonal, and peer sources online. In: Birchmeier, Z., Dietz-Uhler, B. & Stasser, G. (Eds.) *Strategic uses of social technology: An interactive perspective of social psychology* Cambridge University Press, pp. 172–194.

Wang, J. (2024) Selective coupling in hybrid organization: Institutional logic contradiction in the context of erp post-implementation. *Management Research Quarterly*, 1(1), 13–25.

Wang, N. & Baptiste, P. (2014) Caractéristique des assembleurs automobiles en chine. *Revue Française De Gestion Industrielle*, 33(3), 41–49. doi:10.53102/2014.33.03.783.

Wu, Z. & Tang, M. (2014) Research on wechat functional service based on the user behavior. *Commercial Research*, 7, 160–165. URL http://en.cnki.com.cn/Article_en/CJFDTotal-BUSI201407025.htm

Yan, Y., Davison, R.M. & Mo, C. (2013) Employee creativity formation: The roles of knowledge seeking, knowledge contributing and flow experience in web 2.0 virtual communities. *Computers in Human Behavior*, 29(5), 1923–1932. doi:10.1016/j.chb.2013.03.007.

Yin, R.K. (2003) *Case Study Research Design and Methods*. Thousand Oaks, CA: Sage Publications.

Zhang, C.B., Li, Y.N., Wu, B. & Li, D.J. (2017) How wechat can retain users: Roles of network externalities, social interaction ties, and perceived values in building continuance intention. *Computers in Human Behavior*, .doi:10.1016/j.chb.2016.11.069.

Zhao, L. & Lu, Y. (2012) Enhancing perceived interactivity through network externalities: An empirical study on micro-blogging service satisfaction and continuance intention. *Decision Support Systems*, 53(4), 825–834. doi:10.1016/j.dss.2012.05.029.

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APPENDIX

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