

Do top management teams' expectations and support drive management innovation in small and medium-sized enterprises?

Abstract

This paper examines the influences of top management teams (TMTs) on the adoption of management innovation (MI) at the employee level in small and medium-sized enterprises (SMEs). By conceptualising TMT influences as composed of the two dimensions of perceived TMT expectations and TMT support, we examine how they may influence MI in SMEs, both directly and indirectly, through the mediation of employee knowledge sharing (EKS). We argue that TMT expectations generate intangible cultural resources that provide the foundation for employees to internalise MI values and norms and that TMT support offers tangible resources to help employees implement MI. We further argue that perceived TMT expectations and support influence SME MI indirectly by encouraging and enabling EKS. Empirical data from China support our conceptual model. The paper advances our knowledge of the roles of TMT and employees as two key internal change agents in driving the adoption of MI in SMEs.

Keywords: management innovation, TMT expectations, TMT support, employee knowledge sharing, SMEs

1. Introduction

This paper explores the roles of top management teams (TMTs) and employees as key internal change agents in driving management innovation (MI) in small and medium-sized enterprises (SMEs). Over the past decades, firms around the globe have become increasingly involved in MI, which we define as an organisation's ability to generate and implement new management practices, processes, structures, and techniques (David, 2019; Vaccaro et al., 2012; Birkinshaw et al., 2008; Hamel, 2007) and is intended to enhance a firm's performance (Volberda et al., 2013; Mol & Birkinshaw, 2009). The current literature has focused on MI in large firms, the size and complexity of which often necessitates new management processes, practices, and

structures to adapt to a changing environment (Damanpour, 2014). MI in large firms also attracts more research attention because they are more likely to develop state-of-the-art practices, processes, and structures that may redefine an industry (Vaccaro et al., 2012; Birkinshaw et al., 2008) or introduce innovations that may spread around the world (Mol & Birkinshaw, 2008; Palmer et al., 1993). In comparison, our knowledge of the adoption of MI in SMEs remains limited (Guzman & Espejo, 2019; Hervas-Oliver et al., 2016). This is an important gap on both theoretical and empirical grounds.

First, according to resource-based theory (RBT) (Barney, 1991), MI as an organisational capability is more important to SMEs than to large firms. SMEs are more likely to engage in MI that is new to the firm in question and affect only that specific firm's management (Volberda et al., 2013). Different from the new-to-the-world MI that would spread beyond their innovating firms, the values of these firm-specific MIs are unique to the adopting firm and hard to replicate, hence constituting an important source of sustainable competitive advantage for SMEs (Volberda et al., 2014; Hamel, 2006).

Second, most SMEs possess weak technological capacity and invest in little to no research and development (R&D) processes due to severe financial constraints, high fixed costs, and high-risk exposure in investment return (Maslach, 2016; Hervas-Oliver et al., 2011; Heidenreich, 2009). Nonetheless, SMEs can achieve superior performance through MI as a relatively low-cost alternative form of innovation to compensate for a lack of technological capacity and R&D activity (Terziovski, 2010; Rammer et al., 2009). Recent empirical studies have shown that SMEs often use MI to compensate for their lack of technological capabilities and call for more research to examine what drives the adoption of MI in SMEs (Guzman & Espejo, 2019; Su & Baird, 2018; Hervas-Oliver et al., 2016).

We address the call to fill this important gap in the MI literature by exploring how two key internal change agents, TMTs and employees, drive MI in SMEs. The influences of TMTs in enhancing MI have been acknowledged in previous studies (Su & Baird, 2018; Denti & Hemlin, 2012; Vaccaro et al., 2012). It also has been acknowledged that the successful adoption of MI depends on employees' acceptance and implementation of MI (Birkinshaw et al., 2008). However, research on how exactly TMT influences drive the adoption of MI in SMEs at the employee level remains sporadic. There are broadly two small and separate literatures examining the influences of TMTs in SME MI. Based on role expectation theory (Carmeli & Schaubroeck, 2007; Dierdorff & Morgeson, 2007), one stream of literature has examined the influence of TMTs through the lens of perceived TMT expectations, which reflect the attitudes or beliefs of TMT members towards innovation (Chatterjee et al., 2002), and the resulting norms and values of MI as part of the organisational culture recognised by employees (Luthans et al., 2008). Another literature has examined the influence of TMTs through the idea of perceived TMT support, which refers to TMT members' contributions to physical activities related to MI, such as providing adequate resources, time, and personnel to promote the implementation of MI (Lee et al., 2014).

This paper brings these separate ideas into an integrative framework, underpinned by a synthesis of RBT (Barney, 1991) and the internalisation-implementation literature of organisational practice adoption (Abbu & Gopalakrishna, 2021; Kirca et al., 2011; Kostova & Roth, 2002). First, in such a framework, we consider TMT expectations and support as two distinct but connected dimensions of TMT influences. TMT expectations drive MI adoption because they generate intangible cultural resources that provide a foundation for employees to *internalise* MI values and norms, and TMT support drives MI adoption because it offers tangible resources to help employees *implement* MI

through their actions. Such a conceptualisation allows us to address our first research question: how do TMT influences (both in terms of TMT expectations and support) drive the adoption (both internalisation and implementation) of MI at the employee level in SMEs?

Second, we theorise that the two dimensions of TMT expectations and support also have implications in terms of the impact of TMT influence on employees' willingness and ability to share knowledge for MI, which in turn contributes to the adoption of MI indirectly by mobilising knowledge sharing among employees. Employees have been recognised as a key MI resource (Mol & Birkinshaw, 2009), and their knowledge and skills play an important role in the adoption of MI in SMEs (Nieves & Segarra-Ciprés, 2015). The successful adoption of MI requires individual employees to share their knowledge. Knowledge sharing refers to the process by which knowledge in various forms is exchanged or transferred from one individual, group, or organisation to another (McAdam et al., 2012). Employee knowledge sharing (EKS) is a process whereby individual employees integrate the knowledge of others into novel organisational knowledge (Razmerita et al., 2016). EKS is crucial because different types of employees have different types of knowledge related to the firm (Nieves & Segarra-Ciprés, 2015), and MI is the result of the way different individuals think, communicate, or interact (McCabe, 2002). However, as knowledge sharing is not a typical employee task, for this condition to be met, TMTs in SMEs need to set expectations around innovation and provide organisational support for employees to share knowledge (Qu et al., 2015). Our second research question therefore asks: does EKS provide an indirect path through which TMT influences (both in terms of TMT expectations and support) drive the adoption of MI in SMEs, and if so, how?

The paper proceeds as follows. Section 2 develops our conceptual framework and

hypotheses, delineating the direct effects of the different dimensions of TMT influence (TMT expectations and support) on MI and their indirect effects on MI via their influence on EKS. Section 3 describes our sample and data collection procedures. Section 4 presents the results. Section 5 discusses the paper's contributions and future research. Section 6 concludes the paper.

2. Theory and hypothesis development

2.1 Management innovation in SMEs: A conceptual model

A review of the literature identifies four different perspectives that have been applied to study the phenomenon of MI, comprising an institutional perspective, a fashion perspective, a cultural perspective, and a rational perspective (Birkinshaw et al., 2008). The study of MI in SMEs is best aligned with the rational perspective, which reflects the predominant motivation for SMEs to adopt MI: to improve the efficiency of internal management and organisation (Nieves & Segarra-Ciprés, 2015). A rational perspective also mirrors the organisational reality of SMEs better than other perspectives, as it places a stronger emphasis on the role of key individuals within the organisation in driving MI (Guzman & Espejo, 2019), while human agency is less of a consideration according to the other three perspectives (Birkinshaw et al., 2008).

A rational perspective focuses on how individuals drive changes in management practices, processes, and structures to make their organisations work more efficiently (Birkinshaw et al., 2008). In the context of SMEs, we identify TMTs and employees as two key internal change agents that drive MI (Hervas-Oliver et al., 2016). More specifically, MI initiatives start with TMTs as the primary source of new ideas (Vaccaro et al., 2012; Damanpour & Aravind, 2012), but the successful implementation of MI initiatives heavily depends on how employees embrace these new ideas (Guzman &

Espejo, 2019). This is because such initiatives constitute a change in the rules and routines by which work is completed at the organisational level (Birkinshaw et al., 2008). Therefore, for a more complete understanding of the adoption of MI within SMEs, it is necessary to explore how TMTs and employees act collectively in driving the process (Volberda et al., 2014).

To theoretically explain how these two internal change agents work in tandem on the adoption of MI in SMEs, we develop a conceptual model by combining ideas from RBT (Barney, 1991; Penrose, 1959) and the internalisation-implementation literature of organisational practice adoption (Yu et al., 2020; Kirca et al., 2011; Kostova & Roth, 2002). In RBT, TMTs are regarded as the entrepreneurial resources of a firm (Penrose, 1959), and as we explain below, the different dimensions of TMT influences can be regarded as important firm resources for the adoption of MI as an organisational capability.

The literature on the internalisation and implementation of organisational practices, on the other hand, conceives of the adoption of an organisational practice as composed of two aspects. The internalisation dimension represents a cultural and attitudinal perspective that focuses on how organisational leaders develop values and norms to promote the widespread acceptance of the practice among organisational members (Abbu & Gopalakrishna, 2021; Zeitz et al., 1999). The implementation dimension concerns the tangible and observable organisational behaviours and activities that facilitate the adoption of an organisational practice (Abbu & Gopalakrishna, 2021; Baker & Sinkula, 1999). In this paper, we adapt and combine these ideas with RBT to develop a conceptual model for examining how the two dimensions of TMT influences, namely, TMT expectations and TMT support, drive the adoption of MI at the employee level.

Our conceptual model comprises three pillars. The first pillar conceptualises perceived TMT expectations as an intangible cultural resource generated by top managers for promoting MI values and norms among employees. Research on perceived TMT expectations is built upon role expectation theory (Carmeli & Schaubroeck, 2007; Dierdorff & Morgeson, 2007), which argues that employees' motivation to perform is derived, in a significant part, by a desire to behave in a manner consistent with the expectations of their leaders. A high level of perceived TMT expectations means employees understand that they are expected to perform their tasks while fostering innovative activities within the organisation. Such a perception creates pressure on employees to actively engage in MI-related work activities.

Past empirical studies have shown that leader-role expectations have a positive influence on the level of employees' participation in organisational innovations (Tierney & Farmer, 2004; Scott & Bruce, 1994). As TMTs are regarded as the entrepreneurial resources of a firm (Penrose, 1959) and TMT expectations create an organisational culture in which employees become more likely to embrace MI, we argue that TMT expectations generate intangible cultural resources that provide the foundation for employees to internalise MI values and norms.

The second pillar conceptualises perceived TMT support as a tangible resource that helps employees develop the ability to implement MI. Such tangible resource support often takes the form of TMTs' commitments in allocating finances, time, and other organisational resources to support employees in implementing MI (Lee et al., 2014). Such TMT support has been shown to be crucial for the successful adoption of MI in, for example, a management accounting system (Naranjo-Gil & Hartmann, 2007) or cost management (Chenhall, 2004). Since such TMT resources are limited and in high demand by almost all organisational activities, TMTs' behaviours in providing

such tangible and observable support not only demonstrate that they are convinced of the value of MI but also committed to helping employees in the actual implementation of MI (Abbu & Gopalakrishna, 2021; Chenhall, 2004).

These two pillars conceive the adoption of MI in SMEs as being shaped by two related but distinct dimensions of TMT influences and enable us to better understand the direct effect of TMT influence on the adoption of MI in SMEs. Perceived TMT expectations establish cultural values and norms for motivating and pressuring employees to participate in MI, while perceived TMT support provides concrete tangible resources such as money and time for facilitating the implementation of MI. Employees may perceive a strong expectation from TMT members regarding their engagement in MI but weak support in concrete actions. These two dimensions of TMT influences are therefore conceptually distinct and have a direct influence on the adoption of MI.

The third pillar expands the framework to examine the intervening role of EKS in providing an indirect path through which TMT expectations and support may drive the adoption of MI in SMEs. The main idea of this pillar is that TMT expectations will influence employees' willingness to share knowledge and TMT support will influence employees' ability to share knowledge for MI (Shen et al., 2014); EKS will in turn contribute to the adoption of MI in SMEs. It has been recognised that employees' knowledge can increase the successful adoption of MI (Mol & Birkinshaw, 2009). However, the implementation of MI initiatives requires not only individual employees capable of translating ideas into actions and routines but also the sharing of knowledge from a wide variety of employees within the organisation (Nieves & Segarra-Ciprés, 2015).

In this study, we argue that EKS will have a positive impact on the successful

adoption of MI in SMEs. The essence of MI is the creation and application of knowledge related to various management processes, practices, and techniques (Damanpour, 2014; Damanpour & Aravind, 2012), and a certain level of EKS is a necessary condition for MI. However, knowledge sharing is not something that is codified within the job descriptions of most employees. For EKS to take place, TMTs need to set expectations around innovation and provide concrete support to enable employees to share knowledge (Qu et al., 2015).

On the one hand, perceived TMT expectations signal that employees' willingness to share ideas and create new knowledge is desirable and will be rewarded; hence, such expectations stimulate employees' willingness to share knowledge for MI (Lai et al., 2015). On the other hand, perceived TMT support in the form of visible actions, such as additional monetary and time support (Lee et al., 2014), can help employees develop stronger capabilities to engage in MI through EKS. In short, perceived TMT expectations promote employees' willingness and perceived TMT support increases employees' capability to engage in EKS for MI.

Previous research into knowledge sharing also suggests that leaders have an important role in facilitating EKS within organisations (Lee et al., 2010; Srivastava et al., 2006) and that EKS is the consequence of a perceived organisational culture (Lee et al., 2016; Wickramasinghe & Widyaratne, 2012; Lin, 2006). Our framework therefore proposes that a better understanding of MI antecedents requires the consideration of how perceived TMT expectations and support affect MI directly as a work-related outcome of employees and indirectly by mobilising EKS within SMEs.

Taken together, the three pillars of our conceptual model suggest that leadership exhibited by TMT members, in terms of their expectations and support for employees' participation, can have a direct impact on the adoption of MI as a work-related outcome

of employees, as well as an indirect impact on the adoption of MI through motivating and enabling knowledge sharing among employees. Figure 1 depicts the conceptual model of this study. The next sections develop specific hypotheses based on the three pillars of our model.

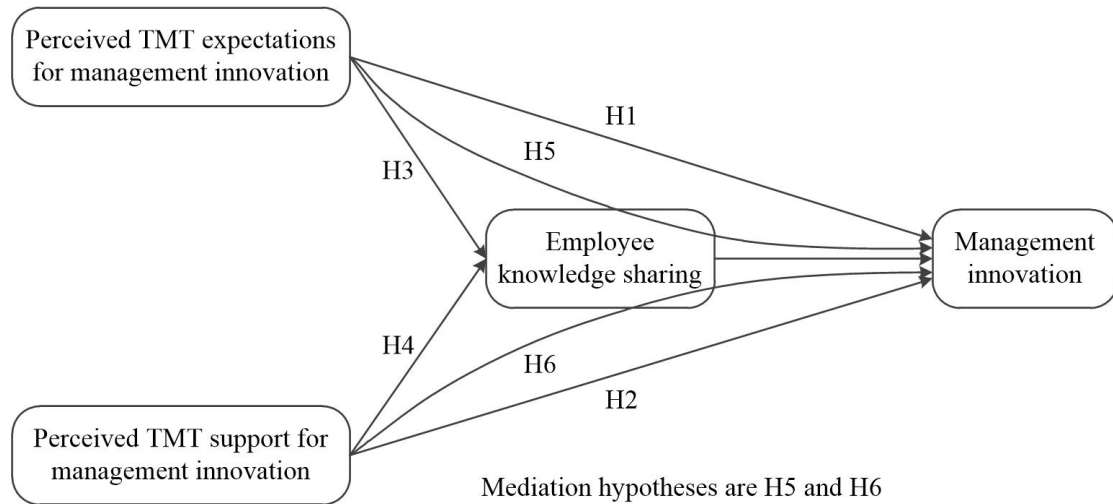


Figure 1. Research model

2.2 Direct effects of perceived TMT expectations and support for MI

Based on the first and second pillars of our conceptual framework, we develop hypotheses concerning how perceived TMT expectations and TMT support act as two key antecedents to MI as a work-related outcome of employees. According to Scott and Bruce (1994), SMEs might internally promote innovation by recognising, encouraging, and rewarding employees' participation in innovation initiatives. Employees' perceptions of organisational members' attitudes, as well as behaviours towards their management philosophy, make up the psychological context of innovation activities (Amabile et al., 1996).

First, role expectation theory (Carmeli & Schaubroeck, 2007; Dierdorff & Morgeson, 2007) suggests that leader expectations for innovation are necessary to motivate followers to engage in MI. Leaders can deliberately set different role

expectations for subordinates, for example, in attaining efficiency rather than innovation (Qu et al., 2015). Because engaging in innovation is not typically in the job/role descriptions of employees, perceived TMT expectations for MI provide important signals to employees that their participation in the implementation of MI is expected to be part of their job (Cullen et al., 2014). Such a signalling effect is particularly powerful in SMEs compared to larger firms due to the relatively flatter organisational structure and smaller hierarchical distance between TMT members and employees. However, when the TMT sets no expectations for MI, employees cannot be expected to engage in activities that promote MI, because this role behaviour is not seen as important or relevant to their jobs (Qu et al., 2015).

Second, perceived TMT expectations for MI are significant in creating an organisational culture that values MI, and such an organisational culture has a strong effect on employees' willingness to embrace and engage in MI-related initiatives (Luthans et al., 2008). In such an organisational culture, employees are more likely to embrace an internalised belief in the value of management practices, structures, and processes and are more motivated to participate in MI that has been initiated by their leaders (Bharadwaj & Menon, 2000).

Previous literature on the internalisation-implementation of organisational practices has demonstrated the importance of such internalised beliefs in the adoption of new management and marketing practices (Abbu & Gopalakrishna, 2021; Kostova & Roth, 2002). In line with this literature, TMT expectations are considered an attitudinal component of TMT influence, which promotes a shared set of MI values and norms among TMT members and employees.

According to the above discussions on TMT expectations from the integrated perspective based on RBT and internalisation-implementation literature, such TMT-

generated MI values and norms offer an intangible cultural resource for fostering an organisational atmosphere that is open to innovation (Rhoades & Eisenberger, 2002), allowing firms to internalise shared MI norms and values at the employee level. Thus, we predict that perceived TMT expectations are an important antecedent to MI in SMEs because they generate intangible cultural resources that provide the foundation for employees to internalise MI values and norms.

H1: Perceived TMT expectations for MI are positively associated with MI in SMEs.

Second, we propose that perceived TMT support also has a crucial role in driving MI in SMEs because it provides concrete and visible resource support for employees to develop capabilities to implement MI. In the current innovation literature, perceived TMT support takes the form of tangible and observable actions that will increase employees' ability to engage in MI and are critical for its successful implementation (Lee et al., 2014). TMT support, including physical activities related to innovation, such as providing adequate money, time, and personnel to support innovation (Lee et al., 2014), ensures the availability of resources for employees to commit to MI (Chenhall, 2004) and constitutes an important condition for employees' motivation to perform MI to be translated into real action (Luthans et al., 2008).

However, like other resources, the TMT's resources for the capacity to support employees in the implementation of MI are limited, and there is a trade-off in terms of resource deployment for different purposes within an organisation. Past empirical studies have shown that a high level of TMT support promotes the successful implementation of enterprise resource planning, leading to both management and technological innovations (Shao et al., 2012; Jones et al., 2006).

In the internalisation-implementation literature (Kirca et al., 2011; Kostova & Roth, 2002), the implementation dimension is expressed in the behaviours and actions required by the practice. In this paper, we integrate RBT and internalisation-implementation literature to argue that while TMT expectations generate intangible cultural resources that provide the foundation for employees to internalise MI values and norms, TMT support offers tangible resources to enable employees to implement MI. With a high level of concrete actions of TMT support, employees are more likely to develop capabilities to engage in the development of ideas for organisational change and to embrace MI as part of their work outcome (Fuchs & Prouska, 2014). Based on the above discussion, we suggest:

H2: Perceived TMT support for MI is positively associated with MI in SMEs.

2.3 The mediating role of EKS

The third pillar of our framework proposes that perceived TMT expectations and support also may influence MI in SMEs indirectly by encouraging and enabling knowledge sharing among employees. A critical portion of the knowledge required for MI resides within individuals (Andries & Cazrnitzki, 2014; Szulanski, 1996). While the TMT may be the main source of knowledge for MI development/initiatives, individual employees are the primary source of knowledge needed for MI implementation. Successful implementation, however, requires not only the existence of individual knowledge but also that individuals share knowledge at the unit and organisational levels (Andries & Cazrnitzki, 2014; Gebauer, 2011).

For individual employees, knowledge sharing involves activities such as talking with colleagues to help them perform a task more effectively. For organisations, EKS

assists in the capture, organisation, and transfer of experience-based knowledge within the organisation, making it available to others, and creating the potential for improvements to organisational performance (Kim & Lee, 2006).

Previous studies in knowledge sharing have demonstrated that EKS does not occur automatically, and leaders play an important role in promoting it within organisations (Lee et al., 2010; Srivastava et al., 2006). In this paper, we argue that leadership exhibited by TMTs in terms of their expectations and support for MI can create an organisational climate that ensures that employees are more willing and capable of sharing knowledge and ideas (Shen et al., 2014). Such knowledge sharing among employees will, in turn, lead to better organisational performance in MI initiatives.

On the one hand, perceived TMT expectations for MI will incentivise employees to share knowledge with the aim of developing and implementing new management processes, practices, and structures. Such perceived expectations from organisational leaders have a signalling effect on employees' willingness to make individual, proprietary knowledge available to others and to appreciate the values of knowledge held by others, creating an environment of tolerance and freedom of knowledge exchange (Shen et al., 2014). With the perception that their leaders expect them to engage in MI activities and that their engagement in MI is likely to be rewarded, employees are more willing to share knowledge and work together to change the way management is practised (Hamel, 2006).

On the other hand, perceived TMT support, as manifested in TMT actions (as opposed to attitudes), can help create an organisational environment in which employees are not just more willing but also more capable of sharing their knowledge (Navimipour & Charband, 2016). Lin (2006), for example, found that organisational support was positively related to the ability of members to engage in knowledge sharing

based on interpersonal trust. Wickramasinghe and Widyaratne (2012) regarded EKS as an outcome sought by employers and revealed a link between leader support and knowledge sharing in software development projects. Lee et al. (2016) indicated that the TMT's visible support in the form of concrete actions, such as the provision of money, time, and personnel support, are key factors in determining the ability of employees to share knowledge. Similarly, Connelly and Kelloway (2003) found that after obtaining support from senior managers, employees tended to act more confidently in terms of strengthening their knowledge-sharing behaviours. We therefore suggest the following:

H3: Perceived TMT expectations for MI are positively associated with EKS.

H4: Perceived TMT support for MI is positively associated with EKS.

When employees are engaged in more knowledge sharing at work, it strengthens intellectual capital within organisations (Lin, 2006), in turn generating novel ideas around an organisation's products, services, and/or processes (Wang et al., 2014). Some scholars propose that MI is the result of employees' collective efforts targeting the reconstruction of knowledge and comprehension around new ways of thinking and performing tasks (Lin et al., 2016; Birkinshaw et al., 2008). We argue that, in the context of SMEs, organisations can gain and create new knowledge through EKS, which provides an important foundation for MI at the organisational level. EKS often involves sharing individuals' idiosyncratic experiences, proprietary work-related knowledge and skills, and different mental models, all of which contribute to connecting individual learning with organisational learning (Swift & Hwang, 2013). EKS also takes place at the level of organisational units within the same firm. For example, Tsai (2001) found that units can produce more innovations if they gain access to new knowledge

developed by other units.

In summary, with strong TMT expectations and support, employees are more willing and able to share their knowledge and create new knowledge to stimulate SMEs' innovation capabilities (Lai et al., 2015). New ideas due to EKS will in turn contribute to MI. Based on these arguments, we expect EKS to act as a mediator between perceived TMT expectations/support and MI.

H5: EKS mediates the impact of perceived TMT expectations for MI on MI in SMEs.

H6: EKS mediates the impact of perceived TMT support for MI on MI in SMEs.

3. Method

3.1 Data collection and sample

We conducted a survey of entrepreneurial SMEs in China to test the hypotheses. The literature on SME innovation has focused on advanced economies (Dabić et al., 2021). Selecting Chinese SMEs helps to enhance the study's contribution in its geographic focus. Specifically, our target firms are selected based on random sampling in the Pearl River Delta (PRD) region in the southern Chinese province of Guangdong. The PRD region is known as the world's factory for global supply chains in a wide range of relatively low-tech manufacturing industries. To survive in these highly competitive sectors, SMEs in the region typically need to be managed very well to compensate for their lack of technological leadership and to compete with similar firms worldwide (Wang & Nicholas, 2005). Therefore, selecting firms from the region helps us focus on issues relating to MI rather than technological and product innovations. Previous research using samples from Europe also shows that SMEs are in greater need of MI to compensate for their lack of technological capabilities (Hervas-Oliver et al., 2016).

The questionnaire was translated into Chinese and then translated back into English by two bilingual experts following the procedure recommended by Brislin (1970). Pilot tests were conducted with three university professors and four SME managers, which led to a refined wording of the survey items and improved overall quality of the questionnaire. Respondents were frontline and middle SME managers from various industries, including retail, electronics and computers, agriculture and farming, metal materials, household electrical appliances, financial services, clothing, furniture, and machinery.

A total of 600 questionnaires (one questionnaire per company) were distributed by mail with follow-up telephone calls conducted by specially trained research assistants. We received 364 responses (60.67 percent). After screening for invalid questionnaires (e.g., non-SMEs, or the respondent was neither a frontline manager nor middle manager), we obtained 284 valid questionnaires, yielding a response rate of 47.33 percent. Table 1 provides an outline of the respondent and SME profiles.

Table 1 The profiles of respondent and SME.

Respondents' detail	Frequency	%	SMEs' detail	Frequency	%
<i>Gender</i>			<i>Scale</i>		
Male	168	59.15	Small-sized	135	47.54
Female	116	40.85	Medium-sized	149	52.46
<i>Age (in yrs)</i>			<i>Firm age (in yrs)</i>		
<28	27	9.51	<5	96	33.80
29-35	158	55.63	5-10	111	39.08
36-45	82	28.87	11-15	50	17.61
46 and above	17	5.99	16 and above	27	9.50
<i>Education</i>			<i>Property</i>		
College	112	39.44	State-owned	88	30.99
Graduate and above	172	60.56	Private	196	69.01
<i>Post</i>			<i>Characteristic</i>		
First-line manager	157	55.28	Traditional	119	41.90
Middle manager	127	44.72	High-tech	165	58.10
<i>Tenure (yrs)</i>			<i>Industry</i>		

<5	72	25.35	Agriculture & Farming	46	16.20
5-10	95	33.45	Manufacturing	143	50.35
11-15	85	29.93	Service	78	27.46
16 and above	32	11.27	Others	17	5.99

Notes: $n=284$; We defined SME according to the standards issued by China's Ministry of Industry and Information Technology. Different industries have different standards. For example, manufacturing firms with 20 to 300 employees or the operating revenues between three to 20 million were considered as small-sized firms, and firms with 301 to 1000 employees or the operating revenues between 20 to 400 million were considered as medium-sized firms.

3.2 Measures

3.2.1 *Dependent variable*

We measured MI based on six items developed by Vaccaro et al. (2012), comprising two items each for new practices (Items 1 and 2), processes (Items 3 and 4), and structures (Items 5 and 6). More specifically, Items 1 and 2 capture management practices, which consist of establishing new rules and associated procedures. Items 3 and 4 reflect new management processes that govern how work is performed, including changes articulated in routines that govern the work of individuals and how compensation is made. Items 5 and 6 refer to new management structures by which organisations arrange communication and align and harness members' efforts, which generate the organisational context in which work is performed. To test the reliability of the measures, we employ Cronbach's alphas, and this value of MI is 0.871, indicating strong internal consistency.

3.3 *Common method variance*

Common method variance (CMV) might be present when both dependent and independent variables are obtained from the same respondents at the same time. Following previous research (Podsakoff et al., 2003), procedural methods and statistical techniques were applied to reduce concerns about CMV. First, there was no particular answer that was encouraged in the survey and the responses were kept confidential. The

criteria such as no double-barreled questions and no complicated syntax were also used to eliminate the ambiguity (Podsakoff et al., 2003). Second, following the suggestion of Harrison et al. (1996), we used multiple-item constructs in our research because CMV may be more problematic at the item level than at the construct level. Finally, several statistical techniques were used to assess CMV after data collection. Following the recommendation of Pavlou et al. (2007), if there were no excessively high correlations (criteria: correlation > 0.9), we can conclude that CMV is unlikely. Moreover, Harman's single-factor test (Podsakoff & Organ, 1986) was used, and the results showed that the first factor only accounted for 32.21% of the 67% explained variance and no single-factor emerged. Based on these procedures, we were reasonably confident that CMV was not a serious problem in our data.

3.2.2 Independent variables

Adopting the measurement of perceived coworker expectations for creativity developed by Farmer et al. (2003) and Qu et al. (2015), perceived TMT expectations for MI was measured based on five items (Cronbach's $\alpha=0.911$). To capture the perceived TMT support for MI, a five-item scale based on Škerlavaj et al. (2014) and Lee et al.'s (2016) studies was developed in this study (Cronbach's $\alpha=0.864$). To measure EKS, we applied ten items developed by Van Den Hooff and De Ridder (2004) to measure how knowledge in different forms is exchanged or transferred among individual employees. The Cronbach's alpha is 0.910.

All the items were measured using a five-point Likert scale ranging from strongly disagree = 1 to strongly agree = 5. We averaged the items of each dimension to create a single index for each corresponding variable. Table 2 provides the definition and measures of the studied variables.

Table 2 Scale Items.

Construct	Indicators	Items
Perceived TMT expectations for MI	PTEMI1	TMT members expect employees to be creative in management innovation
	PTEMI2	TMT members would probably be disappointed if employees were not creative in management innovation
	PTEMI3	TMT members think that creative in management innovation is important
	PTEMI4	It really wouldn't matter to TMT members if I was not creative in management innovation*
	PTEMI5	No one of TMT members would be surprised if I was not creative in management innovation*
Perceived TMT support for MI	PTSMI1	Any management innovation is supported and encouraged by TMT members
	PTSMI2	Employees have sufficient access to the necessary facilities and resources from TMT members to implement management innovation
	PTSMI3	TMT members think that encouraging management innovation is beneficial for the development of enterprises
	PTSMI4	TMT members always support and encourage employees to be creative in management innovation
	PTSMI5	TMT members provide most of the necessary help to enable management innovation
Employee knowledge sharing	EKS1	When I have learned something new, I see to it that colleagues in my department can learn it as well
	EKS2	I share my skills with colleagues within my department
	EKS3	I share the information I have with colleagues within my department
	EKS4	When I have learned something new, I see to it that colleagues outside of my department can learn it as well
	EKS5	I share my skills with colleagues outside of my department
	EKS6	I share the information I have with colleagues outside of my department
	EKS7	Colleagues within my department tell me what they know, when I ask them about it
	EKS8	Colleagues within my department tell me what their skills are, when I ask them about it
	EKS9	Colleagues outside of my department tell me what they know, when I ask them about it
	EKS10	Colleagues outside of my department tell me what their skills are, when I ask them about it
Management innovation	MI1	Rules and procedures within our organisation are regularly renewed
	MI2	We regularly make changes to our employees' tasks and function
	MI3	Our organisation regularly implements new management systems
	MI4	The policy with regard to compensation has been changed in the last three years
	MI5	The intra- and inter-departmental communication structure within our organization is regularly restructured
	MI6	We continuously alter certain elements of the organizational structure

Note: * = reverse coded.

3.2.3 Control variables

Previous studies have suggested that firm size, firm age, ownership, and industry may affect the extent to which enterprises engage in MI (Yu et al., 2019; Heyden et al., 2018; Vaccaro et al., 2012; Mol & Birkinshaw, 2009). Therefore, these factors were controlled in this research. More specifically, we included a dummy variable indicating whether the firm is medium-sized (coded as '1') or small-sized (coded as '0') according to the firm's number of full-time employees. A four-point Likert scale was used to measure the firm's age. Respondents were asked to indicate the firm's ownership as either privately owned (coded as '1') or state-owned (coded as '0'). In addition, to account for potential industry-specific effects on MI, we included a variable for firms active in a high-tech industry (coded as '1') or low low-tech industry (coded as '0').

4. Results

4.1 Reliability and validity

To confirm the factor with the underlying structure and subscales, we first performed confirmatory factor analysis (CFA) by using the AMOS 24.0 software package. The model fit indices were as follows: $\chi^2 = 538.8$, degrees of freedom (df) = 293, $p < 0.001$; $\chi^2/df = 1.839$; comparative-fit index (CFI) = 0.939; Tucker-Lewis index (TLI) = 0.932; incremental-fit index (IFI) = 0.939; and root mean-square residual (RMR) = 0.032. All fit indices were above the necessary values, indicating that the measurement model has a good fit to the data (Hu & Bentler, 1999). Furthermore, we performed a series of CFAs to examine the fit of several alternative three-factor models and presented the results in Table 3. The best competing model was the fourth one, in which we loaded the items of EKS with MI onto one single latent variable: $\chi^2 = 1029.00$, df = 296, CFI = 0.82, TLI = 0.80, RMSEA = 0.09, RMR = 0.06. The chi-square

difference test showed that our proposed four-factor model was significantly better than this best competing model: $\Delta\chi^2(4) = 490.20$. We thus retained our proposed four-factor model and proceeded to test our hypotheses.

Table 3 Comparisons of measurement models

	χ^2	df	$\Delta\chi^2$	CFI	TLI	RMSEA	RMR
Baseline four-factor model	538.80	293		0.94	0.93	0.05	0.03
Alternative three-factor measurement models							
1. support and expectations combined	1109.88	296	571.08	0.80	0.78	0.10	0.09
2. support and knowledge sharing combined	1082.89	296	544.09	0.80	0.79	0.10	0.08
3. expectations and knowledge sharing combined	1285.09	296	746.29	0.75	0.72	0.11	0.07
4. knowledge sharing and MI combined	1029.00	296	490.20	0.82	0.80	0.09	0.06

Second, we examined the convergent validity of the measures employed. As presented in Table 4, (1) all standardised loading values were greater than the threshold of 0.5 (ranging from 0.538 to 0.865); (2) all average variance extracted (AVE) values exceeded the recommended threshold of 0.5, suggesting adequate convergence; and (3) composite reliability (CR) and Cronbach's α , applying the benchmark value of 0.7 as "modest" reliability, also were calculated in this research, and all measures were higher than this benchmark (Baron & Kenny, 1986). Therefore, we concluded that the reliability and validity of the measurements in this study were acceptable.

Third, we examined the discriminant validity by comparing the latent variable correlations and the square root of the average variance of each construct. When the square root of the AVE is higher than the correlations between the constructs, discriminant validity is reached (Fornell & Larcker, 1981). As presented in Table 5, this requirement was fulfilled by each of the constructs. In addition, in line with Hair et al. (2009), discriminant validity can be tested by comparing the maximum shared squared variance (MSV) and average shared squared variance (ASV) of latent variables with

their own AVE values. Table 4 shows good discriminant validity, as the MSV and ASV values were smaller than their respective AVE values. Accordingly, our model's overall fit and the convergent and discriminant validity show that the model fits the data, and the constructs are independent and reliable.

Table 4 Overall reliability of the constructs and factor loading of indicators.

Construct	Indicators	AVE	MSV	ASV	Cronbach's α /CR	Factor loading
Perceived TMT expectations for MI	PTEMI1	0.673	0.225	0.157	0.911/0.911	0.791
	PTEMI2					0.845
	PTEMI3					0.865
	PTEMI4					0.824
	PTEMI5					0.772
Perceived TMT support for MI	PTSMI1	0.563	0.171	0.120	0.864/0.865	0.768
	PTSMI2					0.707
	PTSMI3					0.814
	PTSMI4					0.728
	PTSMI5					0.730
Employee knowledge sharing	EKS1	0.505	0.296	0.189	0.910/0.910	0.685
	EKS2					0.710
	EKS3					0.789
	EKS4					0.776
	EKS5					0.691
	EKS6					0.668
	EKS7					0.705
	EKS8					0.727
	EKS9					0.659
	EKS10					0.686
Management innovation	MI1	0.543	0.296	0.231	0.871/0.875	0.722
	MI2					0.770
	MI3					0.538
	MI4					0.782
	MI5					0.724
	MI6					0.849

Notes: AVE, average variance extracted; MSV, maximum shared squared variance; ASV, average shared square variance; CR, composite reliability.

4.2 Descriptive statistics and correlation analysis

Table 5 presents the means, standard deviations, and correlations. The results showed that several associations between the researched variables are noteworthy. First, both perceived TMT expectations and support for MI are significantly and positively associated with MI. Second, both perceived TMT expectations and support for MI are

significantly and positively associated with EKS. Third, EKS is significantly related to MI. In addition, variance inflation factors (VIFs) were applied as a further diagnostic test of the possibility of multicollinearity. The VIF factors of the studied variables ranged from 1.009 to 1.238, which were below the cut-off value of 10, suggesting that multicollinearity is of minimal concern (O'brien, 2007).

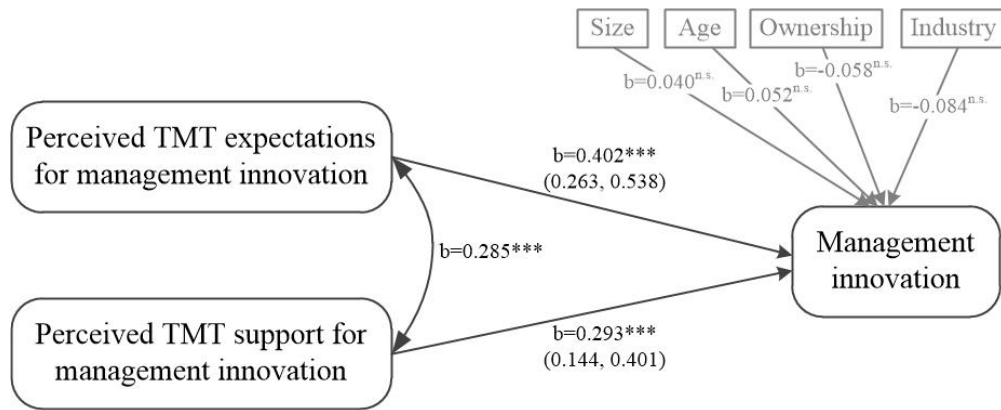
Table 5 Means, standard deviations, and correlations.

Variables	1	2	3	4	5	6	7	8
1. Firm size								
2. Firm age	-0.024							
3. Ownership	0.003	-0.061						
4. Industry	0.092	-0.111	0.033					
5. PTEMI	-0.042	-0.077	-0.011	0.094	0.820			
6. PTSMI	0.036	0.061	-0.004	0.012	0.249**	0.750		
7. EKS	0.018	-0.045	-0.060	0.104	0.375**	0.292**	0.711	
8. MI	0.033	0.046	-0.066	-0.046	0.426**	0.358**	0.505**	0.737
Mean	0.520	2.030	0.690	0.580	3.487	3.014	3.560	3.402
SD	0.500	0.947	0.463	0.494	0.693	0.766	0.579	0.692

Notes: Bold numbers on the diagonal line represent the square root of average variance extracted (AVE); ** = $p < 0.01$, * = $p < 0.05$.

4.3 Direct effect

We followed the procedures in Dabić et al.'s (2020) recent work examining direct effects using structural equation modelling (SEM) with AMOS 24.0 software. The direct effects of perceived TMT expectations and support on MI were examined through a three-factor structural model. Figure 2 shows the effect, p value, and 95% bias-corrected bootstrap confidence intervals, which were based on 5000 bootstrap samples, for the direct effects of perceived TMT expectations ($b=0.402$, $p < 0.001$) and support ($b=0.293$, $p < 0.001$) on MI. A 95% bias-corrected bootstrap confidence interval does not include zero in either case (0.263 to 0.538 for expectations and 0.144 to 0.401 for support), pointing to statistically significant relationships (Hayes, 2015). Thus, it can be concluded that firms with high levels of TMT expectations and support for MI perform better in MI; therefore, Hypotheses 1 and 2 are supported.



Notes: *** = $p < 0.001$; n.s. = not significant; () = bias-corrected 95% CI

Figure 2. Results of direct effects

4.4 Mediation analysis

Following Jyoti and Rani's (2019) research, we constructed three contrasting models, i.e., no mediation, partial mediation, and full mediation, to test the mediating effect. The control variables also were included in the estimation, with paths to the mediator and dependent variables (Hayes, 2013).

In the no mediation model, we tested the direct effects of PTEMI and PTSMI on MI, which were significant ($p < 0.001$). In the partial mediation model, both direct (from PTEMI and PTSMI to MI) and indirect path relationships (from PTEMI and PTSMI to MI through EKS) were examined. The results revealed that all of the direct and indirect impacts were significant ($p < 0.001$). In the full mediation model, indirect relationships between independent and dependent variables (i.e., PTSMI→EKS→MI and PTEMI→EKS→MI) were assessed and also were significant ($p < 0.001$).

In this study, we selected three contrasting models based on the chi-square difference test (Knepp & Entwisle, 1969). As shown in Table 6, the no mediation model is significantly different from the full mediation and partial mediation models. Furthermore, the partial mediation model is significantly different from the full

mediation model. The partial mediation model can explain 43.9% of the variance in MI ($R^2 = 0.439$), which is better than the no mediation model ($R^2 = 0.330$) and full mediation model ($R^2 = 0.334$). The goodness of fit indices of the partial mediation model are better than those of the no mediation and full mediation models. We thus retained our proposed partial mediation model and proceeded to test our hypotheses.

Table 6 Mediation analysis.

Model	χ^2	$\Delta\chi^2$	CFI	TLI	IFI	RMR	RMSEA	R^2 (MI)
No mediation (I)	165.110	502.963***(I&III)	1.000 ^a	1.001 ^a	1.001 ^a	0.026	0.000	0.330
Partial mediation (II)	629.005	463.895*** (II&I)	0.942	0.936	0.942	0.030	0.046	0.439
Full mediation (III)	668.073	39.069***(II&III)	0.932	0.926	0.933	0.047	0.049	0.334

Notes: *** = $p < 0.001$; ^a When exceeds 1, the fit index indicates extremely well -fitting model (West et al., 2012).

The direct effects of the partial mediation model are presented in Table 7, where EKS is included as a mediator. Perceived TMT expectations ($b=0.279$, $p < 0.001$) and support ($b=0.206$, $p < 0.001$) for MI significantly and positively affect MI. Perceived TMT expectations for MI has a significant and positive impact on EKS ($b=0.331$, $p < 0.001$), and perceived TMT support for MI has a significant and positive impact on EKS ($b=0.234$, $p < 0.001$). The 95% bias-corrected bootstrap confidence interval is above zero in all cases, pointing to statistically significant relationships (Hayes, 2015). Therefore, Hypotheses 3 and 4 are supported. Figure 3 shows the effect, p value, and 95% bias-corrected bootstrap confidence interval for all the direct and indirect paths, which indicated a good fit between the hypothesised partial mediation model and the data.

The indirect effects of the partial mediation model are presented in Table 8, which shows that the indirect effects of “PTEMI→EKS→MI” ($b=0.124$, $p < 0.01$, bias-corrected 95% CI = 0.058 to 0.207) and “PTSMI→EKS→MI” ($b=0.087$, $p < 0.01$, bias-

corrected 95% CI = 0.039 to 0.149) are significant. Thus, Hypotheses 5 and 6 are supported.

Table 7 Direct effects in the partial mediation structural model.

Path	Direct effect	bias-corrected 95% CI	Hypothesis
PTEMI->MI	0.279***	(0.137, 0.422)	H1: supported
PTSMI->MI	0.206***	(0.075, 0.320)	H2: supported
PTEMI->EKS	0.331***	(0.195, 0.460)	H3: supported
PTSMI->EKS	0.234***	(0.114, 0.363)	H4: supported
EKS->MI	0.373***	(0.233, 0.492)	—
Firm size->EKS	0.014	(-0.104, 0.116)	—
Firm age->EKS	-0.034	(-0.151, 0.077)	—
Ownership->EKS	-0.063	(-0.175, 0.051)	—
Industry->EKS	0.072	(-0.051, 0.188)	—
Firm size-> MI	0.035	(-0.068, 0.132)	—
Firm age-> MI	0.065	(-0.027, 0.151)	—
Ownership-> MI	-0.034	(-0.129, 0.061)	—
Industry-> MI	-0.112*	(-0.209, -0.024)	—

Notes: *** = $p < 0.001$.

Table 8 Indirect effects in the partial mediation structural model.

Path	Indirect effect	bias-corrected 95% CI	Hypothesis
PTEMI->EKS->MI	0.124**	(0.058, 0.207)	H5: supported
PTSMI->EKS->MI	0.087**	(0.039, 0.149)	H6: supported

Notes: ** = $p < 0.01$.

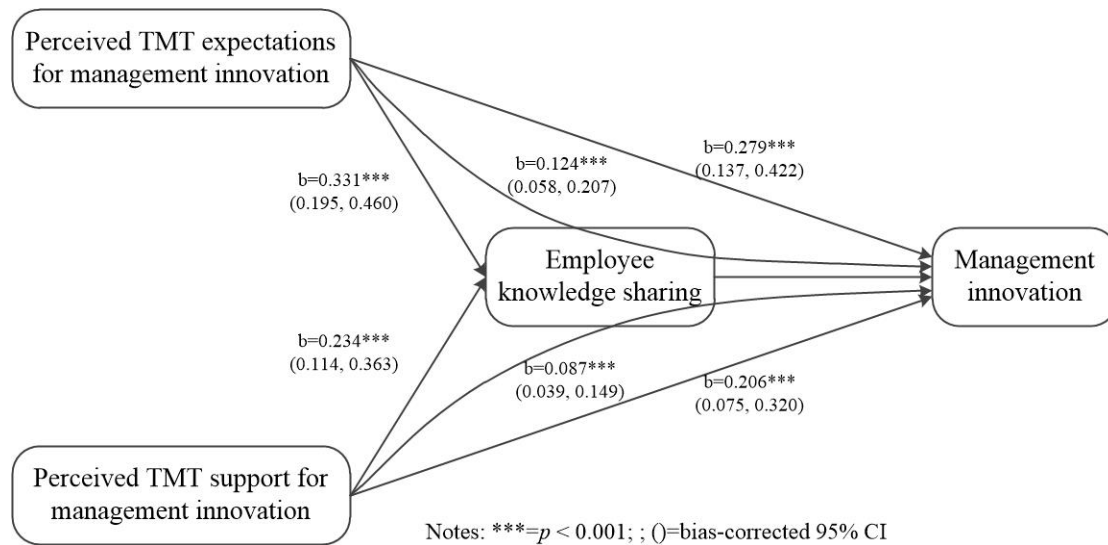


Figure 3. Results of the partial mediation model

5. Discussion and future research

Our analysis of 284 SMEs in southern China found that the greater the perceptions of TMT expectations and support for MI, the more likely it is that MI will be adopted in SMEs. The results also revealed an indirect pathway whereby perceived TMT expectations and support are linked with MI through the mediation of EKS. The paper has made several theoretical and managerial contributions.

5.1 Theoretical contributions

First, the paper contributes to the SME innovation literature by identifying employees' perceptions of TMTs' expectations and support as two important TMT-related resource antecedents to MI. Specifically, we integrate RBT (Barney, 1991) and the internalisation-implementation literature of organisational practice adoption (Abbu & Gopalakrishna, 2021; Kirca et al., 2011; Kostova & Roth, 2002) to develop a new conceptual model for exploring the role of TMT influences in making MI happen at the employee level in SMEs. In such a framework, the adoption of MI is conceptualised as having two components: the internalisation dimension, which represents a cultural

phenomenon whereby employees view a particular MI initiative as valuable and embrace it, and the implementation dimension, which concerns the actions and behaviours required for the adoption of MI.

Current knowledge on how these two conceptually distinct dimensions of TMT influence MI adoption remains sparse. We argued that TMT expectations generate intangible cultural resources that provide the foundation for employees to internalise MI values and norms and that TMT support offers tangible resources to help employees implement MI in their actions. Because TMTs are seen as entrepreneurial resources in RBT (Penrose, 1959), such a conceptualisation of TMT expectations and support as TMT-related firm resources help us gain better insights into how the two distinct dimensions drive the adoption of MI as an organisational capability. Empirical data from China provide evidence that both dimensions of TMT influences matter in their direct effects, as predicted by our model.

Second, by incorporating research on knowledge sharing, we further identify EKS as an alternative indirect path through which TMTs exert their influence on the adoption of MI. The current literature has acknowledged that SMEs rely mainly on top managers for the generation of innovation ideas, but how the knowledge of employees contributes to MI has received less attention (Guzman & Espejo, 2019; Andries & Czarnitzki, 2014). In line with the internalisation-implementation literature on the adoption of organisational practices (Kirca et al., 2011; Kostova & Roth, 2002; Norris, 2002), we make a conceptual distinction between perceived TMT expectations (as a cultural/attitudinal perspective) and perceived TMT support (as a behavioural perspective) to better understand how TMTs can influence employees' willingness and ability to engage in knowledge sharing for MI.

While EKS is acknowledged as an important condition for the successful adoption of MI, EKS is not typically in employees' job descriptions and does not occur automatically (Srivastava et al., 2006). Rather, leadership exhibited by TMTs in terms of their expectations and support for MI can foster employees' willingness and ability to share knowledge and ideas (Shen et al., 2014), which will in turn contribute to the adoption of MI initiatives.

The findings confirm that TMT expectations and support can facilitate the adoption of MI indirectly by creating an organisational climate to ensure that employees are more willing and able to share knowledge and ideas for the purpose of implementing MI (Shen et al., 2014). The findings regarding the mediation effect of EKS also support the idea that knowledge sharing among employees is an important condition for the creation and implementation of MI initiatives (Damanpour & Aravind, 2012).

Third, while Birkinshaw et al. (2008) first identified the roles of key change agents inside and outside the organisation in driving MI adoption, their study is concerned with the new-to-the-world types of MI developed by large organisations (Vaccaro et al., 2012). As a differentiation point, this research represents the first attempt to study how the key internal change agents of TMTs and employees may interact in influencing SMEs' adoption of MI that are new to the adopting firm. Most of the extant research on MI assumes that new ideas are introduced either by top managers or by external change agents such as consultants (Guzman & Espejo, 2019; Birkinshaw et al., 2008). Such an assumption makes sense when studying MI in large firms. However, MI in SMEs is driven more by internal change agents such as TMTs and employees, who are more important than external consultants as sources of knowledge (Nieves & Segarra-Ciprés, 2015). In this paper, we identify TMTs as the main source of new idea generation for MI, while employees are relied upon to implement changes in

management practices, processes, structures, and techniques. Built upon the rational perspective that MI is deliberately driven by key individuals within organisations (Birkinshaw et al., 2008; Kaplan, 1998), our results highlight the importance of TMT influences in making MI happen at the level of employees.

5.2 Managerial implications

Our findings also have implications for SME top managers intending to promote MI in their firms. Our results show that perceptions of TMT expectations and support for MI can create a positive atmosphere that inspires and enables employees to share knowledge and unleash their new ideas and initiatives for MI. Therefore, we suggest that TMTs should make it clear to employees that they expect MI to take place and provide the necessary resources to support the development and implementation of MI within the organisation. An organisational climate with clear expectations and a supportive culture can create the positive conditions needed for EKS and MI to occur.

When employees feel they are expected and supported to engage with innovative management processes and practices, they are more likely to take/embrace initiatives and less likely to be fearful of failure. This is consistent with previous studies that call for senior management to play an important role in facilitating EKS by setting clear innovation expectations and by providing strong and concrete organisational support (Srivastava et al., 2016; Qu et al., 2015; Lee et al., 2010).

In addition, the finding of EKS as tightly linked with MI suggests that, from a managerial perspective, it may be desirable to include knowledge sharing in routine performance appraisals. In the meantime, it also is important to create a knowledge-sharing culture in which employees see it as natural rather than as something they are forced to do (Lin, 2006).

5.3 Limitations and future research

This study has several limitations that also offer opportunities for future research. First, cross-sectional data analysis cannot capture the dynamic causal relationships between the variables involved. For example, it is unknown whether the predicted pathways from TMT expectations/support to EKS and MI could in fact be reversed. It is possible that employees' active engagement in knowledge sharing and MI attracts the attention of TMTs, leading them to set higher expectations and to provide more support in the promotion of MI. Future research employing a longitudinal design may more clearly reveal the nature of such relationships. Second, the study treats TMT expectations as a demand-side attitude variable and TMT support as a supply-side behaviour variable and studies their impacts on SME MI separately. The results offer a foundation for follow-up studies to examine the possible interactive effect between these variables. Third, our focus on internal driving forces reflects the reality for most SME MI, which primarily involves management processes and practices that are new to the adopting firm (Guzman & Espejo, 2019). Despite their specific and somewhat idiosyncratic nature, however, we cannot rule out the possibility that even such firm-specific MI also may be a consequence of both a firm's internal context and external search (Mol & Birkinshaw, 2009). Future research identifying possible external driving forces for SME MI will add value to this line of research. Fourth, consistent with a recent study on MI in SMEs (Hervas-Oliver et al., 2016), this research is based on manufacturing firms with low technological or product innovation. Such a sampling, however, might constrain the variance and generalisability of our findings. Future research can use the theoretical model developed for this study to examine the roles of TMT and employees in driving MI in high-tech SMEs. Finally, MI is intended to enhance the performance of SMEs; however, along with effective innovations, there also will be ineffective or

even disruptive innovations (Mol & Birkinshaw, 2014). This study focuses on internal antecedents and different pathways leading to MI. Future research is needed to examine the performance consequences of specific MI initiatives.

6. Conclusion

This study addresses the call for an investigation into the ways key internal change agents act collectively in driving MI in SMEs (Volberda et al., 2014), contributing to an understudied area of research on MI in SMEs (Guzman & Espejo, 2019; Su & Baird, 2018). We conceptualise perceived TMT expectations and TMT support as two components of how TMT influences the adoption of MI at the employee level in the context of SMEs. Such a conceptual model that integrates RBT and internalisation-implementation literature allows us to conduct a more systematic analysis of TMT influences on MI by theorising and empirically testing how perceived TMT expectations and TMT support drive MI in SMEs directly, and also indirectly, through their impact on EKS. The role of employees in the pursuit of MI within SMEs is relevant through both perceived TMT expectations and support. The paper helps us to understand how the two key internal forces of TMT and employees work in tandem to drive the adoption of MI in SMEs, generating insights into the internal pathways through which MI occurs in SMEs.

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