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# How entrepreneurial SMEs compete through digital platforms: The roles of digital platform capability, network capability and ambidexterity

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## ABSTRACT

Digitalization offers unprecedented opportunities for entrepreneurial small and medium-sized enterprises (SMEs). However, many entrepreneurial SMEs lack resources and capabilities or suffer from inertia, which hampers these opportunities. This study investigates how entrepreneurial SMEs can enhance performance through digital platforms. Specifically, the study examines the effect of digital platform capability and network capability on entrepreneurial SMEs' financial performance. The study also examines how exploitation and exploration orientations moderate this relationship. Based on analysis of 230 entrepreneurial SMEs, the results indicate that digital platform capability has a positive indirect effect on entrepreneurial SMEs' performance via network capability. The study also shows that exploitation and exploration orientations negatively and positively moderate this effect, respectively. The results suggest that entrepreneurial SMEs can enhance their performance through digital platform capability by aligning this capability with their orientation. These findings thereby enrich the literature on entrepreneurial SMEs and capabilities.

## 1. Introduction

Entrepreneurial small and medium-sized enterprises (SMEs) struggle to compete in highly dynamic environments (Chan, Teoh, Yeow, & Pan, 2018). In response to competitive pressure, many entrepreneurial SMEs use digital platforms to leverage their business strategy (Li, Liu, Belitski, Ghobadian, & O'Regan, 2016). Digital platforms are technologies that allow firms to homogenize, edit, and distribute data on an unprecedented scale (Yoo, Henfridsson, & Lyytinen, 2010). For example, new devices and software (e.g., advanced machinery) and network standards (e.g., peer-to-peer protocols) enable new features to emerge. Digital platforms are thereby transforming the way firms build a competitive advantage (Parker, Van Alstyne, & Choudary, 2016). In fact, digital platforms play a central role in many firms' value propositions by enabling them to leverage information management (Cenamor, Rönnerberg Sjödin, & Parida, 2017). For example, big data, artificial intelligence, and machine learning have become priorities for many firms that compete in digital platform ecosystems (Subramaniam, Iyer, & Venkatraman, 2018). Thus, digital platforms represent an emerging field that is challenging the

fundamentals of firm performance (Kazan, Tan, Lim, Sørensen, & Damsgaard, 2018).

The literature has extensively examined the benefits of implementing information and communication technology (ICT) for firm performance (Brynjolfsson & McAfee, 2014; Parida & Örtqvist, 2015). Specifically, using ICT may enhance operational efficiency by optimizing task management and market orientation through advanced market knowledge (Melville, Kraemer, & Gurbaxani, 2004). However, the implementation of ICT may require major investment that does not lead to performance improvements (Yunis, Tarhini, & Kassar, 2018). Thus, the understanding of the impact of digital platforms on firm performance is still limited, and a considerable number of firms fail in their attempts to adopt such platforms.

Recent research points to the complexity of digital platform adoption and the uniqueness of entrepreneurial SMEs. On the one hand, the literature defends the thesis that digital technologies cannot, on their own, directly generate benefits (Yunis et al., 2018). Specifically, firms need ICT-based capabilities that mobilize and deploy digital technologies to effect dramatic organizational change (Giotopoulos, Kontolaimou, Korra, & Tsakanikas, 2017; Mohd Salleh, Rohde, & Green,

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2017). In fact, ICT-based capabilities may transform the organization by enhancing dynamic capabilities (Parida, Oghazi, & Cedergren, 2016; Ravichandran, 2018). However, digital platforms represent a more complex form of ICT that facilitates interactions between different partners (Constantinides, Henfridsson, & Parker, 2018). Thus, recent articles demand further research on how digital platform capability affects firm performance through a profound renovation of network management (Helfat & Raubitschek, 2018; Teece, 2018).

On the other hand, the literature has traditionally examined the implementation of digital technologies in large firms, and specific insights into entrepreneurial SMEs are relatively scarce (Jin & Hurd, 2018; Mohd Salleh et al., 2017). Entrepreneurial SMEs face unique challenges in implementing digital platforms because they may lack the necessary resources, skills, and commitment; a better understanding of these issues is necessary (Giotopoulos et al., 2017; Nasco, Toledo, & Mykytyn, 2008). When addressing the liability of smallness, networks may represent a key source of resources and may facilitate the discovery of valuable opportunities by entrepreneurial SMEs (Lin & Lin, 2016; Shu, Ren, & Zheng, 2018; Varis & Littunen, 2010; Zacca, Dayan, & Ahrens, 2015). For example, Alibaba's digital platform eases the internationalization of SMEs in New Zealand (Jin & Hurd, 2018), and crowdfunding platforms facilitate access to capital networks (Nambisan, Siegel, & Kenney, 2018).

In managing internal and external relationships, many entrepreneurial SMEs are unable to develop an ambidextrous approach and must choose between an exploitative or exploratory orientation (Dai, Du, Byun, & Zhu, 2017; Solís-Molina, Hernández-Espallardo, & Rodríguez-Orejuela, 2018). This orientation may affect the profitability of digital platforms because the technologies adopted must be consistent with the SME's values (Mohd Salleh et al., 2017). Along these lines, recent research shows that entrepreneurial actions are necessary if firms aim to capture the potential value of digital platforms (Yunis et al., 2018). However, besides the liability of smallness, many SME entrepreneurs also display a cognitive inertia that prevents them from fully engaging with digital platforms (Li, Su, Zhang, & Mao, 2017). Thus, the understanding of the implications for performance of the alignment between SMEs' logic and digital platform capability is still limited.

The purpose of this paper is to shed light on the relationship between digital platforms and performance in the context of entrepreneurial SMEs. Drawing on the platform literature (Gawer, 2014; Jacobides, Cennamo, & Gawer, 2018; McIntyre & Srinivasan, 2017; Thomas, Autio, & Gann, 2014) and research on dynamic capabilities (Mikalef & Pateli, 2017; Teece, 2018; Teece, Pisano, & Shuen, 1997), this study examines the indirect effect of SMEs' digital platform capability on SMEs' performance via network capability. Recent research shows that the firm's digital strategy should be in alignment with the firm's logic (Yeow, Soh, & Hansen, 2018). Drawing on the entrepreneurship and ambidexterity literature (Junni, Sarala, Taras, & Tarba, 2013; Li, Su, et al., 2017; March, 1991; Voss & Voss, 2013), this study examines the moderating effects of exploitative and exploratory logics on the relationship between network capability and performance. The empirical analysis uses a sample of 230 Swedish SMEs.

The results show an indirect relationship between SMEs' digital platform capability and performance. Specifically, the results show that SMEs' digital platform capability has a positive impact on network capability. Additionally, the results indicate that SMEs' network capability has a significant positive impact on performance. The results also show that exploitative logic negatively moderates the relationship between SMEs' network capability and performance, whereas exploratory logic positively moderates this relationship.

These findings suggest that an SME's performance improvements resulting from digital platforms depend on the SME's capabilities. Specifically, SMEs can develop a digital platform capability, which enhances network capability, to increase performance. Previous research on dynamic capabilities and platforms suggests that ICT cannot,

on its own, directly generate critical changes in performance. Research also shows that an ability to mobilize ICT resources is necessary to motivate organizational changes (Melville et al., 2004; Mikalef & Pateli, 2017). The findings of this study extend these insights by showing that digital platform capability may indirectly affect SMEs' performance by enhancing network capability.

The findings also contribute to the entrepreneurship literature (Giotopoulos et al., 2017; Nasco et al., 2008) by suggesting that exploitation and exploration orientations have significant yet different influences on the relationship between digital platform capability and performance. Specifically, an exploitation orientation hinders the indirect benefits of digital platform capability through network capability, whereas an exploration orientation enables greater network capability. This study thereby enriches recent entrepreneurship and ambidexterity research (Solís-Molina et al., 2018; Yunis et al., 2018) by showing that alignment between network capability and the SME's logic can explain differences in the profitability of digital platform capability.

This paper has the following structure. We next describe the theoretical background of digital platform capability and explains the hypotheses. The subsequent sections describe the sample and empirical methods. Finally, we present the results and discuss the main findings, theoretical contributions, managerial implications, and suggestions for future research.

## 2. Theoretical background

### 2.1. Entrepreneurial SMEs and digital platform capability

The implementation of digital technologies, also known as digitalization, is attracting much research effort (Frishammar, Cenamor, Cavalli-Björkman, Hernell, & Carlsson, 2018; Jahanmir & Cavadas, 2018; Viglia, Pera, & Bigné, 2018), especially in the context of entrepreneurial SMEs (Bi, Davison, & Smyrniotis, 2017; Giotopoulos et al., 2017; Li, Su, et al., 2017). Digital technologies are based on ICT systems that standardize information and allow organizations to rapidly code, store, formalize, and distribute increasing amounts of knowledge, which is becoming ever more diverse (Markus, Steinfield, Wigand, & Minton, 2006; Williams, Dwivedi, Lal, & Schwarz, 2009). For two decades, research has examined how ICT and digital technologies can raise overall performance via improvements in operational efficiency (e.g., through better inventory management) and customer orientation (e.g., through more accurately matching market needs; Brynjolfsson & McAfee, 2014; Melville et al., 2004). In this context, technical developments have led to the emergence and rapid spread of more complex technologies, which are known as digital platforms (Parker et al., 2016).

Digital platforms are challenging traditional business propositions by offering technical elements such as hardware or software devices, whose features may be extended through complementary modules, and a set of rules, standards, and organizational processes to coordinate third parties and adopters (de Reuver, Sorensen, & Basole, 2018; McIntyre & Srinivasan, 2017). Accordingly, digital platforms are modular architectures that include core and replaceable modules and the corresponding governance (Tiwana, 2014). A platform architecture enables firms to pursue both scalability—by centralizing and integrating common features in the core modules—and evolvability—by reconfiguring the replaceable modules (Wareham, Fox, & Cano Giner, 2014). Specifically, the agents in platform ecosystems can share and use common resources and knowledge, while leveraging unique resources by creating new complementary modules. In this respect, the recent advancements in collecting, analyzing, and interpreting information have boosted the adoption of digital platforms as facilitators of interactions and have placed information and network management at the center of many business models (McAfee & Brynjolfsson, 2012; Van Alstyne, Parker, & Choudary, 2016).

In this context, merely acquiring digital platforms is not enough for

firms to raise their performance, because deeper changes are required (Mohd Salleh et al., 2017). Specifically, adopting a platform approach represents a complex transformation of the value proposition, and this transformation affects the pillars of the organization (Cenamor et al., 2017). Therefore, digital platforms are turning the focus of value creation toward the network, which entails a drastic shift toward a more externally oriented organization (Li et al., 2017; Parker, Van Alstyne, & Jiang, 2017). In this respect, digital platform capability is crucial because this capability represents the ability to deploy ICT-based resources in combination with other internal and external resources (Mikalef & Pateli, 2017). Accordingly, digital platform capability allows firms to integrate critical shared knowledge that leverages internal resources while reconfiguring internal and external resources to better respond to highly changeable market needs (Helfat & Raubitschek, 2018; Teece, 2018). However, the complexity of digitalization implies that digital platform capability may not improve firm performance directly but rather through dynamic capabilities (Kroh, Luetjen, Globocnik, & Schultz, 2018; Ravichandran, 2018). This relationship is especially relevant in the context of entrepreneurial SMEs because the platform approach is aligned with entrepreneurial SMEs' inclination toward networking (Shu et al., 2018). However, entrepreneurial SMEs lack resources and capabilities, which may hamper the adoption of a new business model (Gupta & Bose, 2018; Karimi & Walter, 2016). The emergence of digital platform capability thus provides many opportunities for entrepreneurs, although the understanding of the implications for entrepreneurial SMEs' performance is still limited. To fill this gap, this study examines the role of network capability as a mediator between digital platform capability and SMEs' performance.

## 2.2. Entrepreneurial SMEs, digital platform capability, and network capability

The importance of digitalization has increased. Having originally been a technical issue, digitalization has now become a strategic management issue that affects the core of the value proposition (Li et al., 2017). With the spread of digital platforms, the focus of value creation has moved from the traditional linear value chain to intertwined networks (Karimi & Walter, 2015; McIntyre & Srinivasan, 2017). Firms increasingly base their value sources on the relationships and information flows between units within the organization and with partners. This scenario is especially true of entrepreneurial SMEs because of their lack of resources (Lin & Lin, 2016; Parida, Pesămaa, Wincent, & Westerberg, 2017). In this respect, the literature highlights the competitive importance of network capability as the ability to manage both internal and external interdependencies (Battistella, De Toni, De Zan, & Pessot, 2017). Specifically, network capability refers to the coordination of groups and individuals that share a common structure and a common result, the internal communication of the external knowledge, the relational skills for handling diverse individuals and the partners' knowledge. In short, network capability represents a key ability in digitalized firms.

Digital platform capability may enhance the different aspects of network capability in the following ways. Digital platform capability entails the development of an architectural view that sets the technical elements and basic rules governing relationship management within and outside firms (Cenamor et al., 2017). Recent research shows that the architectural view has a significant influence on how internal units and external partners interact (Li et al., 2016).

On the one hand, platform integration may enhance internal communication and coordination. Specifically, digital platform capability entails designing an integrative architecture that centralizes and formalizes internal information flows (Dominguez Gonzalez & Massaroli de Melo, 2018; Helfat & Raubitschek, 2018). In this respect, digital platforms facilitate internal communication and the coordination of resources and capabilities, activities, and goals (Helfat & Campo-

Rembado, 2016).

On the other hand, platform reconfiguration may also improve relational skills and partner knowledge. The modular architecture that characterizes the platform approach enables firms to manage a changing network of partners (Baldwin, 2012; Marion, Meyer, & Barczak, 2015). Platform governance provides the guidelines to handle communication and potential conflicts by defining the role of each partner (Tiwana, 2014; Wareham et al., 2014). In this respect, digital platform capability enables entrepreneurial SMEs to improve the ability to communicate with external partners and to better acquire and organize structured information from external partners. In short, these arguments indicate that the technical and social architecture of digital platform capability can enhance network capability. These arguments lead to the following hypothesis:

**H1.** Digital platform capability has a positive influence on the network capability of entrepreneurial SMEs.

## 2.3. Network capability and entrepreneurial SMEs' performance

Network capability is a dynamic capability that creates interdependencies both within and outside the organization (Battistella et al., 2017). The literature shows that network capability allows firms to gain access to different resources, identify opportunities, and respond quickly to fast-changing market needs (Gulati, Nohria, & Zaheer, 2000; Solano Acosta, Herrero Crespo, & Collado Agudo, 2018). Because of their limited size, entrepreneurial SMEs rely on external relationships to overcome liabilities (Zacca et al., 2015). In this context, a developed network capability represents a critical driver of entrepreneurial SMEs' success (Parida & Örtqvist, 2015). Specifically, the management of internal and external information flows can improve entrepreneurial SMEs' performance by stimulating knowledge sharing, cost reductions, innovation speed, reputation gains, and opportunity identification (Lin & Lin, 2016). Thus, a platform-enhanced network capability may improve entrepreneurial SMEs' performance in several ways.

Network capability in digitalized firms is based on a common architecture that firms use internally and externally to share knowledge (Ritala, Olander, Michailova, & Husted, 2015; Wang & Hu, 2017). Specifically, employees of both the firm and its partners can use digital platforms as a hub for common valuable knowledge such as storing best organizational practices (Dominguez Gonzalez & Massaroli de Melo, 2018). In this respect, enhanced internal and external communication allows firms to optimize the assimilation and distribution of knowledge and hence decision-making processes (Giotopoulos et al., 2017). Moreover, developing network capability through digital capabilities implies building a network embeddedness that reduces transaction costs (Li, Zheng, & Zhuang, 2017). Therefore, firms are able to benefit from the scalability that platforms offer (Wareham et al., 2014). Furthermore, by adopting a platform approach, firms accept mutual monitoring mechanisms that make the relationships more transparent, cultivate mutual trust, and mitigate opportunism (Lin & Lin, 2016). These mechanisms are critical for entrepreneurial SMEs because entrepreneurial SMEs usually face information asymmetries with respect to larger partners. Thus, a platform-enhanced network capability may improve efficiency through more fluent, egalitarian, and trustworthy interactions.

Additionally, the efficient management of internal and external information flows facilitates opportunity discovery and accelerates innovation (Mikalef & Pateli, 2017; Shu et al., 2018). The ability to coordinate internal and external knowledge puts firms in a position to identify market trends and to respond fast to market needs (Battistella et al., 2017). Accordingly, receiving heterogeneous knowledge from diverse sources in a structured way facilitates the innovation process that subsequently ensures the evolvability of the value proposition and the long-term success of the firm (Wareham et al., 2014). Finally, a platform-based network capability gives rise to a sense of belonging to a

network of firms that provides positive customer recognition and access to a better position from which to negotiate with other firms (Ceccagnoli, Forman, Huang, & Wu, 2012). Specifically, entrepreneurial SMEs can overcome reputational liability through the signaling effects of their network (Lin & Lin, 2016). To summarize, these arguments indicate that a platform-enhanced network capability may improve entrepreneurial SMEs' performance. Thus, these arguments lead to the following hypothesis:

**H2.** Entrepreneurial SMEs' network capability has a positive influence on entrepreneurial SMEs' performance.

#### 2.4. Entrepreneurial SMEs, digital platform capability, and ambidexterity

Digital platforms have grown in importance from the functional IT level to the strategic and management level (Yeow et al., 2018). Successful implementation of digital technologies involves the resources and capabilities of the whole organization (Karimi & Walter, 2015). In this respect, organizational alignment is essential to facilitate a better use of digital platforms (Yunis et al., 2018). Thus, digital platform capability requires an organizational orientation that enables the leveraging of benefits from this capability.

Research on entrepreneurship and ambidexterity extensively examines two different conceptions of organizational orientation—exploration and exploitation—and the corresponding performance implications (Dai et al., 2017; Junni et al., 2013; March, 1991; Solano Acosta et al., 2018). On one hand, exploitation focuses on current internal knowledge, capabilities, and well-established decision-making to maximize profits from existing businesses. Exploitation usually relates to reliable revenues, high control and efficiency, and short-term success. On the other hand, exploration focuses on learning new knowledge, discovering new capabilities, and investigating new ways of doing business. The exploration orientation generally has links to uncertain outcomes, high autonomy, and long-term results.

A large part of the literature on ambidexterity defends the complementarities between the two orientations (Kristal, Huang, & Roth, 2010). Specifically, ambidexterity can positively affect firm performance by allowing firms to achieve both efficiency and opportunity discoveries. Recent studies suggest that a platform approach may facilitate reconciliation between exploitation and exploration trade-offs (Wan, Cenamor, Parker, & Van Alstyne, 2017).

However, these orientations require vastly different structures and resources (Dominguez Gonzalez & Massaroli de Melo, 2018). In fact, many firms that pursue ambidexterity fail in the process (O'Reilly & Tushman, 2013; Solís-Molina et al., 2018). This failure is especially relevant for entrepreneurial SMEs, which face demanding requirements to balance exploitation and exploration using limited resources (Junni et al., 2013). In this respect, recent research shows that ambidexterity may be an impossible or ineffective goal, suggesting that entrepreneurial SMEs benefit more from focusing on either exploitation or exploration (Solís-Molina et al., 2018). Thus, this study examines how exploitation and exploration exert different influences on the indirect effect, via network capability, of digital platform capability on entrepreneurial SMEs' performance.

An exploitation orientation may lead entrepreneurial SMEs to focus on using platform-enhanced network capabilities to pursue efficiency in several ways. For example, entrepreneurial SMEs with an exploitation orientation emphasize the importance of the integration features that digital platforms offer. In this respect, entrepreneurial SMEs may use digital platforms to integrate relationships by formalizing social interactions, paying special attention to existing internal and external teams. Formal socialization enables structured procedures, codification of current knowledge, and standardized communication (Xu, Cui, Qualls, & Zhang, 2017). However, an orientation toward current knowledge and practices usually leads firms into the (short-term) success trap (Junni et al., 2013). Specifically, entrepreneurial SMEs lack the

necessary knowledge and relationships that, when exploited, guarantee sustainable performance in the long term, and, in many cases, even in the short term (Solís-Molina et al., 2018). An exploitation orientation may therefore boost the efficiency benefits of a platform-enhanced network capability, but these benefits are not enough to cope with the fast-changing environment.

In contrast, exploration orientation may lead entrepreneurial SMEs to focus on using a platform-enhanced network capability to pursue innovation in several ways. For example, entrepreneurial SMEs with an exploration orientation stress the importance of the reconfiguration features that digital platforms offer. In this respect, entrepreneurial SMEs may use digital platforms to manage interactions by focusing on informal interactions, paying special attention to discovering new knowledge and creating new relationships (Li et al., 2017; Lin & Lin, 2016). Informal socialization facilitates more voluntary communication, more diverse knowledge, and thus more novel outcomes (Xu et al., 2017). This access to heterogeneous knowledge and novel ideas supports the evolvability of the value proposition and is critical for entrepreneurial SMEs' performance (Pati, Nandakumar, Ghobadian, Ireland, & O'Regan, 2018). Thus, exploration orientation may leverage opportunity identification, market adaptability, and the long-term performance that network capability enables. In short, these arguments suggest that exploitation and exploration orientations exert different influences on the relationship between network capability and entrepreneurial SMEs' performance. Thus, these arguments lead to the following hypotheses:

**H3.** Entrepreneurial SMEs' exploitation orientation negatively moderates the effect of SMEs' network capability on entrepreneurial SMEs' performance.

**H4.** Entrepreneurial SMEs' exploration orientation positively moderates the effect of SMEs' network capability on entrepreneurial SMEs' performance.

### 3. Method

#### 3.1. Data collection and sample

We conducted a survey targeting entrepreneurial SMEs in the manufacturing sector in Sweden to test the proposed hypotheses. These SMEs were selected because they operate in a competitive and dynamic environment, where the ability to innovate is a requirement for growth and high performance (Madrid-Guijarro, Garcia, & Van Auken, 2009; Parida, Westerberg, & Frishammar, 2012; van de Vrande, de Jong, Vanhaverbeke, & de Rochemont, 2009). Moreover, by sampling manufacturing SMEs, we focused on SMEs that offer tangible products and thus have a formalized innovation process. Regarding the choice of country, scholars have used Sweden as an empirical research context for different reasons (Holgersson, 2013). First, SMEs play a key role in Sweden, representing more than 99% of all firms and contributing more than 63% of total value added (SCB, 2016). Second, institutional support for SMEs is a major part of the Swedish budget for entrepreneurship (Lundström et al., 2014). Finally, Sweden is one of the leading economies in Europe in digitalization (Gürdür, El-khoury, & Törngren, 2019). Therefore, Sweden has advanced technological and human resources that facilitate the implementation of digital platforms.

A Swedish business database (Orbis) containing all active firms in Sweden was used to obtain the sample. The focus was on manufacturing firms corresponding to four Swedish Standard Industrial Classification (SNI) codes: 26 (manufacture of computer, electronics, and optical products), 27 (manufacture of electrical equipment), 28 (manufacture of machinery), and 61 (telecommunications). We applied two sampling constraints. First, the target firms had to meet the European Union (EU) definition of SMEs, having fewer than 250 employees. Second, to ensure that the firms were active, they had to have a turnover of at least USD

150,000. Based on these criteria (Parida & Örtqvist, 2015), we randomly selected 1200 manufacturing companies that were active in a field with the SNI code 26, 27, 28, or 61.

We subsequently developed a self-administered questionnaire. The survey instrument was pre-tested on five academic experts and six CEOs from the four industry areas to ensure that the questions were valid. Based on feedback from the pilot survey, minor adjustments were made to the survey questions. The postal survey was addressed to the SMEs' CEOs, who have a holistic overview of company operations and strategic orientation. The survey was sent with a cover letter explaining the purpose of the study and clearly mentioning that participation in the study was voluntary. Respondents were also guaranteed that their responses would be anonymous and would be used for academic research purposes only. After a reminder, 129 usable and complete questionnaires were received, giving a response rate of 10%. The study targeted SMEs, so the response rate was expected to be quite low (Baruch, 1999; Baruch & Holtom, 2008). This low response rate may have been exacerbated by a greater research focus on SMEs, especially in the manufacturing sector.

### 3.2. Variables

#### 3.2.1. Dependent variable

Entrepreneurial SMEs are a key source of flexibility and innovation (Gray, 2006; Varis & Littunen, 2010). Entrepreneurial SMEs are small and medium-sized firms that develop and/or commercialize new or improved technologies in new or improved ways (Holgersson, 2013). Thus, *entrepreneurial SMEs' performance* captures the dynamic results of entrepreneurial SMEs. We measured the dependent variable using sales growth as an indicator of performance (Parida, Oghazi, & Cedergren, 2016). Thus, we used the three-year compounded sales growth for the period 2014 to 2017.

#### 3.2.2. Independent variable

The measure for *Digital platform capability* was based on a refined version of the scale for information technology capabilities (Rai & Tang, 2010). Digital platform capability enables firms to leverage external resources for competitive benefits. In this study, digital platforms refer to the digital information technology that supports information exchange activities with partners. The study examines an SME's ability to achieve platform integration "through the timely and idiosyncratic exchange of information with its partners" and an SME's ability to reconfigure platform resources "through modular designs and standardized interfaces in applications and processes" (Rai & Tang, 2010, p. 517).

*Digital platform capability* was a second-order construct. We used two first-order constructs consisting of four items each: *Platform integration* (e.g., "Our platform easily accesses data from our partners' IT systems"; "Our platform easily aggregates relevant information from our partners' databases") and *Platform reconfiguration* (e.g., "Our platform is easily adapted to include new partners"; "Our platform can be easily extended to accommodate new IT applications or functions"). Each item was measured on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

#### 3.2.3. Mediating variable

The *Network capability* scale was a 12-item scale based on a measure used in previous studies (Parida, Patel, Wincant, & Kohtamäki, 2016; Walter, Auer, & Ritter, 2006). *Network capability* refers to the firm's abilities to use external resources. In this study, *Network capability* captures the SME's abilities to "develop and utilize inter-organizational relationships to gain access to various resources held by other actors" (Walter et al., 2006, p. 542). *Network capability* was a second-order construct measured by four first-order constructs with three items each: *Internal communication* (e.g., "In our company employees develop informal contacts among themselves"), *Coordination* (e.g., "In our

company we discuss regularly with our partners how we can support each other"), *Relationship skills* (e.g., "In our company we can deal flexibly with our partners"), and *Partner knowledge* (e.g., "In our company we know our partners' markets"). Each item was measured on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

#### 3.2.4. Moderating variables

Traditionally, research on entrepreneurship and ambidexterity examines two organizational orientations: exploitation and exploration (March, 1991). Specifically, *Exploitation orientation* refers to "the set of practices that refine and extend existing skills and resources" typically "to achieve lower costs and reliability," whereas *Exploration orientation* refers to "practices that develop new supply chain competencies through experimentation and acquisition of new knowledge and resources" (Kristal et al., 2010, pp. 415–416). We used four items to measure first-order constructs for *Exploitation orientation* (e.g., "Leveraging of our current supply chain technologies is important to our firm's strategy") and *Exploration orientation* (e.g., "To improve our supply chain, we continually explore for new opportunities"). Each item was measured on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

#### 3.2.5. Control variables

We controlled for two generally accepted firm characteristics: age and size (Parida & Örtqvist, 2015; Solís-Molina et al., 2018). *Age* refers to the number of years since the creation of the firm, and *Size* refers to the number of employees. We also controlled for heterogeneity in the firm's network by including *International orientation* in the analysis. The internationalization of SMEs can affect performance (Lu & Beamish, 2001). We therefore used the percentage of total turnover originating from international markets to control for diversity in the network.

### 3.3. Model specification

We studied the effects of digital platform capability on entrepreneurial SMEs' performance using partial least squares structural equation modeling (PLS-SEM; Hair, Hult, Ringle, & Sarstedt, 2016; Richter, Cepeda, Roldán, & Ringle, 2016; Rigdon, 2012, 2016; Sarstedt et al., 2019). Previous studies provide support for this choice of method. PLS-SEM is a variance-based technique that was suitable for testing and validating the models in this study for several reasons.

First, the models consisted of hierarchical latent variables with different measurement modes. Specifically, there were two levels of abstraction regarding the constructs: first and second order. For example, *Digital platform capability* was a second-order variable that was measured by two first-order variables: *Platform integration* and *Platform reconfiguration*. Moreover, the measurement modes were different depending on the variables (Sarstedt, Hair, Ringle, Thiele, & Gudergan, 2016). For the first-order variables in this study, we used Mode A measurement and the reflective approach. Accordingly, the indicators were error-prone manifestations of the low-order construct. In the case of the second-order variables, we used Mode B measurement and the formative approach. Accordingly, the first-order variables provided distinct aspects of the construct. The literature supports the use of PLS-SEM to analyze hierarchical latent variable models that include different measurement modes (Becker, Klein, & Wetzels, 2012). Based on the recommended approach for reflective-formative models (Becker et al., 2012), a sequential latent variable score method was used. This method is also known as a two-stage approach. Specifically, we estimated a repeated indicator model in the first stage and used the scores for the constructs in the second stage (Wilson, 2010). Second, the studied relationships included both indirect effects and moderation. The literature advocates the analysis of these relationships simultaneously using PLS-SEM (Henseler, Ringle, & Sinkovics, 2009; Hsieh & Hsieh, 2015; Zacca et al., 2015). Specifically, PLS-SEM enables estimation of different causal relationships between exogenous and endogenous

variables. Third, the sample size (230 responses) surpassed the minimum requirements for using the structural model considering the formative indicators and structural paths (Hair et al., 2016). Finally, PLS-SEM offers advanced techniques for the evaluation of results, including common method variance analysis, the heterotrait-monotrait ratio of correlations (HTMT) for discriminant validity, and multi-group analysis (Richter et al., 2016). In short, PLS-SEM represented a suitable method for conducting the empirical analysis. Thus, we used bootstrapping with 5000 subsamples, which is a nonparametric procedure, to test the statistical significance of the path coefficients (Davison & Hinkley, 1997).

### 3.4. Reliability

Various tests were conducted to ensure the reliability and validity of this study. Specifically, Cronbach's alpha ( $\alpha$ ) and construct reliability (CR) measures were used to assess the reliability of the factors, as shown in Table A1 and Table A2. The  $\alpha$  values for the first- and second-order constructs were between 0.80 and 0.95, and the individual factor loadings were between 0.79 and 0.98. These values were greater than the generally accepted threshold of 0.70 (Hair et al., 2016). For reliability reasons, the first item in the *Exploration orientation* variable had a significantly lower contribution (0.56). The item was omitted without this change, causing significant changes to the results. The values for composite reliability (CR) were between 0.88 and 0.95, supporting instrument reliability. Finally, the average variance extracted (AVE) values for the first-order constructs were between 0.72 and 0.91. These values were greater than the acceptance level of 0.50 and support convergent validity.

### 3.5. Nonresponse and common method bias

A multi-group analysis was conducted to investigate potential nonresponse bias (Armstrong & Overton, 1977). Specifically, the potential differences between early and late respondents were compared by creating two groups based on the median. The results in Table A7 reveal no significant differences in the effects between early and late respondents. Thus, nonresponse bias problems were not identified.

Harman's single-factor test was used to examine potential common method bias (Podsakoff & Organ, 1986). The results of the exploratory factor analysis of all items in the model show that four factors had eigenvalues greater than 1. In addition, the first factor explained 34% of the variance. This variance was less than 50%, so common method bias was unlikely to be a problem.

## 4. Results

This section presents the results for the PLS-SEM analysis based on recent research (Cepeda-Carrion, Cegarra-Navarro, & Cillo, 2019; Joe F Hair, Risher, Sarstedt, & Ringle, 2018). Table A3 and Table A4 show the descriptive statistics for the variables. Table A5 and Fig. 1 display the empirical results of the hypothesis testing. The path coefficients from the PLS-SEM analysis show that *Digital platform capability* has a significant positive effect on *Network capability* ( $\beta = 0.200$ ;  $t = 2.930$ ;  $p = 0.003$ ), thereby supporting H1. The  $R^2$  and the adjusted  $R^2$  values are 0.040 and 0.036, respectively, suggesting that *Digital platform capability* explains 3.6% of the variance of *Network capability*.

The results of the PLS-SEM analysis also show that *Network capability* has a significant positive effect on *SME performance* ( $\beta = 0.128$ ;  $t = 1.971$ ;  $p = 0.049$ ), thereby supporting H2. The results reveal the significance of the moderating effects. *Exploitation orientation* exerts a significant negative effect on the relationship between *Network capability* and *SME performance* ( $\beta = -0.397$ ;  $t = 2.521$ ;  $p = 0.012$ ), thereby supporting H3. In contrast, the moderating effect of *Exploration orientation* on the relationship between *Network capability* and *SME performance* is significant and positive ( $\beta = 0.354$ ;  $t = 2.594$ ;

$p = 0.010$ ). The  $R^2$  and the adjusted  $R^2$  values are 0.216 and 0.188, respectively, suggesting that the model explains 18.8% of the variance of the dependent variable.

The significant effects of *Digital platform capability* on *Network capability* and *Network capability* on *SME performance* suggest the existence of a mediating effect. The results of PLS-SEM show a positive indirect effect of *Digital platform capability* on *SME performance* via *Network capability* ( $\beta = 0.025$ ). The low significance level ( $p = 0.103$ ) calls for further analysis. Based on previous research (Ali, Ali, Leal-Rodríguez, & Albort-Morant, 2018; Hayes, 2018; Leal-Rodríguez, Ariza-Montes, Roldán, & Leal-Millán, 2014), we introduced moderators in the analysis of the mediating effect. Table A6 shows the results for the conditional indirect effects. The results show that the bias-corrected bootstrap 95% confidence intervals are either above or below zero, which indicates that the indirect effects are significant at different levels of the moderators. Specifically, the indirect effect of *Digital platform capability* on *SME performance* is positive at low levels of both *Exploitation orientation* and *Exploration orientation*. The results also show that the indirect effect is negative at high levels of *Exploitation orientation* and positive at high levels of *Exploration orientation*.

Regarding control variables, the results show the nonsignificant effects of *Age* ( $\beta = -0.038$ ;  $t = 0.721$ ; *n.s.*) and *Size* ( $\beta = -0.047$ ;  $t = 0.978$ ; *n.s.*). The results show that *International orientation* has a significant positive effect on *SME performance* ( $\beta = 0.191$ ;  $t = 2.738$ ;  $p = 0.006$ ).

Finally, recent research calls for the introduction of new robustness techniques (Sarstedt et al., 2019). Thus, we studied potential nonlinear effects by running a model including quadratic effects. The estimated coefficient for the quadratic effect is nonsignificant ( $\beta = 0.054$ ;  $p$ -value = 0.217). Thus, the results only show significant linear effects.

## 5. Discussion and conclusion

Digitalization has become a strategic priority for an increasing number of entrepreneurial SMEs (Chan et al., 2018; Li et al., 2016). The diffusion of digital platforms is based on the unprecedented benefits of managing large and growing numbers of diverse relationships and ever-increasing amounts of information (McAfee & Brynjolfsson, 2012). The platform approach represents an emerging research stream that presents opportunities for efficiency improvements and innovation thrusts (Jacobides et al., 2018; McIntyre & Srinivasan, 2017; Parker et al., 2016; Wareham et al., 2014). However, current understanding of the performance implications of implementing digital platforms is limited, and many firms' digitalization efforts are unsuccessful (de Reuver et al., 2018; Frishammar et al., 2018). This lack of success is especially relevant for entrepreneurial SMEs because of their liability of smallness, which creates unique challenges (Giotopoulos et al., 2017; Nasco et al., 2008). Recent research therefore calls for further developments to explain the relationship between digital platforms and entrepreneurial SMEs' performance (Mohd Salleh et al., 2017).

The platform approach is characterized by unique modular architectures consisting of interrelated technical elements and the rules governing the agents using these elements (Tiwana, 2014). Accordingly, adopting digital platforms has become a strategic decision involving core resources and routines within the organization (Yeow et al., 2018). More specifically, solely acquiring ICT cannot automatically bring significant performance improvements (Melville et al., 2004; Mikalef & Pateli, 2017); a digital platform capability is necessary (Helfat & Raubitschek, 2018; Teece, 2018). Given the external orientation of the platform approach, digital capability may affect the way firms relate to external partners. In fact, considerations of exploitation and exploration orientations may be critical to explain the profitability of digital platform capability (Junni et al., 2013). Nevertheless, insights into how the impact of digital platforms on performance relates to matters of internal organization are scarce.

This study contributes to filling this research gap by examining the

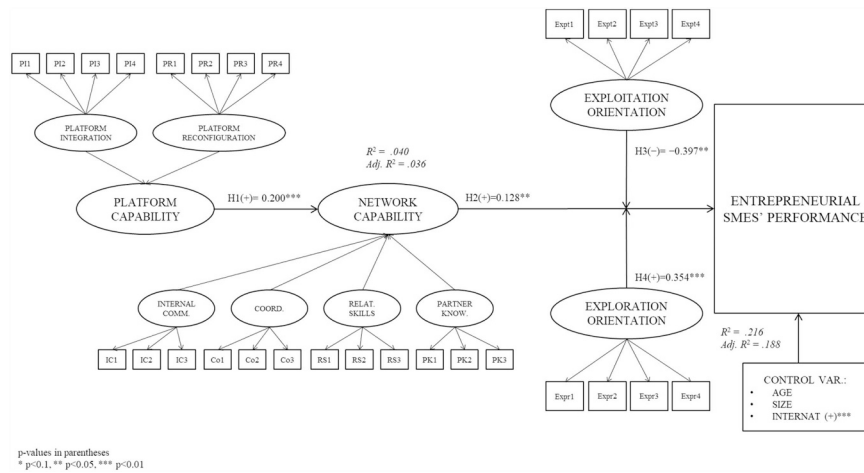


Fig. 1. Results of the structural model.

indirect effect, via network capability, of digital platform capability on performance. Moreover, this study examines the moderating effect of the firm's orientation. Thus, the findings enhance current understanding of digital platform profitability in the context of entrepreneurial SMEs by providing insights into the consequences of the ability to manage networks and the significant influence of exploitation and exploration orientations.

5.1. Theoretical implications

This study contributes to the understanding of digital platform profitability in the context of entrepreneurial SMEs in several ways. First, the findings show that digital platform capability has a significant positive effect on network capability. The platform literature reports a shift in the value proposition from internal organizational boundaries toward network value (McIntyre & Srinivasan, 2017; Thomas et al., 2014). This finding adds to the platform literature by showing that the interdependencies of digital platform capability may induce enhancements in the ability to manage networks. This finding is relevant because the platform approach defends a broader scope of value creation involving several agents. However, major emphasis is on using an industrial level of analysis, with less attention on the implications for internal organization (Gawer, 2014). Based on recent research that shows the internal transformation that is necessary when adopting a platform approach (Cenamor et al., 2017), this finding stresses that digital platform capability can also positively affect an organization's other internal capabilities. Accordingly, digital platforms transform not only industries but also the internal resources and capabilities of organizations.

Second, the results show that network capability has a significant positive effect on performance. The literature reports that ICT-based capabilities may affect performance via other capabilities (Parida, Oghazi, & Cedergren, 2016; Ravichandran, 2018). The findings contribute to research on dynamic capabilities (Helfat & Raubitschek, 2018; Teece, 2018) by showing the importance of digital platform capability as a trigger that motivates and boosts the dynamism of existing dynamic capabilities. Specifically, digital platform capability enables improvements to efficiency and innovation, thereby facilitating the integration and reconfiguration of relationship management. The findings therefore unravel the complexity of platform profitability by showing that such platforms have an indirect effect on performance via enhanced network capability. Given the limited resources of entrepreneurial SMEs, this finding may help entrepreneurial SMEs deploy resources and capabilities more efficiently by improving entrepreneurial SMEs' planning.

Finally, the findings show significant differences between the

moderating effects of exploitation and exploration orientations. The literature stresses that alignment between a firm's organizational orientation and that firm's digital strategy is necessary for success (Li et al., 2016; Tiwana, 2014; Wan et al., 2017; Yeow et al., 2018). The findings contribute to the literature on both entrepreneurship and ambidexterity (March, 1991; Solís-Molina et al., 2018; Yunis et al., 2018) by explaining that exploitation and exploration orientations may, respectively, hinder and enhance the indirect effect of digital platform capability on performance. This finding is especially relevant for entrepreneurial SMEs because entrepreneurial SMEs usually focus on either exploitation or exploration (Solís-Molina et al., 2018). Thus, the findings suggest that entrepreneurial SMEs may benefit from an exploration orientation when pursuing digitalization. The findings thereby shed light on the organizational logics that support or undermine the profitability of digital platform capability in the context of entrepreneurial SMEs.

5.2. Managerial implications

This study has the following managerial implications. Because of limited resources and capabilities, entrepreneurial SMEs must address significant obstacles to benefit from digital platforms. A lack of understanding and the liability of smallness may discourage entrepreneurial SMEs from adopting digital platforms (Li et al., 2017). The platform approach represents a paradigm that may enable entrepreneurial SMEs to successfully benefit from digital platforms. For example, big data, marketplaces, and crowdfunding platforms offer new profitable opportunities to entrepreneurial SMEs in terms of new value propositions, new markets, and new access to resources (Jin & Hurd, 2018; Nambisan et al., 2018; Subramaniam et al., 2018). However, the platform approach is a complex paradigm that affects diverse resources and capabilities. The findings offer some insights into the indirect effect of digital platform capability on performance via network capability. Thus, the results suggest that successful entrepreneurial SMEs improve their performance by having a digital platform capability that enhances their network capability. Moreover, the results on the moderating effects of different orientations can help managers in entrepreneurial SMEs to focus on an exploration orientation. This focus will enable them to reap the innovative benefits that platform-enhanced network capability provides, and thus develop the factors that contribute to long-term performance.

5.3. Limitations and future research

This study has several limitations regarding the interpretation of the findings. The study focuses on network capability because of the

networked nature of the platform approach. However, digital platform capability may also affect other operational and dynamic capabilities. Future research should therefore consider additional capabilities to analyze potential mediating effects and the differences between these capabilities. Another limitation is that this study uses a sample of manufacturing SMEs. The role of entrepreneurial SMEs in industry can determine the profitability of exploitation and exploration orientations. Thus, future research may extend these findings to entrepreneurial SMEs operating in service sectors or manufacturing SMEs with a high

degree of servitization by investigating potential similarities and differences in the results. Finally, the empirical context of Sweden was chosen because of the high relevance of entrepreneurial SMEs and digitalization. However, these specific conditions may play a notable role in explaining the results. Accordingly, the role of digital platform capability may be different for entrepreneurial SMEs in countries with different institutional support for entrepreneurship and different levels of digitalization. A cross-country analysis comparing these potential differences may inspire further research.

**Appendix A**

**Table A1**  
Measurement model results for first-order constructs (Mode A) (Step I).

Constructs and items	Item wording	S.L.	S.E.	t-Val.	$\alpha$	$\rho_A$	C.R.	AVE	VIF
<b>Platform integration DPC</b>									
PINT1	Our platform easily accesses data from our partners' IT systems	0.88	0.02	55.10	0.92	0.92	0.94	0.80	2.18
PINT2	Our platform provides seamless connection between our partners' IT systems and our IT systems (e.g., forecasting, production, manufacturing, shipment etc.)	0.92	0.01	74.87					
PINT3	Our platform has the capability to exchange real-time information with our partners	0.91	0.02	54.94					
PINT4	Our platform easily aggregates relevant information from our partners' databases (e.g., operating information, business customer performance, cost information etc.)	0.87	0.02	44.09					
<b>Platform reconfiguration DPC</b>									
PREC1	Our platform is easily adapted to include new partners	0.87	0.02	48.36	0.90	0.90	0.93	0.78	2.18
PREC2	Our platform can be easily extended to accommodate new IT applications or functions	0.90	0.02	58.45					
PREC3	Our platform employs standards that are accepted by most current and potential partners	0.89	0.02	56.63					
PREC4	Our platform consists of modular software components, most of which can be reused in other business applications	0.87	0.02	46.22					
<b>Internal communication NC</b>									
IC1	In our company we have regular meetings for every project	0.83	0.03	27.44	0.82	0.83	0.89	0.73	2.35
IC2	In our company employees develop informal contacts among themselves	0.90	0.02	57.81					
IC3	In our company managers and employees often give feedback to each other...	0.84	0.03	27.44					
<b>Coordination NC</b>									
CO1	In our company we analyze what we would like and desire to achieve with which partner	0.95	0.01	103.95	0.95	0.95	0.97	0.91	2.75
CO2	In our company we develop relations with each partner based on what they can contribute	0.95	0.01	86.55					
CO3	In our company we discuss regularly with our partners how we can support each other	0.96	0.01	117.73					
<b>Relationship skills NC</b>									
RS1	In our company we have the ability to build good personal relationships with our business partners	0.92	0.02	61.97	0.91	0.91	0.94	0.85	2.84
RS2	In our company we can deal flexibly with our partners	0.94	0.01	79.55					
RS3	In our company we almost always solve problems constructively with our partners.	0.91	0.02	58.52					
<b>Partner knowledge NC</b>									
PK1	In our company we know our partners' markets	0.79	0.03	25.85	0.80	0.81	0.88	0.72	2.03
PK2	In our company we know our partners' products/procedures/services	0.89	0.02	55.56					
PK3	In our company we know our partners' strengths and weaknesses	0.86	0.03	27.25					
<b>Exploitation orientation</b>									
ET1	In order to stay competitive, our supply chain managers focus on reducing operational redundancies in our existing processes.	0.94	0.08	11.47	0.95	1.10	0.95	0.83	2.20
ET2	Leveraging of our current supply chain technologies is important to our firm's strategy.	0.98	0.07	14.22					
ET3	In order to stay competitive, our supply chain managers focus on improving our existing technologies.	0.91	0.08	11.67					
ET4	Our managers focus on developing stronger competencies in our existing supply chain processes.	0.80	0.09	8.59					
<b>Exploration orientation</b>									
ER1	We proactively pursue new supply chain solutions. [Omitted]	0.56	0.51	2.01	0.93	1.14	0.95	0.87	2.25
ER2	We continually experiment to find new solutions that will improve our supply chain.	0.96	0.05	20.69					
ER3	To improve our supply chain, we continually explore for new opportunities.	0.91	0.06	14.71					
ER4	We are constantly seeking novel approaches in order to solve supply chain problems.	0.94	0.05	20.81					

**Table A2**  
Measurement model results for second-order constructs (Mode B) (Step II).

Second-order constructs	Path. coeff.	S.E.	t-Values	p-Values	$\alpha$	$\rho_A$	C.R.	AVE	VIF
Digital platform capability					0.93	0.93	0.95	0.69	1.00
Platform integration	0.54	0.01	50.29	0.00					
Platform reconfiguration	0.53	0.01	50.21	0.00					
Network capability					0.94	0.94	0.95	0.61	1.21
Internal communication	0.26	0.01	27.18	0.00					
Coordination	0.33	0.01	30.37	0.00					
Relationship skills	0.31	0.01	33.69	0.00					
Partner knowledge	0.25	0.01	21.76	0.00					



**Table A3**  
Descriptive statistics after the Step I: Mean, S.D., and HTMT for discriminant validity.

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1. Platform integration	3.32	1.64												
2. Platform reconfiguration	3.79	1.53	0.806											
3. Internal communication	4.59	1.33	0.156	0.268										
4. Coordination	5.47	1.41	0.094	0.178	0.748									
5. Relationship skills	5.11	1.33	0.122	0.224	0.803	0.812								
6. Partner knowledge	4.86	1.34	0.195	0.285	0.785	0.73	0.726							
7. Exploitation orientation	4.60	1.54	0.210	0.295	0.393	0.176	0.139	0.370						
8. Exploration orientation	4.47	1.44	0.242	0.292	0.436	0.195	0.269	0.359	0.781					
9. Age	31.41	18.62	0.036	0.043	0.051	0.008	0.038	0.063	0.088	0.065				
10. Size	28.34	20.49	0.063	0.070	0.126	0.109	0.121	0.158	0.180	0.171	0.005			
11. International orientation	18.09	29.54	0.080	0.035	0.093	0.063	0.045	0.049	0.035	0.132	0.011	0.008		
12. Performance	4.68	43.43	0.129	0.088	0.115	0.069	0.145	0.131	0.107	0.061	0.096	0.074	0.127	

**Table A4**  
Descriptive statistics after the Step II: Mean, S.D., and HTMT for discriminant validity.

	Mean	S.D.	1	2	3	4	5	6	7	8
1. Digital platform capability	3.56	1.47								
2. Network capability	5.01	1.17	0.242							
3. Exploitation orientation	4.60	1.54	0.280	0.303						
4. Exploration orientation	4.47	1.44	0.295	0.356	0.781					
5. Age	31.41	18.62	0.031	0.042	0.088	0.065				
6. Size	28.34	20.49	0.077	0.147	0.180	0.171	0.005			
7. International orientation	18.09	29.54	0.061	0.069	0.035	0.132	0.011	0.008		
8. Performance	4.68	43.43	0.073	0.13	0.107	0.061	0.096	0.074	0.127	

**Table A5**  
Summary of the results.

Structural paths	Path. coeff.	S.E.	t-Values	p-Values	Hypothesis
<b>Direct effects</b>					
Digital platform capability → Network capability	0.200	0.068	2.930	0.003	H1; supported
Network capability → Entrepreneurial SMEs' performance	0.128	0.065	1.971	0.049	H2; supported
<b>Moderating effect</b>					
Exploitation orientation × Network capability → Entrepreneurial SMEs' performance	-0.397	0.157	2.521	0.012	H3; supported
Exploration orientation × Network capability → Entrepreneurial SMEs' performance	0.354	0.136	2.594	0.010	H4; supported
<b>Mediating effect</b>					
Digital platform capability → Network capability → Entrepreneurial SMEs' performance	0.025	0.016	1.631	0.103	Additional test
<b>Goodness of model fit</b>					
Standardized root-mean square residual composite model = 0.079					
<b>Structural model fit</b>					
$R^2_{(\text{Network capability})} = 0.040$					
$R^2_{(\text{Performance})} = 0.216$					
<b>Predictive relevance of model fit</b>					
$Q^2_{(\text{Network capability})} = 0.034$					
$Q^2_{(\text{Performance})} = 0.079$					

**Table A6**  
Summary of the results for the mediation analysis.

Mediation: Digital platform capability → Network capability → Entrepreneurial SMEs' performance				
Moderator	Indirect effect	Boot SE	Lower CI	Upper CI
Exploitation/Exploration orientation (Low)	2.31	1.55	0.08	6.04
Exploitation orientation (High)	-4.34	3.22	-12.64	-0.25
Exploration orientation (High)	8.17	5.74	0.45	22.43

**Table A7**  
Summary of the results of multi-group analysis.

Effects	Path. coeff. diff	t-Values	p-Values	Conclusion
Direct effects				
Digital platform capability → Network capability	0.080	0.587	0.558	Non-significant difference
Network capability → Entrepreneurial SMEs' performance	0.004	0.017	0.987	Non-significant difference
Moderating effect				
Exploitation orientation × Network capability → Entrepreneurial SMEs' performance	0.176	0.439	0.661	Non-significant difference
Exploration orientation × Network capability → Entrepreneurial SMEs' performance	0.132	0.293	0.770	Non-significant difference

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