



Contents lists available at ScienceDirect

## Journal of International Management

journal homepage: [www.elsevier.com/locate/intman](http://www.elsevier.com/locate/intman)

# The Formation, Consolidation, and Transition of International Brokerage Networks: The Case of an International New Venture in an Emerging Market

Qian Xiang<sup>a</sup>, Daomi Lin<sup>b,\*</sup>, Jianjing Wang<sup>c</sup>

<sup>a</sup> School of Finance and Economics, Guangdong Polytechnic Normal University, China

<sup>b</sup> Sun Yat-sen Business School, Sun Yat-sen University, China

<sup>c</sup> Lingnan College, Sun Yat-sen University, China

## ARTICLE INFO

### Keywords:

International new venture  
Brokerage network  
Triadic closure  
Emerging industry  
Emerging market

## ABSTRACT

Brokerage has been considered an important source of opportunity in international entrepreneurship. While extant research focuses on pre-existing social capital that underlies the brokerage position, little attention has been paid to the evolutionary process and the contextual conditions of becoming a broker and its transition over time. This study addresses these issues through a single case study of an international new venture (INV) founded in the emerging electric vehicle industry in China, an emerging market. The findings show that by reducing transaction costs, INVs can build initial brokerage positions by integrating technological capabilities with marketing capabilities, consolidate the brokerage network by leveraging a diverse customer base and supplier networks, and transition from a bridging focus to a coordination focus through trust-building and knowledge diffusion as structural holes close over time. This path is more effective in international business, emerging markets, and emerging industries, as these contexts have high transaction costs arising from unclear labor division, fragmentation, ambiguous standards, information asymmetry, and potential opportunistic behaviors. This study contributes to the international entrepreneurship and brokerage literature by examining the process of formation, consolidation, and transition of international brokerage networks through the evolutionary and the contextual lens.

## 1. Introduction

Research has demonstrated that international brokerage opportunities serve as an important source of international entrepreneurship (IE) (Chen and Tan, 2009; Oviatt and McDougall, 2005). Since brokers have information and control benefits over otherwise disconnected parties, they are more likely to recognize and are more capable of exploiting opportunities (Burt, 2000). Brokerage opportunities can be more salient in international business since cross-border transactions carry greater costs of communication and transportation and higher uncertainty based on institutional and cultural differences (Brouthers, 2002; Delios and Beamish, 1999). Several studies have demonstrated that brokers' ability to reduce international transaction costs for two parties underpins their competitive advantage in cross-border business (i.e., Ellis, 2003; Peng and York, 2001; Tracey and Phillips, 2011).

\* Corresponding author at: Lingnan College, Sun Yat-sen University, Office 563, No.6 Lanyuan Building, East Campus of Sun Yat-sen University, 132 Outer Ring East Road, Panyu District, Guangzhou 501275, China.

E-mail address: [lindm6@mail.sysu.edu.cn](mailto:lindm6@mail.sysu.edu.cn) (D. Lin).

<https://doi.org/10.1016/j.intman.2022.100995>

Received 21 May 2020; Received in revised form 8 November 2022; Accepted 16 November 2022

Available online 28 November 2022

1075-4253/© 2022 Elsevier Inc. All rights reserved.

However, previous research has focused on the benefits of brokerage positions in identifying and exploiting international entrepreneurial opportunities (Spulber, 2003; Peng and York, 2001) while taking the condition of being a broker for granted. This is especially the case for international new ventures (INVs), which “from inception, seek to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries” (Oviatt and McDougall, 1994: 49). Despite the increasing attention being paid to the role of brokers in IE, the process of how to become an international broker and how the brokerage position changes over time have received relatively scant attention. This is a significant omission because INVs are different from traditional international firms in that they have few built-in advantages and resource endowments to build brokerage positions from scratch, let alone maintain the advantages over time. Therefore, the establishment and the evolution of brokerage networks under resource constraints remain important questions for INVs.

This study attempts to answer the above questions by studying a born global firm in the Chinese electric vehicle (EV) industry because the contexts of emerging market (i.e., China) and emerging industry (i.e., EV industry) provide a clear manifestation of establishing and consolidating international brokerage advantages under resource constraints and uncertainty (Tracey and Phillips, 2011; Sapsed et al., 2007). First, international brokerage opportunities could be more prominent in emerging markets where weak formal institutions and environmental turbulence induce more uncertainty and ambiguity in impersonal transactions (Batjargal et al., 2013; North, 1990). This disparity and the notable cultural differences in emerging market countries compared to developed countries call for a delicate investigation (Hoskisson et al., 2000; Xiao and Tsui, 2007). Second, emerging industries are different from established industries in that they are fragmented and characterized by market and technological uncertainty, which could be a critical source of information asymmetry that incentivizes firms to exploit brokerage opportunities (Agarwal et al., 2017; Mezas and Kuperman, 2000).

We conducted a single case study of a Chinese INV—GREENMO—that has sold electric vehicles and components to the overseas market since 2012. Despite the lack of prior entrepreneurial experience, technological knowledge, and industry-specific overseas networks, GREENMO achieved high growth at its start by brokering between overseas customers and domestic suppliers. It is a typical case that depicts how a resource-constrained firm builds initial linkages with customers, consolidates the brokerage position, and maintains its advantages after closing the structural hole (i.e., triadic closure) at the adolescent stage of an industry and in a market with institutional voids.

Our study contributes to the literature on brokerage networks and international entrepreneurship. First, this study uncovers the process of the formation, consolidation, and transition of an international broker as an INV, enriching our understanding of the evolution of the international brokerage network. Second, this study contributes to the network literature and reveals that triadic closure might not curtail information and control benefits but rather sustain brokering advantages by transforming the broker's role from intermediating between disconnected parties to coordinating between connected parties, which echoes the *tertius iungens* orientation (Obstfeld, 2005). Third, this study contributes to the international entrepreneurship literature by shedding light on the specific contextual characteristics that enable international brokers to form and evolve through reducing transaction costs, contributing to the boundary conditions of the view of “entrepreneurs as intermediaries/brokers” (Ellis, 2003; Peng et al., 2014).

## 2. Theoretical foundations

This section sets out to establish a theoretical foundation for this study. First, we review the literature on international entrepreneurship and social network theory, highlighting the role of brokerage networks and the importance of their formation and evolution in early internationalization. Then we take a closer look at the roles of specific contextual conditions (i.e., emerging markets and emerging industries) in this process. In so doing, we build the theoretical foundation to study the dynamics of brokerage networks in international entrepreneurship in the contexts of emerging industries and emerging markets.

### 2.1. The dynamics of brokerage networks in international entrepreneurship

Literature about INVs has demonstrated the important role of networks in facilitating early and rapid internationalization (Andersson et al., 2018; Chetty and Campbell-Hunt, 2004). First, founders' networks usually provide INVs with early access to foreign customers and suppliers, as well as overseas information and knowledge, which enable them to skip the step-by-step internationalization process and engage in international markets rapidly (Casillas et al., 2015; Freeman et al., 2006; Schwens and Kabst, 2009). Second, international business networks also help INVs gain knowledge about overseas opportunities and send out reliable and trustworthy referral signals (Galkina and Chetty, 2015; Ripollés and Blesa, 2022; Zhou et al., 2007). Among them, the specific role of the brokerage network has been demonstrated in international entrepreneurship (Andersson et al., 2018; Gerschewski et al., 2015; Schwens and Kabst, 2009). For example, cooperative interfirm relationships that bridge geographically remote areas contribute to international new firm formation (Bae et al., 2011). Similarly, organizations that bridge other actors with information and knowledge may promote neglected areas of creativity and potentially disruptive innovations (Sapsed et al., 2007).

The network literature has also built a solid theoretical foundation to understand the impact of brokerage on international entrepreneurship (Chen and Tan, 2009; Ellis, 2011). Brokers are “intermediate actors that facilitate transactions between other actors lacking access to or trust in one another” (Marsden, 1982: 202). According to the social network and structural holes theory, an actor bridging the two disconnected parties can manipulate or exploit those parties to the actor's benefit (Burt, 1992), thereby giving rise to entrepreneurial opportunities. Because of the greater homogeneity of information within, instead of between, groups, brokers who bestride structural holes usually obtain information early and comprehensively (Burt, 2004). In addition to these information benefits, brokers enjoy control benefits through negotiating between two parties whose relationship is subject to inevitable uncertainties (Burt,

1992).

Reducing transaction costs for otherwise disconnected parties is also key to brokerage opportunities (Williamson, 1985), which is articulated in the view of “entrepreneurs as intermediaries” (Ellis, 2003; Peng et al., 2014). Brokers, who possess more comprehensive information and control benefits, can reduce transaction costs involved in the searching, negotiation, and monitoring processes and reach a more profitable exchange for both parties (Burt, 2004; Peng et al., 2014). Transaction costs are prevalent in cross-border businesses since linguistics, search, monitoring, enforcement, and negotiation costs impose great uncertainty and risks on firms (Brouthers and Brouthers, 2003; Chen, 2010). An international broker can reduce transaction costs to accelerate the deal to close, a way in which international entrepreneurial opportunities emerge (Lin et al., 2016; Peng and York, 2001).

Despite the theoretical foundation provided by the structural hole theory and transaction cost economies, the process of how INV brokerage networks form during early internationalization has mainly been overlooked with few exceptions (e.g., Coviello, 2006). It remains unclear how INVs develop into international brokers when they have few resources or network endowments. Moreover, the opinions about how brokers evolve have diverged. Following the view of structural holes (Burt, 1992, 2000), a brokerage advantage built upon structural holes could eventually be undermined as the disconnected parties meet and directly connect (i.e., triadic closure) (Greve et al., 2010). This type of brokerage benefit rests on an active separation of the two parties tied to the third. In contrast, another stream of research emphasizes the benefits of cohesion in networks (i.e., trust and relational embeddedness) (Coleman, 2009) and argues that the persistence of brokerage positions decreases broker performance (Min and Mitsuhashi, 2012). Along this line, Obstfeld (2005) contends that brokers with triadic closure can sustain their advantages by continuously providing essential coordination for two parties. Given the two contrasting views, how brokers evolve (i.e., whether and through what mechanisms brokers would maintain separation between the two parties or coordinate between the connected parties) remains to be uncovered. Therefore, it is necessary to explore the formation, evolution, and transition of brokerage networks. In addition, contextual conditions play important and specific roles in this process. The remainder of the section outlines the characteristics of emerging markets and industries and their potential impacts on brokerage networks.

## 2.2. Emerging markets as a context for international brokerage

Emerging markets have gained growing attention in recent research on INVs. Characterized as turbulent and immature, emerging markets pose non-negligible impacts on INVs (Andersson et al., 2018; Falahat et al., 2018). INVs from emerging markets usually suffer greater liabilities of foreignness during internationalization, and those who develop networking and marketing capabilities are more capable of overcoming liabilities (Andersson et al., 2018; Bucciari et al., 2021; Ngasri and Freeman, 2018). It is also noted that INVs from emerging markets are more motivated to seek strategic assets aggressively from the outset and exploit internationalization opportunities (McCormick and Somaya, 2020; Kumar et al., 2020). Despite these insights, the literature has paid limited attention to how emerging markets facilitate or constrain the formation and transition of international brokerage networks. While the Western context serves as the backbone of structural hole theory, we have little knowledge about how brokerage advantages form and evolve in emerging markets, especially the Eastern context, such as China, despite the salient information asymmetry highlighted in previous studies (Khanna and Rivkin, 2001; Peng, 2003). Emerging markets such as China differ from developed and Western countries in the following notable ways, affecting brokerage advantages' formation and evolution.

First, developed countries provide mature and stable institutions to ensure efficient contract-making and enforcement. At the same time, emerging markets are well recognized as incomplete formal institutions (e.g., lack of legal protection of property rights, weak enforcement of commercial laws, and inefficient market intermediaries) (Freeman and Cavusgil, 2007; Peng, 2003). Moreover, emerging markets are likely to be in the process of economic transition, which also increases environmental turbulence (Hoskisson et al., 2000; Peng, 2003). Therefore, entrepreneurial firms in emerging markets are confronted with more significant uncertainty and ambiguity about regulations and policies due to the immature and frequently changing environment, which explains a higher need for brokers in cross-border transactions to circumvent the deficiency of institutional support (Peng and Wang, 2002).

Second, since formal institutional voids in emerging markets place constraints on impersonal economic exchanges, informal institutions, such as cognitive norms and cultural settings, are essential in facilitating transactions as a substitute for formal institutions (Peng and York, 2001). For example, in China, *guanxi*, a unique network tie that relies on interpersonal trust rather than generalized social trust, is ubiquitous in social interactions (Chen et al., 2004). As a home-based network tie, *guanxi* plays a mediating role in INVs' internationalization and performance (Zhou et al., 2007). In this context, foreign firms that intend to launch businesses are disadvantaged since they cannot resort to formal institutional support to secure transactions or employ political connections to acquire resources during initial market entry (Ahlstrom et al., 2002). Moreover, Eastern countries are culturally different from Western countries. The collectivist culture is more likely to dampen the benefits of structural holes due to its dissonance with the dominant spirit of cooperation (Xiao and Tsui, 2007).

Due to the deficiency of legal and regulatory frameworks and the unique informal institutional context, both foreign firms and domestic firms face higher transaction costs, which influence the identification and exploitation of brokerage opportunities in emerging markets (Chen et al., 2010; Li et al., 2017). Overall, emerging and eastern markets (i.e., China) serve as a unique setting to understand contextual influences on brokerage formation and evolution.

## 2.3. Emerging industries as a context for international brokerage

Emerging markets are not the only contexts that imply higher transaction costs. Industry characteristics such as uncertainty and fragmentation also increase transaction costs and thus shape the dynamics of brokerage position in INVs' internationalization. The

emerging or growth phase of industry development typically displays high uncertainty in market needs and technology development, as well as market turbulence caused by frequent entries and exits (Agarwal et al., 2017). Compared with mature industries, emerging industries are usually characterized by a lack of well-structured institutions and norms, little coordination among actors, weak institutional environment, and high uncertainty, which provide more opportunities for new ventures while incumbents are probably reluctant to adapt (David et al., 2013; Jiang et al., 2011; Maguire et al., 2004). Moreover, with the fluctuation in market demands of emerging industries worldwide, insufficient demand in the domestic market could be a driving force for firms' early internationalization (Chetty and Campbell-Hunt, 2004; Karra et al., 2008).

On account of the transaction costs imposed by uncertainty, turbulence, and ambiguity in emerging industries, the extant literature has demonstrated the important role of brokers in facilitating information flows and resource acquisition (Sapsed et al., 2007). Since knowledge and technology are dispersed among separate organizations, brokers who bridge structural holes could promote knowledge flows by connecting actors with heterogeneous backgrounds in technology (Choi et al., 2011). In addition, compared to a mature industry with established standards and technology architecture, an emerging industry is unlikely to have a unified standard since established practices are absent and knowledge is fragmented and uncertain (Denoo et al., 2021). Integrating the knowledge of various organizations to address technological problems would benefit collective learning and industry development (Peltoniemi, 2011). Therefore, emerging industries serve as a unique context to understand how INVs can leverage the deficiency to build brokerage advantages.

In summary, the studies presented thus far highlight the importance of structural holes and transaction costs as the source of international brokerage opportunities and build a foundation to understand their dynamics. These studies also suggest that the emerging market and the emerging industry contexts in which firms are embedded might provide an unexcavated field to understand the formation and evolution of brokerage networks. Therefore, a case study might be suitable to examine the evolutionary process and the underlying context of how an INV forms a brokerage position and its transition of brokerage roles under resource constraints.

### 3. Method

Since this study aims to investigate the evolutionary process of forming and consolidating the international brokerage position, a qualitative design is deemed appropriate to examine the process, context, and intrinsic mechanisms underlying the phenomenon (Eisenhardt and Graebner, 2007; Liu, 2017; Yin, 2009). Rather than generalizing a common pattern from multiple cases, this study uses a single case study because it can reveal the detailed process from multiple perspectives while simultaneously emphasizing the context that incubates the formation and evolution of an INV's brokerage network (Eisenhardt and Graebner, 2007; Yin, 2009). Following the abductive approach (Dubois and Gadde, 2002), this study seeks to enrich international entrepreneurship theory by intertwining empirical observations and theoretical frameworks in a continuous reiteration between data, framework, and case analysis.

#### 3.1. Case selection

The INV we selected—GREENMO—was founded in 2011 in China by a nascent Chinese entrepreneur—Kevin. Since 2012, GREENMO has targeted the international market and sold electric motors to the global market. It accessed its foreign customers mainly through B2B platforms (e.g., Alibaba, Made-in-China) and industry exhibitions. We selected GREENMO for the following reasons. First, GREENMO is a typical INV that has explored the international market of electric motors since its founding and has become an intermediary company bridging domestic manufacturers and foreign customers. GREENMO is also in an emerging industry and emerging market since EV motors comprise a booming sector in the global market due to the current increasing environmental protection pressure from governments, institutions, and consumers.

Second, GREENMO's overseas revenue has sustained high growth since its inception. The yearly revenue of the company has almost doubled every year since 2012. GREENMO has rapidly extended its business relationships with overseas customers and domestic suppliers, with a growth of ten times within five years. Its overseas customers have a global distribution, of which a large proportion of the revenues are from developed countries (shown in Table 1 and Figs. 1–3 in Appendix A). The archival data indicate that GREENMO is a valuable case to demonstrate how international brokerage networks are initially formed and developed in INVs.

Third, unlike many founders of INVs who are well endowed with resources and international connections, including industry-specific experience and international business ties, GREENMO's founder had no industry-specific knowledge and few international business relationships in the field of manufacturing. As a resource-constrained start-up firm, GREENMO managed to compete with established firms<sup>1</sup> and grew rapidly. Starting with only four employees, its revenue in 2017 increased 19-fold over its initial revenue in 2012.

Given these criteria, GREENMO is an appropriate case to explore the dynamic process of international brokerage formation and development with resource constraints.

<sup>1</sup> We searched B2B platforms and found that at least three incumbent firms (Hepu Power, Shandong Super Motor Power, and Hohomer) competed with GREENMO in exporting electric motors and providing supply solutions. They were all founded earlier than GREENMO and had good financial performances by the end of 2016.

**Table 1**  
Overview of interviews.

Informants	Name	Type of stakeholder	Location	Interview method	Position	Number of interviews	Date of interviews	Synopsis of interview	Stages the interview covers
1	Kevin	Founder of GREENMO	Guangzhou, China	Face-to-face	Founder, CEO	6	6/8/2015	The current status of the firm and the industry structure of EV in China	Stage 1
				Face-to-face			23/12/2015	Career history of the founder; GREENMO's initial customer acquisition before 2014 and its strategic intent to be a total solution provider	Stage 1 and Stage 2
				Face-to-face			2/26/2016	How the firm developed into a total solution provider	Stage 2
				Face-to-face			12/20/2016	How the firm acquired customers and cooperated with suppliers to be the center of the brokerage ego network; Initial intent to do cooperative R&D	Stage 2
				Face-to-face			3/1/2017	How to connect the EV manufacturer and the overseas customers to collaborate in R&D	Stage 3
				Face-to-face			2/20/2018	The benefits and potential risks of triadic closure and future plans	Stage 3
2	Tony	Initial employees of GREENMO	Foshan, China	Face-to-face	Sales manager	2	12/20/2016	The process of acquiring customers and details of customer services	Stage 1 and Stage 2
				Face-to-face			3/1/2017	The differentiated processes of acquiring customers before 2014 and after 2014.	Stage 1, Stage 2 and Stage 3
3	Eric		Guangzhou, China	Face-to-face	Financial manager	1	3/1/2017	The development of the electric motor industry; Financial conditions of GREENMO	Stage 1, Stage 2 and Stage 3
4	Justin	Initial employees of GREENMO	Guangzhou, China	Face-to-face	Manufacturing manager	1	12/20/2016	Basic information about GREENMO's R&D and its motor manufacturing	Stage 1 and Stage 2
5	Harry	Supplier of controller	Foshan, China		CEO	1	12/28/2016	The motivation of cooperation, the detailed process of cooperation and intention of long-term cooperation	Stage 1, Stage 2 and Stage 3
6	Mr. Zhang	Supplier of Vehicle	Zhongshan, China	Face-to-face	CEO	1	12/28/2016		Stage 1, Stage 2 and Stage 3
7	Nicole	Supplier of Vehicle	Shanghai, China	Over the phone	Sales manager	1	2/22/2017		Stage 2
8	Mr. Zhong	Supplier of rear axle	Dongguan, China	Face-to-face	CEO	1	3/1/2017		Stage 2 and Stage 3

(continued on next page)

Table 1 (continued)

Informants	Name	Type of stakeholder	Location	Interview method	Position	Number of interviews	Date of interviews	Synopsis of interview	Stages the interview covers
9	Mr. Chris	Customer for scooters	The United States	Over the phone	General Manager	1	6/22/2017	The business transaction process with GREENMO, the cooperative relationship with GREENMO	Stage 2
10	Mr. Boris	Customer for electric bus	Croatia	Over the phone	Founder	1	6/22/2017		Stage 1 and Stage 2
11	Mr. Fadeel	Customer for scooters	Israel	Over the phone	Managing Director	1	12/24/2018		Stage 1 and Stage 2
12	Mr. Senthil	Customer for drive kit	India	Over the phone	Manager of engineering department	1	6/24/2017		Stage 1 and Stage 2

### 3.2. Data collection

We studied the internationalization process of GREENMO from 2012 to 2018 based on data from multiple sources. First, we collected data through formal interviews and informal contacts from 2015 to 2018, which, on the one hand, covered the ongoing development after 2015 and, on the other hand, was retrospective in terms of the development before 2015. To follow any strategic changes regarding the network positions of GREENMO, we contacted the founder CEO every three months to update relevant information and catch up with strategic changes. When critical changes were happening, such as establishing an ego-centric network or connecting the previously disconnected partners, we followed with formal in-depth interviews. In total, 18 formal in-depth interviews were conducted with GREENMO's founder and major stakeholders, including employees, domestic suppliers, and foreign customers, with informed consent given prior to the interviews. Table 1 provides an overview of our formal interviewees and the dates we interviewed them. All interviews lasted for 30 to 60 min or even longer and were recorded and transcribed. The data collection started with interviews with the founder. We asked the founder in detail about the entrepreneurial and internationalization processes of the company. Then, we asked the employees of GREENMO about the business process of serving foreign customers (e.g., online inquiries, delivery, site inspection, and after-sales service). With basic information about the internationalization process, we turned to suppliers and customers via purposeful sampling. This also helped to corroborate data and reduce any retrospective biases. We asked them about the evolving relationships with GREENMO and their motivations for concluding deals with GREENMO. We provided an interview protocol (Appendix B) to each interviewee before the interview, and we adapted the questions according to the information provided during the conversation. Additional informants and interviews were included as we moved back and forth between theory and empirical evidence to adjust and specify the theoretical question we attempted to address (Corbin and Strauss, 2014). Once we began to develop the evolving framework of this study, we used theoretical sampling to obtain information that could enrich the framework or adjust provisional propositions (Dey, 2007).

In addition to the interviews, we conducted four field visits to GREENMO and its suppliers in 2017 and made detailed field notes of what we observed in the factories. The observation data from suppliers' factories helped us verify information about the R&D collaboration between GREENMO and suppliers. Documents containing objective statistics were also collected, including financial statements, lists of customers and suppliers, search rankings, and products on [Alibaba.com](http://Alibaba.com) and [Made-in-China.com](http://Made-in-China.com). These documents shed light on the industry context and help triangulate our primary findings (Yin, 2009). We considered the data to be saturated when further data collection did not generate a deeper understanding of the case.

### 3.3. Data analysis

We conducted the data analysis by generating ideas through comparing empirical data with the literature and by using these ideas to direct the themes of the next round of interviews or the archival data collection iteratively. After each round of interviews, we asked a professional stenographer to transcribe the audio. Using NVivo 11.0, two authors coded the transcripts, field notes, and documents. First, we used open coding to generate meaningful phrases that reflected the interviewees' opinions about the case (Corbin and Strauss, 2014). This group of codes centered on how GREENMO built network ties with suppliers and customers in different stages of internationalization. We then returned to the literature to identify the correlations between the theory and our findings. Brokering as an entrepreneurial opportunity emerged as a potential explanation. With a more specific theoretical foundation, we repeated the open coding process until reaching saturation of the open codes. For example, the impediments that foreign customers face when doing business in China were emphasized in multiple interviews; these impediments arise from differences in culture, linguistics, and business practices between the Chinese market and foreign markets.

Second, we extracted short expressions from the refined open codes to generate second-order themes, such as "transaction costs due to cross-border business and the special context of a newly emerging industry." This step helped to develop conceptual categories that were related to both the empirical findings and the theories.

Third, after repeatedly generating first- and second-order codes to include all the relevant information and constantly comparing our information with the evolving theoretical framework, we aggregated the second-order themes into four key elements—contexts as sources of transaction costs to foster brokerage opportunities, forming initial linkages, consolidating the brokerage position, and



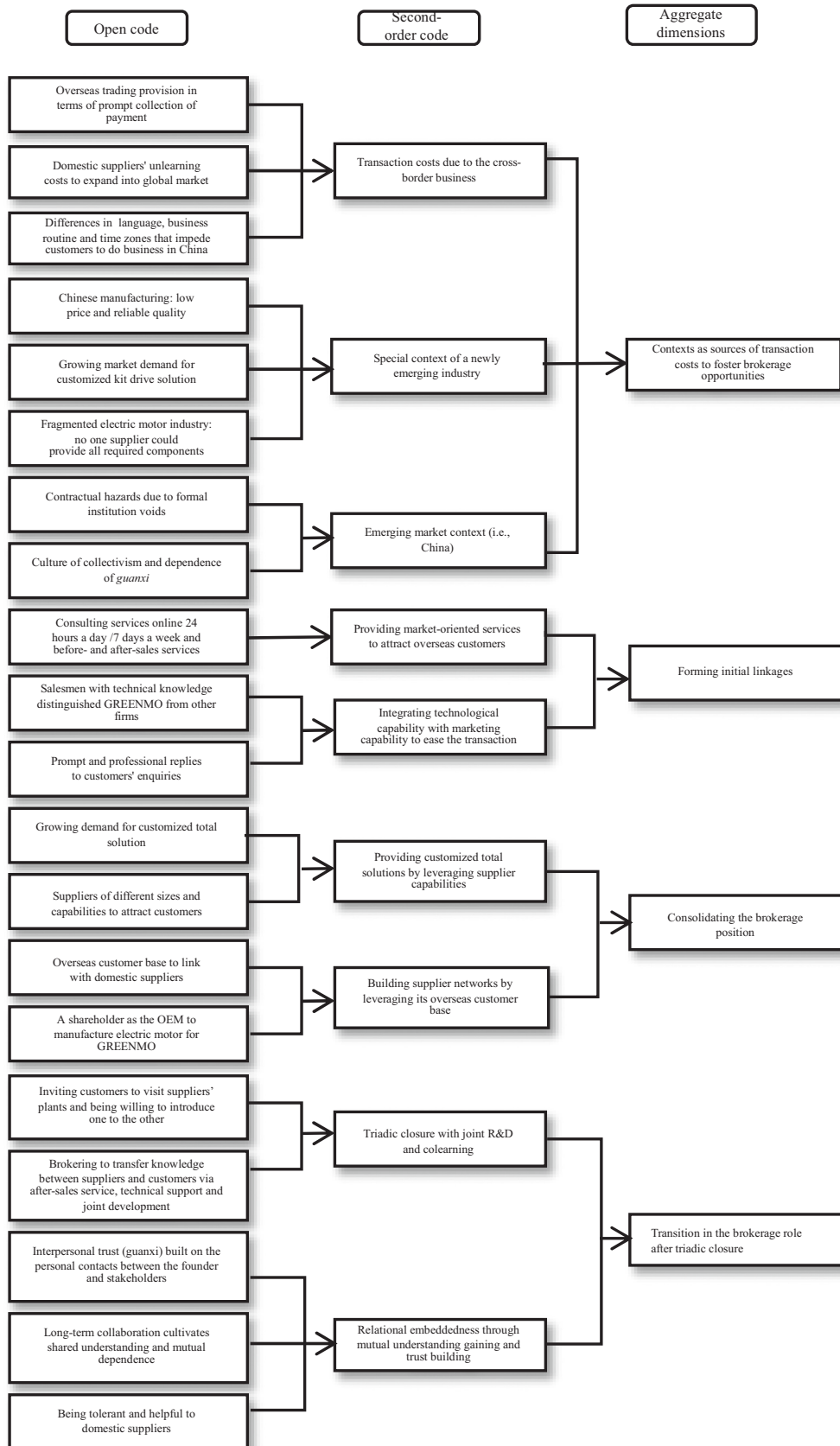


Fig. 1. Data structure.

transition in the brokerage role after triadic closure. The aggregate dimensions also indicate an ego network evolution process. Fig. 1 displays part of our coding process.

To ensure the construct validity of our research, we verified the important facts with multiple sources, including interviews with different informants and archival data. For example, we were first informed of the particular development stage of the EV industry in China by one of the employees of GREENMO. We recognized that the emerging and fragmented status of this industry might be an important contextual factor. Then, to corroborate the data, we collected information from news coverage, industry analyses, and other interviewees, including a sales manager of one reputable EV manufacturer in China and a foreign customer. Moreover, the validity of the findings was assured to some extent, as each coauthor independently coded the transcripts and discussed their disagreements about the categories (Miles and Huberman, 1994). We also invited colleagues familiar with INV research to comment on the manuscript for peer debriefing. Member checking was further adopted, and the founder of GREENMO checked and commented on our drafts. He agreed with our theoretical interpretation of GREENMO's internationalization process. In addition, to improve the internal validity, we applied theory triangulation by discussing different theoretical perspectives, such as the linkage-leverage-learning framework, transaction cost theory, and entrepreneurial opportunity theory, to interpret the findings during the research period (Yin, 2009), and we finally reached our current theoretical interpretation.

#### 4. Findings

We summarize our findings in Fig. 2, categorizing GREENMO's process of forming and consolidating the brokerage position into three stages. The first stage represents GREENMO's efforts to accumulate the first batch of overseas customers from 2012 to 2014 when Kevin seized the opportunity to export electric motors (i.e., low voltage AC (LVAC) motors<sup>2</sup>). With four newly recruited engineers and in cooperation with GH,<sup>3</sup> a domestic traditional motor manufacturer with design and manufacturing capacity in Fujian Province, GREENMO quickly formed initial relationships with overseas customers through e-commerce by integrating technological capabilities with marketing capabilities. In the second stage, from 2014 to 2016, GREENMO provided total customized solutions to overseas customers with EV components procured from various suppliers, an arrangement through which GREENMO leveraged its customer networks to reinforce supplier linkages and vice versa. This way, GREENMO consolidated its brokerage position and established its brokerage ego network. During the third stage, from 2016 to 2018, GREENMO transitioned its brokerage role from bridging the otherwise disconnected parties to coordinating the connected parties through increasing trust and effectively diffusing knowledge. Fig. 2 illustrates the mechanisms and characteristics of the brokerage network evolution in every stage and its underlying contexts. We summarize our findings for every stage in parallel with Fig. 2, with representative quotes shown in Table 2.

##### 4.1. Stage 1. Building linkages with initial overseas customers (2012–2014)

###### 4.1.1. Integrating technological capabilities with marketing capabilities

With the newly developed electric motor, GREENMO began to construct linkages with overseas customers in 2012. Based on Alibaba.com, GREENMO set out to acquire foreign customers by emphasizing its marketing capability. First, the differences in language and time zones, as well as business routines, set communication barriers between customers and sellers, which largely lowered the promptness, efficiency, and effectiveness of communication. To reduce this transaction cost, GREENMO's marketing personnel provided consulting services online 24 h a day/7 days a week to respond to customer requests and provide before- and after-sales services. Prompt replies to customers' inquiries differentiated GREENMO from its competitors and attracted overseas customers to enter a business contract.

".... I don't think there is any delay on their side. They are very quick. Usually less than an hour I get a reply, even through email." (Customer-Senthi, # 12).

"...Usually, Kevin or Tony or other people talk to me during the night even if they are not supposed to be working at that time. They work and adapt to European business hours." (Customer-Boris, #10).

Second, the fast-growing EV industry, characterized by diverse designs and fragmented knowledge, called for brokers to integrate technical information. While overseas customers admired Chinese-made EV components due to their high quality and low cost, it was complex to ensure technical compatibility (e.g., interface type) between different components. Moreover, the search and evaluation of qualified suppliers, the matching between components with varied technical specifications, and the communication of technical inquiries usually impose large transaction costs. For example, after posting detailed product descriptions online, the domestic supplier needed to answer several technical questions in the inquiries regarding power, maximum speed, torque and installation, compatibility

<sup>2</sup> The LVAC motor consists of an electromagnet winding or distributed stator winding and a rotating armature or rotor. The LVAC motor converts alternating current into mechanical energy.

<sup>3</sup> To develop the LVAC motor, GREENMO recruited four engineers and cooperated with GH in R&D and manufacturing to develop electric motors. Several patents for electric motor design were granted. And GH was convinced to serve as the original equipment manufacturer (OEM) for GREENMO.



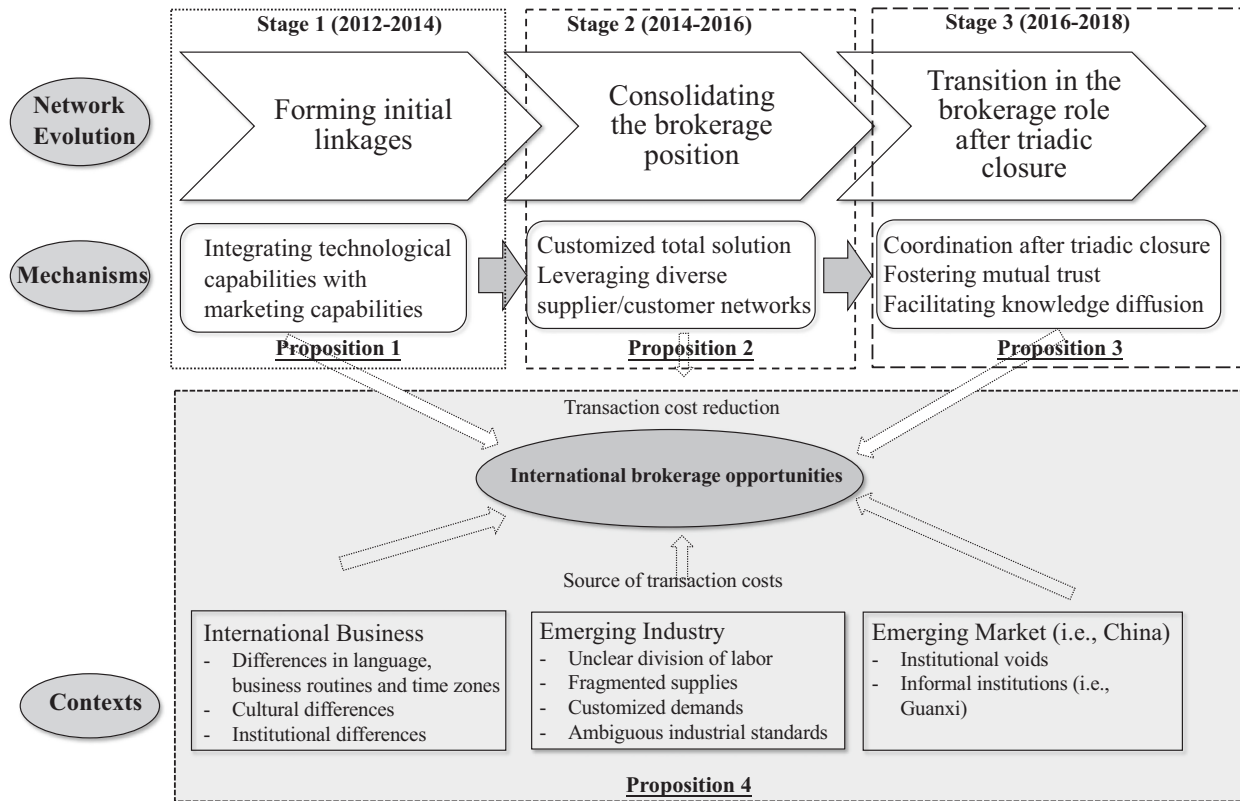


Fig. 2. The evolutionary path and contextual background of brokerage network for an international new venture.

with other components, payment process, and so on, all of which entailed professional technical knowledge. To reduce transaction costs due to knowledge fragmentation and the functional barriers between technology and marketing, GREENMO empowered its salespeople with technological capabilities. Kevin mentioned that two salesmen—Tony and Eric, who both have educational backgrounds in engineering—are familiar with blueprints, manufacturing, and production. Moreover, the four sales employees in GREENMO learned about related technologies through R&D activities that GREENMO performed to design electric motors. Therefore, GREENMO's technological capability and professionalism embedded in marketing personnel were critical during communication with customers due to functional barriers (i.e., marketing vs. technological) and knowledge fragmentation in emerging industries.

"I was looking for suppliers on Alibaba like I usually do. Before we found GREENMO, I only spoke to salespeople who had no technical background. I wanted to make a product according to my market demand. I didn't get any professional answers because I always talked to salespeople; they cannot answer my questions clearly." (Customer-Fadeel, #11).

As a result, GREENMO benefited from its integration of marketing and technological capabilities to effectively communicate with foreign customers, respond to their technical inquiries and earn a professional reputation to form its initial customer base for electric motors. At the end of 2014, GREENMO had completed transactions with 30 foreign customers and increased its revenue by 110 %. We highlight this mechanism in the first stage in Fig. 2.

#### 4.2. Stage 2. Consolidating the brokerage position (2014–2016)

##### 4.2.1. Providing customized total solutions by leveraging supplier capabilities

The initial linkages with overseas customers granted GREENMO access to knowledge about market preferences and specific demands. GREENMO gradually recognized a large demand for total solutions of a whole set of well-matched EV parts, including motors, rear axles, batteries, controllers, and so on. However, EV was an emerging industry with an unclear division of labor and fragmented supplies, which meant that there were barely any suppliers that could provide all required components for one-stop shopping.

In addition, as overseas customers' orders were usually small batches with customized requirements for exploration and refinement purposes, the communication and negotiation with various suppliers required a great deal of time and effort. While their specialized demands were disregarded by large and reputable manufacturers, which mainly focused on mass production catering to the domestic market, the overseas customers could hardly resort to small- and medium-sized enterprises (SMEs) since SMEs were usually deficient in providing everything that customers needed. GREENMO took this opportunity and became a broker to provide total solutions and intermediate between overseas customers and domestic manufacturers to match customized demands and fragmented supplies.

"It was about 5-6 suppliers before I found GREENMO, and I even made some transactions with 3 of them. I imported from them but was not satisfied. I spent much time explaining what I needed, and they just sent me their standard products regardless of my customized requirements." (Customer-Fadeel, #11).

"We were designing a scooter. We needed a battery, a rear axle, cabling, and switches to assemble. We got all the necessary kits from GREENMO... GREENMO provides expertise on drive systems that our company does not necessarily have, like programming motors and cables. Basically, those little things turn out to be big things... That's just a big plus." (Customer-Chris, #9).

Meanwhile, the formal institutional voids in China, such as the weak enforcement of commercial laws, increased contractual hazards, and risks of opportunistic behaviors, were particularly exacerbated during the complex process of customs clearance and shipment. Dealing with multiple suppliers undoubtedly added uncertainty and risks. For example, errors could be found during EV assembly due to component flaws or unmatched components, which might lead to legal disputes. Therefore, overseas customers preferred a broker who could efficiently integrate components from other Chinese suppliers.

To provide total solutions, GREENMO intentionally cooperated with suppliers of different sizes and capabilities to form a diverse supplier network. Large incumbent suppliers granted GREENMO reputation and reliability, while SMEs were more committed to product customization, R&D, and after-sales services. To strengthen its reliability as a start-up broker, GREENMO leveraged its suppliers' reputation and manufacturing capacity. GREENMO convinced its suppliers to put the GREENMO brand on the walls of their factories and all the supplied products. GREENMO also guided its overseas customers to visit the suppliers' factories, which demonstrated GREENMO's manufacturing capacity and reliability.

"GREENMO's factory does impress me. It's an industrial business. It's impressive because they have a wide range of products and it all works very well. That's a big plus, and seeing it is believing (trust)." (Customer-Chris, #9).

Suppliers also coordinated to demonstrate their manufacturing capacity.

"When those customers visited our factory, Kevin acted as a host to introduce our factory. We're willing to let GREENMO dominate, and we just provide some assistance if necessary." (Supplier-Nicole, #7).

Therefore, GREENMO, with its linkages to suppliers of various sizes, was considered capable of satisfying the customers' various demands as a broker.

"Some firms may have strict rules for selecting suppliers, but I would like to relax the standards to adapt to my customers' needs. That is, sometimes I need to make friends with 'nobles,' sometimes I have to make friends with 'common folks,' sometimes 'middle class.' To me, suppliers of different levels are necessary to my business due to my varied customers. Because I know that

**Table 2**  
Representative quotes and evidence underlying main findings.

Aggregate dimensions	Main findings	Quotes and evidence
Contexts as sources of transaction costs to foster brokerage opportunities	Transaction costs due to the cross-border business	<p>“My suppliers are very willing to supply those components. First, it's a deal which could bring them revenue; second, they are pleased to cooperate because they are always faced with problems of deferral of payments from other buyers in domestic markets. However, when they sold components abroad via GREENMO, they received their payments in a much shorter and certain time.” (CEO-Kevin, #1)</p> <p>“You might get 100 inquiries a day, but less than ten customers intended to buy something from you. However, you'll have to spend much time on 100 customers to give replies. In this situation, you can acquire customers only if you know well about technology, communication in English, after-sales service, and some other operational issues. That's why I never think about developing market channels by myself.” (Supplier- Harry, #5)</p> <p>“Many large state-owned enterprises are unwilling to sell in a small quantity. They would not make a transition. They just prefer mass production with only one or two flagship products, selling to several target clients.” (CEO-Kevin, #1)</p> <p>“It is a very different experience compared to other companies in China because staff in GREENMO can talk and write effectively in English. They also give us prompt replies, unlike any other companies.” (Customer-Boris, #10)</p> <p>“It's too costly and difficult to find a company to collaborate with you in manufacturing components in U.S. ... Nobody produces AC induction motor anymore, or DC motors, they really don't do that here. That is the one thing that drive me to China. You really can't get a gear box or axle in the United States.” (Customer-Chris, #9)</p> <p>“When customers come to buy one product, they will find it hard to find another part to match this product. And they cannot find the manufacturer in their own country. Under such circumstances, they will provide you with some design drawings which require you, the sales of GREENMO, to check the drawings and find a rear axle to match the motor. Then they will show you another design drawing to tell you what they expect for the whole vehicle. The customer needs a good solution to fill all of the requirements. So, we (salespeople) just check the drawings, do the math, and search for products back and forth.” (Employee-Tony, #2)</p> <p>“With other companies I can only choose from the catalog and we cannot choose the design. My design is already set, and I need to find an electric motor matching the existing design. Whereas I looked at GREENMO's catalog and asked them to make changes, and they readily modified and shipped it to me.” (Customer-Senthi, #12)</p> <p>“Additionally, the foreign customer knows perfectly how difficult it is to do container loading, checking cargo, and cleaning customs with orders from several different suppliers. It is hard to coordinate those things, even if he sent someone to do the full-time job in China.” (Employee-Tony, #2)</p> <p>“We try to provide 100 % commitment to our clients during the transaction, no matter what it concerns, like information, technology, the contracts, after-sales service, and so on. And I know that there are barely any suppliers in China that could guarantee this.” (CEO-Kevin, #1)</p> <p>China is classified as an emerging market with underdeveloped institutions (Luo and Tung, 2007; Li et al., 2013). China was ranked 47.42 percentile from the highest rank among all countries in the “rule of law index” released by the World Bank in 2017, which suggests that the laws are less respected and abided by in this context.</p> <p>China is scored at 20 on the dimension of Hofstede's national cultural indices (Hofstede, 2001), which suggests that China is a collectivist culture.</p> <p>“Guanxi, represents a personal relationship characterized by sentiment (qing) and obligation (yi) (Liang, 1977; Yang, 1994), resembling strong or semistrong ties in the Western network</p>
	Overseas trading provision in terms of prompt collection of payment	
	Domestic suppliers' unlearning costs to expand into global market	
	Differences in language, business routine and time zones that impede customers to do business in China	
	Special context of a newly emerging industry	
	Chinese manufacturing: low price and reliable quality	
	Growing market demand for customized kit drive solution	
	Fragmented electric motor industry: no one supplier could provide all required components	
	Emerging market context (i.e., China)	
	Contractual hazards due to formal institution voids	
	Culture of collectivism and dependence of <i>guanxi</i>	

(continued on next page)

Table 2 (continued)

Aggregate dimensions	Main findings	Quotes and evidence
Forming initial linkages	Providing market-oriented services to attract overseas customers	literature (Granovetter, 1985)", as defined by Chen, Chen and Xin (2004: 201). It has been largely acknowledged that guanxi is a building block in Chinese society (e.g., Luo and Park, 2001).
	Consulting services online 24 h a day /7 days a week and before- and after-sales services	"Whenever I ask them to help buy some components from other suppliers and send them to me, they never hesitate. They spent their time buying and sending it to me, and I feel thrilled and pleased with GREENMO as a supplier." (Customer-Senthi, #12) "...Usually, Kevin or Tony or other people talk to me during the night even if they are not supposed to be working at that time. They work and adapt to European business hours." (Customer-Boris, #10)
	Integrating technological capability with marketing capability to ease the transaction Salesmen with technical knowledge distinguished GREENMO from other firms	"Procurements of electric motors and other related products need professional knowledge. Thus, ordinary salespeople are not capable of dealing with technically professional inquiries... Customers like to communicate with technical staff. And, in this industry, customers are all with technical backgrounds. If you could not understand what they want within a limited time, they would leave, and you'll never get them back." (Employee-Tony, #2)
Consolidating the brokerage positions	Prompt and professional replies to customers' enquires	"GREENMO gives precise and clear answers to the problems that we are looking for, and this is the most important thing to us. They are professional, and it is easy to discuss with them... I completely trust all the information provided by Kevin and anybody else in GREENMO. This is because today, you can hardly meet anybody who really gives you clear information about technical specifications. Moreover, professional cooperation with all the staff in GREENMO is excellent, and we can always reach agreements. We are not talking about trading (quantity, price), but we are really doing professional talking. This is definitely the company that we want to partner with." (Customer-Boris, #10) "They (GREENMO) understood our drawings very well, and the products they made were very accurate and close to the drawings." (Customer-Senthi, # 12)
	Providing customized total solutions by leveraging supplier capabilities Growing demand for customized total solution	"...customers always want more than one part of vehicle. However, they would like to have one supplier to provide five parts rather than acquiring each from five suppliers. Why? First, packing, container loading, customs declaration is challenging when he has to coordinate these procedures with multiple suppliers as he is not in China to deal with these. He is not able to ask any supplier to arrange the shipments for him; Second, these customers also feel reasonable if one supplier in China could do all of these for them, although they had to give up some profits. They know that even if they sent one employee to deal with these in China, they usually can't make it." (Employee-Tony, #2)
	Suppliers of different sizes and capabilities to attract customers	"This industry is fragmented, even geographically. So, there is no obvious clusters. We procured components from suppliers from everywhere, like Shandong province, Fujian province, Shanghai, and so on. We also need to cooperate with different types of suppliers. It's easier to work and negotiate with small and medium sized firms, since they also need the opportunity to increase sales. But we still have to source some parts from well-known firms, mostly the standard parts." (CEO-Kevin, #1) "GREENMO also helps me get components from other manufacturers. They worked with all of these companies to develop the products. This way, GREENMO is the intermediary between suppliers and me all around China, and I trust GREENMO for those contacts." (Customer-Fadeel, #11)
	Building supplier networks by leveraging its overseas customer base	
	Overseas customer base to link with domestic suppliers	"More than 90 % of customers I brought to domestic customers are from foreign countries. They are glad to have me build the sales channel for them. For some of the suppliers, the customers I

(continued on next page)

Table 2 (continued)

Aggregate dimensions	Main findings	Quotes and evidence
Transition in the brokerage role after triadic closure	A shareholder as the OEM to manufacture electric motor for GREENMO	<p>brought to them could account for an estimated 60 %–80 % of their whole overseas sales.” (CEO-Kevin, #1)</p> <p>“In this industry (electric vehicle), the larger scale the firm is, the less likely that he will step into the foreign trade. Because if you want to do business abroad, you'll have to take time to develop elaborate products, while it (product design) is far easier in domestic market.” (Employee-Tony, #2)</p> <p>“GH would like to manufacture the electric motors for GREENMO because it expects GREENMO to expand the market and bring it more profits. GH is not capable of establishing distribution channels by itself, so it is willing to do the manufacturing.” (Employee-Justin, #4)</p>
	Triadic closure with joint R&D and colearning Inviting customers to visit suppliers' plants and being willing to introduce one to the other	<p>“Customers know I'm acting as an agent. But they also know that I can provide what they want because they know I can get those complimentary products—the motor, controller, and vehicle. I am a supplier; it doesn't mean that I must be the one manufacturing them. ...They (customers) would definitely come to my company, then I take them to suppliers' factories, which use our brand. This also shows trust between us. Besides, they come to visit the factory to make sure that I could provide them real products, not counterfeits by cheating.” (CEO-Kevin, #1)</p>
	Brokering to transfer knowledge between suppliers and customers via after-sales service, technical support and joint development	<p>“We observe that direct current (DC) motors are gaining much potential in electric motor industry. Kevin is following the latest progress of products and knows well about the market demand, the technical knowledge, and the market trends for technology. I think this is why we could expect a long-term cooperation.” (Supplier-Zhang, #6)</p> <p>“I could learn know-how from our alliances, and I would like to share what I know to them. When I cooperate with vehicle manufacturers, I could learn knowledge about vehicle, then I could leverage this knowledge to my customers.” (CEO-Kevin, #1)</p>
	Relational embeddedness through mutual understanding gaining and trust building Interpersonal trust (guanxi) built on the personal contacts between the founder and stakeholders	<p>“I invited Chris to the place where I was born and grew up for a vacation last year (2016). He was so glad to have the opportunity to experience village life in China and taste so many delicious foods. He stayed here for half a month, during the time we felt like brothers.” (CEO-Kevin, #1)</p> <p>“I think Kevin's strength is more than the ability to do the business. What really impressed me is his charming personality, which really attracts customers. On some occasions, these customers have other options, but they finally chose GREENMO to buy the components. It's just because Kevin knows how to build friendships before the transaction with customers.” (Supplier-Harry, #5)</p>
	Being tolerant and helpful to domestic suppliers	<p>The founder Kevin (#1), once told us in a chat during the driving that he would personally provide financial support to small-sized suppliers when they had cash-flow problems. The information has been recorded on the researcher's filed note, but not audio recorded.</p>
	Long-term collaboration cultivates shared understanding and mutual dependence	<p>“Our customers need more than component procurement; indeed, they want to learn how to make a whole vehicle. I taught them how to integrate; that's the secret technology they could not learn from others. I also introduced my customers to those suppliers, by which they could form collaboration to customize components. And I'm not afraid that they (customers and suppliers) are bypassing me to do business. At least I got their trust.....Put another way, they know if I found out that they made the transaction bypassing me, they would lose more in the future. Since we've collaborated for a long time, there are such large sunk costs. You would find it costly to build a collaboration with another firm. So do the customers. They don't want to waste time on communication, matching parts, and all other things about getting along.” (CEO-Kevin, #1)</p> <p>“As opportunities emerge, I would tell vehicle manufacturers that my customers got some new ideas about our products. I suggest they add my electric motor or other parts I've matched with on their vehicles. They are very willing to accept the suggestion...On this occasion, we could say that GREENMO and vehicle manufacturers are intertwined, because we are both buyers and</p>

(continued on next page)

Table 2 (continued)

Aggregate dimensions	Main findings	Quotes and evidence
		<p>sellers to each other. The connection is strong. For an analogy, a couple would not easily break up if they have kids, which is the same way as mutual interest between GREENMO and vehicle manufacturers.” (CEO-Kevin, #1)</p> <p>“Why do we trust GREENMO? It is because we know new product development requires a lot of money and energy. What's more, it requires focus and determination. We know clearly how GREENMO invests in this business from our continuous cooperation and joint development. We also input a lot.” (Supplier-Zhong, #8)</p>

some of our clients expect more, while others are easy to satisfy. Those big brands are what I need to associate with as long as they don't detest me. But I'm not able to tightly control the collaboration. Then I have to cultivate relationships with some small enterprises which may not be that respectable but easier to get control of.” (CEO-Kevin, #1)

As GREENMO gradually built a diverse supplier network and accumulated a more extensive customer base, its sales rose rapidly. GREENMO began to provide integrated EV solutions in 2014 and acquired 36 new overseas customers, experiencing 80 % sales growth in one year.

#### 4.2.2. Building supplier networks by leveraging its overseas customer base

With a limited brand reputation and reliable records, it was initially difficult for GREENMO to build supplier networks. However, GREENMO managed to link with domestic suppliers by leveraging an overseas customer base.

The opportunity for international expansion was attractive to domestic suppliers as GREENMO acted as a broker to provide an overseas customer base and market-oriented services. Accessing and acquiring foreign customers was a time-consuming and path-dependent process that required proficient marketing skills, including answering customer inquiries on time, providing professional service for site inspections, customizing solutions for customer demand, and facilitating customer market development. For this reason, most suppliers were reluctant to build their overseas marketing channels.

“...GREENMO is different from us; they look for new customers very professionally. We both know how difficult it is to find and seize new (overseas) customers... Dealing with inquiries requires energy and a lot of human resources. So, we only focus on our manufacturing and domestic market sales and let GREENMO explore the overseas market for us.” (Supplier-Zhang, #6)

Although some large established suppliers may have already had overseas sales channels, GREENMO's overseas customer base still comprised valuable assets because the profiles of the large suppliers' existing overseas customers were different from those of GREENMO's, partially because customers were dispersed all over the world with diverse demands due to the fragmented nature of the emerging industry.

“I think we could cooperate with GREENMO over a long period because no matter how small GREENMO is, it is another way to expand our customer base. It is actually another channel and resource for us. And because we have been established in this industry for years, most of our customers differ from GREENMO's.” (Supplier-Nicole, #7)

Moreover, the demand for high-quality products was attractive to domestic SMEs because they did not have a competitive advantage in economies of scale. Compared to customers in the domestic market who prioritized low prices, overseas customers cared more about quality.

“We entrusted our international business development to GREENMO. They have quite a large customer base... Our products have first-class quality, while GREENMO's customers are those who care about quality, being less sensitive about price ... We take those foreign customers as key clients despite the fact that they place fewer orders.” (Supplier-Zhong, #8)

In addition, the international routine of prompt payment is attractive to domestic suppliers. In the Chinese domestic market, the payment period could be as long as three months, especially when collaborating with large firms with strong bargaining power. Some SMEs may periodically suffer from the pressure of weak cash flows due to the prolonged payment cycle. In contrast, the payment period was usually seven days in the international market. With this different routine, most SME suppliers were attracted to GREENMO's overseas channel.

Considering GREENMO's ability to link with overseas customers, suppliers of all sizes were willing to cooperate with GREENMO and regarded GREENMO as an essential and irreplaceable broker. In turn, this supplier network further promoted GREENMO's attractiveness to overseas customers, which strengthened GREENMO's central role in a brokerage ego network. The mechanisms and network evolution are illustrated in stage 2 of Fig. 2.

#### 4.3. Stage 3. Transition in the brokerage role after triadic closure (2016–2018)

##### 4.3.1. Playing a pivotal role in coordination after triadic closure

As a broker between the domestic and overseas markets, GREENMO reached an annual sales of 1,700,000 USD in 2016. After years



of collaboration since 2012, GREENMO had accumulated trust among suppliers and customers, which led to opportunities for joint R&D. According to GREENMO's archival data, suppliers who had collaborative R&D projects with GREENMO accounted for approximately 40 %–50 % of all suppliers in 2017. While involved in joint R&D projects, GREENMO was granted two utility patents and seven appearance patents in the Chinese and U.S. patent and trademark offices.

For domestic suppliers, GREENMO was the broker that bridged them to the overseas market and offered product development opportunities while simultaneously reducing their cross-border communication costs. The joint R&D efforts led by GREENMO allowed them to develop potential star products with a trustworthy partner who could share costs and risks. The ambition to access a larger global market also motivates joint R&D efforts. Additionally, as international collaboration entailed asset-specific investment due to a small number of customized demands (e.g., modifying the supplier's products to match GREENMO's motors), the trust GREENMO earned through brokering made it a preferable collaborator. Through intermediation by GREENMO, suppliers faced fewer opportunistic risks than through intermediation by other brokers. Therefore, suppliers were willing to collaborate with GREENMO to explore promising opportunities and obtain knowledge about overseas markets.

“My suppliers are pleased to cooperate with us. One of the reasons is that they hope GREENMO could grow big and strong because they're aware of the connection between us. They know that if GREENMO has a larger business, they will also benefit. For this reason, they are incentivized to share their technology with us and are willing to do product integration and development with us jointly. They kind of invest in our prospects.” (CEO-Kevin, #1)

For foreign customers, GREENMO was an important broker that linked them with required EV products and shared the same ambition to design new products jointly. Since a well-developed business infrastructure was absent in the emerging and fast-growing EV industry, foreign customers were willing to learn from GREENMO, which gathered the latest and comprehensive knowledge from various manufacturers.

“Whenever we ask them to change, they do it without any problems. If I give them drawings for parts, I will get those parts as per the drawings. They have been proving that for quite some time now.” (Customer-Senthi, #12)

Moreover, considering the transaction costs incurred by high information asymmetry and uncertainty due to institutional voids, it would be reasonable for suppliers and customers to cooperate with a trustworthy coordinator continuously. Although the joint R&D projects and the co-learning process brought the customers and suppliers together and terminated the structural holes, it did not reduce the brokerage advantages of GREENMO. Instead, the closure of the structural holes demonstrated the pivotal value of brokerage in lowering transaction costs through effective communication and professional coordination. As noted by Kevin,

“My suppliers might profit more if they bypass me and directly reach my customers. However, it is not likely to happen. The key point is that any part, such as the controller and motor, needs to be matched. This procedure would take a lot of time and effort. There are also communication costs and risks when you turn to other companies for a match. Since they trust GREENMO in its service and technological capability, they will rely on us, a broker, rather than destroy this long-term cooperation.” (CEO-Kevin, #1)

Therefore, GREENMO served as a platform that integrated not only EV components but also fragmented information and knowledge, through which transaction efficiency and knowledge integration were improved.

#### 4.3.2. *Fostering mutual trust and facilitating knowledge diffusion through co-learning*

During joint developments with suppliers, GREENMO gained knowledge of component assembly and maintenance through customizing components, matching parts into integrated products, and other related activities. In turn, GREENMO shared information with suppliers about the foreign market and potential product development opportunities. Knowledge about technical issues and marketing information was transferred via GREENMO during prototype design, product refinement, after-sales service, and so on. Customers also gained knowledge of product development and detailed issues about international business.

“I learned everything from GREENMO. I just knew how to order components and deal with payment issues. Details such as payment issues and product development I learned were all from GREENMO. They taught me everything about developing and ordering from suppliers and how to get good shipping prices. I didn't know all of these detailed procedures before, and they guided me in this.” (Customer-Fadeel, #11)

As GREENMO was the broker to transfer knowledge between suppliers and customers, this co-learning experience further cultivated mutual trust and facilitated knowledge diffusion. The long-term collaboration facilitated codified and tacit knowledge transfer and fostered shared understanding and mutual dependence among the GREENMO networks.

“I told Kevin I trusted him because we met a few times, and I have already visited his facilities .....Kevin and I would collaborate on this. We filed both Chinese and American patents and do a joint venture type of thing. We wire money over there to his company, and we always get more and better than what we asked for, so for me, that's trust right there.” (Customer-Chris, #9)

“Under most situations, if you buy a vehicle, the seller doesn't need to talk about the technical parts of the vehicle. However, my customers are those who want to assemble a vehicle based on parts sourced from me. So it is more than a transaction; they also learn something during the transaction. I learn (technical knowledge about parts and assembly) from my suppliers, then I would like to transfer this know-how to my customers. Thus, my customers would be more dependent on me and would like to bring up more requests and place orders.” (CEO-Kevin, #1)

The trust and knowledge gained through co-learning activities enhanced the relational embeddedness of the strong ties between GREENMO and its partners. Joint R&D efforts entailed close and frequent cooperation, which promoted emotional intensity and made GREENMO trustworthy as a coordinator. We highlight this mechanism in stage 3 of Fig. 2 as well.

## 5. Discussion

By analyzing the above case of GREENMO, this study explores how an INV with resource constraints develops into an international broker, consolidates a brokerage network, and transitions its brokerage role after a triadic closure in the context of an emerging industry and emerging market. In Fig. 2, we illustrate and discuss the three stages of formation, consolidation, and transition of GREENMO's international brokerage role from an evolutionary and a contextual perspective.

First, from an evolutionary perspective, we show that an INV can build its initial connections with overseas customers by integrating technological capabilities with marketing capabilities. Then it can consolidate its brokerage position by providing customized solutions and leveraging its partners' capabilities, reducing transaction costs arising from institutional differences, fragmentation, and ambiguity of standards. Over time, the INV can transition its brokerage role from bridging the separated parties to coordinating the connected parties. Instead of fading away, brokerage benefits are sustained as the broker embraces the role of coordinator to foster trust and knowledge diffusion in networks, reducing transaction costs due to high uncertainty and ambiguity. Second, from a contextual perspective, the contexts of international business, emerging markets, and emerging industries jointly provide a fertile ground for brokers to reduce the high transaction costs arising from the differences in culture and business routines across countries, the fragmentation and customization in emerging industries, and institutional voids in emerging markets.

### 5.1. Forming initial connections by integrating technological capabilities with marketing capabilities

From an evolutionary perspective, the first stage of becoming a broker is to develop initial network connections by integrating technological capabilities with marketing capabilities, as shown in the dotted-line box of Fig. 2. While marketing capabilities reduce the transaction costs originating from bilingual barriers and time zone differences, serving as a threshold to attract customers, the technological capability of sales teams differentiated GREENMO from other competitors by reducing the cross-functional communication barriers due to the unclear labor division in emerging industries.

Although previous literature has emphasized marketing and technological capabilities in early internationalization (Andersson et al., 2018; Cavusgil and Knight, 2015), research has paid little attention to the context of emerging industries where technological professionalism serves as a critical source of brokerage capability to overcome cross-functional barriers. As previous studies demonstrate, actors in emerging industries usually have little coordination and standardization (Maguire et al., 2004; Denoo et al., 2021). The GREENMO case adds to our knowledge that, on the one hand, personnel in companies may not have clear functional divisions such that overseas technicians are usually in charge of procurement and prefer to communicate with salespeople who are knowledgeable in techniques. On the other hand, a lack of standardization imposes difficulties for firms to match and integrate different components in fragmented markets. These characteristics constitute high transaction costs between the demand and supply side, thus creating brokerage opportunities for capable INV brokers to exploit. Therefore, we propose the process and mechanism to acquire initial customers:

**Proposition 1.** INVs from emerging markets and emerging industries that can integrate technological capabilities with marketing capabilities are more likely to build initial linkages with overseas customers by reducing transaction costs arising from unclear labor division, fragmentation, and ambiguity of standards.

### 5.2. Consolidating the brokerage position by leveraging diverse partners' capabilities

The findings in the second stage, during which GREENMO consolidated its brokerage position and built an ego network, show that the diversified networks of customers can be leveraged to build supplier networks and vice versa.

Previous studies have recognized the importance of egocentric networks. For example, dense ego networks function better in sustaining learning and trust, while weak ties function better in facilitating creative processes (Forti et al., 2013). However, the literature pays less attention to the specific brokerage role of the entrepreneur at the center of the ego network. It has been vague about how to build an egocentric brokerage network. Our findings show that the high unlearning costs and path dependence of Chinese domestic suppliers intensify the need for a central broker (Knight and Cavusgil, 2004; Schwens and Kabst, 2009).

Moreover, the need for a central broker to intermediate and integrate information and resources between the demand and supply sides arises from the fragmented supply and the customized demand of the emerging EV industry. The fragmentation of information, knowledge, and customer demand in the emerging industry poses high transaction costs for both customers and suppliers, thus giving rise to brokerage opportunities (Agarwal et al., 2017). By providing total solutions and leveraging diverse resources from the egocentric brokerage network, INV brokers can integrate non-standardized and fragmented suppliers to match the dispersed and customized demand. Therefore, we propose the following proposition, shown in the short dashed-line box in Fig. 2, and illustrate the mechanism showing how a broker evolved into a central player by reducing transaction costs.

**Proposition 2.** INVs from emerging markets and emerging industries that can leverage a diverse customer base to strengthen a supplier network and leverage the supplier network to acquire more customers are more likely to consolidate their brokerage positions and establish a brokerage ego network by reducing transaction costs arising from the fragmented supply and customized demand.

### 5.3. The transition from a structural broker to a coordinating broker after triadic closure

Unlike the typical viewpoint that emphasizes the “structural hole” as the premise of brokerage benefits, our finding shows that brokerage advantages can be sustained or even enhanced when the previously unconnected parties close the structural hole over time. Despite the elimination of the structural hole due to joint R&D, GREENMO's brokerage benefit did not fade; in contrast, the brokerage benefit was sustained as GREENMO coordinated between both parties through value-adding activities and transaction cost reduction.

This finding helps to clarify the inconsistency between Coleman (2009) cohesion view and Granovetter (1973) and Burt (2004) finding of brokerage advantages. While proponents of cohesion (Coleman, 2009) argue for the benefits of trust and better information flows and advocate a *tertius iungens* strategy (Obstfeld, 2005) by introducing disconnected parties or facilitating new coordination between connected parties, the proponents of brokerage rest on diversified and nonredundant information and advocate a *tertius gaudens* strategy (Obstfeld, 2005) that keeps two parties separated. The GREENMO case shows a vivid example of using the *tertius iungens* strategy. Since collaboration in joint R&D projects requires a high level of coordination, commitment, risk-sharing, and trust, the increasing cohesion due to triadic closure further reduces transaction costs. It thus facilitates knowledge diffusion and innovation (Kauppila et al., 2018). Furthermore, GREENMO, as a trustworthy coordinator, reduces transaction costs arising from high uncertainty, ambiguity, information asymmetry, and potential opportunistic behaviors in R&D collaborations in an emerging industry. As relational embeddedness increases and trust accumulates, GREENMO transfers from bridging social capital to bonding social capital, facilitating collaboration and co-learning (Claridge, 2018). While a broker bridging structural holes benefits from reducing both parties' transaction costs to access each other's resources, a broker coordinating connected parties benefits from reducing both parties' transaction costs of highly committed and risky collaborations.

Therefore, we propose that INVs can evolve from a broker that exploits structural holes to a broker that facilitates trust-building and efficient information flows after triadic closure, as demonstrated by the long-dashed line box in Fig. 2.

**Proposition 3.** INVs from emerging markets and emerging industries that transition their brokerage role from a bridging focus to a coordination focus after triadic closure are more likely to sustain brokerage advantages by fostering mutual trust and knowledge diffusion among parties to reduce transaction costs arising from uncertainty, information asymmetry, and potential opportunistic behaviors in highly committed collaborations.

### 5.4. Contexts as the conditions for the evolutionary path

Finally, we discuss the contextual conditions of the above proposed evolutionary path for INV brokerage networks, as shown in the bottom half of Fig. 2. First, international business as a context provides a foundation for brokers to reduce transaction costs. Institutional and cultural contexts in international business have long been considered to cause cross-border transaction costs, including overseas search costs, bilingual costs, costs to overcome institutional barriers, and costs to understand cultural differences (Brouthers, 2002; Delios and Beamish, 1999). Previous research has demonstrated that institutional distance underlies the advantages of international brokers, as these transaction costs increase the likelihood of manufacturers employing an intermediary (Ellis, 2003; Peng and Ilinitch, 1998). In the GREENMO case, different time zones and language barriers give rise to communication costs. Different routines in business (i.e., rapid vs. slow payment, mass or customized production, priority in quality vs. cost) promote the need for brokers. Therefore, the characteristics of international business pose higher transaction costs than domestic business do for potential brokers to exploit as opportunities.

Second, the context of an emerging industry constitutes a source of brokerage opportunity and amplifies the benefits of network cohesion after triadic closure. As expounded in the prior discussion, emerging industries are characterized by unclear divisions of labor, underdeveloped business systems, fragmentation and customization, and ambiguous standards (Agarwal et al., 2017; Denoo et al., 2021). These characteristics reward brokers who can integrate technological capabilities with marketing capabilities and those who can integrate diverse customer and supplier resources. Moreover, even after triadic closure, given the information asymmetry, uncertainty, and ambiguity in emerging markets, overseas customers and domestic suppliers being connected still need an efficient coordinator to facilitate effective communication and avoid potential opportunistic behaviors. Based on this, a trustworthy coordinator that facilitates highly committed collaboration, instead of a broker that bridges the disconnected parties, is preferred in emerging industries.

Third, emerging markets (i.e., China) also come with high transaction costs that provide opportunities for brokers. In an emerging market valuing interpersonal trust and kin networks, the uncertainty of doing business with unfamiliar business partners is persistent (Chen et al., 2004; Li and Scullion, 2006). With institutional voids, overseas customers and domestic suppliers need brokers to facilitate cooperation repeatedly and eliminate the cost of building trust. Moreover, cultures in emerging markets matter. As in our case, in the Chinese context, where collectivism prevails, exploiting a brokerage advantage might be considered opportunistic and inhibit trust and mutual understanding (Xiao and Tsui, 2007). While previous literature questions the effectiveness of brokers in collectivist cultures, the GREENMO case provides an evolutionary path to achieve brokerage advantages even after closing the structural holes. In our case, the brokerage advantages are realized through enhancing communication effectiveness and trustworthiness, integrating fragmented information and knowledge, and fostering mutual obligations for each partner (Chen et al., 2004). Therefore, emerging markets provide more opportunities for brokers to form and transition to a coordinator than established markets.

Therefore, we elaborate on different contexts and link them to brokerage network formation and evolution.

**Proposition 4.** The evolutionary path of the formation, consolidation, and transition of INVs' brokerage roles could be more effective in international business, emerging industries, and emerging markets where high transaction costs occur.

### 5.5. Theoretical contribution

First, our research contributes to the literature on IE by explicating how an INV develops into a broker under resource constraints and consolidates brokerage advantages. In addition to the extant literature that emphasizes pre-existing advantages (e.g., technology, social networks) during the global expansion of start-ups (Freeman et al., 2006; Hennart, 2014; Knight and Cavusgil, 2004), we illustrate how an INV built connections initially as a broker and evolved into the center of a brokerage ego network over time. This finding sheds light on the evolutionary process of an INV as a broker in the absence of resource endowments. It identifies critical underlying factors, such as the integration of technological and marketing capabilities, the leveraging of supplier and customer networks, and contextual conditions. This enriches our understanding of IE, particularly how INVs build brokerage positions and enact international brokerage opportunities.

Second, the research extends our understanding of the evolution of brokerage advantage. In contrast to previous studies that emphasize the advantages (i.e., information and control benefits) of brokering an unclosed triadic network (Min and Mitsuhashi, 2012), our study shows that in emerging industries with information asymmetry and opportunistic behaviors, triadic closure with increased relational embeddedness does not deprive brokers of their advantages but rather enhances mutual understanding and trust through efficiency improvements in transactions. Our findings identify an evolutionary path for brokers in emerging industries to resolve the unsustainability of brokerage positions through the transition from *tertius gaudens* to *tertius iungens* strategy (e.g., Kauppila et al., 2018) to reduce transaction costs in highly committed collaborations.

Third, this study highlights the contextual conditions of the evolutionary path of the formation, consolidation, and transition of brokerage networks. By elaborating on the characteristics of international business, emerging industries, and emerging markets as the significant sources of transaction costs, this study contributes to the view of “entrepreneurs as intermediaries/brokers” in a specific context (Peng et al., 2014). Therefore, this study links the specific contextual conditions to the reduction of transaction costs and the evolution of brokerage networks.

## 6. Conclusions

This study reveals the evolutionary process of how an INV develops into a broker and evolves under resource constraints. Analysis based on a single case shows that high transaction costs arising from unclear labor division, uncertainty, ambiguity, fragmented supply, customized demand, and so on enable INVs to exploit brokerage opportunities by reducing transaction costs. An INV can develop initial network connections by integrating technological and marketing capabilities. Subsequently, it can leverage customer/supplier networks to establish a brokerage ego network by providing customized total solutions. Over time, the INV can transition from a broker bridging structure holes to a broker coordinating connected parties as structural holes close and can further strengthen benefits from network cohesion. The contexts of international business, emerging markets, and emerging industries serve as boundary conditions for the proposed evolutionary path to be more effective.

Although this study uncovers the process of the development and evolution of INV international brokerage networks through qualitative analyses, some limitations should be noted. First, as with all single case studies, our findings are based on specific contexts (i.e., an emerging industry and an emerging market) and might fall short of generalizability. The emerging stage of the industrial environment, with its fragmented supplies and customized demands, is proposed to be one of the major sources of brokerage opportunities in this study. Together with the institutional and cultural distances between emerging and developed markets, the context of this study—emerging markets and emerging industries—is unique. Thus, future studies must be cautious when applying the findings to different contexts. For instance, an established industry could have much lower transaction costs. Given the clear labor division and standardization in mature industries, firms might prefer making (vertical integration) to buying (outsourcing) and leave fewer opportunities for brokers to reduce transaction costs. In developed countries, where the institutional environment is more established, and thus the overall information asymmetry issues would be less significant than in emerging markets, there would be fewer transaction costs. International players might not need a broker or coordinator but rely on transparent information and the established system to avoid opportunistic behaviors. In a purely domestic environment, the cultural, psychological, and geographic distances are lower, reducing transaction costs and the request for a broker. Therefore, in the above contexts, Proposition 1–3 might not hold to the same extent.

Second, this study focuses on a single-country context where the INV conducts its brokering business without consideration of the heterogeneity of its customers' home countries. Although we contend that transaction costs imposed by the emerging market and emerging industry would give rise to a general demand for a broker, the variances in the institutional environment among different countries might influence how foreign customers perceive the transaction costs and the way INVs exploit brokerage opportunities. For instance, a customer from a country advocating extreme individualism may terminate the transaction with GREENMO and turn to suppliers for lower prices when the structural hole is closed. In such cases, a brokering strategy separating the disconnected parties might be a wise choice. Therefore, future research could examine the effects of the customers' home country differences on the evolution of brokerage benefits.

Our findings provide implications for start-ups that intend to launch international businesses by engaging in a brokerage position under resource constraints. First, as an entrepreneurial firm with few resources and little experience, reducing transaction costs from specific contexts might be a prioritized strategy. Specifically, in an emerging industry with high transaction costs, emphasizing technological capability and leveraging customer or supplier networks might help to enact a brokerage opportunity. Second, strengthening and maintaining brokerage advantages in emerging markets entail trust-building through long-term collaborations with suppliers and more knowledge-intensive transactions with overseas customers. Coordinating among the networks might be preferred

after triadic closure. The evolutionary network process of GREENMO might be constructive to start-ups who expect to grow into brokerage firms that connect suppliers and customers in a niche emerging market.

### Declaration of competing interest

None.

### Data availability

Data will be made available on request.

### Acknowledgements

The authors thank the National Social Science Foundation of China (22BGL047) for the generous financial support. We want to expressed our gratefulness to all the interviewees from GREENMO and its customers and suppliers. We also gratefully acknowledge the helpful comments and suggestions of the editor and the two reviewers, as well as the paper session participants at 2018 annual meeting of Academy of Management.

### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.intman.2022.100995>.

### References

- Agarwal, R., Moeen, M., Shah, S.K., 2017. Athena's birth: triggers, actors, and actions preceding industry inception. *Strateg. Entrep. J.* 11 (3), 287–305.
- Ahlstrom, D., Young, M.N., Nair, A., 2002. Deceptive managerial practices in China: strategies for foreign firms. *Bus. Horiz.* 45 (6), 49–59.
- Andersson, S., Evers, N., Gliga, G., 2018. Entrepreneurial marketing and INV internationalisation in China. *Qual. Mark. Res. Int. J.* 21 (2), 202–231.
- Bae, J., Wezel, F.C., Koo, J., 2011. Cross-cutting ties, organizational density, and new firm formation in the US biotech industry, 1994–98. *Acad. Manag. J.* 54 (2), 295–311.
- Brothers, K.D., 2002. Institutional, cultural and transactional costs on entry mode choice and performance. *J. Int. Bus. Stud.* 33 (2), 203–221.
- Brothers, K.D., Brothers, L.E., 2003. Why service and manufacturing entry mode choices differ: the influence of transaction cost factors, risk and trust. *J. Manag. Stud.* 40 (5), 1179–1204.
- Buccieri, D., Javalgi, R.R.G., Gross, A., 2021. Innovation and differentiation of emerging market international new ventures the role of entrepreneurial marketing. *J. Strateg. Mark.* 1–29.
- Burt, R.S., 1992. *Structural Hole*. Harvard Business School Press, Cambridge, MA.
- Burt, R.S., 2000. The network structure of social capital. *Res. Organ. Behav.* 22, 345–423.
- Burt, R.S., 2004. Structural holes and good ideas. *Am. J. Sociol.* 110 (2), 349–399.
- Casillas, J.C., Barbero, J.L., Sapienza, H.J., 2015. Knowledge acquisition, learning, and the initial pace of internationalization. *Int. Bus. Rev.* 24 (1), 102–114.
- Cavusgil, S.T., Knight, G., 2015. The INV firm: an entrepreneurial and capabilities perspective on early and rapid internationalization. *J. Int. Bus. Stud.* 46 (1), 3–16.
- Chen, S.F.S., 2010. A general TCE model of international business institutions: market failure and reciprocity. *J. Int. Bus. Stud.* 41 (6), 935–959.
- Chen, W., Tan, J., 2009. Understanding transnational entrepreneurship through a network lens: theoretical and methodological considerations. *Enterp. Theory Pract.* 33 (5), 1079–1091.
- Chen, C.C., Chen, Y.R., Xin, K., 2004. Guanxi practices and trust in management: a procedural justice perspective. *Organ. Sci.* 15 (2), 200–209.
- Chen, C.C.P., Ding, Y., Kim, C.F., 2010. High-level politically connected firms, corruption, and analyst forecast accuracy around the world. *J. Int. Bus. Stud.* 41 (9), 1505–1524.
- Chetty, S., Campbell-Hunt, C., 2004. A strategic approach to internationalization: a traditional versus a “born-global” approach. *J. Int. Mark.* 12 (1), 57–81.
- Choi, H., Park, S., Lee, J.D., 2011. Government-driven knowledge networks as precursors to emerging sectors: a case of the hydrogen energy sector in Korea. *Ind. Corp. Chang.* 20 (3), 751–787.
- Claridge, T., 2018. Functions of social capital—bonding, bridging, linking. *Social Capital Research* 20, 1–7.
- Coleman, J.S., 2009. Social capital in the creation of human capital. *Am. J. Sociol.* 94, 95–120.
- Corbin, J., Strauss, A., 2014. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Sage publications.
- Coviello, N.E., 2006. The network dynamics of INVs. *J. Int. Bus. Stud.* 37 (5), 713–731.
- David, R.J., Sine, W.D., Haveman, H.A., 2013. Seizing opportunity in emerging fields: how institutional entrepreneurs legitimated the professional form of management consulting. *Organ. Sci.* 24 (2), 356–377.
- Delios, A., Beamish, P.W., 1999. Ownership strategy of Japanese firms: transactional, institutional, and experience influences. *Strateg. Manag. J.* 20 (10), 915–933.
- Denoo, L., Yli-Renko, H., Clarysse, B., 2021. The impact of customer ties and industry segment maturity on business model adaptation in an emerging industry. *Strateg. Entrep. J.* 1–31 <https://doi.org/10.1002/sej.1400>.
- Dey, I., 2007. Grounding categories. In: Bryant, A., Charmaz, K. (Eds.), *The Sage Handbook of Grounded Theory*. Sage, Thousand Oaks, CA, pp. 167–190.
- Dubois, A., Gadde, L.-E., 2002. Systematic combining: an abductive approach to case research. *J. Bus. Res.* 55 (7), 553–560.
- Eisenhardt, K.M., Graebner, M.E., 2007. Theory building from cases: opportunities and challenges. *Acad. Manag. J.* 50 (1), 25–32.
- Ellis, P.D., 2003. Social structure and intermediation: market-making strategies in international exchange. *J. Manag. Stud.* 40 (7), 1683–1708.
- Ellis, P.D., 2011. Social ties and international entrepreneurship: opportunities and constraints affecting firm internationalization. *J. Int. Bus. Stud.* 42 (1), 99–127.
- Falahat, M., Knight, G., Alon, I., 2018. Orientations and capabilities of born global firms from emerging markets. *Int. Mark. Rev.* 35 (6), 936–957.
- Forti, E., Franzoni, C., Sobrero, M., 2013. Bridges or isolates? Investigating the social networks of academic inventors. *Res. Policy* 42 (8), 1378–1388.
- Freeman, S., Cavusgil, S.T., 2007. Toward a typology of commitment states among managers of INV firms: a study of accelerated internationalization. *J. Int. Mark.* 15 (4), 1–40.
- Freeman, S., Edwards, R., Schroder, B., 2006. How smaller INV firms use networks and alliances to overcome constraints to rapid internationalization. *J. Int. Mark.* 14 (3), 33–63.
- Galkina, T., Chetty, S., 2015. Effectuation and networking of internationalizing SMEs. *Manag. Int. Rev.* 55 (5), 647–676.



- Gerschewski, S., Rose, E.L., Lindsay, V.J., 2015. Understanding the drivers of international performance for born global firms: an integrated perspective. *J. World Bus.* 50 (3), 558–575.
- Granovetter, M.S., 1973. The strength of weak ties. *Am. J. Sociol.* 78, 1360–1380.
- Granovetter, M., 1985. Economic action and social structure: the problem of embeddedness. *Am. J. Sociol.* 91 (3), 481–510.
- Greve, H.R., Baum, J.A.C., Mitsuhashi, H., Rowley, T., 2010. 'Built to last but falling apart: cohesion, friction and withdrawal from interfirm alliances. *Acad. Manag. J.* 53, 302–322.
- Hennart, J.-F., 2014. The accidental internationalists: a theory of INV. *Enterp. Theory Pract.* 38 (1), 117–135.
- Hofstede, G., 2001. *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. SAGE Publications, Thousand Oaks, CA.
- Hoskisson, R.E., Eden, L., Lau, C.M., Wright, M., 2000. Strategy in emerging economies. *Acad. Manag. J.* 43, 249–267.
- Jiang, L., Tan, J., Thursby, M., 2011. Incumbent firm invention in emerging fields: evidence from the semiconductor industry. *Strateg. Manag. J.* 32 (1), 55–75.
- Karra, N., Phillips, N., Tracey, P., 2008. Building the born global firm: developing entrepreneurial capabilities for international new venture success. *Long Range Plan.* 41 (4), 440–458.
- Kauppila, O.P., Bizzi, L., Obstfeld, D., 2018. Connecting and creating: tertius iungens, individual creativity, and strategic decision processes. *Strateg. Manag. J.* 39 (3), 697–719.
- Khanna, T., Rivkin, J.W., 2001. Estimating the performance effects of business groups in emerging markets. *Strateg. Manag. J.* 22 (1), 45–74.
- Knight, G.A., Cavusgil, S.T., 2004. Innovation, organizational capabilities, and the born-global firm. *J. Int. Bus. Stud.* 35 (2), 124–141.
- Kumar, V., Singh, D., Purkayastha, A., Popli, M., Gaur, A., 2020. Springboard internationalization by emerging market firms: speed of first cross-border acquisition. *J. Int. Bus. Stud.* 51 (2), 172–193.
- Li, S., Scullion, H., 2006. Bridging the distance: managing cross-border knowledge holders. *Asia Pac. J. Manag.* 23 (1), 71–92.
- Li, H., Zhang, Y.A., Lyles, M., 2013. Knowledge spillovers, search, and creation in China's emerging market. *Manag. Organ. Rev.* 9 (3), 395–412.
- Li, L., Liu, X., Yuan, D., Yu, M., 2017. Does outward FDI generate higher productivity for emerging economy MNEs? –Micro-level evidence from Chinese manufacturing firms. *Int. Bus. Rev.* 26 (5), 839–854.
- Liang, S.M., 1977. *The Essentials of Chinese Culture*. Wenxue Publishing House, Taipei.
- Lin, D., Lu, J., Liu, X., Zhang, X., 2016. International knowledge brokerage and returnees' entrepreneurial decisions. *J. Int. Bus. Stud.* 47 (3), 295–318.
- Liu, Y., 2017. INV firms' growth and collaborative entry mode: the role of transnational entrepreneurs. *Int. Mark. Rev.* 34 (1), 46–67.
- Luo, Y., Park, S.H., 2001. Strategic alignment and performance of market-seeking MNCs in China. *Strateg. Manag. J.* 22 (2), 141–155.
- Luo, Y., Tung, R.L., 2007. International expansion of emerging market enterprises: A springboard perspective. *J. Int. Bus. Stud.* 38 (4), 481–498.
- Maguire, S., Hardy, C., Lawrence, T.B., 2004. Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Acad. Manag. J.* 47 (5), 657–679.
- Marsden, P., 1982. Brokerage behaviour in restricted exchange networks. Social structure and network analysis. Sage, Beverley Hills, pp. 201–218.
- McCormick, M., Somaya, D., 2020. Born globals from emerging economies: reconciling early exporting with theories of internationalization. *Glob. Strateg. J.* 10 (2), 251–281.
- Mezias, S.J., Kuperman, J.C., 2000. The community dynamics of entrepreneurship: the birth of the American film industry, 1895–1929. *J. Bus. Ventur.* 16, 209–233.
- Miles, M.B., Huberman, A.M., 1994. *Qualitative data analysis: An expanded sourcebook*. Sage, Thousand Oaks, CA.
- Min, J., Mitsuhashi, H., 2012. Retracted: dynamics of unclosed triangles in alliance networks: disappearance of brokerage positions and performance consequences. *J. Manag. Stud.* 49 (6), 1078–1108.
- Ngasri, N.E.M., Freeman, S., 2018. Conceptualizing network configurations as dynamic capabilities for emerging market born globals. *International Studies of Management & Organization* 48 (2), 221–237.
- North, D.C., 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge University Press, Cambridge, UK.
- Obstfeld, D., 2005. Social networks, the tertius iungens orientation, and involvement in innovation. *Adm. Sci. Q.* 50, 100–130.
- Oviatt, B.M., McDougall, P.P., 1994. Toward a theory of INVs. *J. Int. Bus. Stud.* 25 (1), 45–64.
- Oviatt, B.M., McDougall, P.P., 2005. Defining international entrepreneurship and modeling the speed of internationalization. *Enterp. Theory Pract.* 29 (5), 537–553.
- Peltoniemi, M., 2011. Reviewing industry life-cycle theory: avenues for future research. *Int. J. Manag. Rev.* 13 (4), 349–375.
- Peng, M.W., 2003. Institutional transitions and strategic choices. *Acad. Manag. Rev.* 28, 275–296.
- Peng, M.W., Ilinitch, A.Y., 1998. Export intermediary firms: a note on export development research. *J. Int. Bus. Stud.* 29 (3), 609–620.
- Peng, M.W., Wang, H., 2002. An intermediation-based view of entrepreneurship. In: Amit, R., Lucier, C.E., Hitt, M.A., Nixon, R.D. (Eds.), *Creating Value: Winners in the New Business Environment*. Blackwell, Oxford, UK.
- Peng, M.W., York, A.S., 2001. Behind intermediary performance in export trade: transactions, agents, and resources. *J. Int. Bus. Stud.* 32 (2), 327–346.
- Peng, M.W., Lee, S.H., Hong, S.J., 2014. Entrepreneurs as intermediaries. *J. World Bus.* 49 (1), 21–31.
- Ripollés, M., Blesa, A., 2022. International new ventures' international performance: a matter of network entrepreneurial orientation and network management activities. *Manag. Res. Rev.* 45 (1), 65–83.
- Sapsed, J., Grantham, A., DeFillippi, R., 2007. A bridge over troubled waters: bridging organisations and entrepreneurial opportunities in emerging sectors. *Res. Policy* 36 (9), 1314–1334.
- Schwens, C., Kabst, R., 2009. Early internationalization: a transaction cost economics and structural embeddedness perspective. *J. Int. Entrep.* 7 (4), 323–340.
- Spulber, D.F., 2003. The intermediation theory of the firm: integrating economic and management approaches to strategy. *Manag. Decis. Econ.* 24, 253–266.
- Tracey, P., Phillips, N., 2011. Entrepreneurship in emerging markets. *Manag. Int. Rev.* 51 (1), 23–39.
- Williamson, O.E., 1985. *The economic institutions of capitalism*. Free Press, New York.
- Xiao, Z., Tsui, A.S., 2007. When brokers may not work: the cultural contingency of social capital in Chinese high-tech firms. *Adm. Sci. Q.* 52 (1), 1–31.
- Yang, M.M., 1994. Gifts, Favors, and Banquets. *The Art of Social Relationships in China*. Cornell University Press, Ithaca, NY, pp. 109–145.
- Yin, R.K., 2009. *Case Study Research: Design and Methods*, 4th ed. Sage, Thousand Oaks, CA.
- Zhou, L., Wu, W.P., Luo, X., 2007. Internationalization and the performance of born-global SMEs: the mediating role of social networks. *J. Int. Bus. Stud.* 38 (4), 673–690.