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Legitimacy building and e-commerce platform development in China: The experience of Alibaba

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ABSTRACT

Although existing studies have connected the emergence and development of e-commerce with infrastructure, culture, and regulations, we approach technological and platform acceptance from the perspective of legitimacy building. In our study, legitimacy is categorized into market, relational, and social legitimacy, and the link between each type of legitimacy and acceptance is explored. We select the case of Alibaba and argue that Alibaba was especially competent in building legitimacy. Alibaba's continuous efforts to build legitimacy facilitated platform evolution despite its exposed weakness in intellectual property rights. These efforts rendered Alibaba as a de facto standard e-business model. This research suggests that any firm that wants market acceptance for its platform or e-commerce technology should focus more on building legitimacy among stakeholders than on anything else.

1. Introduction

During recent decades, the digital economy has rapidly grown in East Asia. Due to the fast development of the Internet and the mobile infrastructure, several "young" firms quickly became national market leaders and have moved into international markets (China Daily, 2016). Accordingly, East Asia has received significant attention from scholars, policy makers, and business practitioners as a locus of entrepreneurship and innovation. Countries in East Asia are now proud of their national firms that are now globally visible, as East Asia has the largest number of firms in Fortune Global 500.

Although it is true that the digital economy has flourished in East Asia, each country has unique political, economic, social, and cultural characteristics. Thus, the digital economy in East Asia has presented different stories for development, even though interests and initiatives to promote ICT (information and communication technology) are similarly strong among the countries in this region (Baller et al., 2016). However, social changes as a result of growth in the digital economy are never identical, not even within East Asia. A drastic, recent social change is in the mode of transaction.

With ICT advancement, East Asian countries have also developed the basic infrastructure for electronic transactions (Baller et al., 2016). Accordingly, online shopping emerged early (Kearney, 2015). The share of electronic commerce (e-commerce) in total transactions has rapidly increased in East Asia. However, the events in a country reveal the idiosyncratic characteristics in the surrounding institutions (Oxley and Yeung, 2001).

Thus far, most studies have explained differences in e-commerce development among countries using three general approaches. The first approach focuses on culture—for example, uncertainty avoidance in Internet use (Oxley and Yeung, 2001), collectivism leading to bandwagon effects (Yoon, 2009), and preferences for traditional transaction practices (Poon and Swatman, 1999). The second approach considers technical arrangement, which determines the level of diffusion of new online products and service introductions (Zhu et al., 2006). The third approach focuses on regulation and policy, which indicates governmental efforts to protect and secure the stability of the economic system in the online space (Wong, 2003).

This study suggests legitimacy building as another factor to determine e-commerce development. Although there are variations across countries in regulations, societal norms, and business relationships, legitimacy building has been largely overlooked as a specific driver of industry development. In a similar vein of institutional theory, stakeholder theory assumes that a firm has a target stakeholder group for the intended behavior (Husted and Allen, 2006; Yang and Rivers, 2009). The leading platform firms in East Asia, such as Alibaba, GMarket, and Rakuten, are the central entities in the national e-commerce industry. Leveraging their positions in the industry, they have been creating different patterns of interactions within current institutional environments and thereby have benefitted from legitimacy successfully

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established in the environmental context. The buyers (consumers), sellers, suppliers, and government have been important in this context, as they are major stakeholders that affect the future growth of the e-commerce platform leaders.

The e-commerce platform leaders are not only profit-seeking firms, but also influence the way of life, as online transactions are now a substantial part of economic behavior. In this study, therefore, we focus on legitimacy building and examine its link to development of an e-commerce platform. Legitimacy is "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995: 574). Because a firm is a socio-economic entity, it feels pressure to gain legitimacy from stakeholders for its broad acceptance (Bergek et al., 2008). Hence, it is reasonable to assume that firms in the e-commerce platform industry try to build legitimacy in the given institutional environment, which in turn facilitates political, technical, and social acceptance and, further, leads to industrial development.

Hence, our research questions are as follows: *What is the role of e-commerce platform firms in building social legitimacy and how does that relate to the development of an e-commerce platform*? In order to address the questions, we choose the e-commerce platform business in China and conduct an exploratory study. This research setting attracts us particularly because, most of all, China is growing quickly and is now the largest e-commerce market, showing 120% of compounded annual growth during 2003–2013 (McKinsey and Company, 2013). The high market concentration ratio almost characterizes China as an oligopolistic structure for e-commerce. This fact subsequently leads to the question of how the market-leading firm has built legitimacy, that is, how the e-commerce platform firms have justified their presence to stakeholders or society. This issue is very important in the future of China's e-commerce industry because the industry is now rapidly experiencing a global transformation.

Our framework suggests that there are three types of legitimacy needs: market legitimacy, relational legitimacy, and social legitimacy. The concept of legitimacy type has been borrowed from Dacin et al. (2007), who claim that firms need legitimacy and the fulfillment of these legitimacy needs enhances firm performance. Although there are alternative explanations, such as strategic or operational approaches, to explain China's e-commerce platform development (Martinsons, 2002), we suggest a complementary, rather than a competitive, view of China's fast growth in the e-commerce platform industry.

This remainder of this paper is organized as follows: In Section 2, we introduce the social legitimacy theory and conceptualize the model, and in Section 3, we explain the research method. Section 4 presents background information on China's e-commerce industry. In Section 5, we provide a detailed case study and discuss further details. Finally, we summarize our research with concluding remarks.

2. Research framework

2.1. Why does legitimacy building matter?

Legitimacy building is required in almost every essential decision of a firm, such as, for example, strategic alliance formation (Baum and Oliver, 1991), post-acquisition integration (Vaara, 2003), innovation (Rothaermel and Hess, 2007), and overseas entry (Chan and Makino, 2007). Legitimation goes through a social validation process that consists of the recognition of a distinctive competency possessed or role played by the organization in providing a good or service (Dacin et al., 2007). The social validation process occurs differently for each firm, and, thus, the level of legitimacy differs among firms. Legitimacy is distinct from reputation, which is based on an emotional reaction (Fombrun, 1996: 37), and it also differs from organizational prestige, which is a favorable public image regarding competencies (Perrow, 1961: 335).

Institutional theory has regarded organizational actions as outcomes of the social justification process (DiMaggio and Powell, 1983; Scott, 1995). Firms engage in organizational actions out of their motivations to be socially and normatively recognized by stakeholders, which include shareholders, customers, governments, suppliers, and alliance partners. Institutional theory has proposed that a firm's action cannot be detached from the social context because it creates inter-dependence with the stakeholders (Amburgey et al., 1996). According to this view, even the most strategic choice is a deliberate attempt to create legitimacy in a society. Consequently, the institutional environment emerges as crucial, as it imposes pressure on firms to increase legitimacy by driving them into conforming to institutional rules, regulations, norms, and expectations (Dacin, 1997; Dacin et al., 2007; Scott, 1995).

However, the nuances of legitimacy differ according to the context. Dacin et al. (2007) propose that firms need different types of legitimacy, driven by the firm's objectives in a particular context. They further identify market legitimacy, relational legitimacy, and social legitimacy, with environmental and firm characteristics driving the need, the targets of the legitimating effort, and the economic and competitive benefits.

Market legitimacy, helps firms establish or maintain the rights or qualifications to operate in a specific market (Dacin et al., 2007). When firms want to increase their presence in the market or enter a new business field, they need recognition in the market and from the important stakeholders. Researchers propose that market legitimacy is especially pertinent and de facto required when governmental authority over business is substantial and government endorsement is essential for existence in a particular market (Peng, 2000; Yiu and Makino, 2002). For example, the Chinese government mandated a market-technology swap policy as a condition for foreign firms' entrance in China and wanted multinational enterprises to contribute to the local technological capability. Although GM was a later entrant, it established a joint R&D institute with a local automobile manufacturer and successfully demonstrated market legitimacy to the Chinese government (Lee et al., 2012).

Relational legitimacy is another type of legitimacy that firms need (Dacin et al., 2007). Firms are networked and always handle their relationships with key stakeholders. Constituents of the stakeholders vary, and key stakeholders differ depending upon the business context. However, what is common across contexts is to send all stakeholders a strong signal that the firm is worthy to do business with. The importance of perceived worthiness becomes even greater as globalization accelerates and increases the presence of international stakeholders in a firm's web of relationships (Bresser, 1988; Kanter, 1989). Relational legitimacy helps firms overcome the liability of foreignness and enhances trust and reliability (Zaheer, 1995). Inter-firm resources and expertise help deal with difficult situations, reduce risks, and enhance firm performance (Child and Faulkner, 1998). Therefore, the need for relational legitimacy is essential for firms that have to deal with a large number of stakeholders. Relational legitimacy enables firms to obtain trust and reliability from stakeholders, and, by so doing, the firms can have a wider range of partner choices in relationship formation (Dacin et al., 2007). For example, in the e-commerce industry, platform firms must deal with many sellers and buyers. The enhancement of relational legitimacy ensures buyer trust and, at the same time, can better attract qualified sellers.

In addition, social legitimacy is also an essential part of the legitimacy function in a firm's socio-institutional environment. Time and space generate different contexts of social responsiveness and corporate social responsibility because all economic activity is embedded within a broader social or institutional context of societal norms, rules, and expectations that defines socially acceptable economic behavior (Dacin et al., 2007; Zukin and DiMaggio, 1990). Nevertheless, "being a good firm" has been an important pressure on firms in any society in any time period (Fombrun, 1996; Perrow, 1961).

An important note is that since building legitimacy leads to social

Table 1
Types of legitimacy.
Source: Dacin et al. (2007).

	Market legitimacy	Relational legitimacy	Social legitimacy
Definition	Rights and qualifications to conduct business in a particular market.	Worthiness as a partner.	Conformity of the firm to social rules and expectations.
Environmental characteristics driving the need for legitimacy	Dependence on government authority and endorsement for market entry and existence.	Competition for attractive stakeholders; necessity of additional relationship-building in the future.	Monitoring of firm compliance with social rules and expectations; importance of socially responsible image to firm survival; pressure for co-evolution.
Firm characteristics driving the need for legitimacy	Market experience; recognition in the market; past performance in the market; government endorsement.	Trust enhancement; dependency of firm business on the stakeholders.	Visibility of firm activity or output; social impact of firm activity or output; image of firm's social responsibility.
Motivation for legitimacy building	To survive or increase one's presence in the market.	To increase one's legitimacy as a good transaction partner.	To increase one's legitimacy as a socially responsible firm; to justify one's market leadership.
Targets	Governments; suppliers; customers.	Customers; collaborators; suppliers.	Public interest groups; customers; local communities.
Economic or competitive benefits	Entrance into or continued existence in a market.	Development of customer loyalty; formation of inter-firm relations.	Possession of a socially responsible firm image; formation of exclusive relationships with key stakeholders.

Note: We adapted our findings to the frame work of Dacin, Oliver, and Roy (2007).

acceptance, the efforts in this area should aim for the stakeholders. Accordingly, the precondition for legitimacy building is to clearly identify the stakeholders. In this sense, stakeholders themselves are crucial parts of institutionalization. Furthermore, as stakeholder needs have increased and diversified, voices for co-evolution and business symbiosis have been more salient (Christmann and Taylor, 2001). Particularly, globalization increases institutional and customer pressure on firms to exceed the locally required level of responsibility. Thus, firms are expected not only to conform to the current social rules, norms, and expectations, but also to show more activity favorable to society, with strong commitments to the market and the networked relations.

In Table 1, we provide a summary of comparisons of market legitimacy, relational legitimacy, and social legitimacy in terms of definition, environmental characteristics driving the need for legitimacy, firm characteristics driving the need for legitimacy, motivation for legitimacy building, legitimacy source, targets, and economic or competitive benefits.

2.2. Drivers of e-commerce development: acceptance in the institutional environment

Because e-commerce occurs in the online space, the transaction behaviors differ from those in the offline transaction system. Relevant technologies thus emerge with critical needs of acceptance in the given social context. These technologies co-evolve with institutional environments, but as business history has demonstrated, many technologies have been turned down by the users or been overridden by emergent competitor technologies (Bergek et al., 2008). Accordingly, whether or not certain technologies as well as firms are accepted may differ depending on the rationales desired by the given societies. Hence, the industrial development of e-commerce inevitably shows country characteristics. Although basic Internet use is related to physical infrastructure, thus to some degree explaining this variation, e-commerce activity is significantly characterized by reliance on the institutional environment (Oxley and Yeung, 2001).

A large volume of literature has investigated the determinants of initiation and institutionalization of e-commerce technology acceptance based on environmental analysis. Research has tended to highlight either technical aspects or socio-economic traits (Thatcher et al., 2006). In nature, e-commerce inevitably competes against offline transactions in which consumers feel more familiar with as an old and established practice. In this light, the development of e-commerce is deemed to depend significantly upon the nature of the institutional environment that legitimatizes the emerging business mode. The institutional environment is “[that] set of fundamental political, social and legal ground rules that establishes the basis for production, exchange and distribution” (Davis and North, 1971: 6).

Several studies have researched the influence of culture linked to e-commerce growth (Wong, 2003; Yoon, 2009). Nevertheless, the institutional environment that possibly leads to the rapid growth of e-commerce activities needs more attention. For example, e-commerce technologies are evolving fast and perhaps faster than the national culture. Technology-related institutions, such as platforms, may be more influential on the growth of e-commerce (Martinsons, 2002). At the same time, although current e-commerce studies are fundamentally based on the technical advancement itself, which should spread quickly across countries (Wong, 2003), the interaction between these technologies and the institutional environment may shape a unique trajectory in each country.

Scholars have illustrated that infrastructure and socio-economics have created a significant level of variation in the acceptance and growth of e-commerce in different countries (Efendioglu and Yip, 2004; Kshetri and Dholakia, 2005). The infrastructure indicates the general information technology (IT) development, including connectivity between hardware and software, telecommunications, product delivery, and transportations systems. In the service aspects, e-payment systems, secure messaging, and electronic markets have been regarded as the primary diffusion factors (Efendioglu and Yip, 2004; Oxley and Yeung, 2001). More fundamentally, the institutional environment is built upon the level of strength of the institutional pressure (Gibbs and Kraemer, 2004); openness to external trade and investment, global competition, and industry structure as key determinants of e-commerce diffusion (Gibbs et al., 2003); and the respect for the rule of law and credibility in the payment channel (Oxley and Yeung, 2001). These aspects determine the scope of e-commerce use (Gibbs and Kraemer, 2004), the likelihood of e-commerce diffusion (Gibbs et al., 2003), and the resistance to adoption of new e-commerce technologies (Oxley and Yeung, 2001).

These institutional factors can also be categorized into three pillars of institutions (Scott, 1995), which were later applied to the e-commerce industry (Kshetri and Dholakia, 2005). One is the regulative pillar, which addresses the rule of law, the existence of laws that govern the online transactions, and controls on the Internet. The normative pillar is the preference for personal face-to-face communications or the social norms. Finally, the cognitive pillar is the collectivistic culture or habits related to economic transactions (low credit card usage). Since countries have different levels of these institutional pillars, they develop e-commerce activities in distinctive manners (Kshetri and Dholakia, 2005).

However, the institutional environments have varyingly affected e-commerce activities, and hence, the overall effects may be complicated.

For example, the rule of law had a positive effect, but uncertainty avoidance, one of the cultural dimensions, had a negative effect on e-commerce development (Zhao et al., 2007). Although it is difficult to generalize across countries, existing studies suggest that the adoption of B2B (business-to-business) e-commerce shows the most visible differences between developing countries and developed countries because developing countries tend to lack the necessary financial, legal, and physical infrastructures for the development of e-commerce (Tan et al., 2007).

In order to continue industrial development, firms as well as technologies should be accepted by society. Platform firms in the e-commerce industry have to interact with consumers, sellers, regulators, technical partners, and shareholders. In the e-commerce system, trust is one of the fundamental requirements (Palvia, 2009) or determinants for the successful proliferation of online exchange relationships (Gefen, 2000). Without trust, acceptance cannot follow; the consequent use of an underlying infrastructure and Internet application layer would be impossible, and e-commerce would not then grow (Martinez and Williams, 2010).

Because trust is crucial, online technologies have offered ways to build trust. In general, it is easy to change the name and appearance of a company in the online space. A disreputable company may exit the business and reenter with a different identity at a very low cost, with no perceptible break in activity (Oxley and Yeung, 2001). Developing countries, most of which were not ready to prepare for technical incompleteness, had trouble with online acceptance and tried hard to increase the social trust. Accordingly, the development of e-commerce technologies is influenced by the technology-enabled efforts to complement the social trust.

South Korea, for example, shared the problems of customer trust in online merchants in the early stage of e-commerce development (Jin et al., 2008). There were fears that merchants might sell defective products, that merchants could be dishonest thieves, and that online payments cannot be recovered even if the product is not delivered. For another example, during the early stage of e-commerce, the Chinese government was either unwilling or unable to fully enforce many of the Internet and e-commerce regulations it instituted (Efendioglu and Yip, 2004). Accordingly, 40% of the sellers using an online auction site were reported to pick a buyer in their hometown so that they could swap the goods for cash face-to-face but use the website for electronic advertisement and bidding.

Trust issues are important not only in the buyer-seller relationship but also in payment stability. Because two parties make a transaction through technology, e-commerce intermediaries increase the credibility of information delivered over the Internet, mitigating possible fraudulence online. Besides the e-commerce intermediaries, credit card companies play an important role in monitoring and certification of commercial transactions, providing assurance to both buyers and sellers (Oxley and Yeung, 2001).

Overall, as illustrated in Fig. 1, we have conceptualized that the industrial development in China's e-commerce platform is promoted by efforts to make firms legitimate with, more specifically, market legitimacy, relational legitimacy, and social legitimacy.

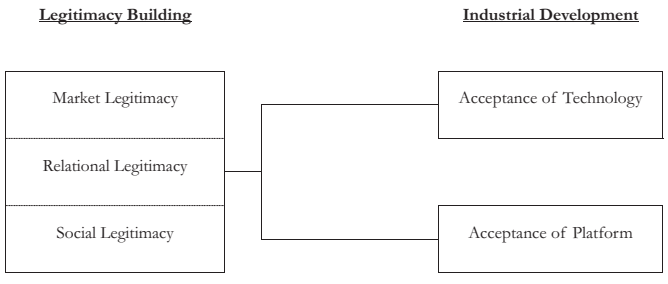

Fig. 1. The theoretical framework: Legitimacy building and industrial development.

3. Methodology

The research setting is the e-commerce platform industry in China. We have configured the leading firms with a historical examination of the industry. As the number of entries have increased in the e-commerce platform business, it is not possible to interview all platform firms. Instead, we have selected Alibaba as our case study for several reasons. First, Alibaba has witnessed the industrial evolution since the early stage of e-commerce. The firm, thus, is a valuable source to provide information about the industry's efforts toward legitimacy building over time. Second, although Alibaba shares approximately 50% of the e-commerce platform business (KPMG, 2014; McKinsey and Company, 2013), its share rises to 90% of the business if including mobile commerce, another form of e-commerce in a broader sense. This fact sufficiently qualifies Alibaba as a key object to study in China's e-commerce industry. At the same time, it means that Alibaba's legitimacy has been essential in explaining its market success. Third, as Alibaba went to initial public offering in the overseas market, the firm is now being globalized. We also examine whether the increasing overseas sales have affected legitimacy building in the domestic market.

In order to obtain interview data about legitimacy building by Alibaba, we have accessed mainly Alibaba's stakeholders, including suppliers, consumer groups, and R&D partners. Overall, we have conducted seven interviews, with each interview lasting 2 h on average per visit. The interviewees have been working within or with Alibaba since its establishment. The interviews were with one Alipay developer, one ex-employee at Alibaba as a merchandiser, one manager in public relations at one of Alibaba's overseas subsidiaries, one manager at the credit card firms, one seller with more than five-year transaction history with Alibaba, and one government officer in charge of online business.

4. Background of China's e-commerce industry

In 2013, China became the largest e-commerce market in the world (KPMG, 2014). The exponential development of China's e-commerce was greatly driven by an increasing Internet penetration rate and the establishment of localized e-commerce platforms. Backed up by the large population of domestic Internet users (more than 688 million people), China's mainstream e-commerce mode has been moving from B2B to C2C (customer-to-customer) and then to B2C (business-to-customer). In 2015, B2C business outran C2C business for the first time in terms of market share (51.6% and 48.4%, respectively) (China E-Commerce Research Center, 2015). The recent trend in China's e-commerce business is presented in Fig. 2.

China's e-commerce started with the B2B mode. The earliest group of China's e-commerce firms was established around 1997–1999. These B2B firms included ChemNet, 8488, Alibaba, Joybuy, and Dangdang (China E-Commerce Research Center, 2009). Since its advent, B2B has remained as the largest share of China's e-commerce market in terms of trade volume, although the dotcom bubble burst slowed growth in the early 2000s.

In 2003, Alibaba launched Taobao, the first C2C business in China. Due to incomplete institutional arrangements for online payments, Alipay began to offer a third-party escrow service in 2003, which enabled transactions between merchants and buyers on Taobao. As a result, China's e-commerce explosively grew until 2008, when the global financial crisis triggered recession in the world market. China's exports were also attacked, but the crisis provided an opportunity for e-commerce firms to shift from the global offline market to the domestic online market.

The strategic change also coincided with governmental policy that attempted to boost the domestic economy to buffer external shocks. Several policies were released to promote business environments favorable to the e-commerce industry. The period after 2008 can be

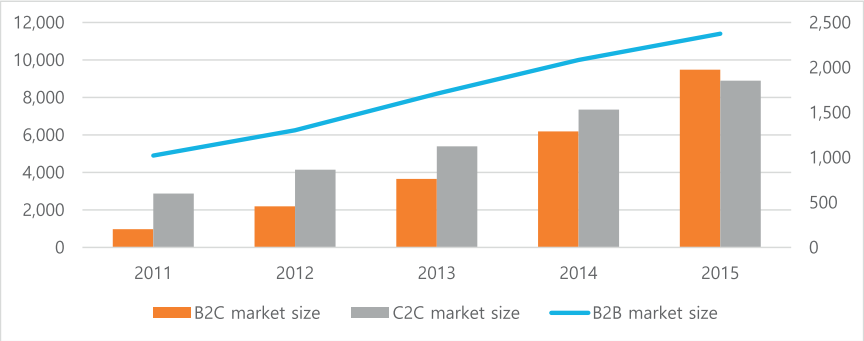

Fig. 2. Growth of e-commerce business in China (unit: billion RMB).
Source: Data from China E-Commerce Research Center (http://www.100ec.cn/) and compiled by the authors.

regarded as the renaissance of China's e-commerce. Subsequently, a large number of e-commerce firms were established during 2008–2009, of which 75.4% of firms were engaged in the B2C market. Alibaba introduced Tmall, a typical open platform and the most representative online B2C business now.

Jingdong (JD.com), another leading e-commerce firm in China, started its B2C business in 2004 and experienced exponential growth from 2007. Unlike the dominant Tmall (by Alibaba), JD.com adopted a closed business model that took all product inventory in-house to ensure quality. The business model of JD.com also integrated the entire value chain built under its control. In 2015, JD.com shared 22.9% of China's B2C market, leading others that operated with a closed business model (China Industry News, 2016). Alibaba and JD.com called themselves all-product brands, whereas consumer behavior indicated buying patterns based on their initial product divisions. In 2015, Tmall (Alibaba) and JD.com jointly shared 80% of the B2C market.

5. Case study

Since the first type of e-commerce emerged, China's e-commerce industry has continued to introduce new technologies and new business models. Not surprisingly in such a dynamic environment, countless new firms have entered, and, at the same time, many firms have left the e-commerce market. Therefore, it is noteworthy that Alibaba has been leading the market with many business models and over time. The e-commerce evolution in China seems to be, in this regard, the history of Alibaba's business growth. Therefore, legitimacy building and the development of China's e-commerce should be closely connected with the Alibaba trajectory.

Alibaba opened the B2B platform in 1999, which was subsequently followed by introduction of Taobao, the C2C platform, in 2002. In 2004, Severe Acute Respiratory Syndrome became a nationwide epidemic in China, which made Chinese people stay home, relying on e-commerce as a shopping channel. This event triggered the rapid growth of Taobao (C2C). There were a number of global platform firms in China, such as eBay, which possessed brands and resources. Nevertheless, due to localization failure, eBay left the Chinese e-commerce market in 2006 save for its global-bound platform only. Since then, Taobao (Alibaba) has played without a global rival and has continued its straight and fast growth.

5.1. Building market legitimacy

Market legitimacy puts forth two points for its conceptual essence: acknowledged qualification and endorsement from authority. Alibaba's market legitimacy has been built most visibly in, among others, the introduction of Alipay and collaboration with the Chinese government, which led to acknowledged technical excellence and government endorsement.

In the early development stage of China's e-commerce, the transaction process suffered from the existence of fraudulent bankcards and counterfeit products, which plagued sellers and buyers, respectively. Soon after launching Taobao in 2002, Alibaba tried to resolve these problems by establishing Alipay, an escrow service that retains the payment until purchase is delivered and confirmed by the buyer. Because the business realm of Alipay overlaps the current banking system, state-owned banks opposed Alibaba's permit for the financial operation (China Economic Review, 2014). However, the Chinese government had a strong drive to develop the e-commerce industry and released “Several Opinions on Accelerating Development of Electronic Commerce” at the end of 2004. This insured the State's preferential policy toward e-commerce.

In February 2005, Alipay responded to the State with an official announcement of the commitment that it should compensate any losses to buyers from Alipay use, which greatly legitimized the businesses of Alibaba among buyers in the e-commerce market. The Chinese government evaluated highly the efforts of Alipay to promote the e-commerce industry and facilitated relevant institutional arrangements. As a result, in April 2005, the “Law of Signature” and the “Regulation on the Online Trading Platform Service” were released, providing a legal foundation for China's e-commerce infrastructure. After the enactment, institutional arrangements proceeded quickly. In October 2005, for example, the People's Bank of China (China's central bank) released the “Electronic Payment Guidelines No.1” which provided comprehensive specifications on safety, responsibility, and technology measures in electronic payment (People's Bank of China, 2005) and the Ministry of Commerce announced the “Guidance on Online Trading” in June 2006.

Alipay has been the biggest contributor for Alibaba to establish its market legitimacy. In addition to the successful attempt to guarantee transaction security, Alipay helped Alibaba settle the dominant position in the C2C market, which enabled Alibaba to soon introduce a series of new business models. After the Alipay service made a debut in China, similar services have been introduced by both domestic and multinational competitors, such as ApplePay. However, their combined market share was quite small compared to that of Alipay. Alipay's market share dropped when WeChat, an integrative mobile service provided by Tencent, launched its own pay system (Wepay) in 2011. However, Alipay has still been powerful as a de facto technical standard. Despite competition with Wepay, Alibaba's share exceeds 73% as of 2015 if e-commerce and mobile commerce (m-commerce) are combined.

In essence, benefitting from Alipay, Alibaba continued to achieve growth without any profit. Taobao's absence from profit-seeking activities has been important in understanding Alibaba's legitimacy building. At the same time, being the first and the only firm in the global market to combine platform and payment has contributed greatly to Alibaba's market legitimacy building. An owner of the firm that sells female shoes told us about the comparative benefits across

countries:

> "I have done e-businesses in the U.S., South Korea and China. Sellers in Korea have to pay 15% to the platform as a platform usage fee and Amazon also collects 10%. But if you work with Alibaba, for example Tmall, the fee is 7%, much lower than other countries. In fact, the fee is even waived for the first three years. Alibaba is such an innovative firm. No firm can imitate Ali."

Before introduction of Tmall, Alibaba made profits not from the platform business but from Alipay. Even now, Alibaba's businesses, including Taobao, Tmall, and Tmall Global (global to consumer business), are being operated by Alipay and external investments, not by the profits from the platform businesses. Alibaba's platforms are assessed to be the most consumer-oriented and have satisfied consumers with the user-friendly interface and technical specialties.[1,2]

Alibaba's market legitimacy building was also strengthened by its relationship with the Chinese government. In China, where the government stands central in industrial development, managing a good relationship with the government is perceived as a state endorsement to society. The Chinese government firmly supported the Alipay launch in 2004 despite the strong opposition from state-owned banks. At a glance, the success of Alibaba appears to be attributed purely to the favorable treatment from the government. However, the relationship between Alibaba and the Chinese government has actually been complementary and mutually beneficent, not just unilateral patronage from the government. A previous manager at Alibaba told us that:

> "A few years ago when Alibaba was about to open the G2C platform, the WTO (World Trade Organization) required China to make a free trade agreement as a condition of its membership. The Chinese government was ready and determined to join the WTO after simulating the potential benefits and losses for a long time. However, China traditionally allowed unofficial trade channels, so there were many imports that China's Customs could not figure out, whereas US Customs tightly controlled cross-border trade. This issue raised diplomatic conflicts with the US when China was about to sign with the US. At that, Alibaba argued that, given the corporate rule that only ID-checked customers could purchase overseas goods through Alibaba's global platform (G2C), it had all transaction information, including amounts and customer IDs for the imported goods, through its platform. The transactions via Alibaba became officially approved and encouraged by the Chinese government, particularly regarding cross-border purchases. Launching G2C led to a win-win situation in that the Chinese government welcomed Alibaba's new launch of the G2C platform as a complementary function to the current government."

As Alipay and Alibaba's G2C business suggest, Alibaba had a good reason for market legitimacy when it began a new business that it can effectively "fill in" the institutional deficiency. The stance gained acceptance from Chinese government, supplier, and consumers, which greatly helped Alibaba clearly build up its market legitimacy.

5.2. Building relational legitimacy

Relational legitimacy is the source of trust and reliability obtained from business-related stakeholders. By building relational legitimacy, a firm can be recognized as an exemplary partner in its business network. Alibaba's relational legitimacy has been sought broadly in four areas: its efforts to make a transparent communication system, to prioritize attending to the more vulnerable partners in managing relationships, to build a symbiotic business environment (i.e., protecting the interests of business partners rather than exploiting them), and to present business models imitable by others.

In the early stage of the e-commerce industry, the system to ensure was far from being established in China. In the early 2000s, Chinese consumers still preferred cash payments and face-to-face negotiations. In a society where people avoid transactions with strangers, reputation highly matters. Alibaba established trust in two aspects, the buyer-seller relationship and the buyer-platform relationship. Traditionally in the e-commerce industry, rating and leaving comments do not necessarily lead to prompt feedback. However, at Alibaba, customers have been able to start chatting even before the purchase. The communications between sellers and buyers have been important reputation building processes for the sellers. The Chinese online buyers have tended to query product quality and instruction or to negotiate the price with the sellers before they place an order.

Customers have not only communicated with sellers, but they have also been able to leave post-sales reviews. A manager at one of Alibaba's partners which supplies customer communication software told us as follows:

> "I think that Chinese customers are conservative. They are persuaded more by their peers, who actually used the products, than by unknown experts. So they welcomed the idea to rate and comment on the sellers and the products. The e-commerce platform has provided the average rating of a seller based on the feedback. Alibaba was the first in China to technically realize two-way instant communication tools on the platform. At the same time, Alibaba has publicly provided in real time the entire worldwide transactions data. Faking ratings, reviews, or replies has been made technically impossible on the Alibaba platforms. As a solution developer, we were very happy to see customers trust Alibaba."

Although customers in advanced countries have been well protected by the relevant institutional arrangements, Chinese customers could not legally return "defective goods" until 1995, when the government manifested that customers should be guaranteed with three rights to repair, exchange, and return. Before this policy, customers were responsible entirely for any risk. They still had to face risks from unstable transactions even years after the policy release. In this regard, the introduction of Alipay, in addition to its financial intermediary function, drastically changed the business paradigm from a seller-dominant to a buyer-oriented model.

Alipay holds money until a customer confirms delivery of goods. If a customer does not approve, the money stays in the buyer's account and is not transferred to the seller for the next 15 days. Alibaba sequentially introduced additional customer services, which include the return or cancellation of a transaction within seven days without any conditionality. The services were radical innovations for the customer relationship. One of the customers that we interviewed confessed her experience of buying at the Alibaba platform as follows:

> "I frequently buy at Taobao. If there is any defect in the goods that I bought, I did not bear any loss. Just do not approve my transaction at the Alipay and return the good. The customers are always weaker than the seller but Alibaba protects us. We have a deep trust in Alibaba."

In fact, Alipay's contributions extend beyond transactional stability. For example, Korean e-commerce platforms must pay a fee to the payment system firm (mainly credit cards firms). The fee rates are approximately 1.5%–3%. In contrast, because Alibaba owns the payment system, it charges lower fees on Taobao than the Korean credit card firms do, which eventually allowed Taobao to help sellers lower product prices. Further, the fees collected from the Alipay service are distributed to the solution developers, those who created the service values and, thus, deserve the financial rewards. Therefore, despite

[1] Bloomberg Technology. 2017. "Alibaba's grip on consumers drives sales past estimates." (https://www.bloomberg.com/news/articles/2017-08-17/alibaba-sales-beat-estimates-on-surging-chinese-consumer-demand).

[2] Forbes, 2017. "Why Alibaba's Tmall platform works so well." (https://www.forbes.com/sites/franklavin/2017/11/20/alibaba-and-the-consumer-journey-my-dinner-with-joe-tsai/#79299ea914e9).

intra-firm vertical integration, which often raises anti-trust debates in advanced countries, Alipay has established strong relational legitimacy because it protected consumer welfare and, therefore, is not subject to public criticism.

Besides the role of Alipay in lowering product prices, Alibaba showed other behaviors unlike those of a textbook monopolist. Taobao, for example, charged no listing or transaction fees before Tmall (B2C) was launched in 2010. Before the start of Tmall, Taobao had zero profit. Its server maintenance costs, marketing costs, and transaction costs had to be covered by external investments or advertising. After 2010, Taobao manifested a no-fee policy on either the buyer or the seller for the first three years and then extended it for an additional two years.

In 2014, Alibaba launched Tmall Global (G2C), expanding its business from the domestic market to the global market. As Tmall purchases overseas, it currently charges a 5% fee. This presents a sharp contrast to other foreign e-commerce, as Western platforms (such as Amazon) usually charge 10% of the purchase as a transactional fee. In China, B2C businesses preferred to use the Tmall Global platform because the total costs of technology solution purchases, interface layout, and marketing activities are generally more than 7% of the total transaction amount. After all, paying for the 5% fee is a cheaper choice than not joining Alibaba. In contrast, the Korean platform charges 7–15% to the small online malls, which is too high. As a result, the number of B2C businesses increased from 1993. Doing business on the Alibaba platform has been more comfortable and profitable, as Alibaba provides institutional protection and a standard business model.

Alibaba was the first and forefront to create all of these models. Other later entrants, such as JD.com, began to imitate Alibaba. As such, the Alibaba business model became an industrial "format." Alibaba's solution, customer policies, logistics and supply chain, and even the no-fee policy have spread out across platform firms. The business models created by Alibaba have enabled China to promote the best environment for e-commerce in the world. The business partners, the customers, and even the competitors have highly evaluated and respected Alibaba for its efforts to pursue mutual benefits and industrial leadership, which greatly enhanced Alibaba's relational legitimacy.

5.3. Building social legitimacy

The essence of social legitimacy building is to make commitments to those who are not directly connected to a firm's interest. The difference between relational legitimacy and social legitimacy is the breadth of context, where social legitimacy incorporates the benefits from a firm's behavior to society and the levels of public goods resulting from the firm's behaviors.

From the very beginning, Alibaba had a strong commitment to building China's e-commerce industry. Hence, social interaction was very important to the firm. Alibaba has officially announced that the firm has a clear goal to innovate for the poor. Innovation for the poor led Alibaba to focus on consumption and production available to poor people. The former action was sought by connecting low-cost, quality products and services to poor customers. Sourcing these goods has sometimes violated intellectual property rights, and Alibaba has persistently suffered from criticism that fake goods are being circulated at Taobao. A newspaper interview with Jack Ma illustrates how Alibaba would perceive this issue. Mr. Ma asserted, "I don't see any problem in people buying faked goods. Faked goods are of better quality and price than the genuine one".[3] He also even committed in patronizing Chinese fake-good manufacturers, most of whom are small and middle-sized sellers and depend upon the channel of Alibaba for their living.[4]

As Alibaba went public on an overseas stock exchange and the Chinese government reinforced protection of intellectual property rights (IPR), domestic regulations against the violation of IPR have increased, and foreign shareholders have been carefully monitoring whether Alibaba complies with the global standard. However, the domestic sentiment seemed somewhat considerably different. One of the consumers that we interviewed told us:

> "There is a widespread sense among Chinese people that foreign goods have taken over the domestic market, as in the age of imperialism. I think that the reason why Chinese people have a favorable feeling for *shanzhai* products, locally made goods parodying foreign goods, is because these products are revenging the foreign goods. I am not rich, so I the price is very important to me. I think that Alibaba made a right choice that it targets lower income class. Low price matters to me the most. Alibaba is sometimes blamed on the newspaper for selling the unauthorized goods. We are afraid that Alibaba may increase prices. We support and trust Alibaba's current actions."

In fact, Alibaba has been visibly active in providing affordable goods to the low-income region. From the outset, Alibaba adopted a "Rural China Strategy" in which its C2C platform Taobao enables low-income customers to benefit from e-commerce technologies. For example, Alibaba started the "Rural Taobao" promotion in October 2014 to serve rural residents, whose population was more than 674 million. Alibaba established operation centers in varying counties and service stations in varying villages to bring goods and services to the countryside by providing information customized to the rural area and extending the logistic channels. As of the end of 2015, more than 12,000 village-level service centers have been opened in 20 provinces. These service centers have taken care of the logistics between counties and villages, rural marketing activities, and customer service communications. They have also assisted villagers with limited access to the Internet with the entire process of e-commerce, from product order, delivery, refund, and exchange as well as payment collection from selling local (rural) products.

Alibaba not only promoted consumption for the poor but also encouraged the participation of the poverty class in the e-commerce value chain. In order to expand its supply base to the low-income region, Alibaba initiated the virtual establishment of "Taobao Village." In essence, Taobao Village is a cluster of rural products collected and stored within a location administratively classified as village. Once Alibaba designates a Taobao Village, rural farmers and sellers in the village can use the platform provided by Taobao at no charge. Alibaba marks a Taobao Village based on three criteria: "businesses of the village should start from the use of Taobao platform," "the annual transaction volumes should exceed 10 million RMB," and "more than 10 percent households should be involved in the e-commerce or 100 active Taobao stores should be opened" (Allizila, 2016). By the end of 2015, Alibaba had promoted 780 Taobao Villages, which operate a distribution system across and within 17 provinces and had opened more than 200,000 online shops on the Taobao platform as a result of implementing this initiative.

The Taobao Village initiative is a valuable example that shows how advancement of IT can contribute to economic development. In the early 2000s, when the Internet penetration rate was very low, posting or promoting products online was far beyond the technical knowledge of rural residents in China. Alibaba continued to provide rural residents with online business solutions, including Alisoft, Aliloan, and Alimama. Alisoft is service platform software that instructs sellers on their business IT needs. Aliloan lends to sellers with good transaction histories and customer ratings at Alibaba. Small sellers, which usually have difficulty in accessing bank loans, have greatly benefited from Aliloan. Alimama enhances a seller's marketing capability. Combined with Alisoft and data services provided by Alibaba, sellers have been able to start businesses by following detailed steps guided by Alimama first to set up Taobao shops and then to organize, publish, and promote

[3] Financial Times. 2016. "Alibaba's Jack Ma says fakes are better than originals." (www.ft.com/content/6700d5cc-3209-11e6-ad39-3fee5ffe5b5b).

[4] Forbes. 2015. "Why Alibaba's counterfeit problems will never be solved." (www.forbes.com/sites/michaelschuman/2015/11/04/alibaba-and-the-40000-thieves/#77df2f6f29dc).

products. Alimama also offers instant communication tools to link buyers and sellers and teaches production promotion through online advertisement. Although Taobao also provides solution manuals for platform maneuvers, most rural sellers obtained necessary information from their acquaintances or the community members. These Ali-family additional solutions have eased the way of learning from peers, so that rural sellers on the Taobao platform have become adaptive to command new IT business skills.

Social legitimacy building by Alibaba has moved further beyond China. Upon launching Tmall Global, it established a supply chain platform called "*Cainiao*" (meaning "bird's nest" in English). The firm organized a network among logistics firms while simultaneously building logistics centers in select locations. Sellers do not need to store goods but have directly stocked them in Alibaba's logistic centers and *Cainiao*. By so doing, sellers do not have to bear the storage, packaging, or delivery costs, all of which are burdened by Alibaba. Due to the under-developed infrastructure in China, supply chain building was difficult in the domestic market. Alibaba instead first experimented overseas and has operated *Cainiao* in the US, the EU, Japan, and Korea. Originally, *Cainiao* was designed for local supplier assistance but, as Alibaba started Tmall Global, the logistics network expanded into the overseas market. By building *Cainiao*, Alibaba finally became able to integrate the entire value chain in e-commerce.

Suppliers also greatly welcomed Alibaba's entry in logistics. In addition to the logistics cost saving and delivery lead-time reduction, suppliers have enjoyed greater power over price deals with Alibaba. When suppliers had to individually ship purchases, suppliers could not exercise any bargaining power over any platform firm. Nevertheless, after suppliers have managed to ship bulky items using Alibaba's storage site, they have been able to ask Alibaba for more favorable treatment. In this mechanism, Alibaba has strengthened the business ties with reliable and competitive suppliers.

The global expansion did not only benefit the suppliers. Securing the ties with qualified suppliers has helped Alibaba enlarge the pool of domestic customers. One Chinese female who works at foreign investment bank located in Shanghai and previously studied in the U.S. told us that:

> "I recently purchased American baby goods through Tmall Global. I used to go overseas for personal shopping or ask my friends to buy and ship to me. But now I don't have to, thanks to Alibaba. I can even check the history of my seller. I can be as relieved as I used to buy at Amazon. I plan to buy a Swedish stroller next time for my niece. It is a large-ticket item but I have no hesitation in using Tmall Global again."

Since Alibaba originally intended to promote satisfaction for the low-income class, Alibaba's social legitimacy was achieved from the part of the society. However, as the firm improved the overall logistics and relevant infrastructure, the service, once targeting lower-income class, became widely spread to middle-income and high-income classes by offering the international delivery. Social legitimacy has been accordingly constructed by the acceptance of the wider society members.

Alibaba used to be involved in several scandals and corruptions, but it has systematically fortified its corporate ethics. For example, Alibaba's market directors do not work on a specific item longer than three months or participate in any events requiring seven rounds of selection processes.

6. Discussion and conclusion

6.1. Becoming a standard model in China's e-commerce industry

Frequently, a state-of-art technology is turned down and the most innovative firms do not succeed in the market. Scholars have endeavored to solve this puzzle, and institutional theorists have proposed that acceptance in the market requires normative reasons, known as legitimacy. The legitimacy perspective has further claimed that legitimacy should be broad enough to be categorized into market legitimacy, relational legitimacy, and social legitimacy, depending upon the context in which the legitimacy is created. These types of legitimacy together lead firms or technologies to increase acceptance in the market. Here the stakeholders are essential as the stakeholder theory posits that stakeholder acceptance is preconditioned for technologies and systems to be adopted.

Market legitimacy is endowed to a firm when a firm obtains qualifications or an official endorsement. Market legitimacy has targeted consumers, suppliers and the government. Alibaba introduced Alipay and filled in an institutional vacancy due to an underdeveloped financial system in China. Alipay has changed the lifestyle of Chinese people: it dominates the e-commerce space and customers also use it for their daily purchases. Previously, Chinese consumers absolutely preferred cash as a payment method, but cash is now replaced by an escrow system initiated mainly by Alipay as of 2015. In addition, Alibaba's close cooperation with the Chinese government for the national interests has undoubtedly legitimized its market presence, as it clearly delivers the message that "Alibaba works for China." Not to mention, Alibaba is accepted by the suppliers as a representative online platform.

Relational legitimacy is obtained when a firm establishes trust and is recognized to be trustworthy among its business partners in the network. Alibaba has tried to build relational legitimacy by systemizing the communications between sellers and buyers (the key stakeholders for relational legitimacy) as well as among buyers in a more transparent and reliable way, which provides accurate and effective information. Alibaba has also taken more care of consumers, who have traditionally borne the risks of business transactions. Although Alibaba is a private firm that assumes profit seeking as its main goal, it has also been considerate to the seller firms and consumers on its platform. It has never placed its own financial gains on top but rather has tried to develop the business environment as friendly and facilitating as possible to everybody. The fact that other firms continue to imitate the Alibaba business model, along with Alibaba's commitment to provide a leading business model for other followers, help Alibaba firmly establish its relationship legitimacy.

Social legitimacy building requires firms or technologies to serve the benefits of society in a macro-context. Alibaba has combined technology and corporate social responsibility by establishing supplier networks, particularly for the low-income class or in rural areas. The Rural China Program, Taobao Village, and the *Cainiao* initiative have represented the efforts of Alibaba in building social legitimacy. The key stakeholders until recently were the lower-income classes in China. In our interviews, Alibaba made it clear that those who had higher demands for e-commerce were not the rich people but lower-income classes or rural residents. As the relevant infrastructure and logistics industry improved, however, Alibaba subsequently included upper-income society into the stakeholder group.

Finally, in our study, sources for each type of legitimacy were intertwined while they are distinct in the framework of Dacin et al. (2007).[5] It seems that the difference arises from the fact that Alibaba had to create an industry. In order to justify its dominant position, it must have extensively sought for legitimacy and, as a result, stakeholders for each type of legitimacy are overlapped. Relatedly, Alibaba's current success is attributed reasonably to by its extensive and inclusive search for legitimacy. China's has several firms in the e-commerce platform business and, in fact, some have shown a good business performance. However, no firm was as challenging (seen from introduction of Alipay despite resistance of state-owned banks: market legitimacy), charity-oriented (seen from Taobao village establishment: social

[5] We admit that the framework is not perfectly adoptable to our setting. Authors appreciate the anonymous reviewer who pointed out this.

legitimacy), and partner-centered (based on the no-fee policy) as Alibaba. Most failed or became out of the business.

For example, EachNet, a subsidiary of Ebay, was leading the e-commerce industry in the early stage. However, it failed in building market legitimacy. While Alibaba accompanied Alipay, EachNet did not bring PayPal, which caused a failure in guaranteeing the transaction safety. Absence of the escrow system deeply hindered the development of its ecommerce business as buyers and sellers could not establish trust. EachNet also lacked relational legitimacy. While Alibaba waivered the platform fee, EachNet charged on the merchants although it stopped the charge in May 2008.

Not only the multinational enterprises, but also the local firms found it hard to build legitimacy. Paipai was an e-commerce platform developed by Tencent in 2005. Based on the Tencent user base, it expanded fast after launching. However, without the killer application, it was hard for Paipai.com to outrun Taobao in terms of size and scope. As for the social legitimacy, Tencent did not consider e-commerce as its core business, so that its movements to attract merchants into the platform were very limited. Paipai made some efforts to establish supporting system for the advertisement or the online shop design to the merchants, but the efforts were not salient. The communications system between platform, merchants and buyers are not well established. As a result, Paipai could not maintain connections with key stakeholders, failing in building social legitimacy.

Overall, Alibaba has become a business leader that has created “standards” in doing business and industrial development in China's e-commerce industry. Our study implies that such social acceptance must be accompanied with a high level of legitimacy. Although technology standardization is usually in the realm of government, sometimes any standard endorsed by the government fails to be accepted in society. This research explains why some standards survive in the market and others do not when there are multiple standards in competition. The Alibaba experience clearly demonstrates that standards, even with government endorsement, should not condescend to the social aspects. Without acceptance in society, standardization would remain nothing but unnecessary state intervention. In this sense, our research, by illustrating how a business model became a de facto standard that greatly changed people's lives, demonstrates that any technology standard should be socially legitimate in order to be successful (that is, acceptance from people) and thereby contributes to the standard-related literature.

6.2. Contributions

First, this study contributes to the linking of institutional theory (legitimacy building) and technology management (platform acceptance). Although scholars have studied the role of legitimacy in the acceptance of multinational enterprises, new products, and institutional arrangements (Peng, 2012; Rao, 2002; Ward et al., 2011), platform acceptance was separately considered in technology management. In this study, we expand the existing platform research into institutional theory, namely, into market, relational, and social legitimacy.

Second, this study analyzes the evolution of the platform from a social-techno perspective. We find that technology and platform acceptance, which are in the domain of technical and social systems, respectively, support industrial evolution. Although some studies have investigated e-commerce technology acceptance (Klopping and McKinney, 2004), the understanding of e-commerce in the context of socio-technical systems is still insufficient. Therefore, our research enhances the relevant knowledge of how social and technical elements interact through a self-reinforcing mechanism.

Third, we also examine the evolution of the platform business model. China's e-commerce mainstream platform business models have moved from B2B to C2C and then to B2C. We illustrate the basis on which this trajectory has been constructed by exploring the platform evolution mechanism. We also suggest that legitimacy is essential in the emergence and diffusion of these platform business models.

Moreover, our study provides managerial implications and its findings would provide practical guidance to industrial practitioners and policy makers. The results highlight that e-commerce companies should consider the bigger picture of platform building rather than focus on the usual business goals.

The three kinds of legitimacy that have been identified provide a comprehensive understanding of the dynamics and mechanisms of platform evolution. As for market legitimacy, it is crucial to break the bottleneck in the business model, such as the payment security issue in Alibaba's case, to enable industrial evolution. Relational legitimacy provides insights that competing against the platform becomes more important than competing against firms. Alibaba adopts its low platform fee strategy to attract and nurture sellers as compared with other leading international e-commerce platform companies. In terms of social legitimacy, the company could develop through embedding in the niche market and then expanding to the mainstream market. We find that Alibaba achieved social legitimacy through the mechanism of innovation by the poor and innovation for the poor. Our research provides new perspectives to companies that adopt platform strategies by investigating the platform's legitimacy mechanisms.

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