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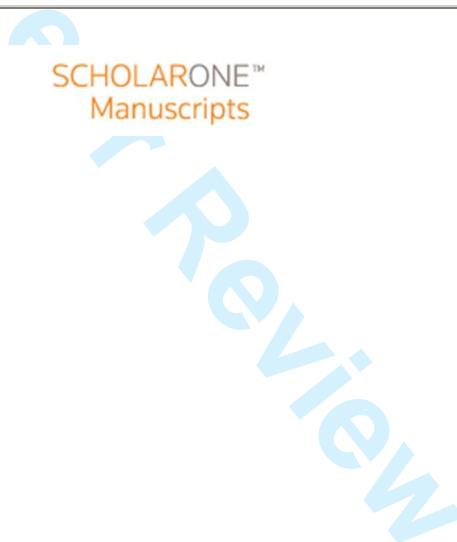
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International Business Review

**Fast-Expanding “Online” Markets in South Korea and China:
Are They Worth Pursuing?**

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3 **Fast-Expanding “Online” Markets in South Korea and China:**
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5 **Are They Worth Pursuing?**
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10 **ABSTRACT**
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14 The online shopping craze in South Korea has been ongoing for more than a decade, but
15 in China, online shopping is currently experiencing tremendous growth, with 64 million
16 additional shoppers per year. Consumers in Asia are among the world’s most prolific online
17 shoppers. This study explains the evolution of the online shopping market in South Korea and
18 China. Using fast-expanding market model as an initial analytical framework and multiple
19 case approach, we find that Chinese online shopping corresponds to the take-off stage of a
20 successful cluster, in which significant opportunities are still present in Chinese Tier-3 and
21 Tier-4 cities. Conversely, the South Korean online market is nearing saturation, though major
22 foreign players are still entering this perceived lucrative marketplace.
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37 **KEYWORDS:**
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39 Cluster, China, South Korea, Online shopping, E-commerce, Fast-expanding markets
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INTRODUCTION

The Internet is an important vehicle for commercial transactions and, from a marketing perspective, is generally used in two ways (Burrow & Kleindl, 2012; Doligalski, 2014; Haubl & Trifts, 2000). On the one hand, companies use the Internet to communicate with their current and potential customers (Burrow & Kleindl, 2012). On the other hand, consumers use the Internet for various purposes, including to gain product information before making a purchase decision (Darban & Li, 2012; Kuah & Weerakkody, 2015). In this sense, e-commerce—the buying and selling of products and services online, the sharing of business information, and the maintenance of business relationships—has created a paradigm shift in the way modern companies conduct business.

The booming online sales globally provide evidence of this paradigm shift. Online shopping is not only burgeoning in developed economies, including the United States, United Kingdom, Japan, Germany, France, and South Korea, where high Internet penetration exists and consumers tend to be more sophisticated due to higher incomes, but also in emerging economies, such as China, Russia, Chile, and Brazil, where the Internet infrastructure is still being developed (Ben-Shabat, Moriarty, Nilforoushan, & Yuen, 2015; Jones Lang LaSalle, 2013).

Stimulated by the rapid growth of online shopping, researchers have become increasingly interested in understanding which factors affect consumers' decisions to purchase online. For example, Agarwal and Wu (2015) attribute the growth of e-commerce in emerging economies to conducive factors at the global, national, and transactional levels. Thus, online shopping has become a fast-expanding market (FEM) in some countries.

This article focuses on the online FEMs in South Korea and the People's Republic of China (China) to understand the evolution, cycle, and stages of their growth. Lessons drawn can help investors, entrepreneurs, and government organizations understand Asian online

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3 markets at a more realistic level. This article proceeds as follows: We begin by reviewing the
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5 cyclical growth of FEMs and the cluster life-cycle theory. Then, we discuss our
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7 methodological approach and present our findings in the light of our theoretical framework.
8
9 The last section concludes.
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11 12 13 14 **ASIA'S ONLINE SHOPPING FEMs**

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16 Led by the “Asian Tigers” of Taiwan and South Korea, many companies in Asia were
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18 decimated when the dot.com bubble burst in 1997. The fastest performers and largest e-
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20 commerce markets in Asian countries, such as China and India, became known as the “Asian
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22 Elephants” (Chakrabarti & Kardile, 2002; Jones Lang LaSalle, 2013). Today, China still
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24 regulates political content on the web to retain propaganda control; the country has
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26 approximately 331 million online shoppers, a number that is expected to grow by 64 million
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28 additional online shoppers, or 19.6% per year (China Internet Network Information Center
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30 [CNNIC], 2014). In contrast, the South Korean government has not restricted or controlled
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32 Internet usage and thus has achieved a high penetration of Internet users. It is estimated that
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34 South Korea has approximately 34 million online shoppers, despite its smaller population of
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36 roughly 50 million people. Revenue from online shopping in South Korea increased by
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38 20.1% from 2012 to 2013 (Statistics Korea, 2015). With more than a 15% growth rate, the e-
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40 commerce markets in China and South Korea constitute two key fast-expanding online
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42 markets in Asia.
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50 **THEORETICAL FRAMEWORK**

51 **FEM Model**

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54 In an FEM, rapid growth and opportunities are present, such that the market becomes the
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56 focal point (Tse, Esposito, & Soufani, 2013). Tse et al. (2013) note that the cyclical process
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3 of an FEM begins with (1) the rising impact of a technology or product on a society, which
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5 then (2) prompts the society or government to expediently embrace the trend, after which (3)
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7 the speed of uptake is so fast that it attracts more players and finally culminates in (4)
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9 consistent growth of the FEM, potentially leading to further spillovers. According to Tse et
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11 al. (2013), this cycle sustains its speed for three to five years before the formation of a
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13 cluster.
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16 The FEM framework is useful in gaining insights from a bottom-up approach into how
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18 FEMs develop and how they can be predicted to affect the economic landscape. However, the
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20 framework seems to stop analyzing an FEM at its peak performance point (i.e., clustering
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22 stage). What happens during or after the clustering stage is not covered in the FEM model.
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24 As a result, we incorporate cluster life cycle into the main FEM model to extend
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26 understanding of the clustering stage and the stages afterward.
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29 30 **Cluster Life-Cycle Model**

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32 A cluster refers to a physical proximate group of interlinked companies connected
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34 through their commonalities and complementarities in their products, services, inputs,
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36 technologies, or output activities (Kuah, 2002). Clustering enhances value-creating benefits,
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38 such as innovation, competition, and productivity, when firms co-locate in physical proximity
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40 and have closely associated activities, either vertically or horizontally (Kuah, Ward, Doyle, &
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42 Shapira, 2010). Externalities arise from clustering, and these include localization externality,
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44 urbanization externality, pecuniary externality, and knowledge spillovers (Kuah, Tse, &
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46 Esposito, 2013).
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49
50 Swann, Prevezer, and Stout (1998) suggest that clusters have a life cycle. They note that
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52 growth and entry of new firms into a cluster depend not only on the life cycle of technologies
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54 but also on the life cycle of the cluster. Indeed, Kuah and Ward (2011) find that older firms
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56 rely less on positive spillovers and that younger firms benefit more from clustering. Swann et
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3 al. (1998) describe three stages of a cluster life cycle: (1) take-off stage, when the number of
4 new entries starts increasing and the cluster grows in size; (2) the growth plateau at the peak
5 entry stage; and (3) saturation stage, when the cluster stops growing. In this last stage, as
6 Poudier and St. John (1996) suggest, externalities and spillovers that initially draw firms
7 together can eventually erode. Intense competition also drives firms in the cluster to focus on
8 market niches in response, and market fragmentation surfaces. Congestion on either the
9 demand or the supply side may cause a cluster to mature or even decline (Kuah, 2002).

18 **Integrated FEM Model**

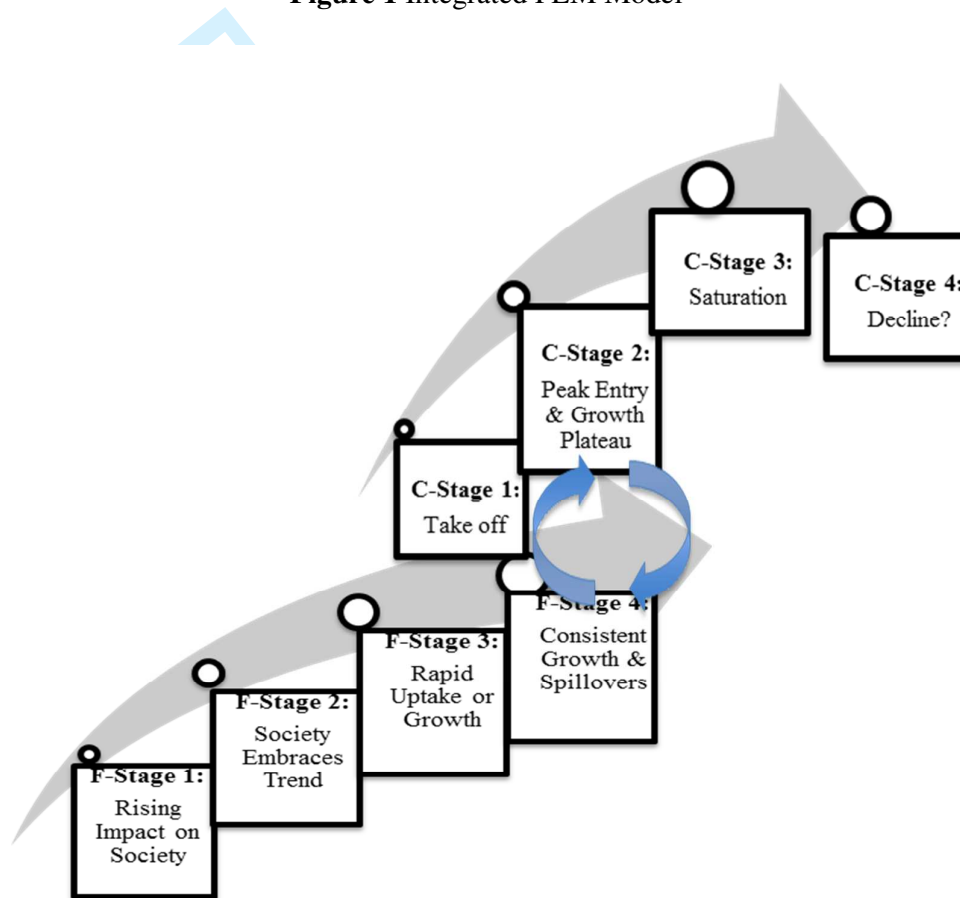
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21 In this research, we incorporate the cluster life cycle into the FEM theory to explain what
22 happens after an FEM experiences consistent growth and industry spillover and how these
23 factors may create a larger cluster. Figure 1 depicts the integrated FEM model.

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28 In the legitimation process of a new organizational form, pioneers that have established
29 new market standards and gained consumers' acceptance move into F-Stage 1. This is also
30 when the new form's impact on the society or government becomes clearer in terms of
31 acceptance. The government and/or commercial sectors take a lead in its development, and
32 the society begins to embrace the new trend (F-Stage 2). After this, the speed of uptake
33 becomes so rapid that this market potentially attracts even more business players and success
34 (F-Stage 3). As incumbents grow due to market demands, new firms are created in proximity
35 to support those incumbents. Other external firms may enter (through joint ventures,
36 acquisition, or direct entry) to compete for a share of this attractive market, leading to
37 clustering or the take off stage of a cluster (C-Stage 1)

49
50 The growth of any FEM will certainly generate externalities, knowledge, and industry
51 spillovers (F-Stage 4). The more firms that enter, the higher are the externalities, thus creating
52 positive feedback that benefits all. Indeed, externalities are known to improve the growth and
53 performance of firms (Kuah & Ward, 2011; Kuah et al., 2013).

This positive feedback loop is characteristics of clustering (Kuah, 2002). However, congestion on either the demand or supply side may cause a cluster to saturate and plateau (C-Stage 3). Market saturation pushes the players to extend their focus, causing fragmentation in the industry. That is, firms in the cluster must explore new market opportunities domestically or internationally, bringing the FEM into other geographic or business areas. If not, the FEM may eventually decline (C-Stage 4).

Figure 1 Integrated FEM Model



CASE APPROACH

Methodologically, the case study is an examination of a unit of analysis (Yin, 2003) using multiple sources of data to present consistent evidence of the unit or to preserve anomalous views in some instances. We selected the cases in South Korea and China because

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3 of (1) the growth rate of more than 15% per year for three years as Tse et al's (2013)
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5 criterion, (2) the increasing interest in the FEM phenomenon, (3) the rapid uptake of online
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7 shopping in Asia. A major strength of the method approach is that there is no upper and
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9 lower limit to the number of observations or the number of cases before a complex issue is
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11 adequately highlighted (Yin, 2003). Another advantage of the case study design is the
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13 affirmation of construct validity from many sources (Ghauri and Gronhaug, 2002, p. 172).
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17 A single case study is therefore adequate if the chosen case is "revelatory" (Yin, 1994, p.
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19 41). The case of online shopping in China, a developing economy, becoming an FEM is
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21 revelatory, is less studied, and forms the main unit of our investigation. South Korea, a
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23 developed economy in Asia, provides a good comparison because its online craze has been
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25 growing for some time. Collectively, the two cases contribute to a better understanding of the
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27 conditions influencing FEMs.
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30 The collective cases draw on multiple sources of information, such as published
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32 research, industry reports, and participant observations. We use published sources of
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34 evidence, such as journal articles, press reviews, and industry reports, because they are both
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36 easily obtainable and reliable. A fundamental feature of secondary data is that they were
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38 produced for some purpose other than to directly answer the current research question.
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40 Therefore, we must assess their evidentiary status before using them in this research (Hakim,
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42 2000; Scott, 1990). To assess the published evidence, we used Scott's (1990) criteria of (1)
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44 authenticity, or attributable authorship and soundness of the document; (2) creditability, or
45
46 the accuracy of information and potential biasness from the document; (3) representativeness,
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48 or the design of survey and sampling of the secondary evidence; and (4) meaning, or the
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50 underlying meaning and definitions that may be biased from the way the document was
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52 prepared. We also used participant observations to supplement the published sources,
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54 including users' experiences on and feedback of different websites and portals in China and
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3 South Korea. These observations mostly came from website reviews and traffic statistics,
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5 talking personally to users in those countries, and our own personal experiences. Multiple
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7 data sources tend to be less prone to “quirks derived from a single source” (Yin, 2003) and
8
9 lead to data triangulation (Stake, 2000; Yin, 2003), which makes the case method more
10
11 attractive.
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14 The main technique for summarizing and analyzing substantial amounts of data is to
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16 adopt an analytical framework (Stake, 2000; Yin, 1994). The analytical strategy that Yin
17
18 (1994) proposes uses a framework for organizing the case study. Our case design makes use
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20 of the FEM model as an initial organizing framework in the next section, before we present
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22 the viability of our integrated FEM model in the following section. Adopting a common
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24 framework across collective cases facilitates comparison of the two key cases of online FEMs
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26 in Asia.
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32 **ANALYSIS: FEM CYCLE**

33 **Rising Impact on the Society: Readiness of Society to Engage into E-Commerce**

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35 As mentioned previously, Tse et al. (2013) indicate that the cyclical process of an FEM
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37 starts with the rising impact of a technology or product on the society. In both China and
38
39 South Korea, the online FEM starts with the adoption and diffusion of Internet technology,
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41 which leads the society (i.e., consumers and firms) to become aware of, accept, and engage in
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43 e-commerce.
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46 ***China***

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48 The Internet was first introduced in China through a worldwide connection between
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50 China’s Institute of High Energy Physics and Stanford University’s research labs in 1991.
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52 This led to the development of CERNET (China Educational and Research Network).
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55 However, rapid expansion and diffusion of the Internet did not occur until 1996, when
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multiple information technology (IT) infrastructure programs and applications across diverse sectors were introduced through the Golden Projects promoted by the Chinese government (Clark, 1999). The Golden Projects created an infrastructure backbone for data networks, information exchange, and financial transactions through the application of Internet technology.

Table 1 Internet Infrastructure in China

	1997	1998	1999	2000	2001
<i>Internet users (million)</i>	0.62	2.10	8.90	22.50	33.70
<i>Computers with Internet connections (million)</i>	0.34	0.75	3.50	8.92	12.54
<i>International gateway bandwidth (Mbps)</i>	30	143	351	2799	7597
<i>Domain names (.cn) (thousand)</i>	5	18.4	48.7	122.1	127.3

Source: Adapted from CNNIC (<http://www.cnnic.net.cn>)

With the development of the network infrastructure, consumers began adopting Internet technology into their daily lives. Table 1 shows that the growth of Internet users from 600,000 in 1997 to 33 million in 2001. The number of names under the .cn domain also jumped from 5,000 in 1997 to 127,000 in 2001.

From a business perspective, e-commerce quickly established itself in China. The first batch of domestic e-commerce websites emerged from 1997 to 1999. The most notable of which included Alibaba.com, which is an e-commerce generalist player pursuing economies of scale with a focus on the mass market (Carroll, 1985), and Dangdang, which is a specialist player putting more of its resources into one category of products (Carroll, 1985). Launched by Jack Ma in 1999 (Backaler, 2010; Jung, Ugboma, & Liow, 2015), Alibaba set up nine related businesses to quickly exploit change and transient opportunities: Taobao, Tmall, Juhuasuan, AliExpress, 1688.com, Alimama.com, Aliyun.com, Ant Financial, and Caniyao. In mid-2003, Alibaba revolutionized the business-to-business (B2B) market, creating Taobao for Chinese exporters to gain access to U.S. buyers online (Jung et al., 2015); it also introduced Alipay, Alibaba's version of PayPal that adds security to online payments

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3 (Backaler, 2010). During this time, foreign generalists and specialists entered into China, the
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5 first of which was eBay in 2003, followed by Amazon.com. Correspondingly, the business-
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7 to-consumer (B2C) market increased. According to CNNIC's survey, 9% of Internet users
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9 had purchased products online by January 2000; this number increased to 31% in January
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11 2002.

12 13 14 ***South Korea***

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16 The South Korean plan for Five National Information Network Projects, which included
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18 National Administrative Information Network and Education and Research Network
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20 Infrastructure, was launched in July 1983. For the next eight years, this national network was
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22 used by the university and education sector. The Internet became available to business and
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24 individuals in 1994, when the Korean National Information Society Agency established the
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26 Korean Information Infrastructure initiative to construct a nationwide optical fiber network.
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28 This was followed by a series of five-year programs that combined government loans with
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30 private sector contributions, including Cyber Korea 21 in 1999, e-Korea Vision 2006 in 2002,
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32 IT Korea Vision 2007 in 2003, and the Broadband Convergence Network and IT 839
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34 initiatives in 2004 (Chung, 2008).
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39 This government strategy made South Korea one of the most technically advanced
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41 countries in the world in terms of Internet usage and broadband penetration. In 1993, only
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43 612 websites had the .kr domain; this number peaked at the end of 2000 at 517,354. As of
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45 December 2001, 24.38 million Koreans (56.6% of the total population) over the age of 7 had
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47 accessed the Internet at least once a month. More than 60% of Internet users report that they
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49 surf the Internet almost every day (Ministry of Commerce, Industry and Energy Republic of
50
51 Korea, n.d.).
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54 At the same time, the fast adoption and diffusion of Internet technology urged businesses
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56 in South Korea to engage in e-commerce. The number of companies that adopted e-
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3 commerce rose from 14 companies in 1999 to 24 companies in 2000 (Ministry of Commerce,
4 Industry and Energy Republic of Korea, n.d.). One early mover in South Korea was Gmarket,
5 founded by Young-Bae Ku in November 2000, with its predecessors AuctionWe and
6 ShoppingMall. The South Korean government's consistent strategies for developing IT
7 attracted some foreign e-commerce players. For example, eBay entered South Korea in 2004
8 by acquiring the Korean company, Auction, which had a similar business model.
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11 Accordingly, while searching for information was the primary purpose for Internet
12 usage, many Koreans regarded the Internet more as a place to conduct online banking
13 transactions. Approximately 20% of all Internet users in Korea are identified as B2C e-
14 commerce users as of 2001.
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16
17 The increased awareness of the e-commerce market among business and consumers has
18 boosted sales. The total volume of e-commerce in Korea increased from \$47.93 billion in
19 2000 to \$99.15 billion in 2001, up more than 250% in just one year (Statistics Korea, 2013).
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21

22 **Embracing the E-Commerce Trend**

23
24 The awareness and readiness of a society can prompt it and/or the government to
25 expediently embrace the FEM (Tse et al., 2013). The government, consumers, and businesses
26 (as a community) all work together to embrace the trend of shopping online in both China
27 and South Korea.
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30 **China**

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32 The Chinese government welcomed the potential economic gains that e-commerce and
33 the Internet potentially brought to the Chinese economy and tried to expedite the
34 development of e-commerce by establishing the infrastructure, cultivating demanded talents,
35 and issuing regulations related to e-commerce (Haley, 2002). China has funded a series of
36 Golden Projects since 1993, including Golden Bridge, Golden Gate, Golden Card, and
37 Golden Tax (Chen, Gillenson, & Sherrell, 2002) to build up the e-commerce infrastructure.
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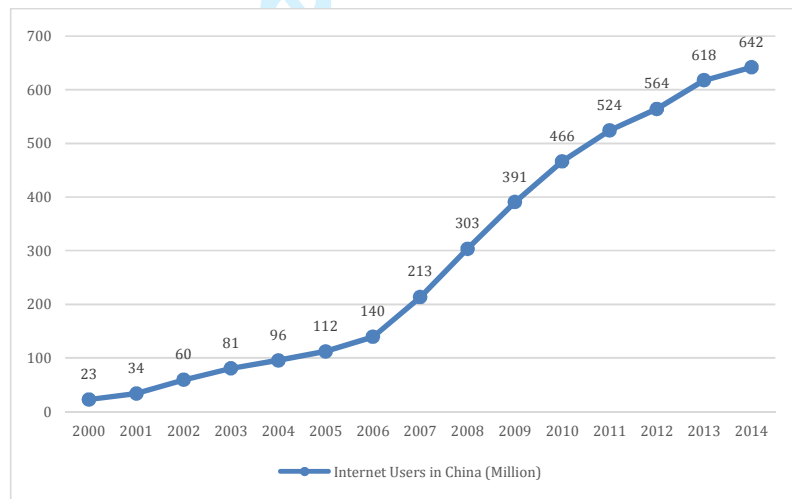
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3 The Chinese government also tried to improve its Internet access speed while cutting down
4 on expense for Internet users. The average cost for Internet users per month was
5 approximately \$10 in 2007, which was less than in 2006 (Li & Suomi, 2009). To nurture
6 more talents, in 2001, the Ministry of Education in China allowed 13 Chinese universities to
7 recruit students for an e-commerce major (Zhang, Li, & Lin, 2005). At the same time, the
8 Chinese government made initiatives to embrace the e-commerce trend through research and
9 development (R&D). For example, the Chinese government sponsored R&D on e-commerce
10 activities by providing research grants to public research institutions and private sectors (Tan
11 & Wu, 2002). Recognizing consumers' concerns about online transactions in terms of system
12 security, suppliers' credibility, and inconvenient payment systems (Tan & Wu, 2002), the
13 Chinese government drafted regulations and policies on Internet usage and e-commerce in
14 1996. These regulations and policies focus on web access, domain name regulation, Internet
15 content regulation, encryption regulation, and so on (Kennedy, 2000; Lo & Everett, 2001).
16 The Chinese government also issued regulations or laws on e-contract, e-signature, taxation,
17 authentication, and so on, to help push e-commerce development (Li & Suomi, 2009).

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36 The trend of online shopping became popular in China among consumers for three
37 reasons. First, the rapid uptake of Internet usage from 2000 to 2014 was substantive in China
38 (see Figure 2). Through China's external media control, Chinese social media platforms, such
39 as Sina Weibo and WeChat, thrive domestically. Chinese consumers are largely influenced
40 by their friends, word of mouth, and social media personalities rather than celebrities or
41 official sources when it comes to product decisions (Shier, 2014); they tend to use these
42 platforms to obtain product advice and knowledge about retailers' credibility, reliability, and
43 service (Ching & Lam, 2014). Social media platforms encourage consumers to chat about
44 their online experiences and blog about products. More than 80% of Chinese consumers
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report that they use social media to learn about products before purchase, and 66% write product reviews after making a purchase (Nilforoushan, Ben-Shabat, & Moriarty, 2013).

Second, with China's rapid economic growth, the number of middle-class consumers has increased, owing to higher disposable incomes and rising wealth in China (Nilforoushan et al., 2013). Accordingly, there is a growing predisposition to spend among Chinese consumers, though they tend to be pragmatic shoppers, motivated strongly by price (McKinsey & Company, 2010). Online retailers cater to this behavior by offering lower prices than traditional bricks-and-mortar stores (Shier, 2014). Online platforms also enable easy price comparison, allowing Chinese consumers to compare prices from multiple places before settling on a purchase (Hoffman & Lannes, 2013).

Figure 2 Internet Users in China (Millions)



Source: Data obtained from <http://www.internetlivestats.com/internet-users/china/>.

Third, online shopping meets Chinese consumers' desires for convenience and variety. This is particularly true for those in lower-tiered cities, where many of the physical retailers do not reside, and thus product variety is limited. As such, lower Tier 3- and Tier-4 cities¹ have become a major segment of the e-commerce market. Despite lower disposable incomes,

¹ China's cities are often classified into tiers according to their population and economic level, though the classification is often vague. Beijing, Shanghai, Shenzhen, and Guangzhou are considered Tier-1 cities, while Chengdu is an example of a Tier-2 city (U.S. Department of Commerce, 2011).

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3 people in these cities are spending the same amount online as their counterparts in higher-
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5 tiered cities (Ritacca & Stanley, 2014), adding up to around 27% of their individual
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7 disposable incomes (Koehler, 2014).
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10 In China, businesses engage in e-commerce mainly through B2B, B2C, and consumer-
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12 to-consumer (C2C) markets. As of 2014, B2B makes up the largest share of the e-commerce
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14 market (more than 75%), followed by C2C and B2C (Gordon, 2014). Three models can be
15
16 used to classify China's e-commerce platforms: the marketplace model, the online retail
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18 model, and the traditional retail model (Backaler, 2010). In the marketplace model,
19
20 marketplace companies provide a website for merchants/individuals to list their offerings and
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22 generate revenues through transaction fees and online advertisement. The marketplace model
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24 includes both B2B and C2C. The major companies are Taobao, Alibaba, and Paipai. Most
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26 merchants/individuals choose to work with marketplaces to avoid heavy up-front investment
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28 and to gain exposure to the marketplaces' enormous existing customer base. The marketplace
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30 model thus dominates the Chinese e-commerce market, with 90% of the market share in
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32 terms of sales volume (McKinsey & Company, 2013). The online retail model provides both
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34 products and a channel to sell directly to customers, and the major companies are 360buy,
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36 Joyo, and Dangdang. For the traditional retail model, companies not only sell products or
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38 services through the Internet but also have traditional retail outlets. The major companies are
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40 Gome, COFCO, and Lining (Backaler, 2010). The online retail model and traditional retail
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42 model constitute B2C e-commerce.
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47 In addition to merchants and marketplace companies, many businesses actively became
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49 part of the e-commerce value chain, taking on the government support and consumer trend of
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51 engaging in e-commerce. According to McKinsey & Company (2013), these businesses
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53 include (1) marketing services that help consumers find and compare offering, such as online
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55 advertising on marketplaces, search engines, portals, and product comparison websites; (2),
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3 third-party payment providers, such as Alipay and Tenpay; (3), logistics providers that
4 provide warehousing (e.g., Yilong warehousing) and express delivery service (e.g., SF
5 express, STO express); (4), IT companies that provide software to help merchants scale up
6 their businesses (e.g., Shanghai Baiban software offers an application for merchants to set up
7 mobile commerce store fronts); and (5), integrated services that build or operate online
8 businesses for small merchants, traditional offline retailers, and foreign brands entering
9 China. For example, various sportswear manufacturers (e.g., ANTA, Li Ning, Kappa) use
10 GalaXeed to market their products online. The associated value chain activities generated
11 US\$13 billion (RMB 83 billion) in revenue in 2011, among which express delivery and
12 online advertisement were the two largest categories, followed by payment and others
13 (McKinsey & Company, 2013).

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As a result of all these factors, China has witnessed the rapid expansion of its e-commerce market. The gross merchandise value of China's online shopping has increased more than 15% in the past few years (IRResearch, 2014). Approximately 331.5 million users in China, of 632 million Internet users in 2014, conduct online shopping. This figure is expected to grow by 19.6% per year (CNNIC, 2014). China's US\$64 billion online retail market (second only to the United States) is predicted to increase over the next five years to US\$271 billion (Nilforoushan et al., 2013).

South Korea

The Korean government has promulgated an e-business National Vision that applies to various governmental organizations and business sectors and also implemented e-commerce law and human resources development (Mutula, 2009). Well aware of the need to establish a regulatory framework to handle major issues in e-commerce, the Korean government endeavored to eliminate the stumbling blocks of consumer protection, privacy, e-payment, protection of intellectual property rights, and security, to achieve robust growth of e-

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3 commerce (Statistics Korea, 2013). For example, it set up the E-Commerce Mediation
4
5 Committee, a simple arbitration system, to offer consumers and e-commerce trading partners
6
7 more accessible and affordable ways to deal with disputes. This committee issued eTrust and
8
9 isafe certificates² to promote awareness of privacy protection and security (Ministry of
10
11 Commerce, Industry and Energy Republic of Korea, n.d.).
12
13

14 The Korean government also set policies central to e-commerce, by establishing the
15
16 Basic Act on Electronic Commerce in 1999, "Comprehensive Policies for e-Commerce
17
18 Development" in 2000, and "e-Business Initiative in Korea" in 2001 (Ministry of Commerce,
19
20 Industry and Energy Republic of Korea, n.d.). Recognizing the weakness of small and
21
22 medium-sized enterprises (SME) in e-commerce, the Korean government supported
23
24 programs for B2B and IT use in SMEs. The Korean government has actively engaged three
25
26 million SME managers in e-business to strengthen and promote IT in the sector (Kim, 2007).
27
28

29 The Korean government launched an Internet education program called "Ten Million
30
31 People Internet Education Project (2000-2002)" which focused on demographics not usually
32
33 associated with web activity, including the elderly, farmers, the disabled, prisoners, and
34
35 housewives. The program offered government-subsidized training and reached four million
36
37 people in 2000 (McKinsey & Company, 2011).
38
39

40 Several lifestyle factors in South Korea help consumers embrace e-commerce. First, the
41
42 Internet in South Korea has high penetration, and South Koreans are tech-savvy. There are an
43
44 estimated 45.3 million Internet users, more than 75% of whom purchased through the web in
45
46 2014 (Google Consumer Barometer Report, 2014). Second, South Koreans have five credit
47
48 cards on average, compared with two in the United States. South Koreans also use credit
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53
54 ² The eTrust certificate is a mark awarded to website operators that satisfy certain set criteria on
55
56 evaluation of consumer protection and privacy policies of the commercial website and purchasing
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58 process. A website must offer a convenient, safe, and reliable e-purchasing experience to customers. Isafe
59
60 offers the ePRIVACY mark and I-safe mark to promote awareness of privacy protection and security to
create a foundation for trust between individuals (users) and operators (suppliers) through active self-
regulation.

more often, with 129.7 credit card transactions per year, as compared with 77.9 credit card transactions in the United States (Jones, 2014), suggesting high purchasing intention and power. Such high credit card usage accelerates e-commerce. Third, in contrast with the Chinese, who have a bargain-hunting mindset, South Koreans cite convenience and time-saving as the most important factors for online shopping (Hwang, McInerney, & Shin, 2015). South Koreans have among the longest working hours (2,193 hours) among Organisation for Economic Co-operation and Development countries, with young, upwardly mobile executives often too busy to go shopping for groceries at traditional stores (Petit de Meurville, Pham, & Trin, 2015). Online stores are not constrained by opening and closing times, physical locations, or, to a large extent, product availability (LaRose, 2001). As Table 2 shows, business quickly became involved in e-commerce.

Table 2 E-Commerce Sales in South Korea, by Type, 2011 & 2012
(Trillions of South Korean won, % of total and % change)

	2011	% of total	2012	% of total	% change
B2B	912.88	91.3%	1050.99	91.8%	15.1%
B2G	58.38	5.8%	62.26	5.4%	6.6%
B2C	18.53	1.9%	19.64%	1.7%	6.0%
C2C	9.79	1.0%	11.8	1.0%	20.6%
Total	999.58	100%	1144.69	100%	14.5%

Note: B2G = business-to-government.
Source: Statistics Korea.

B2B has emerged as the major type of e-commerce in South Korea, comprising 91% of e-commerce revenues, as Table 2 shows. The use of B2B e-commerce is dominated by the manufacturing sector, followed by wholesale and retail trade, though manufacturing's dominance is decreasing. Nonetheless, all industries exhibited a growth in e-commerce from 2001 to 2007. The growth of B2B e-commerce is likely due to the growing utilization of e-business systems among SMEs. As Table 3 illustrates, companies are implementing e-business systems at a consistently increasing annual rate.

Chaebols, which are large, family-controlled conglomerates, are the dominant players in the small Korea B2C e-commerce market. These companies integrate an offline and online

product–market presence, leading to the dominance of “bricks-and-clicks” stores in the B2C market. In such stores, physical stores provide in-store purchase or pick-up services, while online ordering and customer service are also available (Pavel, 2010).

Table 3 E-Business System Utilization

<i>e-Business System Introduction Rates</i>	2003	2004	2005	2006
<i>Enterprise Resource Planning</i>	14.7%	14.8%	23%	24.8%
<i>e-Bidding System</i>	9.8%	10.1%	10%	11.4%
<i>Supply Chain Management</i>	4.5%	2.2%	2.9%	3.6%
<i>Customer Relationship Management</i>	1.4%	3.6%	4.4%	3.5%

Source: MOCIE, 2006

Therefore, online shopping in South Korea is very popular, maintaining a steady high growth rate since 2005 (KISA, 2014). Revenue from online shopping reached US\$9.59 billion in 2013 and US\$11.53 billion in 2014. This represents an increment of 20.1% and shows the high demand for online shopping (Statistics Korea, 2015). Ben-Shabat et al. (2015) assert that South Korea remains a leader in consumer online and mobile engagement and boasts a solid financial and logistical infrastructure. South Korea was ranked the fifth most attractive market for e-commerce globally and third within Asia in 2013, though it dropped to seventh place, according to Ben-Shabat et al. (2015), because its e-commerce sales growth slowed down relative to other countries.

Growth of Existing Players and Influx of New Entrants

China

To serve a geographically diversified market, e-commerce in China necessitates that the online market and concomitant supporting industries, such as “Taobao villages” (Guo, Liang, & Luo, 2014), and the express logistic sector (Deloitte, 2014) be competitive. More players from within and outside the industry in China have joined in e-commerce.

On the one hand, there has been an influx of outside players into the industry. Consider, for example, Taobao and Tmall, the two major components of the leading e-commerce player Alibaba Group. Both have attracted many players into e-commerce and related sectors.

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3 Taobao focuses on the C2C market, and its popularity among consumers boosts 20 Taobao
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5 villages across the country, in which entrepreneurs from remote areas commit to C2C
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7 business through the Taobao platform, focusing on manufacturing, packaging, logistics,
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9 marketing, and training (Guo et al., 2014). Most Taobao villages are located in Zhejiang,
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11 Guangdong, Jiangsu, Shandong, Jiangxi, Fujian, and Hebei provinces, in which many small
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13 mom-and-pop operations in the same Taobao village sell similar products, forming an online
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15 industry cluster (Lam & Li, 2014). For example, Qingyanliu village in Yiwu city, Zhejiang
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17 Province, is the top Taobao village in terms of e-commerce sales, focusing mainly on small
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19 commodities and general merchandise; Baigou, another major Taobao village located in
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21 Hebei Province, specializes in selling luggage.
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25 The growth of Taobao villages has marked an important step in the process of rural
26
27 modernization. They help lift the incomes of rural residents and narrow the urban–rural
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29 income gap. Some Taobao villages, such as Junpu village in Guangdong, with the support of
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31 the local government, have gone a step further by opening a “Taobao university” to teach
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33 people how to sell online. The local government in Junpu village has provided support by
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35 offering free wireless Internet connections to residents, as well as tax credits (The Economist,
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37 2014).
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41 Tmall represents the B2C market for independent retailers and individuals to sell directly
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43 to the public. Many brands are opening online stores on Tmall to take advantage of its large
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45 customer base and third-party services. For example, Uniqlo, the Japanese casual clothing
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47 retailer, has formed a partnership with Tmall, to tap its expertise in areas such as website
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49 design, payments, and deliveries (Hoffmann, Lannes & Dai, 2012).
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53 On the other hand, the incumbents are also extending their businesses into related
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55 industries. Recognizing that the logistical challenges outside of urban centers have kept
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57 China from its full online retail potential, some e-commerce players are integrating logistics
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3 functions into their businesses. One entrant that succeeded with its logistics in 2004 was
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5 JD.com. JingDong (JD), the leading domestic online direct sales company in China, owns 86
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7 warehouses in 34 cities. It has 1,629 delivery stations and 214 pickup stations in 495 cities
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9 across China, thus making same-day delivery available in 43 cities (Lam & Li, 2014).
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11 Maintaining control of its in-house logistics enables JD to process orders and make deliveries
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13 faster than competitors. The online shopping industry functions similar to an enlarged cluster
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15 in China, but it also creates rapid urbanization externalities and industry spillovers even on a
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17 global scale (Guo et al., 2014).
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20 21 *South Korea*

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23 Similar patterns have emerged in South Korea. Noting the opportunity of e-commerce,
24
25 many companies have expanded their concepts online. For example, one early mover to the
26
27 online space, Gmarket, revolutionized the online market by bringing together buyers and
28
29 sellers internationally in an auction format. Large chaebols, such as LG and Samsung,
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31 participated in this space and sold their products and services using competitive auctions and
32
33 fixed-priced store fronts. Retailers such as Daum Communications and GS Home Shopping
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35 have all opened their own online marketplaces, making the online competition even tougher.
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37 Another recent entrant to South Korea's online shopping was Tesco in 2009. Noting that
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39 South Koreans spend a significant amount of time on public transport, Tesco initiated the
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41 idea of a virtual store, which allowed consumers to do their shopping while waiting for public
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43 transportation. Tesco's virtual stores were set up in public spaces such as subways and bus
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45 stops. The store signboard allowed customers to place their order by scanning the QR code of
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47 the products and to receive same-day delivery of goods.
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52 Existing players also transform or integrate their businesses. For example, Coupang
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54 made large investments in its mobile apps, which generate 70% of Coupang's revenue and
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56 80% of its total traffic. Coupang's logistics network provides delivery within the same day
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3 (Shu, 2014). Kakao Pay, co-developed by Daum Kakao and LG CNS, is in partnership with
4
5 the “big five” online shopping malls, including GS Home Shopping, and online book stores
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7 such as Kyobo Bookstore and Aladdin are in competition with digital wallets Apple Pay and
8
9 Alipay (Kim, 2015).
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11 **Continuing Growth or Decline?**

12 ***China: An Online Global World***

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16 Backed by a huge population, a significant online community, and large geographic
17
18 coverage, e-commerce in China creates its own clusters. China binds together a unique
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20 marketplace containing some 1.37 billion Mandarin-speaking people, located in 657 cities (as
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22 of 2015) and more remote areas, with different levels of economic development and retail
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24 saturation (Administrative Divisions of China, 2014). Recent research suggests that the e-
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26 commerce industry in China has not been fully exploited. For example, McKinsey &
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28 Company (2015) reports that online sales have the potential to reach \$650 billion by 2020.
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30 Such a prediction can be well supported by both macro- and micro-level data. From a macro-
31
32 level perspective, the 55% Internet penetration in China in 2015 is still well below the 70% or
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34 higher ratio in developed economies (McKinsey & Company, 2015). With the further
35
36 development of an Internet infrastructure, more market potential can be exploited. The e-
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38 commerce market still has a concentrated structure. For example, as of 2014, Alibaba had a
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40 52.8% market share in the B2B market, while Tmall had a 50.55% market share in the B2C
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42 market (Guintoli, 2014).
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48 From a micro-level perspective, we propose that such growth may come from Tier-3 and
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50 Tier-4 cities, and rural areas, more than Tier-1 and Tier-2 cities. The proliferation of e-
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52 commerce in Tier-3 and Tier-4 cities, and rural areas can be predicted by the lower Internet
53
54 penetration and the passion for e-commerce of existing digital users. Compared with the 76%
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56 Internet penetration rate in Tier-1 and Tier-2 cities in China, the Internet penetration rate is
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3 only 47% for Tier-3 and Tier-4 cities, and only 19% for rural areas (Incitez China, 2015).
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5 However, although they have lower average incomes, digital consumers in Chinese Tier-3
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7 and Tier-4 cities and rural areas are just as active in e-commerce as their urban counterparts,
8
9 who are more prosperous. According to McKinsey & Company (2015), online shopping
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11 penetration among digital consumers in rural and Tier-3/4 cities is 64% and 66%,
12
13 respectively, not far from that in urban areas (72%). Such data suggest a larger potential e-
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15 commerce market in China associated with the Internet development in these areas.
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19 The market potential from a large number of Tier-3 and Tier-4 cities, and rural areas
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21 receives further support from the limited product variety and offering due to a lack of
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23 physical retailers and brand presence (Ben-Shabat et al., 2015). The growing economy and
24
25 disposable incomes have enabled consumers in Tier-3 and Tier-4 cities, and rural areas to
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27 turn to online purchases for a greater assortment of goods and new products (KPMG, 2014).
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31 Another growing pillar comes from the global market. China's online shopping market
32
33 has created a network of e-commerce players, manufacturers, wholesalers, and foreign
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35 retailers around world, as it has been driven by Chinese consumers' obsession with foreign
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37 products due to safety and authenticity concerns. In 2013, foreign product purchases online
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39 reached RMB 70 billion (US\$11.49 billion), and the amount is doubling every year (Hoffman
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41 & Lannes, 2013; Lee, 2014). In 2014, Alibaba's Alipay system released Alipay ePass, which
42
43 allows consumers to order from a growing number of international sites, such as the Gap,
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45 Gilt, and ASOS.com. Alibaba has also invested in the e-commerce platform ShopRunner,
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47 which helps the likes of Cole Haan and Neiman Marcus ship to China. Alibaba gained
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49 recognition in the U.S. market, mainly due to its successful U.S. initial public offering in
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51 September 2014. Through AliExpress and Alibaba.com, Alibaba serves manufacturers,
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53 wholesalers, and consumers in the United States and other parts of Asia.
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3 In essence, the significant and growing online Chinese community and China's
4 expanding Internet infrastructure suggest a stable and predictable growth pattern in China's
5 e-commerce. China's e-commerce platforms are expected to allow more domestic and
6 foreign players to gradually tap onto this huge FEM, and continued growth in the next five
7 years is inevitable.

14 ***South Korea: Battle Zone Asia***

16 E-commerce has reached a saturation point in South Korea for two reasons. First, South
17 Korea is a small economy with a low population base. With the high penetration rate of the
18 Internet usage for more than a decade, most of the market potential has been explored.
19 Second, Korean consumers are well educated, tech savvy, and generally willing to
20 experiment with new things. Many Korean consumers buy products from overseas directly
21 through online shopping malls. According to the Korean Customs Service, e-commerce
22 imports reached \$1.54 billion in 2014, a 48% increase from the year before (Lee, 2015).
23 More than 15.5 million purchases were made, and of those direct online purchases, the U.S.
24 market accounted for 73%.

26 The saturation is largely due to a fragmented market structure, declining growth rate of
27 the industry, and a lower profit margin of existing players. Industry-wise, in 2009, the
28 combined market share of two main players—namely, Auction and Gmarket—reached
29 almost 90%, whereas their combined share declined to 60% in 2013, due to the influx of
30 competitors (Jung et al., 2015). Furthermore, South Korea is losing its lead in Asia in terms
31 of its e-commerce sales growth, dropping from fourth to seventh place globally in 2015 (Ben-
32 Shabat et al., 2015). The individual players T-Mon, Coupang, and WeMakePrice are still
33 experiencing losses. For example, T-Mon reported a net loss of 44 billion won (\$41 million)
34 in the first three quarters of 2013. This loss was chiefly due to the millions the firms spent on
35 marketing—for example, by hiring Korean celebrities and investing heavily in television ads

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3 (Schumpeter Business and Management, 2014). These firms need to make such large
4
5 investments because no player currently dominates, they all sell similar products, and they
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7 have a similar operations model. According to beSUCCESS (2014), what determines market
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9 position is not service or price differentiation, but rather the amount of money they spend in
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11 advertising, free shipping, and discounts.
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14 To deal with the saturating South Korean market, some players have begun expanding
15
16 internationally for more opportunities. For example, Gmarket (currently Qoo10) was a first
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18 mover in its internationalization efforts. With its success in the domestic market, it became a
19
20 strong contender in Southeast Asia, where it introduced its successful business model to
21
22 countries such as Singapore, Japan, Malaysia, and Indonesia. This move has provided
23
24 Gmarket sources of revenue diversification and enabled the company to successfully catch
25
26 pockets of growth in parts of Southeast Asia. Its presence also made it attractive for eBay to
27
28 acquire the company and to form a joint-venture partnership through Qoo10. Currently,
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30 Amazon.com is in the preparation stage of opening its first branch office in South Korea.
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36 **DISCUSSION**

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38 The analysis of e-commerce in China and South Korea confirms our integrated FEM
39
40 model. When comparing China and South Korea, we find that e-commerce in both countries
41
42 went through the first three stages of the FEM model at different times. In the first stage,
43
44 Internet technology generally brought about awareness and adoption of e-commerce, albeit a
45
46 decade later in China (F-Stage 1). The government, consumers, and businesses embraced the
47
48 use of e-commerce during the second stage, perhaps even more rapidly in China, which led to
49
50 the fast expansion of online shopping in both countries (F-Stage 2). During the third stage,
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52 the growth of online shopping attracted more players from outside the industry, and existing
53
54 players also diversified into related industries (F-Stage 3).
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3 However, in F-Stage 4, e-commerce in South Korea and China seemed to diverge as
4 predicted by the integrated model. With a smaller domestic market and highly penetrated
5 Internet usage, South Korea seemed to come into a saturation stage, in which domestic e-
6 commerce players' project margin dimmed and industry growth slowed down. We contend
7 that this FEM or cluster has begun to saturate or reach a plateau, as rapid growth has already
8 occurred during the past several years. In response, domestic Korean players have begun
9 either expanding internationally to tap into the Southeast Asian markets or exploring new
10 business models of offering e-commerce in South Korea (e.g., virtue stores).
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21 Conversely, owing to its huge domestic market, physical clusters - in the form of Taobao
22 villages - mushroomed in China, with associated spillover effects in the form of urbanization
23 externality (Guo et al., 2014). Tier-3 and Tier-4 cities and rural areas experienced economic
24 growth as a result of clustering, and the FEM constituted new demands for more products and
25 services. Although Internet usage and e-commerce have achieved high penetration rates in
26 both Tier-1 and Tier-2 cities, market opportunities in Tier-3 and Tier-4 cities and rural areas
27 have remained largely unexploited. Noting the large domestic market, particularly the Tier-3
28 and Tier-4 cities and rural areas, Chinese e-commerce players now make every effort to
29 improve their logistics arrangements to bring more foreign products and services into the
30 domestic market. We therefore observed positive feedback of industry clustering in Chinese
31 e-commerce. This finding provides support for our integrated FEM model that the growth
32 and success of an FEM create externalities, knowledge, and industry spillovers. As
33 incumbents increase in size and new firms are created, even more spillover will result. Table
34 4 summarizes the main findings in South Korea and China using the integrated FEM model.
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Table 4: FEM in South Korea and China

	<i>South Korea</i>	<i>China</i>
F-Stage 1: <i>Rising Impact & Readiness to Engage</i>	The government was an early adopter and started creating the network infrastructure in 1983. A nationwide fiber optic network was constructed in 1994. Since then, consumers and business have become aware of the e-commerce.	The government created the infrastructure backbone in 1993, and rapid commercial uptake commenced around 1999. Led by the commercial sector, namely Alibaba in B2C and C2C, which created online payment (Alipay) around 2003, Chinese companies were allowed to trade with the world.
F-Stage 2: <i>Embrace E-commerce Trend by Government, Consumers, and Businesses</i>	The government supported this stage with policies on e-commerce and programs for SMEs, and it eliminated stumbling blocks on consumer protection, privacy, e-payment, protection of intellectual property rights, and online security. Readiness of the society such as consumers' tech-savviness, high Internet penetration rate, high purchasing power, and bargain-hunting mindset, sparking widespread proliferation of online shopping in South Korea. Early market mover was Gmarket in 2000. Domestic retailers such as GS Home Shopping, and CJ O Shopping joined in, making competition even tougher.	The government established the infrastructure, cultivated the personnel, and issued some regulations and policies on web access, domain name, content, and encryption. Also supported with laws on e-contract, e-signature, and taxation. Readiness of the society, such as consumers' desires for convenience and variety in lower-tiered cities, price comparison, higher disposable incomes in large cities, and thriving social media platforms throughout the country, allows different segments of the economy to embrace online shopping. Early market mover, Alibaba, engaged in much experimentation (e.g., Taobao, Tmall, Juhuasuan, 1688.com) to exploit various segments. Others such as JD, Dangdang, and YiHaoDian also caught on to the wave.
F-Stage 3: <i>Rapid Uptake and Growth</i>	In the take-off stage, new entrants actively sought the market, triggering rapid growth in the past decade. E.g., large Chaebols such as LG and Samsung participated in B2C sales through Gmarket. Gmarket also extended its successful model to Asia. In 2009, eBay acquired Gmarket's Korean operation and formed a joint venture with Gmarket's foreign subsidiaries, while Tesco UK set up its virtual stores.	In the take-off stage, the entry of many new players and industry sparked rapid growth. Still an attractive market for foreign players. E.g., entrepreneurs joined in online platforms to perform C2C sales, and suppliers burgeoned in concert (e.g., Taobao villages, logistical sector in China). More foreign brands set up stores online at Tmall to capture the B2C Chinese market and are not limited by geographical constraints.
C-Stage 1: <i>Take Off of a Cluster</i>		
F-Stage 4: <i>Growth & Spillovers</i>		Taobao villages formed by clusters of suppliers, producing complementary products and creating urbanization externalities in those villages. Urbanization of rural areas creates new demand and further spillover effect in future.
C-Stage 2: <i>Peak Growth Leading to Plateau</i>	The e-commerce in South Korea is currently at a plateau and saturate stage, with South Korea losing its lead in Asia. E-commerce business players responded by exploring new business model in domestic market and expanding overseas.	

CONCLUSION AND IMPLICATIONS

This article focuses on online FEMs in South Korea and China to understand the evolution, cycle, and stages of their growth. It aimed to answer whether these online markets are indeed fast expanding and therefore worth pursuing. We contend that the Chinese online shopping market corresponds to the take-off stage of a potentially huge cluster, in which new businesses and keen foreign players continue to participate to sell their products. This is indeed an attractive FEM. China is also becoming an online global force, as the country itself is a unique market bounded by a common language and one that is also interested in trading with the world.

South Korean online retailers are strong contenders to capture the Asian market, as the case of Gmarket/Qoo10 demonstrates. However, we find that clustering of online retailers in South Korea's market is nearing its saturation point. This saturation is due to a fragmented market structure, declining industry growth rate, and a lower profit margin of existing players. Thus, despite being an established FEM in Asia, we contend that South Korea's online shopping is less attractive and is no longer worth pursuing.

This study provides implications for business practitioners and policy makers on FEMs. First, we shed further light on the nature of FEMs. Any industry has its life cycle, but failure to identify the later stages of an exciting FEM may lead to over-investment, resulting in the poor performance of existing and new businesses. To make the FEM model complete, we incorporate the cluster life cycle into an integrated FEM framework. We find that in both South Korea and China, the FEMs have resulted in the clustering of players, which can then be assessed further if the FEM or cluster growth is indeed gaining momentum. FEM growth has slowed down in South Korea as a result of the limited market size, high Internet penetration, and market saturation. We conclude that the FEM/cluster may be plateauing in

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3 terms of growth. Through the two cases, we also conclude that our integrated FEM model
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5 serves to assist the analysis of any FEM.
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8 Second, monitoring industry changes in an FEM is always important. Some of the
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10 critical indicators, such as firms' acquisition, market fragmentation, or declining industry
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12 growth, signal that an FEM is becoming saturated. This is the case in South Korea, and thus
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14 we suggest that industry players now try to consolidate to find niches there. However, new
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16 entrants are continuing to consider South Korea.
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19 Third, our discussion on the establishment of e-commerce infrastructure and lifestyle
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21 factors in a developed Asian country and a developing Asian country may help practitioners
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23 identify other online FEMs around the world. Although e-commerce currently accounts for
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25 less than 1% of the total retail sales in Southeast Asia, we expect rapid growth as the network
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27 infrastructure continues to improve and consumers' income increases in parts of Asia.
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30 Finally, we offer some important implications to policy makers. From the case of China,
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32 online shopping as an FEM seems to be a good tool to advance the urbanization and
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34 economic growth of rural areas. The growth of Taobao villages creates job opportunities,
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36 helps lift the incomes of rural residents, and narrows the urban–rural income gap (Lam & Li,
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38 2014). The continued development of C2C e-commerce has indeed driven sources of revenue
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40 diversification for entrepreneurs in the remote cities and villages that can lead to more long-
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42 lasting economic advantages. China's express delivery industry now has more than 8,000
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44 companies, some offering nationwide deliveries and many others offering one-day delivery
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46 service to a city area. The boom in online shopping has forced the logistics sector in China to
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48 be more efficient, resulting in the mushrooming of express delivery services—a spillover
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50 effect from the online FEM.
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54 We conclude that even when the commercial sector takes a lead in the development of e-
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56 commerce (as in China and, to a lesser extent, South Korea), it is imperative that policy
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makers carefully plan and implement the infrastructure, policies, and programs in support of e-commerce. Various consumer lifestyle choices have led to the embracement of online shopping, but online shopping as an FEM could potentially advance the urbanization and economic growth of rural areas, thus enhancing connectivity. This may especially occur in a large or developing country that has much to offer in terms of its demand and supply conditions.

For Peer Review

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