



AN ANTI-MAINSTREAM ARGUMENT: INNOVATION IS 'RELATIVE' & IMITATION IS 'ABSOLUTE' AND 'MARKET-PROFIT-DRIVEN'

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Abstract

A pseudo or failed empirical approach conducted by the author and the result seems contradictory to literature findings. Cognitive-distance is not correlated with innovation/imitation performances, triggering a research detour, switching to examine the mechanisms and strategic implications of innovation and imitation in relation to the rise of imitation industry, especially from those emerging and/or BOP-markets. From motivation perspective, imitators are primarily market-and-profit-driven for survival purpose, pursuing 'make it look like, but cheaper' strategy. In contrast, innovators focus on 'make it better' strategy. The three market behavior-based entrepreneurial sources and opportunities available in BOM-markets but not in matured markets indicate a need to re-conceptualize the traditional concepts of innovation and imitation, in order to objectively interpret and rationalize the mechanism of how the rise of imitation industry has been functioning as an eminent economic driver to unleash the dormant values of those fast-growing BOP-markets, in which, consumers have been not only thirsty for material satisfaction, but also hungry for liberation from their historically pent-up psychological dignity and social trust. The author proposes the concept of 'adjusted-imitation' as a synonym of innovative-imitation or imitative-innovation, in an attempt to argue that, imitation is absolute, innovation is relative, and there is no pure form of imitation, nor pure form of innovation. The degree of newness is the measure of 'adjusted-imitation'. Four management strategies are proposed for firms to gain capabilities required to unleash the dormant values of BOP-markets. Interviews, on-site observations, archives, web-postings and case-studies are employed to corroborate the

author's anti-mainstream argument. Although pending for verification, the theoretical constructs proposed in this text provide a direction for future researchers to examine the rapidly emerged post-modern business drivers and phenomenon from developing economies, calling for a reconstruction of the extant management framework, in order to accommodate the increasingly globalized and diversified business ecology. Note that, defending illegal imitation is, by no means, the intention of this text.

Keywords: Cognitive-Distance, Innovation, Imitation, Shanzhai, Adjusted-Imitation, Business Ecology, Nodal Factor, Strategy, BOP-market, BOP-consumer, Psychological Dignity, Social Trust

INTRODUCTION

This text is motivated to conceptually argue that, innovation is 'relative', and imitation is 'absolute'. Both innovation and imitation are relevant concepts of technologies and their applications, determined by the 'degree of newness' or the 'distance' between the newly developed technology and existing ones. 'Innovation' may be interpreted as something (products/services) with 'high-degree of newness' or 'far-distanced' from the existing ones. 'Imitation' refers to 'low-degree of newness' or 'closely-distanced' from the existing ones. Regardless the 'degree of newness', 'an absolute new technology or management application' does not, and will not exist. To this end, this text is entitled as 'Innovation is *Relative* and Imitation is *Absolute*' as an '*anti-mainstream argument*', seems not too far-fetched.

The main idea argued in this text is that, imitation is absolutely and universal; innovation is relative and individual-based. Both are strategies of learning process, transitioned from traditionally multi-layered hierarchical system to presently multi-channeled horizontal system. Such a transition is primarily driven by the purposes of adjusting and simplifying technologies and processes, improving customer satisfaction and retention without diminishing the capabilities of cost-reductions throughout the flow of value-chain as a whole. Also argued in this text is that, reviving BOP-consumers' psychological dignity and social trust plays a more important role than simply providing them with material satisfaction, especially in terms of stimulating the rise of imitation-industry (See Figure 1), and exploiting the dormant value of BOP-markets. It is suggested in this text that, there are three external (environmental) nodal factors, available in BOP-market but not available in matured-market, nurturing the sources of entrepreneurial opportunities (See Table 2 & 3). To take advantage of these three external nodal factors, firms need to develop four internal (managerial) nodal factors in order to unleash the maximum potentials of BOP-market. Knowledge is a process of puzzling, the author

attempts to allure thinkers to either criticize or extend these ideas. To an individual people, 40-year China economic reformation is quite a long period to witness; to history however, it is too short to theorize the mechanism of its transformational achievement.

Literature review has revealed some paradoxical or unjustified theoretical loopholes in defining the relationship between innovation and imitation. The combination of the increasingly globalized business environment and the rapidly advanced information networking technology has been the dominant driver expediting the speed of knowledge and technology diffusions, providing the diversified sources or temptations of imitations; broadening the scale and scope of cost-allocations, influencing the ROIs of innovations; simultaneously, increasing the risks of doing business both innovatively and imitatively. Overall, the evolution of global business ecology has been nurturing a set of post-modern competition drivers, propelling and stimulating the aspiration of developing countries (like China) to catch-up through imitation approaches, and stirring up a wave of argument or debate on the five unsettled questions, controversial, confusing, and even misleading the development of management theory (See Table 1):

Table 1: The Five Unsettled Questions Influencing the Interpretation of Innovation and Imitation

	<p><i>Can Innovators be Inevitably More Competitive than Imitators? The Answer is 'Not Always'!</i></p>
Q1	<p>On the industry level, it is argued that, imitation may be a more astute competitive strategy than innovation when an industry with weak intellectual property, high technologically interdependent structure, high market uncertainty, high speed of technological change, high speed of information flow (Bolton, 1993). On the firm level, it is argued that, the relationship between innovators and imitators may be interpreted as a competition of speed and threshold, the faster speed of technological upgrade combined with the higher level of technological threshold from innovators, the less threat would be encountered from imitators, indicating that, MNCs across industries in China during the past 40-years have been not-fast-enough to upgrade technology, not-high-enough to raise technological-threshold and not-strong-enough to withhold imitation (Zhao, 2016).</p>
	<p><i>Can Innovation be Linearly Related to Financial Return? The Answer is 'Not Always'!</i></p>
Q2	<p>Many innovation-pioneers have fail to obtain their expected financial returns (Teece, 1986), leading to a series of theoretical frameworks addressing Innovators' Dilemma (Christensen, 1997), Innovators' Solution (Christensen & Raynor, 2003), calling for Open Innovation Platform (Chesbrough, 2003), and Disruptive Innovation Platform (Christensen, et al., 2006), indicating an imperative need to re-cognize and re-balance the ecologically twined relationship between innovators and imitators (Zhao, 2019a; 2019b).</p>

How is Western Concept of Innovation Differentiated from that of Eastern Concept?

Table 1...

Q3 The result of a longitudinal and comparative analysis suggested that, given the differentiated political, social, cultural and value systems, Western innovation is organized within vertical hierarchies, Eastern innovation is organized within horizontal networks; managers of those MNCs and FDIs need to understand the peculiarity of local business ecology in order to be immunized from imitators (Bolton, 1993). Collaboration is an effective strategy to fill this organizational gap between West and East (Zhao, 2013; 2014; 2016; 2017).

How to Establish a Business Strategy to Ensure Innovators' Financial Returns?

Q4 Technology itself does not create value. Instead, it is business strategy that converts technology into a process of value creation. Both innovation and imitation are business strategies, and only when a business strategy is formulated, implemented and positioned into properly selected markets, targeting at the right customers, at the right time, can innovations become able to generate the expected profit-returns, otherwise, innovators' investment would be relentlessly discounted (Zhao, 2016; 2017). Only when a business strategy is able to leverage both internal and external resources, can innovators become able to gain the expected financial returns, otherwise, innovators' competitive advantages would be inevitably diluted (Teece, 1986). When imitation is pervasive in a market (like in China), it means that the market is not in a mood of accepting the original innovations, thus, if a business strategy is not properly designed, then, the expected profit-returns of innovators would be inevitably accrued to their imitators or competitors (Teece, 1986).

What Role Should Government Play to Promote Developing Country Firms' Innovation?

Q5 The rapid development of Indian pharmaceutical industry since the mid-1990s, from the stage of duplicative imitation to the stage of innovative imitation, has enabled many Indian pharmaceutical firms to follow the footprints, moving up from low-end to high-end of global value-chain, from importers to exporters; such a leapfrogged progress is indispensable from Indian government enforcement and incentive policies and regulations to encourage R&Ds (Kale & Little, 2007). In contrast, the government 'mouse-catching' policy: white cat, black cat, catching the mouse is the good cat, has been abetting or conniving the rampant imitation during the past 40-years in China, indicating the crucial and non-negligible role of government especially in those developing countries (Zhao, 2012; 2013; 2014; 2016; 2017; 2019a; 2019b).

Having these five unsettled questions listed and elaborated in Table 1, the author of this text is neither intended, nor motivated to defend illegal activities of imitations. Instead, the author is endeavored to argue that, innovators and imitators are natural twins, equally contributing to the

evolution of business ecology. The author is open to critiques, aiming to call for a way of thinking to accommodate the co-existence of the two natural twins, and to enrich the dynamism of management theory. Be cordially advised not to wear a 'right or wrong' lens to judge author.

This paper is started by showcasing a failed empirical study on whether the cognitive-distance is related to, or functions as a motivator of innovations or imitations. The finding is contradictory to previous literature, presumably due to the data validity and reliability, inspiring the author to take different angles to explore drivers/motivators influencing the mechanism of innovation or imitation, to conceptualize the critical factors contributing to the rise of imitation-industry (See Figure 1), and to explain how market behaviors is related to the rise of imitation-industry (See Table 2). The author proposes the concept of 'adjusted-imitation' to re-conceptualize 'innovation' as 'Innovative-Imitation', and 'imitation' as 'Imitative-Innovation', just to argue that, 'pure innovation' does not exist, nor 'pure imitation'. Then, the author adopts the BOP-framework to interpret the rise of imitation-industry, and concludes that: globalization, information technology and digital solutions are Post-Modern Drivers stimulating imitation opportunities available in BOP-market but Not Available in matured-market (See Table 3), and that, what imitation-based 'cheap-but-good-enough' products can provide to BOP-consumers (ignored by market-leaders) is not only the material needs, but most importantly, the psychological dignity and social trust. Lastly, the author argues that, unlike innovators, imitators are market-profit-driven for survival purpose. Only when the four management strategies are established and institutionalized (See Table 4), can firms become able to unleash the dormant values of BOP-markets, and to trigger the rise of imitation-industry.

A FAILED EMPIRICAL STUDY: IS COGNITIVE-DISTANCE RELATED TO INNOVATION OR IMITATION PERFORMANCES?

Searching for solutions is the motivations of both imitators and innovators. Solutions can be both technological and managerial for firms (large or small), to meet the needs of optimizing productivity. The source of solutions can be externally (horizontally) oriented (learning knowledge, technologies, business processes or models from other companies or competitors within the same industry, or from cross-industries); or internally (vertically) oriented (relying on organizations accumulated tangible or intangible resources (financial and human capitals, intellectual properties, experiences, R&D capabilities, market reputations to improve products/services). Therefore, measuring the knowledge-distance between solution-seekers and solution-providers, namely the cognitive-distance, is critically needed to interpret the source and motivation of imitation and innovation respectively.

The Concept of Cognitive-Distance and Its Impacts on Innovation/Imitation

Cognitive-distance is conceptualized as a measure to evaluate the knowledge difference between strategic partners (Nootboom et al., 2007), or a measure to evaluate the knowledge difference between/among individual people (Weick, 1979; 1995); or as a measure to evaluate a shared technological application (Smircich, 1983), or a shared management model (Nootboom, 2000). The criteria of measuring cognitive-distance may be differentiated by a set of parameters such as perception, interpretation, the intrinsically inculcated organizational culture (Schein, 1985), and their respective impact on firms' innovation/imitation performances (Nootboom, 1992; 1999). It is suggested that, the increased cognitive-distance leads to a stronger impact on learning through interaction, because people with different knowledge tend to stretch their knowledge through interactions for the purpose of bridging the gap of diversified knowledge (Nootboom et al., 2007). To this end, the cognitive-distance may determine the opportunities of knowledge combination or integration, and likely to trigger the possibility of innovations/imitations (March, 1991). When the cognitive-distance between the 'knower' and 'knowledge seeker' is too far, it may preclude the possibilities and/or opportunities of knowledge sharing and learning (Gulati, 1995). Also suggested is that, a high degree of cognitive-distance may be linked with a positive impact on the high degree of novelty of innovation/imitation, such as a technological leapfrog far-distanced from the existing designs or existing management models (Almeida & Kogut, 1999; Fleming, 2001; Rosenkopf & Almeida, 2003). A low degree of cognitive-distance may be linked with a routine of learning and seeking for analogical solutions (Rowley et al., 2000; Hagedoorn & Duysters, 2002).

Is Cognitive-Distance a Driver or a Motivator of Innovation or Imitation?

A stream of literature contends that, the cognitive-distance between the anticipated knowledge and the expected solutions can be thought of a driver or a motivator triggering or stimulating firms to innovate (Majchrzak et al., 2004; Wuyts et al., 2005; Nootboom et al., 2007). While, another stream of theory conceives the cognitive-distance as a threat, preventing solution-providers (innovators) or solution-seekers (imitators) to collaborate (Mowery et al., 1996, 1998; Stuart, 1998; Penner-Hahn & Shaver, 2005; Tanriverdi & Venkatraman, 2005). A group of scholars argued that, the degree of newness or novelty can better measure the cognitive-distance and differentiate innovation from imitation (Holyoak & Thagard, 1995; Hargadon & Sutton, 1997). The result of this text reveals that, cognitive-distance is neither correlated with imitation, nor with innovation.

Supporters for Internal Sources: Affinity Distance Theory

Innovation is a recombination of existing knowledge (Schumpeter, 1939), so is imitation. Some scholars contend that, internal source (knowledge or technology developed and accumulated within company, or within value-chain partners, or within industry), is more important as the source of innovation than that of external sources (Guiri et al., 2007). Customers, users, competitors and suppliers, are considered externally provided complementary resources to enrich firms' internal knowledge and enhance their innovation capabilities (Chesbrough, 2003; Gassmann, 2006; Laursen & Salter, 2006; Lettl et al., 2006; Piller & Walcher, 2006). The proximity or affinity of cognitive-distance is not only related to but also determines the chances of either innovation or imitation (Mowery et al., 1996, 1998; Stuart, 1998; Penner-Hahn & Shaver, 2005; Tanriverdi & Venkatraman, 2005). Far-distanced knowledge is likely to lead to innovation, while closely-distanced knowledge is likely to provide an easiness of learning and to trigger an imitation (Garcia & Calantone, 2002).

Supporters for External Sources: Far-distanced or Cross-industry Theory

External sources such as the diffusions of knowledge and technology, the shortened life-cycle of products/services, and the increased mobility of work forces across industries, play more active roles in stimulating the exchange of knowledge and information than internal sources do (Penrose, 1959). The accessibility to external or heterogeneous sources is more provocative and effective for firms to improve their innovation/imitation performances than internal or homogeneous sources (Porter, 1990; Prahalad & Hamel, 1990; Hagedoorn & Schakenraad, 1994; Smith Ring & van de Ven, 1994). As far as learning is concerned, cognitive-distance is used to measure the possibilities of collaboration between/among firms or partners (Barkema et al., 1997). Far-distanced cross-industry learning is likely to facilitate firms to develop and convey high degree of novelty (Holyoak & Thagard, 1995), to enhance competitive advantages (Keane, 1987; Dahl & Moreau, 2002), to improve performances (Gavetti et al., 2005), and to reduce the risk of uncertainty (De Bono, 1990). The degree of newness is often used to measure and predict financial returns (Laursen & Salter, 2006), and customer benefits (Chandy & Tellis, 1998; Sorescu et al., 2003) of both innovation and imitation. More aptly to say is that, cognitive-distance should not be recognized as barriers of learning; instead, it is linked with the motivation of both innovation and imitation (Majchrzak et al., 2004; Wuyts et al., 2005; Nootboom et al., 2007).

Cross-industry learning is defined as a far-distanced channel for firms to gain external knowledge (Enkel & Lenz (2009), and to gain more innovation-based competitive capabilities and advantages from an 'outside-in' process, than from an 'inside-out' process (Enkel & Du

rmüller, 2008). The potential of cross-industry knowledge and technology spillovers has been highlighted as the resource with synthetic value (Hargadon & Sutton, 1997). To exploit the maximum value of external source of knowledge, firms need to establish an effective management system in order to facilitate their learning abilities (Gassmann et al., 2004), to encourage cross-industry collaboration (Herstatt & Kalogerakis, 2005), and to cultivate a cross-industry analogical thinking process (Gassmann & Zeschky, 2008; Herstatt & Engel, 2006).

Three Questions Prepared for Interviews and Data Collection and Analysis

Having the concept and its impact defined, the author of this text prepared three questions (originally to be used as research hypothesis) for interviews (mostly informal) conducted from 2006 to 2012 in China. Interviewees include political leaders, government economic consultants, business professors, corporate executives and small business owners. The results of interviews helped search for archival data complementary to analyzing how the relationship between cognitive-distance and innovation/imitation decisions and activities is perceived. The objective is to detect or diagnose whether or not, cognitive-distance can be generally defined as a driver or motivator of innovation/imitation.

Question 1: Is cognitive-distance related to Innovation or Imitation Decisions and Performances?

Question 2: Is high degree of cognitive-distance (externally outside the firm or even cross-industries) associated with high degree of novelty (radical or breakthrough) of Innovation or Imitation?

Question 3: Is low degree of cognitive-distance (internally within the firm or same industry) associated with low degree of novelty (analogical or incremental) of Innovation or Imitation?

METHODOLOGY AND RELATED ISSUES DISCOUNTING THE QUALITY OF RESEARCH DESIGN

This text is based upon the method of inductive theory building through case-studies, interviews and archival data analysis, and cross-checking with previous research findings (Yin, 2009), aiming to provide insights on the relationship between cognitive-distance and innovation/imitation activities and performance. Such a mixed methodology is recommended to analyze cross-firms and cross-industries collaborations (Andriopoulos & Lewis, 2009). The increasingly tightened political sensitivity makes it almost impossible to formally organize interviews. Although collaboration is defined as a critical indicator to measure innovators/imitators performances (Siggelkow, 2007), however, collaboration in China is mostly

Guanxi-based, rather than business-oriented. Most of interviewees candidly admit that, the concept of cognitive-distance is new and/or even unknown to them.

Data Collection and Organization

The author of this text applies the cross-case method to collect and analyze data in an attempt to identify how cognitive-distance is related to innovation/imitation activities and performances. Given that, imitation is absolute, and innovation is relative, and that, the conceptual distinction between innovation and imitation, from the perspective of cognitive-distance, is controversial or even confusing, therefore, this text pre-defined that, innovation refers to far-distanced solution(s) with high degree of novelty from the existing knowledge or technology, and that, imitation refers to closely-distanced solution(s) with low degree of novelty from the existing ones.

The 50-case-firms across a broad-range of industries (from IT-industry, to manufacturing and service industries), were selected from the annual list of 'innovation-fund application' available at government agency (Developing and Planning Committee), otherwise would be impossible to reliably define the innovation/imitation-oriented firms given China is reputed as a Shanzhai-based economy. The 300-interviewees were divided into two groups, one is consisted of 240 business executives from those 50-firms, and the other group comprises 60 individuals as political leaders, government economic consultants, management professors. All interviews were stochastically and casually arranged through personal connections. All interviews were face-to-face conducted in order to observe or perceive the implied meanings from interviewees' facial and body expressions. All interviews were audio-recorded (under the agreement of confidentiality), transcribed verbatim, translated into business interpretations, and then, discussed and confirmed with the interviewee(s), just for the purpose of information reliability (Bourgeois & Eisenhardt, 1988).

Published papers and websites postings are used as complementary data for cross-checking, either to qualify or to disqualify the data usability (Glaser & Strauss, 1967), in order to strengthen the validity of research constructs (Strauss & Corbin, 1990). In case of archival and web-based data not conforming to the data of interviews, relevant interviewee(s) are contacted again, to ensure as much consistency as possible (Rowley, 2002). Such a data triangulation method is recommended to either refute or reinforce the research confidence especially when the research object is subjected to haphazard or episodic phenomenon (Eisenhardt & Graebner, 2007).

Variables and Theoretical Constructs

With regard to variable-setting and theoretical-building, this text relies on interviewees' responses as variables to analyze relationship between cognitive-distance and innovation/imitation performance. Imitation-driven-firm is categorized into the portfolio of solution-seekers; innovation-driven-firm is categorized into the portfolio of solution-providers (with patent-registration). The cognitive-distance is operationalized as three-point scale (1-close and within industry, 2-mid and cross-industries, 3-far with global operations) to estimate the cognitive proximity between 'seekers' and 'providers' (Nooteboom et al., 2007; Wuyts et al., 2005). This text adopts the re-cursive cycle process introduced in grounded theory to develop theoretical constructs by cross-checking whether the results from data comply with or differentiate from extant literature (Miles & Huberman, 1994). To corroborate the strength of data, a confirmation procedure is conducted by the application of conceptual coding system, namely the 'in-vivo' codes advocated in the research on organizational ethnography (Van Maanen, 1979). The term 'in-vivo' is introduced in grounded theory stipulating that, interviewees' original words should be used as codes to label the interview data (interview transcript), in order to protect interviewees' original meaning.

As suggested that, company size and age is related to their innovation capabilities and performances (Sorenson & Stuart, 2000), therefore, they are used as control variables to avoid related bias (Acs & Audretsch, 1991). Firm' innovation competency may decline as age grows; the clock-speed of product life cycle is an active factor catalyzing the competitive intensity of industrial innovation (Fine, 1998). Having these variables considered, this research design seems to be relatively adjusted. Originally, the degree of novelty was designed as an independent variable to statistically test its impact on profit-making, however, in the face of data-inconsistency in terms of firms' financial resources, R&D-capabilities and market portfolios (Nooteboom, 1994), the author opted to be conservative, and canceled that temptation, expecting future research to fulfill this responsibility.

RESULTS

Despite the data-biases, the results may still deserve to be reported, at least for information-sharing purpose. Cognitive-distance is not correlated to firms' performances of innovation or imitation (Question 1). The degree of cognitive-distance is not associated with the degree of novelty of innovation or imitation (Question 2 and 3). The combination of market-need and profit-making is the primary driver or motivator driving Chinese firms to innovate/imitate. Of the 240 business executives interviewed, 30 candidly expressed their 'no-knowledge' status toward the concept of cognitive-distance; the rest 210 unwittingly exposed their status of 'pretended

knowing'. Of the 60 non-executive interviewees, most of them (54) simply believe that, profit is the measure of technological effort, regardless of innovation or imitation; the rest 6 hold that, understanding and making use of government policy is the key for firms to obtain financial support required to pursue technological enhancement either innovatively or imitatively. The results of on-site observations from those 50-case-firms provided little substantial information on R&D-investment. Instead, seeking analogical solutions or imitating to 'make their product(s) look-like but cheaper in price than those hot-selling brands', is mistakenly confused with the concept of innovation.

As for the source of solution (imitation), Chinese firms are keen to target at those hot-selling brands from companies within the same industry, indicating that, imitation is short-distanced between solution-provider and solution-seeker. This is because of three reasons, according to the result of interviews, namely, easy-access-technology, quick profit and minimum risk. As for the control variables, the results of this study show no signs to confirm the relationship between company size and age with their innovation/imitation performances.

Most of those interviewed executives argued that, given the short-history of China economic reformation, no firms are aged yet; and that, large firms tend to have more funding-sources from government or banks than small ones, mainly because they are either state-owned-enterprises (SOEs) or having special '*Guanxi*' with government; and that, most of their CEOs were appointed by government, lacking business knowledge and experiences, their priority is short-term based and profit-making oriented in order to establish and prove their personal political performance record. Therefore, most of them are not willing to take the risks of heavy-cost related R&Ds (failure of R&Ds may cause them disgraced or deprived from their position in government system). Note that, a few non-executive interviewees surmised that, it is now too early for Chinese firms to go after breakthrough kind of radical-innovations; and that, comparing with the Asian Dragons emerged in 80s-90s of last century, the growth speed of China economy is relatively faster, but not yet mature enough; and that, given the shortened product life-cycle, the expedited clock-speed of product upgrade, the tightened knowledge management, and the increasingly globalized pressure of IPR system; all is sending a message that, Chinese firms should continue the 'follower-strategy', continue to take advantage of those market-leaders' technological and market development, and continue to focus on those developing markets, otherwise it would be too risky for them to survive the rapidly intensified global competition.

Limitations of This Empirical Approach Inspiring the Theoretical Exploration on Innovation/Imitation

The biased data collection determines the limitations of this empirical approach, too ontological to provide a meaningful result. Fail to provide a brainstormed training program prior to surveys or interviews, to bridge the conceptual gap between Western version of innovation/imitation and Chinese version, is the first drawback, leading to a validity bias (not speaking the same language). Fail to design a systematically standardized metrics to measure the result of surveys and interviews, is the second drawback (e.g. metrics to calibrate the reliability bias resulting from the massively overlapped-patent-registration). Fail to run a longitudinal investigation to track the impacts of innovation/imitation activity on market performances and consumer-behaviors is the third drawback, influencing the generalizability.

Having these data-quality-biases recognized, and being enlightened and encouraged by a theoretical finding that, perceptual data can hardly be statistically tested (Eisenhardt & Graebner, 2007), the author of this text decided to take a detour, adopting an exploratory approach to interpret the relationship between innovation and imitation, and the developmental mechanism of the rise of imitation-industry, through the dynamically emerging and diversifying window of developing country firms' behaviors.

THEORETICAL OBJECTIVES: INNOVATORS AND IMITATORS ARE EQUAL CONTRIBUTORS TO BUSINESS ECOLOGY

It is suggested that, when invading into the developing markets, exclusively focusing on high-end consumers and ignoring the demand of low-end consumers constituting at least 80% of local population, is defined as the root-cause explaining how those MNCs have missed the great potentials of business opportunities, and why failed in competing with imitation-based China Shanzhai firms (Zhao, 2012; 2013; 2014; 2016; 2017). It is also criticized implicitly that, conventionally pursued strategies may not be appropriate for MNCs to continue their competitive capabilities and advantages in developing markets (London & Hart, 2004). Previous literature contributes little attention to these failures, providing an opportunity for this text to fill this gap. Taking a paradoxical view combining with deductive, inductive and exploratory approaches, the author decides to search and examine evidences from previous literature and archival data, and to cross-check with the collected data and case studies, in an attempt to theorize the functions and impacts of innovation and imitation on the evolution of business ecology.

Arguments on the Roles of Innovators and Imitators in Business Ecology

Innovation is the result of imitating the previous knowledge and experience (Schumpeter, 1939). Re-balancing the relationship between Innovators and Imitators has been debated over time in the literature of management, resulting in the framework of innovators' dilemma and its solutions (Christensen, 1997; Christensen & Raynor, 2003), being deemed too pessimistic or prejudiced to fairly reflect and appreciate the role of imitators in propelling the progress of innovation, driving the change of economic pattern, and reforming the dynamism of business ecology (Zhao, 2016; 2017). By adopting a reversed path-dependent process from pre-selecting external sources or targets, to pre-setting a price-cap, and to imitating and competing with those hot-selling brands, Chinese firms have shown the world a new set of managerial techniques or a smart-way of doing business, a post-modern catching-up business model, an effective, feasible and applicable model for other developing country firms to follow, a model causing innovators' R&D-efforts and investments to fall into an abyss of 'sunk-cost' (Zhao, 2019a; 2019b).

Today's Innovation Celebrities can be Traced-back as the Descendants of Imitators

Which one of contemporary innovators is naturally born? McDonald's model can be traced to White Castle; the application of credit card (Visa, Master, Discover etc.) can be traced to Diners Club, turning the plastic card into something that can provide business partners and consumers with privileges, convenience, safeness and time-savings. The founder of Wal-Mart openly admitted that, the company had borrowed the major ideas and practices from numerous predecessors' business model, and by a process of justification and customization, Wal-Mart eventually established its own win-win-win business formula, shaking the foundation of traditional operations of retailing industry. The architecture-design of Nissan Infiniti (FX 35 and FX 45) was imitated worldwide as a design-fashion of SUV. The time that imitation is a synonym of stigma is over. A professor from the University of Colombo, Sri Lanka, implored during a seminar, to call for re-conceptualization of imitation as a business strategy, or a choice.

Imitation Deserves to be Embraced as a Competitive Business Strategy

Imitation is, after all, an intelligent way of learning, sociologically recognition-driven, economically market-driven, and technologically efficiency-driven. Imitation itself is not evil unless being used to produce fakeries, sabotaging innovators' intellectual property's right. For example, spyware is invented for good reasons, monitoring end-users' behaviors, tracking customers' feedbacks and so forth. However, when used to pilfer people IDs and personal information, and to duplicate them for criminal purpose, it becomes evil. Imitation is profit-driven, and deserves to be considered as an effective business strategy to survive in a hostile

environment, and to overcome financial, technological and managerial weaknesses. An effective imitation-strategy should be able to ensure firms to achieve cost-saving, time-saving, labor-saving and material-saving. In a sense, imitators and innovators are competitors of each other.

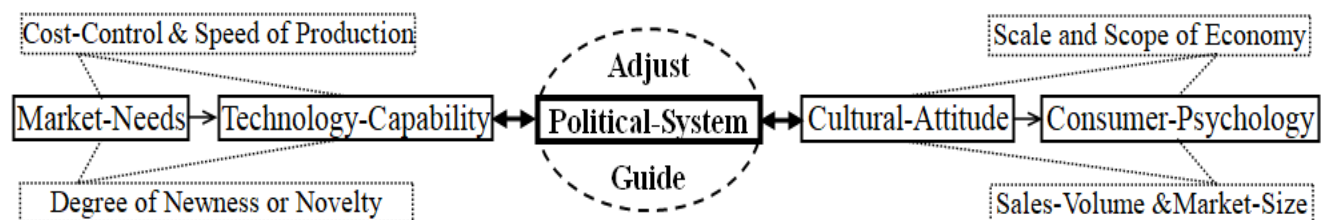
The Need to Re-cognize and Re-position the Strategic Role of Imitation

Regardless of how smart an Imitator can be, it is inevitably linked with the derogative term 'plagiarism' or infringement of IPR. Such a stereotyped mindset is rootless, prejudiced and misleading. Firstly, IPR is a multi-related parameter, varied from industry to industry, from country to country. When marketing their products/services to global market for cost-allocation and ROI purposes, innovators should have a risk-control system prepared to prevent the potential threats from imitator(s); secondly, the globalized information technology makes knowledge flow or spillover multi-channeled, turning the source (target) of imitation to become difficult to be objectively identified. Consequently, the time-sequence is often used to differentiate original from imitated one, namely, the first entry to market is the original innovation, and others are imitations. A professor from China RenMin University argued on national TV that 'Isn't it true that, once an innovative product is released and welcome in market places, it immediately becomes the source of learning, namely the target of imitation before the mature stage of its life-cycle ... a part of business game, not a big fuss ... time to challenge the stereotyped Western management system'.

The Need to Understand the Five Major Factors Stimulating the Rise of Imitation-Industry

Either innovation or imitation must be ultimately measured by their respective market performance and competitiveness. Given the government autocratic role in most of those developing countries (Table 1), of the five critical factors, government manipulates (adjust) and controls (guide) the flow from market-need, technology-capability, to cultural attitude, and consumer-psychology, and the synergy of these factors determines the rise of imitation-industry (See Figure 1):

Figure 1: The Five Critical Factors Contributing to the Rise of Imitation-Industry



1. Market-based Interpretation to Explain the Rise of Imitation-Industry: China has been named as 'World Factory' of cheap and imitated products. 'Made-in-China' has become the brand of 'Cheap-but-Good-Enough' products widely distributed to the shelves of global retailers, enabling Chinese Shanzhai firms to efficiently implement an imitation-based cost-allocation strategy, to effectively achieve an economy of scale, and to transition from one of the poorest economy to the 2nd of world economy (Zhao, 2012; 2013; 2014; 2016; 2017). Serving global market-needs does not earn Chinese Shanzhai firms a good reputation. Instead, being blamed for ripping off innovators' intellectual properties and disordering the Western dominated 'fair competition', these accusations mirrors more or less a cynical attitude, ignoring a fundamental fact that, the rise of China imitation-industry is indisputably the contribution of global market demand. For that matter, should global market be blamed for infringing the IPR? For the same matter, three aspects of market behaviors deserve to be elaborated in order to holistically understand the mechanism of the rise of imitation-industry (See Table 2):

Table 2: From Three Aspects of Market Behaviors to Interpret the Rise of Imitation-Industry

1 st	<i>From demand perspective</i> , the increased global-market-demand for Cheap-but-Good-Enough Products determines the rise of imitation-oriented industry.
2 nd	<i>From supply perspective</i> , capturing and satisfying consumers' price-sensitive preference is the key to interpret the rise of imitation-industry, or the success of Shanzhai economy in China. Some Shanzhai products are not only look-alike, but even look-better than their original-counterparts.
3 rd	<i>From consumer-behavior perspective</i> , the improved life-quality of the mass at the BOP-market has enabled the poor to attain an increasing power of purchase and discourse. The expedited clock-speed of products' upgrade has not only shortened products' life cycle, but also changed rich consumers' decision-behaviors, from previously sticking to highly-priced brands to show-off their privileged identify, to presently having a 'look-alike but cheap substitutes', so that they can frequently buy a new to replace the old one. The desire for 'Cheap-but-Good-Enough' products is not limited to the poor.

Table 2 indicates that, consumers' preference determines the supply-demand relationship. Knowing the forgeries but not giving a damn, and keep buying them, becomes the emerging pattern of consuming behavior, driving the rise of imitation-industry. Does it mean that, consumers are willing to put up with the second-rate quality? The answer is 'Absolutely No'. The results of a stochastically conducted on-the-spot survey by the author of this text (2006-2012) showed that, of the 50 retailing stores across US territory from east to west, over 90% of surveyed shoppers (poor and rich, measured by their professions) responded that, 'Made-in-

China' products are cheap but 'not that bad', indicating that, imitation is not necessarily a 'synonym' of 'bad quality'. The improved quality of imitators' products has been changing the previously sharp-contrast of consumer-demographic pattern between the poor (low-end) and the rich (high-end). When 'cheap but not too bad' is available, why 'expensive'?

To make a case in point, not long ago in China, when walking on a street or an alley, or the seconds after stepping off a bus or a subway station of any major cities, one is likely to be approached by a man/woman imprudently sidling up to you and whispering, 'Want a cell-phone or a game-player?' When you show no heed, he/she vanished or slipped into the crowd of adjacent street. Immediately, and another man/woman may approach to you whispering different mantras 'Want Rolex? Calvin Klein? or Prada?' Anyhow, you are inescapably ambushed by and exposed to a dizzy array of products with globally branded names but priced so low that you would hardly refuse being seduced. Such a scene is not limited to the geographic territory of China. It is reported that, the cheap knock-offs has become a scoring ecstasy on the streets of London, Paris, New York and other major municipalities of the world. Counterfeits are no longer only pursued by the poor (*Beijing Chronicle*, 2005), more and more celebrities including movie-stars of Hollywood now start abandoning their privileged-pride of being the owners of those luxury brands, and admitting their purchase of imitated or fake-products (fake bags of Louis Vuitton and Mulberry, fake dresses of Chanel, fake watch of Gucci, fake jewelries, just to name a few, for more information), indicating that, 'Made-in-China' cheap-but-good-enough products already established their global market-demand (Phillips, 2007). Search engines may prompt numerous stories about celebrities or movie stars being caught at the airport for carrying fakeries of brands; although struggling to explain their penance, inadvertent and/or gullible innocence to custom-officers, they could not hide or reject their inner desire for 'cheap luxury brands', sarcastically sabotaging the conventionally promulgated customer-relationship between branded-companies and their privileged customers.

To make another case in point, the results of interviewing with 300 senior executives of Chinese firms showed that, price-to-performance has been adopted as their core strategy to pursue 'PROFIT' through customer-satisfaction, which has been leading their transition from 'look-like' type of imitation to 'look-better' type of innovative-imitation. Such a transitional path is defined as a catching-up model applied by developing economies (Kim, 1997; 1998). Taking advantage of celebrity-effect as the decoys (image spokesmen) to solicit and instigate consumers' purchasing desire, is a commonly applied marketing strategy for Shanzhai firms to promote their sales. During interviews, most of those executives did not show any sign of shamefulness for manufacturing and supplying fakeries or forgeries. 'What does original-innovation mean anyway if not accepted by market? ...we make their products cheaper ...we

pick up the low-end or BOP-markets ignored by them (market-leaders), we satisfied consumers' need and they failed to do so ... what about the frequently aroused law-suits within the circle of those market-leaders, Apple and Samsung for example, accusing each other for infringement of IPR? ... why do we get the blame for imitation and they don't ... they invaded into China market to make a great fortune without getting ready to take risks (being imitated) ... this seems not what they have written in their management text book ...' It seemed that, these Chinese executives have built a strong and defensive argument, shaking the authentic-base of the conventionally inherited framework of management.

2. Technology-based Interpretation to Explain the Rise of Imitation-Industry: The rapidly emerged digital technology has revolutionized the traditionally heavy-cost work-flow of 'Industrial Design', expediting the speed, and broadening the scale and scope of China imitation-industry. The 'art-of-retouch' has become a stylized fashion-phrase in China to proudly express the success of imitation activities. On-screen simulation makes the 'art-of-retouch' done digitally, makes the imitation cheaper and faster than ever. Instead of heavily invested in-house and self-dependent R&Ds, most of Chinese firms get used to keeping their eyes on the newly emerged technologies and hot-selling products launched by those market-leaders, and relying on reversed-designing-engineering method to pursue 'quick profit' through imitations. With financial capabilities and cost-saving experiences accumulated from imitations, some companies started their investment plan, funding youngsters to study abroad as their 'technology spies' in the name of supporting education and global communication. They believed that, this is an effective resource-based investment strategy to avoid the sunk-cost likely generated from R&Ds. '... the combination of stealing technologies and enhancing the skills and abilities of art-of-retouch technique to adjust the original design, has been prioritized as our core strategy ...' says a CEO; '...removing unwanted components without changing the core design of originals is the marrow of the so-called art-of-retouch ...' says a CTO.

Digital technology has triggered the birth of a series of new way of doing business, the re-touched images of celebrities and movie stars, the re-touched news headlines, the re-touched movies just to name a few. The scandal of Russian news channel accused of 'stealing and re-touching' the footage of 'Titanic Movie'; the world-class scientific news agency, the 'Discovery Channel', was also accused of faking an on-screen volcano, may be used as two typical examples to illustrate the application of digital-technology in news and media industry. Regardless of the authenticity of these scandals, by large, the impact of digital-technology is far-profound, especially on stimulating the rise of imitation-industry.

3. Political-based Interpretation to Explain the Rise of Imitation-Industry: Understanding the difference between political-economy (pursued in China) and market-economy (pursued in Western world) is the key to interpret the rampant rise of imitation-industry in China. According to some anti-piracy agencies' online postings such as 'International Intellectual Property Alliance (IIPA)', and 'Quality Brands Protection Committee (QBPC)', the government of China has become so proud to announce that, even though China is defamed as the 'Capital of Imitation', however, 'Made-in-China' products now occupy at least 60% of retailers' shelves worldwide. Such a success, both scale and scope, has been attributed by China government to the victory of political economy outperforming market economy (the righteousness of communist government leadership), and to the victory of Deng Xiaoping's 'cat theory: white cat, black cat, catching the mouse is the good cat'. This is why 'Do whatever takes to make money' becomes the motto of 'China way of doing business' (Zhao, 2016; 2017). Imitation has been, implicitly or explicitly, glorified as the engine driving the mainstream of technological enhancement and economic reformation in China. Anti-piracy has never been substantially set as government priority. As far as competition is concerned, what those MNCs have been competing with is not an individual or a group of Chinese firms. Instead, the government has been functioning as a unified competitor behind the scene, just for the purpose of showing off the world that, communism-based socialism is more competitive than capitalism. Ironically, China now is more capitalism-driven than any form of capitalism ever defined in the history of human society. To this end, an interesting question is: which of those MNCs is strong enough to compete with the government of such a huge country? Answers to this question may help those Western management gurus to objectively understand why those globally reputed MNCs (with strong financial, technological and managerial resources and capabilities), have failed in competing with Chinese Shanzhai firms (lack of financial, technological and managerial resources and capabilities) during the past 40 years (Zhao, 2016; 2017; 2019a; 2019b).

The rampant imitation has been bemoaned and criticized nationwide. '... given the autocracy of government, if Shanzhai imitation is wanted to be stopped, it would have been stopped long time ago, with or without IPR-system ... keeping one eye open and another closed has been the attitude of government, abetting or conniving the massive expansion of imitation-industry as long as it is profit-making ... this has become a post-modern secular value system, prevailing and dominating the ideology and superstructure of our nation...' A vice chairman of a provincial government said to the author of this text during a private meeting. '... either theoretically or practically, China Shanzhai economy was molded by Deng Xiaoping's cat-theory ... foreigners would never understand this ... we (government) are not stupid, we surely understand that imitation doesn't do any good to the nation in the long run, we chose to do so

only because we have no choices at least for the time being ...’ said another senior government official in charge of technological planning and development openly during an economic seminar. A theorist of communist party pointed out during his speech for the opening ceremony of a senior party leaders’ training course that ‘... we are the lucky beneficiaries of today’s rapid development of digital technology, providing us a platform to improve the efficiency and quality of our products at minimum cost ... On-screen simulation has catalyzed the birth of numerous professionally specialized digital design firms across industries... Digital art-of-retouch has enabled our firms to simplify and alter the original designs, and expedite the speed of our learning (imitation) process ...’ He concluded his speech by an encouraging (instigating) call that ‘... foreign companies are trying to allocate their costs of R&D investment, to exploit our cheap labor, and to make huge profit in our territory ... it would be silly if we cannot grasp this historically unprecedented opportunity to learn (imitate) and make use of their technologies ...’ The rampant imitation in China is government abetted, rather than a grassroots’ activity.

4. Cultural-based Interpretation to Explain the Rise of Imitation-Industry: Establishing a cultural-based understanding is critical not only to explain the rise of imitation-industry, but also to interpret the dilemma between material-need and moral-value-collapses in China. A professor of social science from China RenMin University bemoaned that: ‘... the impacts of Shanzhai industry on China society is far-beyond the measure of short-term gains of economic growth. The dark-side is more thrilling, shivering and/or even horrifying than what has been perceived so far ... when a country is in favor of fakery/forgery over the originals, and when its ideological and moral standards of ‘true or false’ and ‘right or wrong’ being turned upside down — then, the loss or damage derived in a long run, would be far beyond the capability of contemporaries to discern, or pin down to the money-figures...’ Using the CCTV’s words (the highest government news-medium agency) aired at 7-O’clock daily news (the prime time): ‘...recovering the social credibility system will be a painstaking task, challenge and top priority of our nation ... imitation has metamorphosed into a behemoth encroaching our society from inside-out, misleading our nation’s value system...’ A professor of political science from Capital University of Finance and Commerce expressed his disillusion: ‘...during the past 40 years of economic reformation, Confucius is blamed, Daoism is distorted, Maoism is mocked, and lastly, Deng Xiaoping is criticized ... the country has been nurturing a behemoth of cheating...this is the root of today’s unprecedented corruption ... which country in the history of mankind, can build a system to nurture its government officials, to become hundreds of billions dollar owners through bribery, graft and/or embezzlement?’ A group of Korean professors (author’s colleagues) commented that: ‘... if such a distorted or morbid ideological, moral and value system not being substantially

calibrated in line with the mainstream of human civilization, only God knows what China would be transformed into ...' A senior economic consultant openly questioned during a seminar that: '...when comparing the price paid to ideological, moral, spiritual losses and environmental degradations, our economic growth seems valueless ... the dwindled value system has been turning our nation into refugee camp of the post-socialist economy ... desperate for a cultural renaissance to revive...otherwise, what we have done today will not be absolved by generations ahead...' Indeed, when the line between 'right and wrong' is dimmed, the damage to future generations is fathomless. An incident (true story) happened in China five years ago and shocked the entire nation, when a 14-year old boy under arrest for committing a homicide of his classmate, threatened police officers in crime scene that: 'My father is Li Gang', a county head who has the power of deciding citizens 'life or death'. Ever since, 'My father is Li Gang' has become a national idiom to mock the morbid society.

To make a paradoxical point for argument purpose, there has been a group of scholars defending the legitimacy of imitation, arguing that, what difference does it make between the explosively emerged plastic surgery (making someone look better than or different from what he/she naturally born) and the rise of imitation-industry? A business professor from ChongQing University advocated that: '... if plastic surgery industry is OK because it is market-driven, the same is Shanzhai industry, but why being blamed or criticized? Bear in mind, plastic surgery is a 'taboo' 20-some year ago in China, what makes it so popularly accepted now? Female or male, young or old, are searching for clinics to make their face look prettier, their body slimmer, or even their hymen repaired without any sense of shyness. Plastic surgery has boomed so prosperously that has nurtured a bunch of Shanzhai manufacturers of Botox and other non-surgery products, not to mention the cosmetic products. A professor of social science from WuHan University advocated with a cynical tone that: '... when authenticity becomes optional, it would be confusing, to what extent and by what criteria, the culture and value systems should be measured?' A hard to believe or an inconceivable example (true story) may help understand the degree of morbid culture and value systems. According to China ministry of education, many students have returned back after years of 'studying' abroad, holding digitally re-touched fake diploma-certificates (bachelor, master and even doctorate). Such a collectively faking activity may help understand the psychologically ridiculed profanity to the sublimity of education and legal systems, and help explain the dramatized society of China in a broad sense. Ironically, according to official investigation, most of those fake-diplomas were forged mainly from UK, German and Australia (well matured societies). A business professor at Manchester University, UK, bemoaned sentimentally during a chat that: 'as an educator, I am ashamed of such thing happened in my country ... chastising what we have been proud of our value system especially

our education and legal systems ... we could have done a better job to prevent such a humiliation.'

5. Psychological-and-Value-based Interpretations to Explain the Rise of Imitation-Industry: A

professor of psychology from Beijing University argued that: '... the rapidly developed material life resulting from economic reformation, has shaped a sharply contrasted psychological adversity of more than one billion low-income people in China ... the rapidly exacerbated disparity between poor and rich, has led to ideological and cultural morbidity, as well as psychologically distorted or twisted consumers' behaviors in China. The poor is pent-up for being ignored and discriminated ... it is the Shanzhai cheap-but-good-enough products providing the poor with psychological dignity and social trust, and liberating their depression ...' He continued that: '... it is such a morbid mentality among over 80% of China population that has led to a market phenomenon of self-ridiculed consumers' psychological behavior, knowing Shanzhai is fake, but wanting to buy it just to show 'you have it, me too' kind of psychological vent ...' A senior government economic consultant made a similar comment that: '...consumers' psychologically self-ridiculed quest of motif for Shanzhai products, may be used to interpret the rampant rise of imitation-industry in China ... the impact of such a falsified value system might take generations to rectify...' He continued to defend his point that: '... more and more market-leaders have allied as an attempt to campaign against imitation. Amazon for example, has committed to monitoring and verifying the content-authenticity of its publications; Microsoft too, has invested heavily to sweep off the pirated software ... all these efforts seems to have generated little effect, majority people already get used to or addicted to the cheap or even free pirate-version of software ... since the authentic version is not only expensive, but also periodically upgraded, why buying it now if the cheap substitutes are available ... such a consumers' psychology has turned China into an unprecedented organized-crime scene of IPR infringement ...'

According to the Business Software Alliance (BSA), software piracy in China alone causes multi-billion-dollar annual loss of those software developers, measured by comparing the piracy sunk-costs with the expected ROIs, particularly in digital design and online-gaming industries. A marketing professor from RenMin University shared his promising observations that: '... such a ridiculed psychology will be improved along with our industrial enhancement and national sense of pride ... 20 years ago, Shanzhai was accused of imitating the appearances of foreign brands, now accused of imitating the chip-set, the core technology ... isn't it a proof that, China Shanzhai industry has been progressing and catching up?'

The Need to Re-conceptualize Innovation and Imitation as the Concepts of Strategy

Given that, innovation is relative, imitation is absolute. There seems to appear a trend of conceptual transition, from innovation to 'innovative-imitation', from imitation to 'imitative-innovation'. Such a transition may be more reflective in cognizing the commonality and disparity between innovation and imitation than conventional concepts. This text argues that, the commonality lies in the process of pursuing new ways of profit-making either technologically or managerially; while the disparity is determined by the 'degree of newness' pursued by innovators or imitators respectively. The 'degree of newness' is measured by the distance from the newly launched products/services to the existing ones, the far distanced should be conceptualized as 'Innovative-Imitation', otherwise 'Imitative-Innovation'. Both 'Innovative-Imitation' and 'Imitative-Innovation' should be conceptualized as business strategies, determined by firms' existing capabilities and available resources. Market-leaders are normally equipped with advanced capabilities, and therefore, likely to opt for 'Innovative-Imitation' strategy to compete for new products/services or new management models with high degree-of newness far distanced from the existing ones. Recently, executives of market-leaders across industries (manufacturers, retailers and service sectors) started to team up to organize various forms of consortiums (e.g. strategic partnerships) in order to communicate and share ideas, practices and experiences from each other, and most importantly, to maintain and strengthen their industrial leadership and discourse power. Such an emerging form of monopolized-consortium, by essence, represents a post-modern monopoly strategy, to ensure market-leaders to innovatively imitate within the consortium, simultaneously, raising the threshold to prevent from being imitated by outsiders. In contrast, market-followers (SMEs, developing country firms), given their weaknesses of technological and managerial capabilities, are likely to adopt 'Imitative-Innovation', to learn new ideas, technologies and processes from market-leaders. OEMs are likely to take advantage of market-leaders' outsourcing strategy as an opportunity to learn, absorb and accumulate their own intellectual capitals. Such a system-mining model has been increasingly becoming a dominant channel for market-followers to gain their distinctive competencies and advantages (Chesbrough, 2003), such as cost/price-reductions, price-to-performance, and low-margin-but-high-volume based profit-making.

'Adjusted-Imitation' as the Synonym of 'Innovative-Imitation' or 'Imitative-Innovation'

Given that, there is no pure form of innovation, nor pure form of imitation; therefore, 'Adjusted-Imitation' should be conceptualized as the synonym of 'Innovative-Imitation' or 'Imitative-Innovation'. Given the differentiated capabilities and resources between market-leaders and market-followers, the degree of adjustment may be used to determine their respective degree of

newness in terms of products/services. In other words, the capability of adjusting the source of imitation may be used to evaluate and differentiate between Innovative-Imitators and imitative-innovators. Strategically, market-leaders aim at 'making products better than existing versions'; market-followers start from 'making products look-like original ones' to 'making products different from original ones', without changing the core of original design.

Both 'Innovative-Imitation' and 'Imitative-Innovation' can be pursued as business strategy depending on firms' available resources and existing technological capabilities. Apple for example, releases an upgraded i-Phone every year with adjusted features and functions, having the core-design remained relatively intact. This is why, i-Phone strategy has been widely referred within the industry as an imitative-innovation strategy or an incremental strategy pursued by a market-leader. What is indicated is that, when an 'adjustment' is carried out in a process of imitation, then, that imitation is qualified either as an innovative-imitation or an imitative-innovation, depending on the degree of adjustment. Another example of imitative-innovation strategy pursued by market-leaders is Ford Motor Corp., a classical business case makes Mr. Alan Mulally a world-class legendary business leader for his intelligent boldness and persistent spirit of 'borrowing and implementing new ideas and techniques from outside'. In the face of excessive lead-time and slackened process flow pervaded in Ford, Mr. Alan resolutely decided to break off from the traditionally inherited costly and inflexible settings of assembly-lines. By imitating TPS, adopting lean system and outsourcing strategy, Ford has adopted and completed a series of adjustments such as re-deploying and re-allocating its assemblers, resulting in a sharply improved cost-allocation, and an enhanced efficiency performance especially in accommodating the fluctuations of order-fulfillments, not to mention the remarkable savings of time and cost. It is worth to mention that, imitation (imitative-innovation) is not limited to manufacturing industry. Rich contents have been published to report the successes of cross-industries imitations, both scholarly or anecdotally. Ever since the concept of 'service-oriented architecture (SOA)' being initiated, it has been widely adopted (imitated) as a measure to evaluate firms' performances in service businesses (cost/risk-reductions and waste-reductions), the far-distanced design of SOA is recognized as innovative-imitation, otherwise the imitative-innovation.

Management Implications from the Concept of Adjusted-Imitation

Having 'adjusted-imitation' conceptualized will provide scholars and practitioners an easiness to interpret the practical meaning of 'Innovative-Imitation' as using existing capabilities and available resources (mostly internal) to 'make-products-better'; and the meaning of 'Imitative-Innovation' as relying on a path-dependent learning process to leverage resources (mostly

external) to ‘make-products-look-like’ the originals. When ‘adjusted-imitation’ (either ‘Innovative-Imitation’ or ‘Imitative-Innovation’) is properly strategized and institutionalized, they can facilitate firms to cultivate their distinctive capabilities, improve their business performances (cost/risk-reductions, price-to-performance, and customer-satisfaction), and enhance their competitive advantages. Only when ‘adjusted-imitation’ is institutionalized as a cohesive-strategy committed throughout top-down levels, rather than as a piecemeal or an alternative or opportunistic activity, can firms become able to chose either lead-by-innovation (Innovative-Imitation) strategy to pursue a high degree-of-newness by consuming internal resources; or lead-by-imitation (Imitative-Innovation) strategy to pursue a low degree-of-newness by developing a wide range of network, leveraging external resources, and transferring the costs/risks of ‘designs and manufacturability’ to the right place, at the right time, and consequently, to achieve and retain competitive capabilities and advantages at a minimum cost. Market-leaders, possessing stronger internal capabilities and resources, and therefore, are more likely to pursue ‘Innovative-Imitation’ than market-followers do. Nonetheless, when an innovation enters into the mature-stage of its life-cycle, starts losing its momentum and suffering from the sunk-cost, internal capabilities and resources also start getting exhausted. To this end, this text argues that, it is the ‘Imitative-Innovation’ strategy that keeps the circle of market-leaders tied up together. Apple and Samsung have been alleged each other’s infringement of IPR, but relying on their respective internal resources, they learn (imitate) from each other, and strive to outperform each other. Such a ‘within the circle competition’ strengthens their industrial leadership position respectively.

To build a strong argument in point, the author of this text conducted (2006-2012) a series of intermittent on-sight surveys of 50 firms (both manufacturing and service) in China, and interviewed (mostly informal) with 300 senior executives, focusing exclusively on the subject of innovation and imitation. The results congruently revealed that, good managerial experiences and/or techniques applied in manufacturing industries have been borrowed (imitated), adjusted and implemented in service industries (hospitals, insurances, and entertainment firms); and that, the combination of ‘borrowing ideas’ and ‘imitating practices’ has become a strategic routine, indicating an increasing trend of management interchangeability, both cross-organizations and cross-industries. One example is the Procter & Gamble (P&G). ‘... more than 70% of our new products can be attributed to the results of imitation from other brands...but we have added new features (adjustments) ...’ a senior sales executive said to the author of this text during an informal interview. He continued saying that: ‘as far as I know, no companies can honestly say that their products are purely in-house innovations, and many of my executive friends have either publically or privately conceded that, ‘innovation-by-imitation’ is

always an option ... the capability of imitating ideas and technologies from rival companies has become today's executives' top-priority...' Another example is ICBC (Industrial and Commercial Bank of China), the bank was the first beneficiary from incorporating (imitating) a standardized IT-network-system originally applied in auto-industry to facilitate the separation between service distribution and production activities, and the separation between differentiable-activities (i.e. front-end face-to-face customer services) and non-differentiable-activities (i.e. back-end IT-based processing activities). The success of ICBC has triggered an entire banking industry of China to imitate and install the IT-Architecture based platform, to facilitate branch users to outsource their respective non-differentiable functions, to reduce the lead-time of administrative tasks, and to minimize the costs of productivities. Ultimately, establishing such an IT-based platform has changed the competition pattern, from traditionally differentiated service-contents or new-offerings, to presently the internal process-simplification from front-end retailers to back-end offices. An executive of a provincial branch of China PICC Life-Insurance also introduced that, the company had achieved its market and customer-volume expansions after adopting (imitating) a newly emerged payment technology (a data-mining software), which has enabled PICC to expedite the speed of claim-settlement in case of an accident from weeks in the past, to a couple of days after the application (imitation) of the payment system, resulting in a tremendously improved efficiency in decision lead-time and process of work-flow. A senior officer of the public health ministry of China central government made a statement during a public speech claiming that: '...mismanagement has been the major cause of hospital mistakes leading to more people die of mistreatment than died of automobile accidents annually in China ... there is an increasing need to strengthen the collaboration and interchangeability between hospitals and insurance companies in order to break off from the traditionally stereotyped mindset and process-flow ...'

Given the above mosaic of real cases, three implications may be drawn to reflect the managerial effect of 'adjusted-imitation'. The first implication may be elaborated as such that, the 'adjusted-imitation' should be used as the synonyms of both 'Innovative-Imitation' and 'Imitative-Innovation'. Having adjusted-imitation strategized and institutionalized can facilitate firms to collaboratively gear in the roll of value-chain.

The second implication may be explained as such that, the increasingly converged trend of cross-organizations and cross-industries interchangeability of management system has been questioning the validity of traditionally conceptualized innovation and imitation.

The third implication may be interpret as such that, the increasingly globalized business environment, the rapidly expanded information and network platform, the widely applied digital technology, and most importantly, the globally transitioned consumer-psychological trend of fed-

up aversion to those highly priced brands, together, they have been stimulating the global demand for the cheap-but-good-enough products/services. 'Knowing the fake but willing to buy' trend of consumer-psychology indicates a diluted curiosity to those shining brands. The three implications of the conceptualized 'adjusted-imitation' also rationalize the rise of imitation-industry.

FROM THE PERSPECTIVE OF BOP-FRAMEWORK TO INTERPRET THE RISE OF IMITATION-INDUSTRY

The author of this text is to argue that, the fast growing bottom-of-pyramid market (Prahalad, 2005) should be qualified, theoretically and practically, as an ecological force not only stimulating and propelling the rise of imitation-industry, but also hosting the co-existence of innovators and imitators. Despite their great theoretical contributions, 'the innovators dilemma and solutions' (Christensen, 1997; Christensen & Raynor, 2003), and 'the disruptive power of innovators' (Christensen, et al., 2006) – the validity and generalizability of these frameworks have been under question for overly emphasizing the role of innovators alone in influencing (disrupting) the low-end market occupied by low-income consumers comprised of over 70%-80% of world population. The mindset of 'innovators lead and imitators follow' is no longer fit with today's increasingly globalized business environment (Zhao, 2019a; 2019b). Instead, a practically meaningful question is, how innovators (market-leaders) and imitators (market-followers) can collaborate to explore the entrepreneurial opportunities embedded but not yet being fully exploited from the BOP-market, and to satisfy BOP-consumers. To this end, it is imperative and urgent for today's managers to understand the ecologically structured co-existence of innovators and imitators, within a unified eco-habitat.

Available Resources and Opportunities in BOP-markets but Not-Available in Matured-markets

The increasingly globalized business environment, the rapidly diffused information network technology, and the innovatively advanced digital solutions, are considered the three post-modern drivers, stimulating the emergence of entrepreneurial opportunities, and incentivizing both market-leaders and market-followers to explore, exploit and unleash the dormant value of BOP-markets, constituted by three sources of opportunities which are not likely to be available in the matured-markets (See Table 3).

Table 3: Three Sources of Opportunities Available in BOP-market but Not-Available in Matured-Market

1 st	The first source of opportunity is the population-based size and volume of BOP-market occupied by low-income and price-sensitive BOP-consumers, constituting over 80% of world population, such a size and volume is not-available in a matured-market, and determines the explosive growth driven by the huge demand for 'cheap-but-good-enough' products/services. The traditionally pursued time-based 'S-curve' product-life-cycle theory does not apply; instead, the size and volume of BOP-consumers determines a perpendicular curve (P-curve), either sharply increased or declined product-life-cycle as the consuming demographic phenomenon particularly in BOP-market, not in matured-market.
2 nd	The second source of opportunity may be attributed to BOP-firms' hunger for new technology and new management model capable of producing and supplying the 'cheap-but-good-enough' products, to serve and satisfy the increasingly growing and the price-sensitive BOP-consumers' psychology.
3 rd	The third source of opportunity may be interpreted from the perspective of re-balancing the traditionally discriminated market-ecology dominated by market-leaders, keeping BOP-consumers ignored, and indicating business opportunities.

Table 3 indicates that, the key to explore and exploit the dormant values of BOP-markets is to activate the entrepreneurial opportunities traditionally shadowed by market-leaders; and that, managers must understand a set of 'nodal-factors' such as political, social, economical, cultural, educational and value systems different from that of the matured-markets, in order to leverage BOP-market resources, capture the latent entrepreneurial opportunities, satisfy BOP-customers' need, and unleash potential values of BOP-markets. Bear in mind, ing historically ignored, BOP-consumers are not only hungry for materialism satisfaction, but also for psychological dignity and social trust, which is actually the basic demand of consumers of all kinds, regardless of poor or rich. The more BOP-consumers' psychological dignity and social trust being satisfied, the more entrepreneurial motivations, desires and opportunities will be activated, the more vibrant value of BOP-markets will be unleashed (Prahalad, 2005).

Reviving the Dignity and Trust to BOP-consumers Leads to the Rise of Imitation-Industry

Gaining the capability of providing psychological dignity and social trust to BOP-consumers is decisive for firms to exploit the dormant value of BOP-market, and to win competitiveness in today's increasingly globalized and diversified business-ecology. Up to date, little attention has been given to this theoretical argument in the mainstream of literature. Instead, BOP-market and BOP-consumers have been mostly deemed as the burden of macro-economy, rather than as an engine driving the resilient entrepreneurial opportunity, or as the thriving

force to lead the next round of global business prosperity (Prahalad, 2005). The significance of producing and supplying 'cheap-but-good-enough' products/services is not limited to satisfying BOP-consumers' material needs, satisfying their psychological dignity and social trust and/or reviving their ecological equality ignored or deprived by those market-leaders, is what really matters. Whether a product is gloriously innovated or ingloriously imitated is really not the concern, instead, the capability of providing cheap-but-good-enough products/services to the price-sensitive BOP-consumers is what really matters. Despite the high default rate and the low profit-margin, more and more firms (large or small) are constantly or even desperately attracted to take the risk in exchange for potential values that might generate from BOP-market. The author argues that, dignity and trust tend to be mutually reciprocal, once BOP-consumers being treated with dignity and trust, they are likely to be more grateful and loyal than mid-high ends of consumers, and this is why Shanzhai has built a solid consumer-base support.

Shanzhai imitation-based 'Made-in-China' brand of 'cheap-but-good-enough' products has propelled China to have transformed from one of the poorest countries to the world 2nd largest economy in less than 40 years. Such a transformation, to a large extent, should be attributed to satisfying BOP-consumers' material needs, psychological dignity and social trust, which have been ignored and deprived by those market-leaders, being obsessed by the long-prevalent but increasingly becoming stereotyped or even obsolete 'Western leads and Eastern follows' type of unilaterally structured management paradigm. This is why: 'how those MNCs with overwhelming financial, technological and managerial capabilities failed in competing with Shanzhai firms in China', is no longer an interesting question; instead, 'how the so-called BOP-market has nurtured the metamorphosis of those small-family-owned and imitation-based business 'rats' into globally scaled business 'giants', some of which were listed by fortune 500 or even fortune 100', becomes a hot-topic among those management savvies.

Four Managerial Strategies to Energize BOP-market and Boost the Rise of Imitation-Industry

To accommodate and activate the three external (environmental) nodal factors nurturing the sources of entrepreneurial opportunities in BOP-market (See Table 3), four internal (managerial) nodal factors need to be developed in order to maximally unleash the dormant values of BOP-market (See Table 4):

Table 4: Four Management Strategies to Unleash the Dormant Values of BOP-markets

1 st	<p><i>On the operational-level:</i> Establishing and Institutionalizing the ‘AIC-strategy’ to force and reinforce firms (large or small) to stay all-time <i>alert</i>, in order to <i>identify</i> and <i>capture</i> businesses opportunities emerging from the fast-growing BOP-market (Zhao, 2016; 2017). Having AIC-strategy institutionalized, managers of MNCs would no longer be excused for being too busy dealing with mid-high markets to relegate or ignore the potentials of BOP-markets.</p>
2 nd	<p><i>On the technology-level:</i> Establishing and Institutionalizing the ‘RSC-strategy’ to force and reinforce firms (large or small) to <i>reconfigure</i>, <i>simply</i> and <i>customize</i> the target(s) of imitation both technologically and managerially, in order to produce and supply the ‘cheap-but-good-enough’ products/services and to satisfy the price-sensitive BOP-consumers’ preferences. By pre-locking the hot-selling and highly-priced brands as imitation-target(s), by pre-setting a competitive price-cap, by <i>reconfiguring</i>, <i>simplifying</i> and <i>customizing</i> the original technologies, designs or production processes, (e.g. peeling off some unnecessary, adding/changing some features or functions without changing the core designs of original ones), Shanzhai firms have progressed incrementally from ‘make-it-look-like’ kind of imitative-innovation, to ‘make-it-look-better’ kind of innovative-imitation (Zhao, 2019a; 2019b).</p>
3 rd	<p><i>On the market-level:</i> Establishing and Institutionalizing the ‘PTP-strategy’ to force and reinforce firms (large or small) to prioritize the ‘<i>Price-to-Performance</i> (PTP)’ as marketing strategy to develop customer-relation, to gain competitive advantages, to squeeze as much profit as possible from the low-margin of BOP-markets.</p>
4 th	<p><i>On the environment-level:</i> Establishing and Institutionalizing the ‘AAC-strategy’ to force and reinforce firms (large or small) to <i>adjust</i>, <i>adapt</i> or <i>change</i> business operations, in order to accommodate the erratically changing industrial infrastructure and the haphazardly intervening government policies and regulations. AAC-strategy ensures the survival and success of Shanzhai imitation-industry mainly by converting government into a supporter. Given the autocracy of China political system, taking advantage of government policies and regulations is defined as the bible of doing business in China. Otherwise, no business can even survive, the eviction of Google and Yahoo are just two of many examples (Zhao, 2016; 2017).</p>

Table 4 illustrates four management strategies forcing and reinforcing firms (large or small) to leverage both internal and external resources and opportunities, to unleash the potentials of BOP-markets. Only when the four strategies are prioritized and institutionalized as an organizational commitment from top-down, can firms become able to gain a synergy from collaborated efforts of R&D-developers, designers, manufacturers, marketers, logistics operators, as well as end-users and customer-service providers; only then, can firms become able to adjust the scalabilities of technological applications, pursue price-to-performance, satisfy customers’ preferences, and avoid or withstand potential or unnecessary risks. The author

argues that, when the four strategies are prioritized and institutionalized, firms may become able to serve both BOP-market and mid-high-markets simultaneously. Another mistake of market-leaders is that, when they invade into emerging markets (i.e. China), they have their highly-priced products/services portfolio remained intact, which is deemed as the root-cause of ignoring and missing the latent opportunities from the BOP-market and its consumers. Critiques argued that, what those MNCs have naively given up in China is the 70-80% of the nation's entire consumer-demography (Zhao, 2016; 2017).

Also deserve to be mentioned is another mistake of MNCs that, they have been wearing a static lens to view the dynamism of China market. They have ignored the fact that, the leapfrogged China economy in conjunction with the increased average income level has already changed the consuming pattern. In contemporary urban areas, it is unlikely to witness a 'panic purchasing' of those highly priced foreign brands. 'Poor does not mean to pay less' has already become an emerging consuming behavior in China, as far as a sales-strategy is properly established. When looking at the price-tags of those globally branded products, one may not be surprised to see an average of three-times higher than those domestically imitated substitutes. Nevertheless, it is frequently to witness a 'demand exceeds supply' kind of situation for pricy foreign brands. Every year when Apple releases a new model of i-Phone, every 'Apple Franchised' store in China is packed. 'FIFO' principle makes majority of those wait-in-line customers only to be told at the sunset that 'sorry, out of stock'. One may not be surprised to witness an average of 3-4 months order-fulfillment interval for a foreign branded car. Possibly, such a 'running out of stock' has been created on purpose (e.g. stimulating market demand), however, a clear message is that, there has been an increasing trend of consumers' desire for original brands

To advocate these arguments, take a look at two small entrepreneurial cases as examples, to illustrating how opportunities are identified and captured by local firms, but missed by MNCs in emerging markets:

Cases 1: Casas Bahia, the largest Brazilian retailer evolved and expanded from the sales of furniture and home appliances, to the sales of IT-products, and then, to the sales of food and services such as the chain-restaurants and hotels. What deserves to be mentioned here is its innovative customer service and sales' promotion model specifically tailored for and targeted at BOP-consumers. By conferring a passbook, the company allows customers to make a small amount of installment for the purchased merchandise. By requiring customers to pay the monthly bills on site (in store), the company establishes and maintains its customer-relationship. On average, 90% of total-sales are executed through financed programs, and to ensure a low default-rate, the company provides financial advices to customers who are tight in budget. A

win-win outcome is created. Within a short period of time, Casas Bahia's payment model has been adopted (imitated) by China retailing industry. Bear in mind, such a compulsive business model (forcing customers to regularly return back into the store and do the payment) would not be tolerated nor accepted by consumers in those matured or developed markets.

Cases 2: ICICI Bank, an Indian multinational banking and financing services company, identified and captured an opportunity of reforming the traditionally discriminated credit-system, under which, BOP-customers had no choice but to rely on local loaners with usurious-rate charge. To fulfill this market need by a long-term solution, rather than a short-term piecemeal solution, and to satisfy BOP-customers' desperate need for credit-service, ICICI decided to take the risk of BOP-customers' high default-rate and to offer them access to credit. By launching a so-called 'self-help-group (SHG)' program (a village-level women-based organization), a win-win solution was created. By selecting 20 women to organize a SHG for each village, and providing trainings to teach them the disciplines of saving, investing and advising, ICICI lends money to SHG (not directly to individual loaners), then, SHG disburses the money to the membership based individuals on needs. Such a SHG-based loan-distribution system has not only enhanced customer-satisfaction, but also effectively controlled the risk of default-rate. Customers were judiciously converted as business partners (i.e. SHG), serving as extensions of the bank, nurturing entrepreneurial opportunities, and enhancing competitive advantages. Such an ICICI's consumer-based-entrepreneurial model (SHG model) triggered an immediate imitation throughout India banking industry.

The two cases illustrate and emphasize how small and local firms have captured opportunities and gained competitive advantages by executing consumer-based-entrepreneurial programs to perform business functions which otherwise would be costly contracted out. By providing customers with a slight extra-service (Casas Bahia), a win-win business model is established. By converting customers into business partners (ICICI), some costs, risks and responsibilities are transferred. Both cases can be used as examples of how local firms have captured entrepreneurial opportunities to liberate the dormant-values of BOP-markets, but those MNCs failed to do so. For example, by wirelessly connecting a finger-print scanner with a mobile device, the conventional on-site banking transaction process has been converted into a flexible and transportable business activity carried out by bank-staffs riding bikes running around the suburban areas, resulting in the enhanced effect of economic scale. Such a simple technological adjustment should have been easily done by MNCs than by a small local firm in India.

CONCLUSIONS AND DISCUSSIONS

Cognitive-distance is, contradictory to literature findings, not correlated with innovation/imitation performances, underlining that, innovation/imitation must be interpreted within a specifically structured business ecology. Innovators may be motivated by reasons other than profit, such as 'leading the industry and creating market need'. Nevertheless, Imitators are primarily market-and-profit driven for survival purpose, concentrating on a process of identifying and applying an easy-to-access technology, and making the original products cheaper through imitation. Therefore, both innovation and imitation should be taken as business strategies, determined by their respectively possessed available resources and capabilities. What innovators compete is the degree-of-newness (making products better); what imitators compete is the 'price' and 'speed' or the time-to-market of their 'look-like products' in exchange for quick-profit.

Understanding the political, social, economical and cultural systems is the precondition for firms (large or small) to understand mechanisms of business development in emerging economies like China, and to unleash their dormant values, otherwise, failure seems inevitable (like MNCs in China). This statement provides a direction for future researchers to examine the rapidly emerged post-modern drivers in stimulating entrepreneurial opportunities. Although pending for verification, it calls for theoretical reconstruction of extant management framework, in order to practically guide firms to take advantage of the respective roles of innovators and imitators in propelling the competition-based evolution of business ecology (Zhao, 2016; 2017; 2019a; 2019b).

By analyzing the five major factors of emerging economy (i.e. China), the author proposes that, the concept of 'adjusted-imitation' may be more instructional for both scholars and practitioners to interpret the concepts of innovation and imitation. Imitation is the motherboard of creativity, there is no such thing called pure form of innovation (re-conceptualized as innovative-imitation), nor pure form of imitation (re-conceptualized as imitative-innovation), and the two should be differentiated by measuring their respectively pursued and achieved degree of newness. The concept of 'adjusted-imitation' may help explain and interpret the rise of imitation-industry especially from those fast-growing BOP-markets, in which, consumers have been in thirsty of not only the material satisfaction, but also the liberation of their historically pent-up psychological dignity and social trust. Only when firms become able to establish an effective management system with AIC, RSC, PTP and AAC capabilities (See Table 4), can they become able to exploit the dormant values of BOP-markets. Last but not the least, the author is, by no means, tempted to defend the illegal activities of imitation; instead, it is discussed as a management strategy.

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