

Sustainability: A Framework of Typology Based on Efficiency and Effectiveness

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Abstract

Marketing performs a profound socioeconomic function in matching offerings with customer needs and preferences in an efficient and effective way. The micro-macro divide is widened by an array of commercial conducts that surround narrowly defined efficiency oriented objectives. Sustainability is therefore rarely linked to the marketing thoughts and practices. Sustainability is not associated with efficiency and effectiveness, which are sometimes considered to be self-exclusive variables, nor does it allow top-down and bottom-up interactions. The framework of sustainability raised in this article adopts a systemic approach to marketing that integrates the three major aspects of performances, inclusive of efficiency, long-term effectiveness, and distributive effectiveness. An example from the historic evolution of the pharmacy marketing system in China indicates that a narrow focus on the business-level operational efficiency and marketing success may be short-sighted and will not bring in an ideal consequence at the societal level. Implications from this case for generating sustainable outcomes with ecological and distributive effectiveness are discussed.

Keywords

efficiency, effectiveness, sustainability, marketing system, historic review, macromarketing

Introduction

Sustainability is a cross-disciplinary concept, which is defined as a human capability for long-term maintenance of the well-being of all lives including those of future generations. It has been now widely admitted by economists and social scientists that the critical goal of sustainable society should be achieved for humanity's ultimate welfare via resource-sustainable, eco-sustainable, and welfare-sustainable development paths. This is organically intertwined with a couple of social trends including a clearer position of corporate social responsibility, a growing awareness of sustainable economic growth in society, and a higher awareness of human long-term well-being, where one gap exists in operation (i.e., micro incentive vs. aggregate effect) plus another gap in theory (i.e., normative vs. descriptive) exist.

In the "micro-macro paradox," due to different participants in marketing systems and their distinct and often contradictory objectives, efforts by practitioners and academics have limited capability for providing a framework to accommodate distinct interests by different parties. Thus, actions taken by commercial organizations often come at the cost to consumers' well-being and to the environment in the long run. In consequence, these contradictory orientations achieve a minimal sustainable marketing outcome. Marketing research also acknowledges this gap and hence calls for synthesized evidence (Huang and Rust 2011; Hult 2011; Hunt 2011; Prothero et al. 2011; Strong 1997). Another gap in sustainability research is between normative (or prescriptive) and descriptive research streams. Research

interests are pooled from normative, descriptive, or even operational perspectives in explaining what standards are actually followed in business operations, why a gap was created by these corresponding actions, and what to do going forward. Pitifully, this divide will not automatically heal due to similar reasons as above, the lack of convergence in interests or initiatives by all players in the marketing system. Therefore, a widening gap between the standards people act upon and what they should comply to has been witnessed in the past decades. Thus, weakening self-restraint of behaviors combined with the growing allure of profits has come at the cost of resource exhaustion and environmental pollution.

This article starts from the wide logical gap between micro and macro marketing where many social issues are brought forward. Businesses shoulder the responsibility of linking individual consumer well-being with the aggregate level of results. The consensus definition is that marketing should undertake a general role in providing offerings to target markets in a personally pleasing, organizationally profitable, and stakeholder responsible way

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(American Marketing Association 2007). Under this consensus, it is not yet seen how to comprehensively and systemically perform the above objectives since in its nature there might be contradictions in stakeholders' fundamental interests in operation. Not coincidentally, a blind spot in contemporary sustainability research is how to accommodate individual consumers and institutions with different theoretical and practical objectives, though recently a few research interests emerge with an aim of providing theoretical frameworks (Huang and Rust 2011; Hult 2011; Hunt 2011; Prothero et al. 2011). The problem is rarely solved due to a lack of integration among the broad marketing themes of long-term vs. short-term benefits, centralization vs. self-governance, and efficiency vs. equity. To better understand sustainability and its profound linkage with marketing, efficiency and effectiveness are introduced as two major considerations to evaluate marketing activities and their contribution to an ecologically and economically sustainable society.

What should be brought to current knowledge is the undeniable fact that all these previous attempts in bringing forward sustainability frameworks are compatible with some normative guidelines of management, such as efficiency and effectiveness. Over the past few decades, marketing focus has shifted more and more towards creating consumer long-term benefits by maximizing consumption-related welfare and minimizing resources depletion whilst maintaining distributive equity in benefits and the spread of resources among social groups. This article attempts to integrate research on marketing and sustainable development to form a holistic standard against which an interrelated and clearer roadmap answers the following three questions: (1) how is sustainability defined by efficiency and effectiveness; (2) how are economic activities evaluated in terms of their contribution to each dimension of sustainability; and (3) how do marketing systems evolve in response to the compound socioeconomic changes to achieve sustainability?

The primary interest is to re-explain sustainability via efficiency and effectiveness (accumulative and space-related) with a link to previous research and business operations and to show that sustainability in its nature is consistent with the roadmap built up by these two critical concepts through which a sustainable future for marketing activities may be achieved. Sustainability, not only known as a mega logic but also as an objective, is awaited to be synthesized with the major themes of marketing system research and to accommodate the current studies and practices within an integrated framework. The literature review summarizes the impacts of various marketing activities on individuals, companies, and societies and shows how these academic studies and practices can improve different types of marketing effectiveness and lead to sustainable results. A history of the pharmacy sector in China is reviewed to support a proposed typology and shows the relevance of sustainability in marketing conduct and how anticipated outcomes are built upon the interplay of efficiency and effectiveness. The revealed historical thread indicates that the fragility of a pharmacy marketing system at different stages is due to a focus on one aspect of sustainability to the detriment of others. This research has theoretical significance for incorporating levels of marketing

elements into one model ultimately linked with sustainability, as well as practical applications for consumption, business conduct, and societal education to achieve ideal outcomes.

Three theoretical contributions will be made. First, a macro view is adopted to complement the current "profitable-social-environment" paradigm in sustainability. It deconstructs this critical concept into dimensions of input-output efficiency, long-term effectiveness, and distributive effectiveness. Hence, all players are pooled into the same framework to avoid emphasizing on any single party's benefits in the micro-macro spectrum. Second, a normative perspective is adopted by raising a set of efficiency-effectiveness standards to evaluate marketing activities undertaken by companies, consumers, and society in terms of their contributory roles to sustainability. The dilemma caused by "normative-descriptive" gap is hung up because the raised efficiency-effectiveness typology reduces the previous dependency of a sustainable outcome on a loosely composed, self-driving, and multiplayer-accommodative open social system. Third, the interplay of efficiency, effectiveness, and sustainability contributes to the literature by casting light on a possible path that combines efficiency-seeking, consumer-awareness, and distributive-balance initiatives at a micro level to nurture aggregate sustainability. As partial support for the propositions generated, a review of historical evolution of pharmacy marketing system in China is presented.

Synchronization of Marketing and Sustainable Theories

Sustainable marketing is comprised of ecological marketing, environmental marketing, consumer marketing, and sustainable development (Hunt 2011). To build this construct, connections between sustainability and previous theories need to be established (Connelly, Ketchen, and Slater 2011), and the dilemmas of actions shown. The most prominent connection might be between sustainable initiatives and attitudes at the micro level and unsustainable behavior at an aggregate level. Sustainability research is theoretically divided between the perspective of corporate initiative and self-control of individual consumers (Peloza et al. 2012). This calls for a new evaluation system, which accommodates vast interests in the connotation and measurement of the sustainability concept. As pointed out by Peloza et al. (2012), different levels of sustainability exist according to consumer perception and reality evaluated by stakeholders.

Facing the wide micro-macro gap, many academics have made tentative efforts to share their knowledge by adopting descriptive or normative perspectives and providing versatile interpretations. Examples include some theoretical frameworks to address the wide divide between (1) the micro-level decisions on administration and control and (2) social values, patterns and norms (Bartels and Jenkins 1977). From the other perspective, the complexity of market systems is explained to be woven by decision at all levels with wisdom (Mick, Thomas, and Lutz 2009). A macro pattern is hence an aggregate result of demands, decisions, and reciprocity flows, which are reflected by "the need for expertise versus the need to admit knowledge

limitations” and “the need to enact authority and accountability versus the need for ego control” (Mick, Thomas, and Lutz 2009, p. 98). This fits the major trend of marketing development by prioritizing consumer education and awareness of long-term well-being.

Shultz (2007) adopts an accommodative framework to account for the differences between micro and macro marketing. He defines marketing as “a form of constructive engagement, a societal function and a systemic set of processes for creating, communicating, and delivering value to customers and for managing customer and societal relationships in ways that benefit local and global stakeholders of these processes” (Shultz 2007, p. 293). Following this notion, marketing should not merely tackle its economic function. Rather, marketing should achieve macro equilibrium by performing certain societal functions with respect to long-term welfare. That is, marketing should facilitate the distributive process in a systemic approach other than fulfilling the micro-level objectives of value delivery to customers, stakeholders, and society at large at profit as defined by the 2007 AMA definition.

Layton’s (2008, 2009, 2011) incrementally developed marketing system theory by generalizing previous viewpoints emphasizes a socio-economic approach. Following the idea of Alderson (1965), marketing’s roles are summarized as sorting, accumulating, allocating and assorting for the flows of products and services. Marketing activities are understood as an open-looped socioeconomic system, defined as a “marketing system” by

“a network of individuals, groups and/or entities, embedded in a social matrix, linked directly or indirectly through sequential or shared participation in economic exchange, which jointly and/or collectively creates economic value with and for customers, through the offer of assortments of products, services, experiences and ideas, that emerge in response to or anticipation of customer demand” (Layton 2011, pp. 259-260).

Though adopting a descriptive perspective to explain the evolution of marketing activities, this framework clearly points out that evolution takes place in the interface between company and the social context in which it is embedded. Within the structure and modules implied by marketing systems theory, another important notion is how to categorize heterogeneous interests and objectives. Here efficiency and effectiveness are two critical yet under-explored criteria needed to gauge business performance (Meng 2008) that also are significant in measuring outcomes of a marketing system. Through a subtle interplay of efficiency-seeking and effectiveness-pursuing actions executed by individuals and businesses, and/or action-takers in the marketing system, expected or unexpected macro consequences are established.

Efficiency, Effectiveness and Sustainability in Marketing System

Why do efficiency and effectiveness matter? The efficiency-effectiveness framework is prevailing to evaluate business performance inclusive of social performance and financial performance

(Crittenden et al. 2011), and this creates a spectrum against which sustainability could be carefully analyzed. Sustainability is a widely embraced concept posited by Global Reporting Initiative (GRI) as “the practice of measuring, disclosing, and being accountable for organizational performance while working towards the goal of sustainable development” (Peloza et al. 2012 p. 75). Its objective is to “meet needs of the present without compromising the ability of future generations to meet their own needs” (World Commission of Environment and Development 1987 p. 15). Inherently, the fit between the efficiency-effectiveness framework and sustainability is undeniable.

With thriving academic interest in marketing’s logic and role in society (Bartels and Jenkins 1977; Hunt and Burnett 1982), a large number of theories provide various accommodative frameworks. Examples include service’s dominant role in the customer-provider value co-creation process (Vargo and Lusch 2004), a micro analytical perspective (Viswanathan et al. 2012), consumer’s quality-of-life perspective (Sirgy and Lee 2006), and a responsibility framework (Hunt 2007), among which a theoretic stream of marketing system was proposed to bridge the gap (Layton 2008, 2009, 2011). Above all, the research consensus is that other than profit-making role, many issues are unanswered which necessitates transformative thinking to interpret marketing’s logic and responsibility. This means a broad vision in pondering the efficiency and effectiveness of marketing.

Even fewer works have canvassed the definition and measurement of system performance, efficiency, and effectiveness in a comprehensive manner (Meng 2008). Among these works, research insights provide a tentative answer about the effectiveness of marketing to society (Lee and Sirgy 2004; Lee et al. 2002). Though often substituted for each other, the terms efficiency and effectiveness need scrutiny in the context of marketing systems. Both have been considered in the discussions of dynamic competition theory (Clark 1954; Ellig 2001; Vickers 2003), neoclassical economics (Brown-Collier 1996; Seth 1994), social economy (Granovetter 1985; O’Boyle 1996; Olson 1971), strategic management (Hunt and Morgan 1995, 1997; Montgomery and Wernerfelt 1989), and marketing (Hunt and Arnett 2006), but the question of efficiency and effectiveness in a marketing systems context cannot be answered by simply pooling these views without categorization.

Here, the author argues that a more holistic framework of efficiency and effectiveness should be established to understand sustainable marketing in its various dimensions, which is introduced to not only accommodate inclusively the conventional environmental, consumer, and consumption considerations in sustainability research but also reflect substantially the progress of marketing discipline as well as seal the wide macro-micro divide, as that might come out four major types of functionalities as below.

Pursuit of efficiency-An endogenous function of marketing system

Traditional economists adopt a transaction cost based standpoint and seek to maximize benefit-cost ratios in defining individual efficiency measures, such as minimal purchasing cost and

maximal satisfaction or customer value obtained from the consumption. Difficult as the effort is to explain precisely the extent of satisfaction consumers attain from consuming and the underlying reasons, researchers have agreed that consumer utility comes from many sources –economic, psychological, social, and cultural. For example, Dittmar (2008) has suggested that both instrumental and symbolic motivations can determine consumers' subjective appraisal of consumption, with instrumental motivations encompassing all the use-related factors and symbolic motivations, including some emotional factors, the identity-related elements.

Efficiency is hence summarized as “an internal standard of individual and organizational performance” (Meng 2008, p. 2). A broad consensus exists as to organization-wide efficiency being a ratio of input-output, or output of per unit input in the clearly definable scope (Bucklin 1978; Carrier 2005; Cox 1948; Stigler 1976; Gui and Sugden 2005; Ingene 1982, 1984, 1985; O'Boyle 1996; Pfeffer and Salancik 1978; Tilley and Hicks 1970). From an individual consumer's perspective, efficiency is associated with the actualization of transaction and perceived benefits gained from purchasing and consumption while minimizing financial and other related costs. From a company perspective, since marketing operates as a basic function to generate sale-related income to compensate the costs of resources and finance as inputs, efficiency reflects a process of facilitating buyer-seller interactions and short-term or long-term relations while minimizing the costs of tangible (e.g., financial, assets, and other physical resources) or intangible (e.g., brand relations, reputation) marketing outputs. From a societal perspective, though participants within a marketing system are connected in a loose way, observation of aggregate efficiency may be attained by measuring the output-input ratio of business groups, networks, clusters, regional/national industries and markets composed by homogeneous or heterogeneous organizations. For example, Pellegrini (1994) observes that to create efficient market growth, product differentiation is a strategic option that is applied to business with a higher market sensitivity and connectivity together with a stronger outsourcing capability, while geographical diversification is widely used by firms and retailers under central sourcing systems.

To achieve the objective of efficient business development, strategic actions must pursue “economies of scale,” the homogeneous accumulation of productivity of the same type of product or product category, and/or “economies of scope,” the heterogeneous accumulation of productivity of related or unrelated product or product category. From a single firm's perspective, economy of scope may represent a consequence of both efficient production and effective marketing, as it is also considered as an indicator of business diversity and flexibility to market changes, considered as a more effective market strategy.

Disputes exist in such a boundary-specific definition, since the meaning of efficiency in the context of inter-relationship and network has been neglected. Examples include controversies about the proper measures of retailing efficiency (Achabal, Heineke, and McIntyre 1984, 1985; Bucklin 1978; Goodman 1985; Hughes and Serpkenci 1985), because retailing often

takes its form of network within which each store is interdependent with other outlets. In terms of narrowly defined efficiency, some scholars suggest substituting the direct measures with reflective measures, such as inter-relational efficiency (including competitive relationships among rivals and customer relationships between sellers and buyers) and aggregate efficiency (marketing's inputs to economic growth, the shaping of structural connections among the elements, as well as niche market's width and depth).

Eco-effectiveness and distributive effectiveness

The societal effectiveness of marketing activities, by contrast, has been implicitly but not systematically addressed and lacks precise measurement in marketing literature and methodology. Different from efficiency, marketing effectiveness is an external standard of marketing activities (Meng 2008). However, similar to the multi-level structure of internal efficiency, effectiveness has a corresponding multi-layer meaning when being applied to individual, company, and societal levels. Effectiveness may have different meanings under different manners of margin delimitation.

In the micro seller-buyer interaction level, marketing's effectiveness is reflected by the positive consequences of value exchange in terms of psychological utility, expectation actualization and satisfaction, profit making, customer relation, and brand loyalty. Beyond this perspective, Lazer (1969, p. 9) maintained that as a “social instrument through which a standard of living is transmitted to society,” marketing's comprehensive effects should be examined from a broader perspective, especially for its role in society. In the aggregate, the effectiveness of marketing systems can be thought as, for example, the process and pattern that marketing's aggregate effects on society in time and space. Societal effectiveness of marketing activities has only been implicitly but not systematically addressed (Lazer 1969) and needs a precise gauge in the marketing literature and methodology. Layton (2011) further points out that “the flows (ownership, possession, finance, risk and information) that underpin the transactions” take place in marketing system everywhere and the marketing system's fundamental role is “to match assortments with customer needs...and interest, preferences of customer groups” (p. 261).

Based on the above, it could be assumed that two general kinds of effectiveness contribute to socioeconomic sustainability, namely as (1) long-term benefits or accumulative well-being for future generation, and (2) distributive equality of well-being among market segments or consumer groups. For instance themes of marketing ethics, green marketing, social marketing, and consumer education surround the consequences that marketing imposes on future consumers' perception, knowledge, ability, behavior, welfare, and even in a broader sense, the human society. Another point of academic interest is how wealth and consumption-related resources or opportunities are allocated within consumer groups. In a retail context, Pellegrini (1994) finds a general growth path to be a combination of geographical diversification and product diversification.

Thoughts on sustainability of marketing from a seller-buyer perspective

Sustainability has two dimensions – continuous growth in time and place. In the sense of time, the consensus is that sustainability means maximizing contemporary benefits while allowing potential opportunity for future growth. In matter of the place, particular attention is given to reducing uneven opportunity and increasing distributive justice in human society. Alongside its ecosystem dimension, sustainability has economic and social meanings: improving quality of life and social justice, fostering equal economic opportunity, reducing poverty and economic externalities, and decreasing internal disruption (like war, corruption, and so on), within a supporting eco-system carrying capacity. Sustainability “concerns the specification of a set of actions to be taken by present persons that will not diminish the prospects of future persons to enjoy levels of consumption, wealth, utility, or welfare comparable to those enjoyed by present persons” (Bromley 2008, p. 57). Growing depletion of resources and ecosystems is widely criticized as “uneconomic growth” for its role of undermining human’s quality of life and challenging future development of next generation. Therefore, the social science research agenda must include “a radical new logic for marketing as a social process requiring thinking beyond the discipline is called for” (Varey 2010, p. 112).

The macro market effectiveness is usually achieved by a collection of constituents. In supplement to those market giants and rising stars, some paralleled markets, including substance markets and underground markets, serve a wide range of segments with high flexibility, where a closer connection between seller and buyer is usually found.

A bottom-up approach/ seller-buyer interaction is adopted to deepen current understanding of sustainability since this relation covers the two critical plays that undertake the responsibility of production and consumption. For example, Varey (2010) discusses marketing’s impacts on human welfare from individual and societal perspectives. This article complements this research stream by providing theoretical and empirical support to bridge the micro-macro gap. It adopts a multi-level efficiency-effectiveness model and introduces a meso-level of cluster’s specification and differentiation variables compatible with sustainability and other social well-being objectives.

Type 1: Micro Marketing Systems with Sole Efficiency-personal Focus and Accomplishment of Transaction. Marketing phenomena can be described as efficiency-seeking buyers and sellers involved in an exchange that may maximize both interests guided by a mutual benefit rule. This analytical perspective is believed to “...help unpack its creation at the micro level of the marketplace and its instrumentality in establishing informality at the macro level of the economy” (Viswanathan et al. 2012, p. 171). Autonomous individuals and/or institutes under the rule of “democratization of wealth” organize a decentralized marketing system (Alperovitz 2005). Consumption of goods and services is understood as a pathway to meet basic needs (Hill, Felice, and Ainscough 2007), establish relationship (Morgan and Hunt 1994),

build brand relationships (Fournier 1998), fulfill self-concepts (Sirgy 1982), realize personal values (Kahle, Beatty, and Homer 1986), form communities (Muñiz and Schau 2005), and ultimately foster human values and rights (Hill, Felice, and Ainscough 2007) and other social goods (Viswanathan, Seth, and Gau 2009; Viswanathan et al. 2009). To maximize their market objectives, companies adopt strategies like market orientation (Kohli, Jaworski, and Kumar 1993; Narver and Slater 1990), relationship marketing, and customer communities. These strategies seek profits to assure a satisfactory level of rewards to all stakeholders as described by Friedman (1970).

Spontaneous as it is, the pursuit of micro-level efficiency may lead to system malfunctioning at aggregate levels. As Varey (2010) discusses, two main points are widely recognized: first, ever-expanding production and consumption is far from ideal and will ultimately collapse by accumulating “individual discontent” until pushed to the point of economic and social transformation; and second, in this situation welfare marketing suggests a way out the dilemma by establishing a new system incorporated with high effectiveness and sustainability. Wilkie (2005, 2007) and Wilkie and Moore (1999) have persistently called for scholarship that examines the impacts of the “aggregate marketing system” on society and the world. The exploration of marketing system effectiveness is thus brought to the research agenda.

Type 2: Marketing Systems with Long-term Effectiveness-Personal Focus with Long-term Welfare Awareness. Simultaneously, academics are rethinking the roles and responsibilities to be undertaken by marketing researchers and practitioners. A new growth pattern is strongly advocated to form a new operating system alternative to the market-centered orthodoxy (Alperovitz 2005; Greider 2003). Several concurrent streams, with the focus either on least eco-environment impacts or on improved long-term benefits for social members, emerge to invite thoughts for a sustainable consumption. Typical areas include sustainable marketing (Kilbourne, McDonagh, and Prothero, 1997; Peattie and Peattie 2009), social marketing (Andreasen 2002), quality-of-life marketing (Lee and Sirgy 2004), and transformative consumer research (Mick 2006). Central to all these, Bloom and Gundlach (2001) proposed a plan for knowledge development that would include enhancement of marketing’s long-term impact on consumer welfare.

Many discussions arise in the area of marketing ethics. For example, marketing’s genuine duty should not be shortsightedly understood as to create product/service-related utility, benefits or relations. Rather, it must improve customer well-being while preserving the well-being of other stakeholders (Lee and Sirgy 2004; Sirgy 2001, 2008; Sirgy and Lee 2006; Sirgy, Lee, and Rahtz 2007; Varey 2010). Social marketing should aim for enhanced quality of life by reducing the negative impact of material acquisition and consumption on the health and personal relationships that are the basis for happiness and life satisfaction (Peattie and Peattie 2009) undiminished for a sustained growth of well-being in future.

Therefore, marketing operations must be reinforced from the beginning to advance human development and quality of life particularly with regard to issues of vulnerability caused by age, poverty, consumption life cycle, bottom-up spill-over, need hierarchy, and opulence (Sirgy 2008). Marketing ethics have many facets, such as the ethics of non-maleficence relating to product safety, children/tweens/teens, materialism, and human development.

Alongside with efforts to define the appropriate and eco-sustainable boundary of business conduct, the literature reflects on what (not) to do in order to mitigate over-consumption at the micro level. This stream is named transformative consumer research (Mick 2006), with notions on consumer's self-restraining their individualism (Varey 2010), reduction of unnecessary usage, consumer sovereignty and education, consumer frailty, antitrust (Sirgy 2008), individual choices' impact on environment (e.g., "carbon-footprint"), and resistance to immoderate consumption (e.g., junk food). For instance, "personal well-being does not require economic growth but selective consumption and noneconomic social resources (social capital)" (Varey 2010, p. 118). With development of environmental awareness, environmental or green marketing is put under spotlight (Coddington 1993). Autio, Heiskanen and Heinonen (2009, p. 50) recommend "in order to be effective, green consumerism requires explicit acknowledgment of the social nature of both environmental concern and consumer behavior. This could entail collective action by consumer organizations and the adoption of community-oriented marketing by green marketers." At the same time, from educative perspective, it is pointed out that the act of consumption need not depend on notions of "acquisition, destruction, or materialism" (Ger and Belk 1996, p. 55-57) but rather on "communication and the exchange of meaning" (Prothero and Fitchett 2000, p. 50).

In the long-term, a consumption life-cycle model should be adopted in some product-specific contexts, such as contribution of goods and services (Lee et al. 2002; Lee and Sirgy 2004; Leelakulthanit, Day, and Walters, 1991), personal housing (Grzeskowiak et al. 2006) and clothing (Marshall and Meiselman 2006) to life satisfaction.

Type 3: Marketing Systems with Distributive Effectiveness-Societal Focus on the Role of Marketing. Varey (2010) points out that "relative wealth" rather than "absolute wealth" should become the purpose of economic growth. To achieve relative wealth particularly for some special groups, redistribution will be needed either "by taking from the rich and giving to the poor or by differentiated growth" or by a focus on "social process/advance-ment" (Varey 2010, p. 114). Distributive justice is thus understood as social advancement that "does not require economic growth but careful use of wealth" (Varey 2010, p. 118). Ethics of social justice (Sirgy 2008) entail issues of distributive justice (Varey 2010) to advance consumption equity, gender equity, and even social and economic inequalities (Santos and Laczniak 2009) and reducing consumption related vulnerability and cost of living.

Hunt (2007) proposes a tentative "responsibilities framework" based on others' thoughts for marketing to clarify the significant role of marketing that marketers should consider their "job function as a part of a larger vocation possessing duties to society... as well as their company" (Laczniak and Murphy 2006, p. 172). Varman, Skälén and Belk (2012) discuss the self-interest driven business efficiency and aggregate effectiveness of activities by using BOP examples from India. The authors reveal a conflict of initiatives leading various aspects of marketing performances.

Research casts light on equal opportunity for BOP consumers in their interests, education, and literacy to maintain a sustainable capability of consumption (Prahalad 2005; Shultz et al. 2012). For example, special marketplace facilities invented to propel exchanges in an effective manner are reviewed in recent research as "subsistence marketplaces" (Viswanathan et al. 2012). Whilst research interest are evolving to find out an endogenous solution to explain why and how this market-generated distributive inequality may be mitigated by appropriate conduct of market interaction between players of different interests evidenced by many theoretical (e.g., marketing system theories featured by a minimal intervention by Layton (2008, 2009, 2011) and governmentality par excellence by a play of free market mechanisms by scholars (Dean 1999; Rose 1999) and methodological (e.g., by simulation) explorations.

Other than general marketing practice, in many countries poverty-related public policy is attached to community health, education, and infrastructure in community. One reason is that limited attention has been paid to cultivating marketplace skills to overcome barriers to improving consumption status in marketplace (Lopes and Theisohn, 2003). In contrast, a key benefit of our framework lies in its potential to reveal skills that consumers use to cope successfully with the demands of subsistence marketplaces" (Viswanathan et al. 2012, p. 171).

Type 4: Marketing Systems with Sustainability-Societal Focus with Long-term Welfare Awareness. With a strong appeal for economic conduct that is economically viable (efficient) while staying compatible with the objectives of environmentally durable and socially equitable (effectiveness), growing attention has been given to how marketing will benefit a sustainable society. The functionality of marketing through its distributive system is put on how "to enhance fairness and equity in economic transactions involving impoverished consumers" (Laczniak and Murphy 2008, p. 11) of BOP consumers or vulnerable individuals. These people are usually profiled as being "most constrained by income, (lack of) wealth, opportunity, literacy, market access, and political power, among other factors" (Santos and Laczniak 2009, p. 3). Long-term effectiveness of economic development indicates that such an attention on cross-generation equity and social well-being accompanied by economic activities should be built. As complements, eradication of poverty, social justice, and economic development are important areas of public policy scholarship as discussed by a few scholars including Bertrand, Mullainathan and Shafir (2006), Bloom (2009), Hill and Adrangi (1999), Viswanathan, Seth and

Table 1. Typology of Macro Efficiency, Effectiveness, and Sustainability.

		Distributive Justice	
		Personal Focus	Societal Focus
Production-Consumption Balance	Future	<u>System with long-term effectiveness</u> Consumer: Anti-Materialism, Selective Consumption, Ecological Sensibility, Young Consumers Care, Awareness of Quality of Life, Product Safety & Non-maleficence; Business: Social Marketing, Green/Environmental Marketing, Ethics of Human Development; Society: Environment Degradation, Recycle Economy.	<u>Sustainability in Economic System</u> Consumer: Equality of Marketplace Skills; Business: CSR, Stakeholder Orientation & Sustainable Marketing; Link: Value Co-creation, Endured Relationship, Social Capital, Impacts from Social Matrix, Human Solidarity; Society: Marketing System, Sustainability, Neoliberalism.
	Now	<u>Orthodox System with Efficiency</u> Consumer: Individualism, Consumerism & Affluent Consumption, Satisfaction of Personal Interest; Business: Managerial Focus, Transaction Fulfilment, Production Quantity, MO; Society: Democratization of Wealth, Accumulation of Outputs, Polarisation of Resources.	<u>System with Distribution Effectiveness</u> Consumer: Care for Vulnerability, Consumption Life Cycle, Bottom-up Spill-over; Business: BOP, Need Hierarchy, Vulnerable Segments, Ethics of Social Justice, Welfarism; Society: Focus on Social Process, Differentiated Growth, Consumption equity, Poverty Relief.

Gau (2009), and Viswanathan et al. (2009). The first goal in BOP markets and marketing is poverty alleviation (Elaydi and Harrison 2010; Viswanathan, Rosa, and Ruth 2010). This goal creates discourses of socioeconomic transformation, empowerment, social responsibility, and inclusivity. The other concern in BOP marketing is of profitability, which is structurally inherent to businesses (Rashid and Rahman 2009). The goal of profitability is aligned with discourses of economic efficiency, incentives, and returns on investments, and monetary risks. Although some scholars have raised questions about the compatibility of these two conflicting goals (Karnani 2007; Zwick, Bonsu, and Darmody 2008), many others believe that a long-term socially beneficial relationship can be forged between these contradictory aspects of BOP markets (London 2009).

Based on this literature, Table 1 maps four areas in a system set up by the axes of time accumulation (from current to future focus) and space distribution (from personal to society focus). In the next section, a typological technique is adopted to review consumer awareness (at individual level), marketing conducts (at business level), and societal trends (at macro level) and to associate them with various orientations in research themes and practices including sustainability.

Propositions

Following the typology of marketing efforts defined by efficiency and effectiveness as shown in Table 1, we now address the second research objective of how to build sustainable development that will link up the micro players in marketing system and contribute to higher level of efficiency and effectiveness. As widely acknowledged, there has been also a cleavage in these opposite two parts of continuum, macro and micro marketing, while leaving most of the middle unaddressed.

The objective of proposition development is to use a framework to accommodate multiple interests in the marketing system to solve the problem of means-and-ends by going beyond “an immediate gratification vis-à-vis consumption” (Burroughs

2010, p. 128), and to eventually bridge the gap between micro and macro plays via nurturing long-term personal and societal well-being. The marketing system embraces both public or state and private sector participants. This leads to objective functions ranging from profit orientation to social equity or distributive justice. Gaps exist between the nature of demands and their social purposes, where individual consumption ethics as “consumerism, individualism, and domination of nature, to quality of life can be compatible with macro phenomenon of “human solidarity (connectedness, responsibility) and ecological sensibility” (Varey 2010, p. 122). The nature of demand is described as “sustainability, durability, nonmaterial, equitable distribution” (Varey 2010, p. 122) while under orthodox marketing it is understood as “choice, novelty, preference.”

Some research propositions are developed to address the intertwining relations between economic efficiency, long-term consumer benefits and distributive equity (as two types of effectiveness), pursuits of sustainable development.

First, sustainability is understood as a term that may be investigated from multiple perspectives. Other than the business profit consideration, from a consumer’s perspective, sustainability means consumer sustainable benefit (Prothero et al. 2011) and standard of living (Huang and Rust 2011; Hult 2011) without impairing environmental quality (Strong 1997) and undermining the ecological awareness of consumer cohort (Hunt 2011). From the viewpoint of social forces (Hult 2011), sustainability means to charitably aid the poor (Huang and Rust 2011) and to furthermore create an equality of opportunity for consumers to providing diversity and justice through marketing activities. Therefore efficiency, effectiveness, and sustainability should not be understood in a segregated manner. Varey (2010, p. 124) advocates a transformative marketing technique because “the role of cross-disciplinary synthetic research is not yet sufficiently recognized and thus undervalued in the marketing discipline, yet it is the pathway to transformation.” Except for Meng (2008), the literature rarely regards the link between consumer, company, and societal

levels of efficiency and effectiveness. It is hence concluded that marketing sustainability first focuses on the ultimate well-being of consumers and capability of long-term development linked with market activities, including psychological well-being, in terms of social ties, openness to experience, and personal growth (Varey 2010). Sustainability in marketing requires a comprehensive consideration of intertwining efficiency and effectiveness of business activities and synchronized thinking containing adequate notice to distributive justice and a collective effort of collaboration between social sectors.

Proposition 1: Sustainability has multi-facet implications that comprise effectiveness of eco-environment responsibility and distributive equality of products/services while maintaining an efficiency of input-output ratio at action-initiating level.

Second, sustainability also requires prioritizing customers, community, employees, suppliers, and investors over earning profits (Bhattacharya, Rao, and Glynn 1995). As pointed out by Layton (2008, 2009, 2011), a marketing system is composed of constituents (e.g. governments, employees, and consumers) that have different objectives. In viewing the network of stakeholders as a system, researchers can understand the role of companies in “managing” stakeholders and the limitations on the feasibility of such strategies. Scholars should also examine the means by which companies and other organizations are most capable of improving societal welfare (Bhattacharya and Korschun 2008).

Proposition 2: Sustainability comprises of the pursuit of internal efficiency and external effectiveness of marketing activities that request an engagement of stakeholders involved in and/or affected by the decisions made or implementation occurred.

Third, ultimately it is a connection between the market and individuals that affects macromarketing performance (Shultz et al. 2012), within which consumers pursue their well-being and quality of life (e.g., Ekici and Peterson 2009; Sirgy 2008). This description draws the focus back to individual-relevant well-being of societal participants fulfilled by transaction and organized in an appropriate pattern with either a top-down institutional or bottom-up interference rather than the benefits gained from consumption at aggregate level. Therefore, marketing sustainability is achieved by a two-way successive interaction between marketing and society inclusive of bottom-up development and top-down interference and lead to bridge the gap between micro and macro level of interests. Sustainability could be weaved from bottom-up through the play of specification and differentiation and/or restrained from up down through the institutional impacts or regulations. Explained from bottom up, a pursuit of trade-off of orientations at each action level plays a fundamental role in forming the future sustainability. For example, market-driven sustainability can supplement mainstream by combining self-restraint of consumer interests (Huang and Rust 2011; Hunt 2011; Hult 2011) with corporate initiatives. A future view of

consumption through consumer’s self-control, as discussed by Sheth, Sethia, and Srinivas (2011), refers to a state of “mindful consumption”, differentiating from under-consumption (when consumer needs are neglected) and over-consumption (when consumer wants are escalated). While from the top down, the system evolves in response to changes in the institutional, technological, and socioeconomic environments in which the marketing system is embedded, and can be appraised in terms of both efficiency and effectiveness. In an effort to put marketing and sustainability together, sustainable marketing is defined as “marketing within, and supportive of, sustainable economic development” (van Dam and Apeldoorn 1996, p. 46). Thus an overall sustainable objective is to be understood within the context of the marketing system.

Proposition 3: Within a marketing system, sustainability is woven up by two-way interactions, i.e. bottom-up self-initiating evolution and dramatic up-down transformation.

Proposition 3a: The mega change is incrementally made by bottom-up evolution, which is initiated by micro players undertaking basic duties with a focus on limited interests.

Proposition 3b: External impacts drive the mega change to increase the external effectiveness of wider customer cohorts, via institutional change, legislative regulation, consumer climate change and other emerging contextual factors.

Lastly, a long-term view of consumer welfare reflects a shift in focus toward benefiting consumers in buyer-seller dyad relation. A representative explanation for introducing buyer-seller dyad relation into the discussion of sustainability to shift it toward a market-oriented sustainability (Crittenden et al. 2011) is that market orientation is actually an element in the construction of sustainable marketing (Hult 2011). A market is defined in terms of a variety of demands (Hunt 2011). Transactions, particularly in emerging markets, occur when various buyers have heterogeneous socio-economic statuses (Sheth 2011). For sellers, heterogeneity implies a diversity of growth paths, resources, capabilities and competences. For buyers, heterogeneity resides in a diversity of backgrounds, preferences, needs, and choice behaviors.

Proposition 4: Unlike a narrowly defined marketing orientation, sustainability allows an organic and future-oriented buyer-seller relation with a long duration and a high level of reciprocity that will not only benefit business interests, but also create a wide social well-being.

Historic Evolution of Pharmacy Marketing System in China

In this section, the history of the Chinese pharmacy marketing system is used to investigate the intertwining efficiency and effectiveness and their determined impacts on sustainability to support the propositions generated as above. The Chinese pharmacy sector to be investigated underwent comprehensive change in the past thousands of years and can be viewed as a

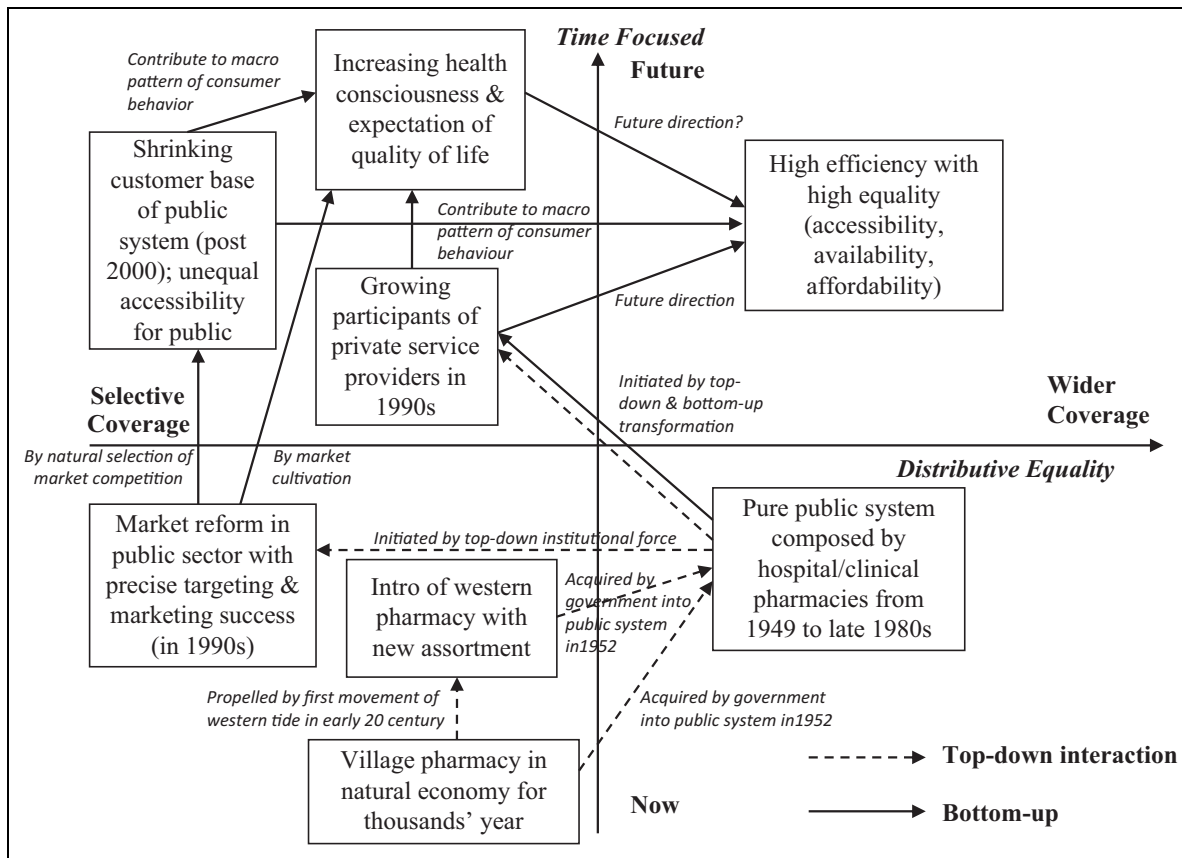


Figure 1. Evolution of macro pharmacy system in China since 1949.

natural experiment of a socioeconomic system where top-down and bottom-up impacts are taking places. Through the analysis, a map of how different types of interactions with consumers, heterogeneous and homogeneous rivals are occurring to contributing to trade-offs between efficiency and effectiveness of the overall pharmacy marketing system at the aggregate level.

Different from efficiency which has been widely testified, marketing effectiveness and sustainability at levels are almost indicative rather than empirical due to a lack of rigor in measure and a limit in generalisability. Developing markets should be assessed against their socioeconomic context in either a historic (Klein and Nason 2001) or systemic approach (Layton 2009, 2011; Shultz et al. 2012). The evolution of the pharmacy system in China has undergone several levels, featured by various efficiency and effectiveness characteristics, as shown in Figure 1.

Stage 1: Natural Economy until the Breakup of Village Pharmacy Dominance (to 1940s)

The Chinese people have a long history of herbal medicine production and usage. Generations of have nurtured a strong belief in Chinese herbal medicine focusing on how to balance the inner body forces (Yin and Yang) and deal with relations with the world. They even extended this into their consumption culture, living attitudes, and personal philosophy. Other than selling the herbal medicines, traditional Chinese pharmacies also

provided a series of services including consultation, diagnosis, acupuncture, massage, and the preparation of medicines, such as steam, distillation, and cooking (Meng 2012). Following the First Opium War in 1840-1842, Western medicines together with western medical technology were introduced into China that made considerable impact on the society (Bertelsmann Foundation Report 2004). Later years witnessed the opening of many more missionary hospitals and increasing popularity of Western medicines throughout all the coastal areas in China and in major cities including Shanghai, Guangdong, Fujian, Beijing, Changsha, and Wuhan. The prevalence of Western medical and medicine techniques among dignitaries and upper classes, however, received widespread condemnation from the common people in the Chinese society. Observing this period, it can be summarized that relations between seller and buyers are one-to-one interactions. As Viswanathan et al. (2012, p. 171) contend,

“sellers are well acquainted with their customers’ preferences. Retailers are usually small, locally owned shops that serve a limited number of regular customers with whom they interact personally. As local residents, they also benefit from easy access to current word-of-mouth information about their customers. Their customer interactions are highly responsive to individual circumstances, which enables them to offer a product-and-service mix that is carefully tailored to local situations.”

Correspondingly, the macro pharmacy marketing system is featured by low efficiency and high equality. The major features of pharmacy marketing system at this stage are summarized as a pure focus on the unit-scale efficiency. Participant pharmacies carry prominent features of linking closely with the target customers. While due to the low socioeconomic and health status and limited medical resources, the diversified demands towards medicine and health products have not been recognized and met. Therefore the overall pharmacy system is diagnosed as efficient at store-level yet with a lack of macro effectiveness.

Stage 2: Sole Structure of Public Pharmacy (from 1949) until the First Market Reform (in 1990s)

From 1949 to mid 1990s, the only drug provision system was from the public sector (hospitals and clinics) and was compulsorily combined with the medical service system (Shi 1993). The prominent characteristics of pharmacy system at this stage are highly centralized and equality-oriented. In this centrally planned medical system, most members of the society are covered by social health insurance and can afford the basic health safeguards with low cost. This mode gained a positive appraisal from the World Health Organization (Alma-Ata Declaration 1978, p. 61-62) as a good example for developing countries seeking to popularize primary medical services. However, this high equality in the availability of medical resources is based on the sacrifice of system-wide efficiency.

The pursuit of absolute distributive equality, on the other hand, operates at the cost of a lack of system efficiency reflected by a widening gap between medical budgets and needed expenditures on public health. After the 1990s, the public health system underwent a dramatic transformation with much of its attention focused on efforts to improve the market efficiency of medical institutes including the public sectors with a focus on the maximization of profit where a medicine surplus over service earnings together with an insufficiency of funding, resulted in a significant reduction of equality in medical resources and the emergence of social controversies as to the nature of the medical system (Feng et al. 1995). In 2000, inadequate fund-raising and the allocation of medical resources had fallen to the ranking of 188 among those 191 members of WHO (Wang 2008). A severely undermined pharmacy system with high micro efficiency and low overall effectiveness (particularly the distributive effectiveness) is then criticized widely (Feng et al. 1995; Wang 2008).

Stage 3: Diversification of Pharmacy via the Second Market Reform (after 2002)

With an increasing demand for medicines for better quality of life and a changing environment in every facet of society, it became necessary to introduce multiple types of outlets to build an adaptive and responsive retail pharmacy system in order to satisfy the multiple facets of drug demand. Confronted with higher cost of medical services and reduced availability of resources, poor consumers in villages were reluctant to take up the medical services due to unaffordability (Wang 2008).

As competition entered with the deregulation of the pharmacy marketing system, a degree of chaos also entered the system, with many low performing pharmacies involved in the market (Feng et al. 1995). This led to both low efficiency of the system as the effective customer base was reduced; and to lower effectiveness as social justice was impaired. The proportion of urban residents who were willing to turn to medical services declined to 18.4% compared to 1998, with the urban and rural residents dropping to 27.1% and 15.4% respectively (Kamal-Chaoui, Leeman, and Zhang 2009). Therefore the efficiency of medical system has been undermined. Consequently, the efficiency and effectiveness of medical resources has declined in the last decade.

Emergence of a private retail health care sector in China was a by-product of the post-1990 changes and market reforms in the public health sectors. Conflicts arose between an imbalanced pharmacy marketing system and an enormous population base living in vast rural areas. For one thing, the rising living standards of people in city and township areas made it imperative to leverage the market mechanism to reasonably allocate finite medical resources and to satisfy the newly emerging segmentations. For another, the collapsing collective economy during the 1990s led to the knockdown of traditional cooperative medical treatment; and even worse, an insufficiency of finance seriously hampered the development of rural medical services. (Wang 2008). Lack of financial support expedited the process of public hospital privatization reform. Under these pressures, many of the public medical institutions adopted the pattern of enterprise reform (MDC 2009) characterized by forms of contract, renting and shareholding-cooperation. However, while the execution of the policy of "efficiency first" and dominant market mechanism increased the resources re-allocation efficiency, this came at the sacrifice of serious imbalance among institutions offering medical services. To make things worse, market dictates undermined basic social justice criteria, which pooled to cause public health services for people in smaller towns and villages to lag far behind those in cities (World Health Organization 2003). A large percentage of people in rural areas failed to obtain reasonable medical services. Propelled by the process of urbanization and improved living standard of urban consumers, the ratio of urban-rural medical service provision stood at a dismal 7:1 (MDC 2009), indicating a much superior and more established pharmacy market in urban China. Demand for imported consumer healthcare and personal-care products was also growing among middle- and upper-class consumers. On an average, each commercial pharmacy provided up to 2,000 types of products ranging from drugs (60%-70% of sales) to health food (10%-15% of sales) to cosmetics (5%-10% of sales) to other items (10% of sales), and served a population of about 4,000. A broad range of economic, institutional, cultural, technological and social changes in Chinese society accompanied this rapid increase in numbers.

By contrast, about 40% to 60% or even higher proportion of farmers in some rural areas in China were stuck in or returned to poverty due to the high cost of medical treatments, leading to the fact that China ranked 188th for its medical services among a total of 191 WTO members (Lee and Sirgy 2004). Similar data

affirms this deteriorating trend by indicating that the coverage of Cooperative Medical Scheme dropped dramatically from 90% in 1978 to 4.5% in 1989 (Feng et al. 1995).

Stage 4: Sustainability in Forward Direction

From the late 1990s, the growth of the capital market has injected fresh vigor into the reshuffling of enterprises and the development of commercial pharmacies. With the change in consumer demand, the opening of retail pharmacy industry and injection of private capital, the number of modern pharmacies has grown and many chain pharmacy retailers have joined the pharmacy system in China. Nowadays, the pharmacy marketing system has grown into a complex multi-participant entity with collaborative bonds linking the participants. It has become imperative to bring all the participants (including public sectors and private sectors) into the same governing framework to let them compete and cooperate to serve society. Since 2002 China has undertaken the second nation-wide reform of its health care system. The primary objective of this reform is to improve the structure and effectiveness of the whole health system by moving away from an over-reliance of funding on market reward, which has controversially pushed public-owned hospitals into the orbit of profit-earning enterprise. As a result, a series of reforms was launched. For example, community health services (including centers and stations) were initiated, first in some selected cities in Eastern China since 2002 and now throughout the whole country. Different types of pharmacies serve different categories of health demands.

Summarizing the evolution of the pharmacy sector in China, it is implied that the twists and turns in the reform progress occur as lesson from failures of handling efficiency-effectiveness relation because a sustainable developing mode is to be built featured by a widely-spread retail network with the capability of offering cheap-price product/service and accommodating and cultivating a wide cohort of future consumers. The pharmacy marketing system in China has now evolved into a multi-level structure comprising pharmacies performing versatile functions and providing a wide array of assortment to satisfy consumers' day-to-day demands. In the aspect of purchasing condition, due to competition between pharmacies, the purchasing prices have differentiated to make it affordable for different segments. In addition, the geographic locations of pharmacies have expanded. The evolution of pharmacy marketing systems is macro reflection how different types of service providers compete in homogeneous and heterogeneous patterns with their rivals.

Implications

To conclude, the typology presents implications for consumers, company, and society in each type of marketing orientation. Representative viewpoints in the typology of sustainable marketing will be as follows.

Aggregation of efficiency-cluster specification

Aggregate efficiency is improved through each business's effort in increasing efficiency by optimizing offering as well as increasing effectiveness of maintaining sound customer relationship. Through competition among pharmacies, the cluster efficiency of pharmacy sector reflected by a specification on one or several of pharmacy's roles of each category can be anticipated. For example, under a division of roles, professional clinic pharmacies in hospitals will evolve towards offering specialty assortment particularly prescription medicine and specialty medicine to medical insurance participants. In comparison, commercial pharmacies are more inclined to cater for consumer's day-to-day demands for health-related products by making purchasing convenient (e.g., 24/7 opening hour and online service).

Establishment of long-term effectiveness

The establishment of long-term effectiveness is accompanied by the evolution of a marketing system containing top-down institutional changes and bottom-up growth of consumer-company interaction. More efforts are to be made through cultivating awareness of well-being and training marketplace skills on the consumer side. From the company's perspective, it is necessary to think about and plan for evolving consumer needs. Plus, from the government's view improved effectiveness at a societal level can take place by leveraging institutional impacts to facilitate consumer transformation. As mentioned in the pharmacy case, introduction of community pharmacies based at service centers/stations thrives the awareness of health protection and promote health education in community.

Pursuit of distribution effectiveness

Driven by competitive pressure from heterogeneous and/or homogeneous rivals, pharmacy managers choose to expand their businesses to demographically diversified segments (also named as blue ocean market) rather than fighting fiercely in the over-crowded arena. Therefore, societal effectiveness of distribution can be anticipated through a collaborative pattern among pharmacies where stores differentiate at cluster level. According to Layton's (2008) framework, a marketing system generates areas of differentiation ranging from system setting, resources, ownership, governance, role, to target market, assortment, location, exchange logic, finance, risk, information, logics, and network. A unique strategic positioning in different pharmacies in terms of price, place, transaction tools, communication, will make it accessible and affordable to diversified cohorts of geo- and demographics-characteristics through a deliberate differentiation and well-designed collaboration.

Conclusions

Based on a review of the literature, this article argues that sustainable marketing requires a normative map synthesized by efficiency and effectiveness in time and space to evaluate the impacts of marketing activities on sustainability. The subsequent

case study of pharmacy marketing in China presents an illustration of sustainability and its relevance to the efficiency and effectiveness of the marketing system.

Future marketing needs create collective well-being by operating efficiently and by improving external effectiveness. In review of various marketing conduct with diversified focuses, sustainability is better underpinned by efficiency and effectiveness. The main point made by this article is that sustainability can be achieved by a wider conclusion of efficiency and effectiveness at all levels. To clear up, there is a necessity to categorize different marketing orientations according to their roles in efficiency and effectiveness and contributions to an overall sustainable consequence. This research proposes a typology of efficiency and effectiveness and summarizes a broad scope of previous research for its theoretical significance. Firstly, efficiency and effectiveness enrich the general criteria of marketing performance, and are synchronized with sustainability to guide future marketing practices. By linking these two critical concepts with sustainability, a typology of sustainability and a series of research propositions are built. Secondly, the sustainability approach to understand marketing can bring all those relevant individuals and institutes involved in performing profound marketing roles as how to engage stakeholders with benefits and losses beyond those narrowly-defined profits. Thirdly, sustainability is established in a multi-level mode containing both top-down and bottom-up interactions. Sustainability research needs provide an interpretation of the process as how they are built in a multi-level manner.

Seen from the retail pharmacy system in China, store features such as assortment availability, place accessibility, and price affordability benefit customers' purchasing value by reducing their costs occurred. From a business perspective, efficiency will be achieved by precisely tracking and satisfying target customers' demands; while when pooling clusters of pharmacy stores together, marketing effectiveness is demonstrated by coverage of retail amenities and their reach to different segments to cater for different demands. The trade-offs between efficiency and effectiveness at each tier advance the sustainable societal outcomes. Lastly, sustainability is compatible with the core of relationship marketing – the focus on a long-term seller-buyer reciprocity gained from delight, trust, commitment, and affiliation – and resulted in an increased marketing effectiveness.

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