

On the 4Ps & 4Cs of Green Logistics Marketing Mix

Yucel Ozturkoglu

Yasar University, Turkey

The world is getting more polluted each day. Fortunately, consumers are now more aware and concerned about environmental issues. Customers are expecting the same sensitivity to the environment in both marketing and production strategies of companies. The main aim of this paper is to develop a framework for understanding the integration of green marketing concept with the marketing mix both in the form of 4Ps (price, place, promotion, product) and 4Cs (communication, costs, convenience, customer). This paper will deal with the environmentally friendly measures to be taken by marketing organizations. In addition to the green marketing sub-mix, some important strategies, including green logistics and reverse logistics topics, are handled extensively with the aim of completing the framework of the green marketing.

Keywords: Green Marketing, Marketing Mix, 4Cs, 4Ps, Green Logistics, Reverse Logistics.

1. INTRODUCTION

In order to get into the green marketing concept, firstly the question of what marketing is all about ought to be answered. The first definition of marketing is given by Kotler (1967) who characterized marketing as a decision-making activity directed at satisfying the customers at a profit by targeting a market. The first decade of the twenty-first century is a period of change in the field of marketing. This definition has been changed over the years and Kotler and Keller (2012) redefined marketing in more detail as an organizational function and a set of processes for creating, communicating, and delivering value to customers, and for managing customer relationships in ways that benefit the organization and its stakeholders. Customer satisfaction is supposed to be one of the most important criteria for customer loyalty (Heskett et al., 1994). By adding more value to the core product, companies try to improve customer satisfaction so that the bonds are strengthened and thereby customer loyalty achieved (Ravald and Grönroos, 1996). Tek (2013) indicates that marketing should include satisfying target customers and prospects through preparing and delivering better and continually

updated value offers (proposals and marketing mixes, including logistics) that will be valued by potential customers (target markets), than competitors, and sustain profitability by means of repeated purchases by those customers.

Tek (2013) claimed that marketing management is ascertained through listening and researching material and spiritual needs and wants of the targeted customers, while not ignoring the untargeted customers, and making necessary preparations to create, through paying whatever the price (money, energy, and time), observing ethical and socially responsible behaviour and delivering either “4Ps Marketing Mix” or “7Ps Marketing Mix” of value to satisfy them and in return obtain material and spiritual benefits for the firm.

Marketing management is a company strategy where firm managers focus on the market oriented techniques. Keller (1998) stated that marketing management is the art and science of choosing target markets and getting, keeping, and growing customers through creating, delivering, and communicating superior customer value. To achieve these tasks organizations can choose to conduct their business based on five different competing concepts/philosophies: the production concept, the product concept, the selling concept,

the marketing concept, and the holistic marketing concept. In this chapter, holistic marketing concept is discussed in detail.

The Holistic marketing concept is based on the development, design, and implementation of marketing programs, processes, and activities that recognize their breadth and interdependencies. Holistic marketing recognizes that everything matters in marketing and that a broad, integrated perspective is often necessary. Four components of holistic marketing are Relationship Marketing, Integrated Marketing, Internal Marketing, and Socially Responsible Marketing.

Traditionally, corporate social responsibility (CSR) is an important issue on environment, human right, labour, consumerism, and community (Ko et al., 2013). A distinction could be made between a social and a managerial definition of marketing: a social definition shows the role marketing plays in the society, such as delivering a higher standard of living. From a social perspective marketing is a societal process by which individuals and groups obtain what they need and want through creating, offering, and freely exchanging products and services of value with others (Kotler and Keller, 2012). Social marketing defines green marketing as the development of the marketing products designed to minimize negative effects on the physical environment. The social orientation recognizes the pre and post consumption costs to the environment.

In today's marketplace the new arising societal forces have resulted in many new consumer and company capabilities. These forces have created new opportunities and challenges and changed marketing management significantly as companies sought new ways to achieve marketing excellence. Organizations worldwide are recognizing the appeal of environment friendly products and strategies (Cronin et al., 2011). Marketing, as the eyes of the firm that observes the market, is not unaffected by this new opportunities (Chamorro, and Bañegil, 2006).

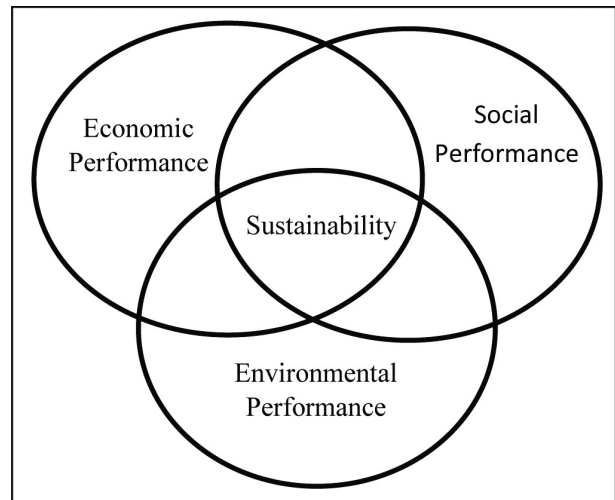


Fig. 1. The TC 19 cooperation structure with technical bodies CEN and CENELEC.

Sustainable Development (SD) and one of its important constituents Green Marketing and Logistics have emerged as the latest catchphrases in the world. As seen on the Figure 1, there is a triple bottom line which the sustainability is made up with the intersection of the economic, social and environmental performance of the organizations. Avoiding harm to people and planet, while doing business has led to the role of green concept in recent years (Centre for Sustainable Enterprise 2010). The Green issues are also important during the process of capturing marketing insights about customers which includes analyses of non-controllable macro environmental forces such as natural environment and ecosystem that should be considered to when preparing value offers. One important caution here is when most, maybe all, marketers talk about "product" they simply mean physical product or service. Yet, as seen in Figure 5 (infra, p. 8) below, what flows along the supply chain is not the sole product or service but the whole marketing mix.

2. MARKETING MIX AND MARKETING SUB-FUNCTIONS AS RELATED TO GREEN MARKETING

Although it is not adequately voiced in the marketing literature, the essence of marketing function is comprised of two marketing sub-mixes. Thus marketing function could be broken down into two sub-mixes and their components; that is obtaining demand and servicing demand (Tek, 2013). Actually, it is a promise to deliver the product and services which are presented to potential customers, at the right time, at the right

place and at the right cost without any damage, as demanded by customers (Tek, 2015). As a matter of fact, what is delivered to potential customers is the whole marketing value offer which is also called Marketing Mix. Kotler and Armstrong (2008) stated that marketing mix is a set of controllable, tactical marketing tools that firms blend to produce the response that they want in the target market. As is known it is made up of four

considered as a facilitating approach for green marketing. No matter how customer oriented it is claimed to be, the green marketing efforts based solely on 4Ps concept gives the impression that it is to the advantage of sellers. On the other hand, the new 4Cs concept rightfully reverses the face of medallion to the consumer side which in reality works to the advantage of both sides.



Fig. 2. Marketing Mix (4Ps and 4Cs) Concepts (Lauterborn, 1990).

sub-mixes namely product, place, promotion and price. In other words, “4Ps” is the decoded or contracted form of this marketing function, while dual marketing sub-functions are expanded form of 4Ps. Bowersox et al. (1968) claimed that the inherent interface of place (P) (logistics) with the remaining 3Ps is long recognized and established. Logistics is part of the “Place” sub-mix which is made up of distribution (value) channels and logistics.

Marketing Value Offer or Marketing Mix (4Ps) is the heart of marketing strategy which, in fact, is about choosing target markets (customers) and preparing value offering to those customers. The term “marketing mix” is an important part of the ABCs of marketing, and is well-known and self-explanatory. The general truth is that the “4Ps” concept is usually in the marketer or seller side. Lauterborn et al. (1993) transformed the 4Ps concept into 4Cs concept. They respectively replaced each of the sub-mixes under the 4Cs concept; customer solution, customer cost, customer communication, and customer convenience. This new viewpoint could be

Paul (2013) described 4Cs as the marketers sees themselves as selling products and customers see themselves as buying value or solution to their problems (Customers Solution). Customers are interested in total cost (Customers Cost) rather than price of obtaining, using and disposing the products. Customers want to get the products and services as conveniently as possible (Customers Convenience). Finally, they want two-way communication (Customers Communication). These have resulted in a shift of 4Ps model of marketing mix to 4Cs model. Generally it seems that 4Cs is better than a 4Ps approach of marketing mix in several ways; Bhasin (2011) claimed that the concept of 4Cs of marketing describes your customer as your core focus. Nezakati, et al. (2011) stated that 4Cs emphasizes more what customer wants and is concerned about than 4Ps does. Although this 4Cs viewpoint carries a rationale, it has not been totally substituted so far. A brief summary of 4Ps and 4Cs in relation with green marketing is given below.

Product Sub-mix: What a firm offers to customers is not the product but satisfaction or

fulfilment. If the product in question is a service, convenience, quality and distinction are ensured, if it's a physical or material thing, weight, volume and shape will affect the physical distribution costs (Tek, 2015). In the context of green marketing this involves green products which are demanded more and more by consumers.

Promotion Sub-mix: If the competition works normally, a well running coordination is required between promotion and physical distribution programs. Extension of promotion campaigns may cause imitations, piracy marketing and buyer weariness. If the promoted item couldn't be found on the date announced, there will be loss of reputation, sales and even customers (Tek, 2015). Green marketing applications need to be promoted promptly. For instance eco-labelling and green points are two examples of green promotion.

Price Sub-mix: Consumers use price as an important extrinsic cue and indicator of product quality or benefits. High priced brands are often perceived to be of higher quality (Yoo et al. 2000). In some cases for example logistics is not directly responsible for the pricing policy but it does heavily affect the pricing. Wastes in physical distribution and high costs are reflected in prices and this further increases costs, and also puts the profits and firm life into risk. In the long run the price of a product must cover all costs including distribution (Bowersox et al, 1968). Green marketing applications must establish a balance between price and consumer benefits.

Place Sub-mix: Marketing mix or value offer could gain worth through the collaboration of all 4Ps, where logistics is the lifeblood and the main driver. Green activities are spreading all over the logistics instruments increasingly. Expenditures in the place component of the marketing mix support the levels of customer service provided by the organization (Stock and Lambert, 2000). Business buildings which may be included in place sub-mix must be rearranged to fit in the green marketing requirements. Intelligent green buildings are one of the most important examples of green place sub-mix.

3. MARKETING STRATEGY AND GREEN MARKETING STRATEGY

Marketing strategy is simply choosing customers (target market) and preparing value proposals for those customers. Having identified the customers, the firm engages in a series of activities called STP marketing (Kotler and Keller,

2012) which is about segmenting, targeting and positioning. There is now an increasing number of conceptual studies on the link between sustainability and marketing (Brindley and Oxborrow, 2014). Over the years the concept of value proposal has been in significant transformation, one of which concerns "green or sustainability". Because of this change a new pursuit regarding sustainability in marketing strategies has just started. As time passed, the role of environment has gained more importance to the extent to be included in the concept of value offer. The new concept of value offer focuses on marketing initiatives that reduce energy consumption and enhance sustainability efforts. But sometimes firm may fail to live up to their green marketing propositions because of the willingness to invest in sustainable technologies. The other reason for the failure is not to understand the consumers' abilities (Dahlstrom, p. 95, 2011). The central factor in the pursuit of sustainability is the value that marketing offering provided to the consumers (Dahlstrom, p. 94, 2011). The best example for this fact is the sustainability criteria adapted by Wal-Mart. Energy and climate, material efficiency, preserving natural resources, people and community are the sustainability criteria that classify Wal-Mart as a firm with substantial concern in green marketing activity (Material Handling Management, 2009). The sustainability criteria developed by this retail giant is a proof of responsive Green Marketing of Wal-Mart. But these criteria also provide the opportunity to classify the vendors of Wal-Mart based on energy and climate, material efficiency, natural resources utilization and community involvement issues.

When a firm is recognized as being "green," that descriptor becomes a valuable resource, particularly relative to marketing and supply chain management functions (Chan et al. 2012). Concerning Green marketing strategies, a Green marketing strategy matrix is developed by MIT (Dahlstrom, 2011). This matrix which underscores for potential strategies may provide some ideas about Green marketing opportunities to serve particularly green-sensitive customers. These strategies analyse the issue of green comparatively in two axes; one on the substantiality of green marketing segments, and the other on differentiability on greenness.

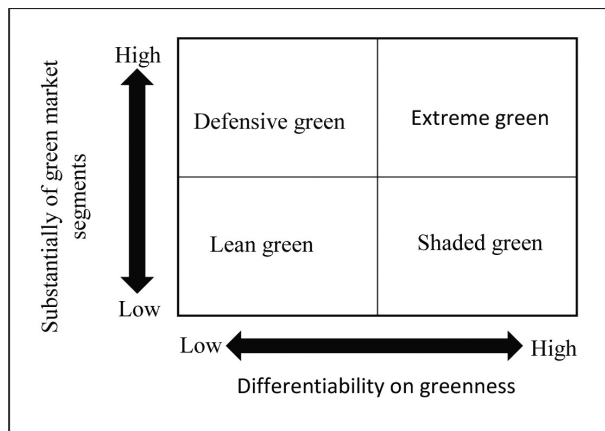


Fig. 3. Green Marketing Strategy (Ginsberg and Bloom, 2004).

Dahlstrom (2011) defined each green marketing strategy: the lean green is a strategy where the size of the green market is modest and the firm has limited ability to differentiate, based on the greenness of product offerings. These companies try to reduce costs and improve efficiencies through environmental friendly activities, thereby creating a lower-cost competitive advantage, not a green one (Ginsberg and Bloom, 2004). The defensive green strategy is a situation under which the market for green products is large, but the ability to differentiate based on the ecological merits of the products is low. In the defensive strategy, companies that use the defensive approach do the minimum in order to avoid negative consequences. The shaded green strategy which the demand for ecologically sensitive products is low, but there is a substantial opportunity to differentiate based on ecological viability of a product. Shaded Green companies focus on having long-term, system wide, environmentally friendly processes that require both significant financial and nonfinancial commitment (Ginsberg and Bloom, 2004). The last strategy is the extreme green marketing strategy where the demand for green products is high and the ability to differentiate based on product greenness is substantial. In these companies, environmental issues and responsibility are fully incorporated into the business and product life-cycle processes (Ginsberg and Bloom, 2004).

Before forming the final value proposition, the firm should complete the market positioning stage of STP which is a strategy that refers to the development of value offer to yield a distinctive target segment better than competitors. Generating viable effective positioning themes is important for the success of marketing strategies. For instance,

the well-known retail organization Body Shop position itself as a firm that support self-esteem, fair trade, ecology, human rights, and humane product testing (The Body Shop, web page, 2015), all of which are related to green marketing.

It is also important for the firm to settle on a single idea for the positioning themes. Selected value proposition gives the firm direction that leads strategic decision making. The developer of the value proposition must consider the extent to which consumers weigh ecological, relational and economic returns relative to the cost of the product (Dahlstrom, p.109, 2011).

After the positioning is completed, the firm may state the value proposition of a start-up brand. The mechanism with which the start-up brand name is eventually transformed to a real brand covering the whole components of value offer is through customer service and customer satisfaction (Tek, 2015). At the product (or to be exact, the marketing mix) introduction stage, a suggested value offer is merely a certain marketing mix design. It could also be called start-up marketing mix. Porter and Kramer (2006) and Tek (2015) stated that the value proposition is critical to the ongoing success of the firm because the proposition is the basis for brand choice and consumer brand loyalty.

There are also three important green communication strategies in the marketing field: educate consumer, empower consumer and convince consumer (Ottman, 2011; Danciu, 2006). The main aim of the consumer education is to make educational efforts on environmental problems and to increase consumer awareness about green products. Empowered consumer supports the sustainable character of the green marketing (Danciu, 2012). Convinced consumer can easily compare performance and assurance of the green product.

4. VALUE OFFER REPRESENTED BY 4CS & 4PS AND GREEN MARKETING LOGISTICS

The term marketing is usually misused when discussing the issues of logistics. As mentioned above, from another perspective, marketing is one of the business functions which are comprised of two sub-functions or sub-mixes (Lewis and Erickson, 1969), obtaining demand and servicing demand. Servicing demand is simply about distribution channels and logistics. Again, when making comparisons, the terms “marketing” and

“logistics” are mistakenly used as if they are two different functions. In reality there is one function, that is marketing, and obtaining demand and servicing demand are the two sub-functions of this marketing (Lewis and Erickson, 1969). If a comparison is needed it should be done between these sub-functions, but not between marketing and logistics which is for the most part a misuse of terms.

The Green marketing sub-mix was introduced in the literature in the early 1990s (Bradley, 2007). In the previous parts of this chapter, the concept of the 4Cs and 4Ps are briefly explained. Here, green marketing sub-mix is explained in detail.

Green Product/Customer Needs Sub-mix: Bradley (2007) claims that green products should preferably be constructed in a way so that they can be recycled and reused. Also, product waste shall not be damaging to the environment and society. Products will be more environmentally friendly if they are manufactured in the way that they can be repaired, reconditioned, remanufactured, reused, and reduced.

Green Promotion/Customer Communication Sub-mix: Green advertising are also effective tools to promote products, services, ideas and organizations’ efforts to show concern and their initiatives to protect and preserve the environment (Hasan and Ali, 2015). The primary issue here is that there has to be something important and worthwhile to promote (Kontic and Biljeskovic, 2010). Queensland Government (2006) says that companies should promote its green credentials and achievements.

Green Price/Customer Costs Sub-mix: one other important sub-mix is the pricing. In general a green product is much more expensive than traditional products. Actually, green products have higher initial out of pocket expenses but lower long-run costs (Polonsky and Rosenberger, 2001).

Green Place/Convenience Sub-mix: Marketers aiming to green their products successfully should preferably position them broadly in the market place (Queensland Government, 2006). To make place greener, companies have to use more environmentally friendly distribution channels and vehicles. Companies should make sure that their suppliers as well as their distributors are environmentally friendly. This can be done with the usage of environment friendly vehicles (Kontic and Biljeskovic, 2010).

	Product	Price	Place	Promotion
Lean	X			
Defensive	X			X
Shaded	X	X		X
Extreme	X	X	X	X

Fig. 4. Marketing Sub-mix in Green Marketing (Ginsberg & Bloom, 2004).

The scope of value offer; be it 4Cs and 4Ps, include more than four components. In both concepts the philosophy of green marketing takes up important place in terms of customer expectations. Setting out from this fact, the definition of green marketing is provided as follows; “Green marketing is the study of all efforts to consume, produce, distribute, promote, package and reclaim products in a manner that is sensitive or responsive to ecological concerns” (Dahlstrom, p. 5, 2011). It is already proven that natural forces and ecosystem can no longer be ignored in business and marketing decisions. The definitions of marketing mostly point out the fact that marketing is a philosophical orientation to the practice of doing business. These definitions do emphasize the satisfaction and value that customers, clients, partners, and society realize due to marketing actions. And the trend is towards the evolution of ecologically responsible behaviour which is the inherent outcome of environment based approach to marketing (Dahlstrom, p. 6-8, 2011).

Green marketing is all around. Also, the case of dual sub-functions model may serve as a guide to understand the role of marketing in green philosophy. Green marketing sub-mix concept is studied by some researchers in different perspectives (Polonsky and Rosenberger (2001), Prakash (2002), Baumann and Rex (2006)). In fact green marketing can also be taken up as a special case of Cause marketing. The green applications play significant roles not only in product and place components or sub-mixes, but in all components and much more i.e. price sub-mix or customer cost sub-mix with respect to 4Cs concept is one example. In this case the cost of green marketing needs to be adjusted in accordance with customer concerns. As for customer communications green marketing should be spread around potential targeted customers.

5. MARKETING CHANNELS AND SUB-MIXES INTERFACE

The distribution channels are where marketing functions take place and through which product flows are carried to the final customers (Tek, 2013). On the other hand, as it is shown in Figure 3 below, not only physical goods flow through the distribution (value) channels, but the whole marketing mix as well. Marketing function and its complement Marketing Mix (4Ps) or Value Proposal is carried through downstream distribution channels or within the contemporary context of value/supply chain. In general, the Supply Chain is the sum total of all downstream movement of Marketing Mixes (4Ps). As it is shown in Figure 5, each marketing mix is comprised of 3Ps plus 1(P) which takes place at each stage of the value channel. As a matter of fact, the total of the marketing mixes that move through each value chain member constitutes the supply chain.

Based on survey by the PEW Internet & American Life Project (Kotler and Keller, 2012) showed that one view of Holistic Marketing sees it as integrating the value exploration, value creation, and value delivery activities with the purpose of building long term, mutually satisfying relationships, and co-prosperity among key stakeholders. "The value exploration" is about how a company identifies new value opportunities. "Value creation" is about how a company efficiently creates more promising new value offerings. Last but not least "the value delivery" is about how a company uses its capabilities and infrastructure to deliver the new value offerings more efficiently. In the context of particularly customer oriented Green Marketing and Green logistics concepts, all elements of this triad should be set in motion in order to capitalize on the benefits of green marketing strategy. Through this way Holistic marketers achieve success by managing a superior value chain that delivers high level of product quality, service and speed. The success in this case is defined as expanded customer share, building customer loyalty and capturing customer lifetime value (Kotler and Keller, 2012, p.58).

A Holistic Marketing approach looks at the whole business (people, processes and products) and tailors a solution to align systems, services and customer touch points (Kotler and Keller, 2012, p.273), so that consumers' experience of a brand is seamless and consistent across all channels. In

practice, Holistic marketing is about creating and developing integrated strategies for brands, campaigns and sales tactics that consider the entire life-cycle of a product or service, crossing departmental boundaries within organizations. It seriously takes into account the customer-facing media, (traditional, digital and social channels) to create strong and consistent multichannel marketing activities. It is as much about developing streamlined system processes as it is about integrated marketing communication channels strategy and deliver (Kotler and Keller, 2012, p.273 & www.kathrynmcmann.com/what-is-holistic-marketing). Briefly, Holistic Marketing is a more encompassing integrated marketing strategy with human-centered process design, for the practical application to manage actions and responsibility, implementation and measurement (www.kathrynmcmann.com/what-is-holistic-marketing).

Holistic Marketing core principle benefits could be listed as follows: <http://www.kathrynmcmann.com/what-is-holistic-marketing>):

- 1) It synchronizes all communication channels for consistent integrated marketing strategies.
- 2) It manages marketing and business programs across multiple marketing channels to provide a consistent experience for customers.
- 3) It unifies services and departments: to offer better targeted mixes or value offers; more effective communication to stakeholders; enhanced utilization of resources and responsibility (people, processes, operations and tools).
- 4) It is designed to be adaptable, agile and market flexible.
- 5) It offers effective communications and efficient internal management for external smooth delivery.

Shortly, the benefit of using a holistic approach is the efficiency, consistency and alignment it brings to the marketing process. By working with a cross-section of internal and external stakeholders and looking at the "big picture" of how a company works, synergies are developed that reinforce the brand message. Different customer touch-points (Kotler and Keller, 2012, p.273) are linked seamlessly; resources are directed to where they will be most effective; duplication of effort is reduced, and risks are spotted and addressed before they become expensive problems

(www.kathrynmcmann.com/what-is-holistic-marketing/).

A properly designed and managed Holistic marketing which includes the contemporary green concepts is the panacea for brand building. Because Holistic marketing and all its components particularly its Integrated Marketing component use a variety of marketing activities such as radio ads, television commercials, magazine ads and newspaper ads all centre around a common idea, slogan or joke that consistently reinforce the brand promise.

shaping the marketing value offers, communication value and delivering value etc. In other words, it covers the marketing mix. It includes all parts of marketing and business functions in general. It must not be forgotten that the backbone of green logistics is the 4Ps which could be translated to green marketing as green pricing, green product and packaging, green distribution and logistics and green communication. Last but not least, eco-labels, eco branding, organic products, green transportation, green stores, green distribution centres, green store designs, green lighting, green

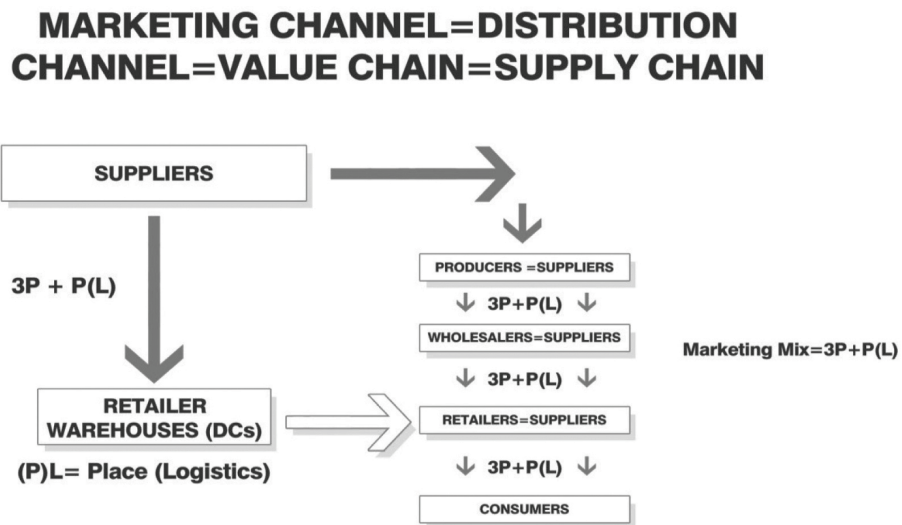


Fig. 5. Marketing Channel of Sub-mix Interface (Tek, 2013).

6. GREEN MARKETING PARADIGM

The term “green” became a part of the vocabularies as ecological marketing (Fisk, 1974; Henion and Kinnear, 1976), environmental marketing (Coddington, 1993), green marketing (Peattie, 1995; Ottman, 1992), sustainable marketing (Fuller, 1999) and greener marketing concepts (Charter and Polonsky, 1999). Kilbourne (1998) stated that green marketing is most frequently associated with the greening of the different aspects of traditional marketing. The green marketing should have a balanced approach between physical, technological, and economic parts of the business and the society (Danciu, 2012).

As Fuller (1999) stated that in the lens of green marketing a new competitive game is being played, since three parties intervene in the exchange relationship: the firm, the customer and the environment. Green Marketing covers all aspects of marketing, starting from modern marketing and social marketing philosophies; it extends to connecting with customers, building strong brands,

heating, solar energy, and other renewable energy sources, recycled wood shelves, saving of rain waters, green house etc. In general, one important motto of green marketing is “reducing, reusing and recycling (three Rs) which are the ways consumers can minimize the volume of waste they generate (Rohr and Martin, 2012). Green marketing does try to reconcile the interests of firms, societal welfare and consumers’ short term interests. In the context of society welfare the role of ISO 14000 should not be underestimated.

The green marketing will become the 21st century business philosophy if the focus on sustainable development environment preservation and a fair quality of life will be maintained (Danciu, 2012). The Green marketing concept which encompasses environment related sustainable marketing issues is increasingly accepted and adopted in almost all developed and emerging countries ,particularly in Europe and in USA, as a permanent approach or strategy required not only by legal authorities but also by the farsighted marketing executives who started to

include and integrate environmental issues into the strategic and marketing plans as well as into the mission statements. Behind this trend lies the competitive forces, global competition, domestic and international regulations and legal enforcements, cultural advancements and improvements, customer orientation, relationship marketing, culture of learning organization and benchmarking. Also concern for efficient customer services and cost reductions, increasing importance of marketing metrics based on auditing that requires productivity and profitability, spreading principles of social responsibilities, corporate citizenship and the rising ethical principles could be added to the above trends. Prakash (2002) stated that companies can be greener themselves in firm level (value addition process & management systems) and product level.

Particularly in Western Europe, so called green parties such as Consumers International and Green Consumers Union has pressed for public action to reduce industrial pollution and many pressure groups carried these concerns into political and social action (Moisander, 2007). International Sustainable Consumption Guide was published in 1987, later on Our Common Future, also known as the Brundtland Report, from the United Nations World Commission on Environment and Development (WCED) was published in 1987 (Lele, 1991). In 1995, UN added the Protection of Environment to the UN Consumer Protection Guide. Consumer researchers studying green marketing have focused on the issue from another viewpoint that puts the responsibilities of consumers to act in an ecologically responsible manner on consumers themselves (Dahlstrom, 2011).

7. INTERACTION BETWEEN GREEN AND THE SOCIAL MARKETING

Jitendra (2002) claimed that every company must perform a dual role, of an organization with a social cause on one hand and as a business with profit motive thinking. As touched briefly about, Social Marketing which is one of the miraculous extensions of modern marketing adopted a different vantage point and makes a relationship between Green marketing as the development and marketing of products designed to reduce bad effects on the physical environment (Johson and Wang, 1998). The Green marketing is really a subset of the societal marketing which is focused on natural environment combined with social

issues (Mulcahy, 2005). In Green marketing products are designed to minimize negative effects on the environment. In contrast to intermediary or retailing perspective, the social orientation recognizes the pre- and post-consumption costs to the environment. Thus they drive social marketing vertically backward along the supply chain to the supply sources and production processes that prepare the products. Social marketing focuses on designing and implementing programs that increase the acceptability of a social idea, cause, or practice in target group (Kotler, 1994). Polonsky (1994) says that there are two perspectives available for companies in this situation:

- Companies can use their environmental consciousness as a marketing tool.
- Companies can be environmentally responsible without promoting this fact.

In an attempt to start environment based approach to production and marketing, many a company and public utilities had to invest billions of dollars in pollution control equipment and environment friendly fuels, making hybrid cars, low-flow toilets, organic foods, and green office and store buildings (Kotler and Keller, 2012). On the other hand, it is clear that green marketing also created opportunities for those who accepted green issues as inevitable and took action to cope up with and make profit from this issue. Retailers and developers of green products started to emphasize products or more correctly marketing mixes that are environment friendly. First environment friendly dancing saloon where the floor is producing electric energy as people danced along in the bar, were seen in Holland (Hoffstedde, 2009). The Guardian (2007) published news that an interesting measure taken by virtual supermarkets is promotion of green credentials in home deliveries.

8. GREEN LOGISTICS VERSUS REVERSE LOGISTICS

Today it is widely recognized that ethical behaviours are sine qua non of lasting or sustainable relationship between firms and between the firms and final consumers. Logistics encompasses broader areas than the supply or value chain activities of individual businesses and individual ethics and extends to the social responsibility of businesses. "Green Marketing" and its main component "Green Logistics," themselves are the broader and more ulterior

promise of businesses to the environment and humanity in general which have recently started to be explicitly included in the agendas of businesses and those of non-profit organizations (Tek, 2013).

Herein the value delivery sub-mix or logistics sub-mix of marketing function undertakes significant role. Certainly, the logistics sub-function which is under the umbrella of greater marketing involves solid attributes with respect to green marketing. Today, green logistics is inevitably taking its place in the process of competitive positioning, marketing and logistics strategies of all businesses, including the retail businesses which are an important member of the value chain. Green Logistics is an issue which is integrated with all organizations along the whole supply chain and thus it can neither be taken independently of the policies and strategies of other supply chain members nor those of the 3PL and 4PL firms. Therefore green logistics issues also need to be integrated throughout the supply chain and resolved together. The issue involves almost all instruments of logistics sub-function such as warehousing, packaging, materials disposal, reuse of materials, recycling, energy savings etc. Furthermore, product returns, product substitutions, repairs and maintenance are also involved.

Logistics value proposition or logistics promise which is the sub-mix of marketing value proposition, should never go unfulfilled.

Reverse distribution, another important constituent, of logistics and green marketing as well should also be added to this definition. Reverse Logistics is introduced as the term often used to refer to the role of logistics in recycling, waste disposal, and management of hazardous materials; a broader perspective includes all issues relating to logistics activities carried out in source reduction, recycling, substitution, reuse of materials and disposal (Stock, 1992). The whole issue of green logistics is also called Reverse Logistics in the literature by some authors.

However as mentioned before it covers more than product returns. It also includes eco-label, organic products, green transportation, green stores, smart stores; lighting, heating, cooling, renewable energy uses such as solar and wind energy, recycling, harnessing of rain waters, actions against global warming, shortage of raw materials, increased cost of energy such as water, etc. The most important green logistics measures are the eco-friendly fuels, energy saving engines, vehicle capacity, reduce speed, optimizing route,

engine load, efficient propulsions, and ship hulls (Caliskan and Ozturkoglu, 2016).

Of course, while being sensitive to environment, the ultimate aim is finding a remedy to the old dilemma of logistics which calls for reducing total cost and maximizing customer services. Another dilemma in this subject matter is the need to coordinate the green logistics processes with other departments of the firm. The return on these coordination efforts is generating additional revenues, conserving of resources and simply to achieve green marketing goals and objectives. A reverse supply chain addresses the manner in which a product returns to the selling company, and the cycle is suggested to end when the company recovers the product's maximum possible value (Kleindorfer et al. 2005).

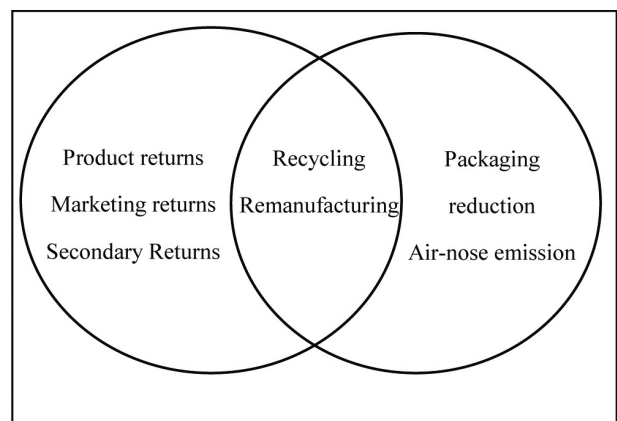


Fig. 6. Reverse versus Green Logistics (De Brito, 2004).

Reverse logistics focuses on saving money and increasing value by reusing or reselling materials to recover lost profits and reduce operational costs. However, Green logistics focuses on transportation issues and use material eco-friendly options, recycling and re-use. De Brito (2004) clarifies that green logistics focuses on the forward flow of the supply chain while reverse logistics is viewed as sustainable development.

9. SUMMARY

The goal of this chapter has been to outline the relationship between marketing sub-mixes (4Ps & 4Cs) and green marketing. The term *marketing mix* is part of the ABC of marketing. In order to understand in more depth; the marketing sub-mixes is first discussed and then green marketing sub-mixes is explained briefly. Marketing strategy which involves preparing value offer or marketing mix is an important bridge for establishing long term relationship with customers. The 4Cs concept

is introduced as a facilitator for the customer *focused sustainable* marketing strategy which seriously considers green marketing issues. As a matter of fact; it does involve many different aspects that must be taken up in a larger scope. *Green marketing needs a holistic approach or the holistic approach should include green marketing which boils down to the same end.* In the light of contemporary holistic marketing concept, value exploration, value creation and value delivery activities need to cover almost all green marketing strategies. *To a large extent, the value delivery is the major task of supply chain and logistics.* The green marketing approach is *sine qua non* of Holistic Marketing concept which cannot be ignored *at any time.* The elements of each sub-mixes of marketing should include the green issues. Logistics sector is the lifeblood and one of the main drivers of *environmental* friendly marketing. Obviously, Green Logistics is not one time task. The firms should continually update their green policies and strategies based on the *4Cs (value offer)* approach and Reverse logistics are also the other topics which are briefly discussed in this study.

REFERENCES

- [1] Baumann, H. & Rex, E. (2006). Beyond ecolabels: What green marketing can learn from conventional marketing. *Journal of Cleaner Production*, 15(6), 567-576.
- [2] Bhasin, H. (2011). An alternative to marketing mix- 4Cs of marketing. Retrieved June 12, 2015, from www.marketing91.com/alternate-marketing-mix-marketing.htm
- [3] Bowersox, D.J., Smykay, E.W., Lalonde, B.J. (Ed.). (1968). *Physical distribution management*, New York: Macmillan Co.
- [4] Bradley, N. (2007). The green marketing mix. Retrieved June 28, 2015, from www.wmin.ac.uk/marketingresearch/Marketing/greenmix.htm
- [5] Brindley, C. & Oxborrow, L. (2014). Aligning the sustainable supply chain to green marketing needs: A case study. *Industrial Marketing Management*, 43, 45-55.
- [6] Caliskan, A. & Ozturkoglu Y. (2016). Maritime logistics, Chapter 19, Ochoa-Zezzatti, A., Sánchez, J., Cedillo-Campos, G., & De Lourdes, M. (Editors), *Handbook of Research on Military, Aeronautical and Maritime Logistics and Operations*, Hershey, PA: IGI Global Publishing, DOI: 10.4018/978-1-4666-9779-9.
- [7] Carter, C. R. & Rogers, D.S. (2008). A framework of sustainable supply chain management: moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 38 (5), 360-387.
- [8] Center for Sustainable Enterprise (2010). About the centerforsustainable enterprise. Retrieved June 15, 2010, from www.kenan-flagler.unc.edu.
- [9] Charter, M. & Polonsky, M.J. (Ed). (1999). *Greener Marketing: a Global Perspective on Greening Marketing Practice*, 2nd edition, Greenleaf: Sheffield.
- [10] Chamorro, A., & Bañegil, T. M. (2006). Green marketing philosophy: A study of Spanish firms with ecolabels. *Corporate Social Responsibility and Environmental Management*, 13(1), 11-24.
- [11] Chan, H., He, H., & Wang, W. C. (2012). Green marketing and its impact on supply chain management in industrial markets. *Industrial Marketing Management*, 41(4), 557-562.
- [12] Coddington W. (Ed). (1993). *Environmental marketing: Positive strategies for reaching the green consumer*. McGraw-Hill: New York.
- [13] Cronin Jr, J. J., Smith, J. S., Gleim, M. R., Ramirez, E., & Martinez, J. D. (2011). Green marketing strategies: an examination of stakeholders and the opportunities they present. *Journal of the Academy of Marketing Science*, 39(1), 158-174.
- [14] Dahlstrom, R. (Ed). (2011). *Green marketing management*, International Edition, UK: Southwestern.
- [15] Danciu, V. (2006). Marketing ecologic. *Eticaverde a productieisiconsumului*, Editura Economica, Bucuresti.
- [16] Danciu, V. (2012.) The green marketing at work: the push-pull effects of the green communication strategies, *The Romanian Economic Journal*, 15(46).
- [17] De Brito, M. (Ed). (2004). Managing reverse logistics or reversing logistics management? (No. ERIM PhD Series; EPS-2004-035-LIS). Erasmus Research Institute of Management (ERIM).
- [18] Fisk G. (Ed). (1974). *Marketing and the ecological crisis*. Harper and Row: London.
- [19] Fuller D. (Ed). (1999). *Sustainable marketing: Managerial-ecological issues*. Sage: Thousand Oaks, CA.
- [20] Ginsberg, J.M., & Bloom, P.N. (2004). Choosing the right green marketing strategy. *MIT Sloan Management Review*, 46(1), 79-84.
- [21] Hasan, Z. & Ali, N.A. (2015). The impact of green marketing strategy on the firm's performance in Malaysia, *Social and Behavioral Sciences*, 172, 463-470.
- [22] Henion, K.E. & Kinnear TC (Eds). (1976). *Ecological marketing*, American Marketing Association: Chicago, IL.
- [23] Heskett, J.L., Jones, T.O., Loveman, G.W., Sasser, W.E. & Schlesinger, L.A. (1994). Putting the service-profit chain to work, *Harvard Business Review*, March-April, 164-74.

- [24] Hoffstedde, D.M. (2009). People, planet & party: duurzaamheids is hot. De Telegraaf. Retrieved May 19, 2015, from www.telegraaf.nl/stopdecrisis/article20498708.ece
- [25] Jitendra, D.K. (2002). Responding to green consumers: The roles for government and business. *Vilapa*, 27(1), January-March.
- [26] Johnson, M.R. & Wang, M.H. (1998). Economical evaluation of disassembly operations for recycling, remanufacturing and reuse. *International Journal of Production Research*, 36(12), 3227-3252.
- [27] <http://www.kathrynmcmann.com/what-is-holistic-marketing/>, "What is a Holistic Marketing?" accessed January 4, 2016.
- [28] Keller, K. L. (Ed). (1998). *Strategic brand management: Building, measuring, and managing brand equity*, Prentice Hall: Upper Saddle River, NJ.
- [29] Kilbourne, W. E. (1998). Green marketing: A theoretical perspective. *Journal of Marketing Management*, 14(6), 641-655.
- [30] Kleindorfer, P. R., Singhal, K., & Wassenhove, L. N. V. (2005). Sustainable operations management. *Production and Operations Management*, 14(4), 482-492.
- [31] Ko, E., Hwang, Y.K. & Kim, E.Y. (2013). Green marketing functions in building corporate image in the retail setting. *Journal of Business Research*, 66, 1709-1715.
- [32] Kontic, I. & Biljeskovic, J. (2010). *Greening the marketing mix: A case study of Rockwool Group*, Unpublished Thesis in Business Administration, Jönköping International Business School, Jönköping University.
- [33] Kotler, P. (Ed). (1967), *Marketing management analysis, planning, and control*. Englewood Cliffs, NJ: Prentice Hall.
- [34] Kotler P. (Ed). (1994). *Marketing management: analysis, planning, implementation and control*. 8th Edition, Prentice-Hall: Englewood Cliffs, NJ.
- [35] Kotler, P. & Armstrong, G. (Eds). (2008). *Principles of marketing*. 13th Edition, New Delhi: Dorling Kinderley, India (Pvt) Ltd.
- [36] Kotler, P. & Keller, K.L. (Eds). (2012). *Marketing management*. 14th Global Edition, (Upper Saddle River, Pearson, Prentice Hall.
- [37] Lauterborn, B. (1990). New marketing litany. *Advertising Age*, 61(41), 26-26.
- [38] Lauterborn, R. F., Schullz, D. E. & Tannenbaum, S. I. (Eds). (1993). *Integrated marketing communications*. 1st Edition, U.S.: NTC Business Books, a division of NTC Publishing.
- [39] Lele, S. M. (1991). Sustainable development: a critical review. *World Development*, 19(6), 607-621.
- [40] Lewis, R.J. & Erickson, L.G., (1969). Marketing functions and marketing systems: A synthesis, *Journal of Marketing*, 33, 12.
- [41] Material Handling Management (2009). Wal-Mart's 15 Questions, Wal-Mart.
- [42] Moisaner, J.(2007). Motivational complexity of green consumerism. *International Journal of Consumer Studies*, 31 (4), 404-409.
- [43] Mulcahy, N. (2005). Investigating the relationships between consumer societal knowledge and the purchase of societal-conscious products: testing the assumption of the societal marketing concept. Unpublished Master of Business, Queensland University of Technology, Australia.
- [44] Nezakati, H., Abu, M. L., & Toh, C. (2011). Exploring hierarchy situation of 4A marketing mix on malaysia's fast food restaurants. *World Applied Sciences Journal*, 15(8), 1157-1167.
- [45] Ottman, J. A. (1992). *Greener marketing*. NTC: Lincolnwood, IL.
- [46] Ottman, J. A. (2011). The new rules of green marketing: Strategies, tools and inspiration of sustainable branding, *Greenleaf Publishing*, Sheffield, UK. ISBN: 978-1-906093-44-0.
- [47] Paul, T. (2013). Mental accounting of mutual fund investors and marketing mix-a study from 4C marketing mix perspective, *Asia Pacific Journal of Marketing & Management Review*, 2(2), 12-22.
- [48] Peattie, K. (Ed.). (1995). *Environmental marketing management*. Pitman: London.
- [49] Polonsky, M.J. (1994). An introduction to green marketing. *Electronic Green Journal*, 1(2), 1-10.
- [50] Polonsky, M.J., & Rosenberger, P.J. (2001). Reevaluating green marketing: A strategic Approach. *Business Horizons*, 44(5), 21-30.
- [51] Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12).
- [52] Prakash, A. (2002). Green marketing, public policy and managerial strategies. *Business Strategy and the Environment*, 11, 285-297.
- [53] Raval, A. & Grönroos, C. (1996). The value concept and relationship marketing. *European Journal of Marketing*, 30 (2), 19-30.
- [54] Rogers, D. S., & Tibben-Lembke, R. S. (1998). Going backwards: Reverse logistics trends and practices. Reno, NV: Reverse Logistics Executive Council.
- [55] Rohr, J.R. & Martin, L.B. (2012). Reduce, reuse, recycle scientific reviews. *Trends in Ecology and Evolution*, 27(4), 192.
- [56] Queensland Government (2006). Green marketing: The competitive advantage of sustainability. Retrieved June 24, 2012. Rohr, J.R. and Martin, L.B., 2012. Reduce, reuse, recycle scientific reviews. *Trends in Ecology and Evolution*, 27(4), p.192.015 from www.derm.qld.gov.au/register/p01860aa.pdf
- [57] Stock, J.R. (1992). *Reverse logistics*. Council of Logistics Management, Oak Brook, IL.

- [58] Stock, J.R. & Lambert, D.M. (2000). Strategic Logistics Management, 4th Edition., NY: McGraw Hill Co.
- [59] Tek, O.B. (2013). Marketing function and logistics revised: revised dual sub-functional model approach, *Logistics and Transport*, 2 (18), 51-66.
- [60] Tek, O. B. (2014). The stance logistics: An attempt to adapt logistics principles on human and inter-human movement behaviors. *Logistics and Transport*, 3 (23) 13-36.
- [61] Tek, O.B. (2015). Promise management and the role of logistics in branding, In proceeding *International Conference on Logistics & Sustainable Transport*, 11-13 June, Celje, Slovenia.
- [62] The Body Shop, Our Values, Retrieved June 15, 2015, from www.thebodyshop.com/values/ProtectPlanet.aspx,
- [63] The Guardian, Supermarket home delivery service promotes its green credentials. Retrieved June 26, 2015, from www.theguardian.com/environment/2007/sep/12/plasticbags.supermarkets
- [64] Yoo, B., Donthu, N. & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), 195-211.

