

Sustainable Marketing: Philosophies, Economies and Strategies for a New Consumer Metabolism

By

Dr. Oluwole Iyiola

Marketing Lecturer

College of Business and Social Studies

Covenant University, Ota

Ogun State. Nigeria.

Abstract

Sustainable marketing is a subset of the sustainable development field recently formed in 1992. Both fields are complex and development elusive, but diverse bodies of knowledge are involved including, philosophy, economics, social sciences, business strategy, marketing, and environmental. The concern is about our ravenous, consumer demands or metabolism, with the world population increasing by 50% in the next forty-five years. This necessitates change in our economic structures, consumer pricing and goods, social responsibility and long-term business viability. In short, sustainable marketing stands to become an imperative for businesses seeking to have or maintain their competitive advantage.

Introduction

The paradigm of sustainable development has sprung up within the past two decades. It is the World Commission, in which the Brundtland commission coined the phrase “sustainable development” and offers a most widely accepted definition that says, “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” In 1992, the World Bank recognizes that environmental degradation even has a capacity to destroy societies. Sustainable development may be one answer in meeting this need, however it is a rather ubiquitous, contested, but indispensable concept (Castro, 2004).

One subfield that has developed is called, “sustainable marketing.” The premise of sustainable marketing is actually two-fold. First, we need consumer marketing in our world for survival. Second, it is this excessive consumptive pattern, or metabolism which can cut-down our societal fiber that is of critical interest. Fuller and Gillett (1999), define sustainable marketing as a, “Process of planning, implementing and controlling the development, pricing, promotion and product distribution that satisfy customer needs, organizational goals and assure ecosystem compatibility.”

There are two objectives to this research. First, is to bring together disciplines effecting sustainable marketing that include, philosophy, sociology, economics and business-strategies to form a comprehensive picture. Second, is to focus on the development and design aspects of an exciting, new marketing area.

Literature Review

Philosophical Divergences

There is an underlying dichotomy between Earth's resources and societal demands, which are in conflict. At the core of this controversy, there are two primary philosophical viewpoints for sustainable development, thus sustainable marketing. The major philosophy in practice today is *anthropocentrism, classical utilitarianism* or *human-centered ethics*. The anthropocentric position dictates basing human needs upon desire. It is the growth-orientated economic development and Earth's resources that are intricately intertwined with human progress. There is open-acknowledgement that Western civilizations' affliction is an addiction to material consumption (Singer, 2001). This addiction may be humorously seen on automobile bumper stickers' boldly declaring, "Born to Shop." It is this type of metabolism moving us toward non-sustainability, but the cultural mindset will be difficult to change. There are unspoken fears in society that sustainable development and marketing will jeopardize people's standard of living, individual autonomy and even self-identity through limiting our consumptive preferences (Beekman, 2004).

Rosen (2000) and Singer (2001) put forth another philosophical viewpoint and identify *biotic egalitarianism or life-centered ethics*. In this scenario human and non-human species are considered in biospheric terms, in that they may be morally important, but not have equal moral significance. It is human behavior that forms moral significance implications and has deep roots within Western civilization dating back to Biblical times. The Bible establishes the concept in Western civilization for a "ladder of life" and subsequently value judgment. However, it becomes a question of whose and what values are we to follow? Justification for moral judgment is the base of sustainable development, which in turn creates a need for sustainable marketing. It is a new dimension to the marketing mix, due to the alignment of economic and natural resources. Sustainable development analyzes the relationship between nature and people. It is Schelling, a 17th century philosopher, who made the statement, "Man is part of nature," that truly epitomizes this relationship (Magee, 2001).

Society has adopted an anthropocentric philosophy that has little consideration of how human demands relate to limited natural resources. If these results are not assessed, the aftermath may be dramatic. Bond (2005) claims that since 1970, the pressure on earth has almost doubled. Some key natural resources have declined by about one-third. Clearly, this consumptive pattern is not "sustainable" for future generations. Beekman's (2004) question then becomes pertinent, which asks what types of policies should be in place? In turn, how will sustainable development and marketing effect business and their long-term competitive advantage?

Tracing the Multiple Paths of Sustainable Development

There are several paths explaining the rise of sustainable development. First, sustainable development may have been a reaction to radical environmentalism. Second, it may have developed as a response to conservative and business utilitarianism. Third, it may have grown-out of a natural response to discussions in mainstream journal literature (Castro, 2004). Although

the origin of sustainable development is uncertain, three fundamental pillars exist. The first pillar provides a theoretical base supporting practical application. There are four major research areas identified within sustainable development, including: ecological, economic, social and cultural parameters. Identification of these areas encourages effective planning and proper implementation. The second pillar recognizes modeling can increase theoretical promotion and operational gateways. The third pillar seeks developing a spatial framework especially for environmental advocacy and management (Roberts and Hills, 2002).

Fuller and Gillett (1999) candidly remark about the state of sustainable marketing. They comment that the Earth's ecosystem suffers from a consumer-driven, no-holds-barred economic pattern. Consumers are not demanding green products, but they are also failing to recognize any connection between environmental impact and marketing consumption. At the macro level, these researchers project the marketer will be a primary, "mover and shaker" in this new developing field of sustainable marketing.

Economics and Culture - The Invisible Hands of Marketing

Economic growth goes hand-in-hand with marketing. Two contrasting economic viewpoints are contained in *The Wall Street Journal* article. The Club of Rome's sentinel report: "The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind." This article acknowledges the steam-engine of consumption. The Club calls for less consumption, concupiscence and consciousness of small creatures (Melloan, 2002). These measures appear necessary, since humans are damaging the planet in their belief. A contrasting economic viewpoint hails from former conservative late President Ronald Reagan and other like minded such as: economists, demographers and scientists. This viewpoint believes that there is not any world shortage of essentials, such as water or energy. They also contend that economic and technological effects are positive, not negative (Melloan, 2002).

Certainly, there are positive aspects to both views. However, we do know that reductions of certain natural resources are occurring at an alarming pace. We know the Earth's projected population is increasing exponentially. In calendar year 2000, the world population was 6.1 billion people and will increase to 8.9 billion in calendar year 2050. (Lawrence, Weber, and Post, 2005). A staggering 50% increase in the world's population. This rise will accelerate physical material outflow from earth's biosphere at an alarming rate, should the same human consumptive pattern or metabolism remain (Daniels, 2003).

However, in order for sustainable development to take-hold, examination of our economic system should occur and not all systems are equal. The neoclassical theory places decision-maker abilities between firms, maximizing earnings balances and advantageous or technological choices (Goldstein, 2002). But, Faucheux, Muir, and O'Connor (1997), compare traditional neoclassical nature capital theory, with weak sustainability. Their conclusion was neoclassical theory is not sufficiently robust for development of sustainability indicators. Therefore, it is a rather poor choice for a new paradigm such as sustainable development or marketing.

There are several problems utilizing capitalism for development of sustainable development or marketing. Capitalism, for example, does not foster environmental or social

sustainability. Nor, does it eliminate poverty that is a major contributor to environmental degradation effecting sustainable development, especially marketing (Hunt, 1999). Also, the capitalistic system is views the environment in a reduction operating mode. But, it was Adam Smith, economist and market-system advocate, who in 1776 wrote *Wealth of Nations*. The invisible hand theory introduces a dual role of economic growth and environmental sustainability within a capitalist system (Castro, 2004).

The competitive resource advantage theory (R-A) is the antithesis to a neoclassical framework. Whereas, the neoclassical theory firm's resources are homogeneous and perfectly mobile, the R-A theory counters that resources are heterogeneous and imperfectly mobile. Several key advantages exist to the R-A theory, with regard to sustainable marketing. Innovation and learning organizations are first-nature to R-A. In addition, the R-A theory understands public policy and institutions have an economic role to play. And, that the marketplace competitive advantage will determine fitness. Consideration of social welfare is within the framework, which is not the case with neoclassical theory. This aspect is important toward social marketing of sustainable marketing that is needed. Pro-active innovation seeks environmental interaction. New opportunities, along with upgrading core competencies meeting market segments or offerings, and anticipated competencies are pursued (Hunt, 1999).

Sustainable marketing may benefit from another economic perspective, capability theory. The capability theory promotes creation of business opportunities involving investment overtime in physical, human and organizational capital. The advantage of a capability framework is promotion of horizontal flows in marketing product designs, engineering processes and pollution control functions. Lastly, the concept of *flow*, rather than data segmentation or individual collection forms the backbone of this theory (Goldstein, 2002).

Just how our culture is going to change over to this new paradigm, is unclear. Society is driven toward action, when an emergency arises. In the case of ecosystems and ravenous consumer demands, the point of emergency is already too late. One principle measure encouraging sustainable development and marketing comes from Passmores' "chains of love." This principle encourages public sentiment adopting values that ensure the Earth is in good shape for future generations. Rawls' espouses a similar "saving's principle" that calls for emotional ties between generations (Beekman, 2004). Passmores' and Rawls' principles facilitate transition of public opinion and action toward sustainable development and marketing. It is still important to realize that sustainable marketing must work with parameters of existing marketing mechanisms (Castro, 2004).

Stakeholder Development

Polonsky (1996) recommends several strategies encouraging stakeholder communications. The firm may work alone, as one isolationist approach. Or, the firm may work directly with stakeholders and considered an aggressive approach. A more subtle adaptation approach may modify behavior toward stakeholder concerns. Lastly, employment of a cooperative approach lends itself to a specific set of outcomes, is another possibility. These strategies are important, because marketers' network with internal and external stakeholders directly. A shift toward a learning organization should occur, but the barriers may be significant

like fear of intellectual property loss or organization activities leading a decline in competitive strategy.

The triadic alignment between design, marketer and stakeholders is substantial. All too often, designers are brought to the table later than needed or are the wrong type. There are eight stages for new product development, including: 1.) Idea generation; 2.) Screening; 3.) Conceptual development and testing; 4.) Market strategy; 5.) Business analysis; 6.) Production development; 7.) Market testing; and 8.) Commercialization. Kotler and Rath (1984) state that designers are not brought into the product design phases until stage six, product development. In the ever-competitive environment, it may be more advantageous to bring designers in at an earlier point to help build stakeholder camaraderie and maximize horizontal communication flow.

Product Design Strategies

Before placing any new product onto consumer shelves, a number of process stages are clearly identifiable: 1.) Opportunity- Identification; 2.) Design; 3.) Testing; 4.) Introduction; and 5.) Life-cycle management. (Polonsky, Rosenberger and Ottman, 1998). It is in the design and life-cycle management phases where marketing can have the greatest impact. They suggest use of the product system life-cycle (Fuller and Gillett, 1999). There are two-steps to this life-cycle, including environmental engineering resources and market-channel networking. The environmental engineering life-cycle is of special interest, since it effects the design phase. The steps of the cycle includes: raw material extraction; material component manufacturing; finished product manufacturing; finished product manufacturing; product use and disposal.

A similar theme calls for Buddha economics, using material flow analysis (MFA) creating a green techno-economic environment. The general MFA metabolism model includes life-cycle analysis; substance flow analysis; total material requirements; environmental space; ecological footprint analysis (Bond, 2005); total material requirements; material intensity per unit service; physical input-output tables; enterprise eco-balances; environmental audits or material; and energy accounts (Daniels, 2003). The product system life cycle and material flow analysis create designs that are low impact products. These innovative processes are complex, but driven by unique observational, technological and environmental contexts.

Unfortunately, the return-on-investment (ROI) is unpredictable for green product development, but may include future savings from liability. (Anex, 2000). Furthermore, there are not enough incentives provided in free-market exchange. Product stewardship is just taking hold and there is much room for improvement, like innovative recycling, reuse or remanufacturing of items. These products are “earth-friendly technologies” (Ottman, 2005). The Netherlands’ established policies for manufacturers’ to take-back product packaging used in shipments. In addition, if appliances are no longer usable, they must go back to the manufacturer (Gross and Port, 1996). Eco-design is now becoming popular, which asks strategy options questions like:

- Can two or more functions be put into one product?
- Can the product use be rented instead of the product purchased?
- Can low-impact materials be used?

- Can material usage be reduced?
- Can water or energy consumption be used?
- Can products' lifetime be extended?
- Can products' be reused, remanufactured or recycled? (Ottman, 1997).

There are two major design skill sets, functional and visual. The functional area will become increasingly important for green innovation, since radical innovation and multiple functions are desired. Horizontal communication and team approaches will become increasingly common. Kotler and Rath (1984) identify factors hampering design in Americas' firms. This includes: a lack of innovation, design and low-risk behaviors. In addition, budget restrictions and politics altering creativity processes, budget meetings and strategic-planning. The barriers to innovation may need some business process engineering, in order for eco-innovation to flourish. The company's philosophy will be one key of how this may be accomplished. Companies may depend upon market-source and testing, others utilize market-sourcing and others rely upon their intuition senses.

The environmental product impact can determine using eco-design methodology and include use of a software product such as, "Design for the Environment" (DfE). The programs analyze trade-offs between materials, components and makes suggestions for alternate materials and product manufacturers (Gross and Port, 1996). Many programs are available for various market segments. Source reduction and waste management techniques are clean production technologies (Ottman, 1997 and Bhat, 1993).

Sustainable design represents a new area, but is an afterthought in many companies (Yudelson and Lunch, 2000). One special interest area is green technology and an area that may become a core competence. There is a direct and proportional relationship between technological and social change and nearly simultaneous. In fact, technology provides environmental improvements and economic growth. But, technology is complex, unpredictable and prognostications cannot be provided by timetables or directions. Technology is not necessarily contain a chain-of-causality, is decidedly influenced by firm structure, competition, human resource availability, industry type and product life-cycles. Unfortunately, there is little incentive to switch over to new green technologies. (Anex, 2000). Marketing plays a key role because of expanding traditional boundaries, dealing with stakeholders, innovative products and being a champion to improvisation (Yudelson and Lunch, 2000; Moorman and Miner, 1998).

Sustainable Development Strategies

A concept is for marketer's is "background strategies." Researchers declare that marketing drives consumption, and that consumption is the antecedent of waste pollution. One primary area of business strategy is design, as previously mentioned. Another strategy for sustainable marketing is the adoption of the product system life cycle (PSLC) (Fuller and Gillett, 1999). Another suggestion is that Buddha economics or material flow analysis (MFA) can move us toward a new sustainable marketing paradigm of "green techno-economics" (Daniels, 2003). Material analysis may be seen in terms of an "ecological footprint" or impact on the Earth. The "ecological footprint" is moving toward the forefront of ecological and business practices (Bond, 2005).

In addition to new material uses, there is a leaning toward radical technology innovations using brand-new production methods (Anex, 2000). New production methods form the basis of cleaner technologies or multiple-use designs (Ottman, 1997). The goal of the environmental segment of sustainable development, having the greatest impact upon sustainable marketing. Front-end production design issues address areas, such as resource depletion and physical resource reductions at the firm level (Spagenberg, 2004). It is easy to see how a combination of material changes, different production techniques and multiple-use product designs may change consumer purchases, sending our society into a savvy, new world.

One framework having a modified capitalistic approach is enviro-preneurialism. It is a tongue-twisting term using an environmental-based marketing strategy. The framework allows a tactical, rather than strategic approach (Anonymous, 1999). Menon and Menon (1997), recognize the environmental impact concern upon global organizations. The environpreneurial framework has three relevant strategies. First, is a strategic market focus upon innovation and technology, rather than regulatory or consumer pressures. This difference cannot be undervalued, since our current paradigm is driven through regulatory (Lyon and Maxwell, 1999) or consumer demands. Second, is adoption of an entrepreneurial viewpoint. Third, is a coalescence of environmental, economic and social objectives? Cultural acceptance of an environmentally based marketing strategy is a paradigm beginning in the 1980's and 1990's (Menon and Menon, 1997).

There are three major assumptions concerning environpreneurialism. Sustainable marketing's basis is the same as sustainable development. First, is recognition there may be a negative impact upon the Earth, with our human consumption or metabolism. We should seek consumer items having a low environmental impact (Ottman, 2003). Second, is that sustainable marketing is a driven through internal philosophy, rather than management or regulatory promulgation (Ryan, 2003; Ottman, 1998; Mirvis, 1994). Lastly, social and socially-responsible marketing concepts blend quite well into this model of environpreneurialism (Osterhus, 1997; Maignan and Ferrell, 2004).

Furthermore, the antecedents and consequences of sustainable marketing strategy provide a political-economic framework, with stakeholders perspectives (Polonsky, Rosenberger and Ottman, 1998) and empirical and theoretical evidences from Porter and van de Linde (Hilliard, 2004). This political-economic environment contains metaphoric inter-domain generalizations, based upon channel-strategy and marketing social performance research theories. Carrillat, Fernando, and Locander (2004), described the market-driving strategies, vice market-driven ones. The market-driving strategy views the art and science of niches firms benefit, actively driving markets through product quality, excellent internal business processes and superior value propositions. These firms are able to gain sustainable competitive advantage, thus incorporating it into a strategic marketing mix.

Discussion

Sustainable marketing can take the marketing field into a new area and considered a key non-business approach. (Fuller and Gillett, 1999; Kotler, 1998) extending marketing in the long term. Sustainable marketing will potentially affect three marketing typologies: the target

market, product and marketer. Of these typologies, a target market with employee input will be most affected. Sustainable marketing takes a lot of coordination and communication between internal and external stakeholders, as Polonsky suggests. But, the results will be worth it.

The product impact on the market may be significant. Industry best practices such as buy-back, return-to-manufacturer, and reuse, remanufacturing and recycling have a great capacity to reduce landfill and incinerator burdens and ecosystem stress. Major companies like Hewlett-Packard and Du Pont are industry leaders in establishing sustainability and eco-efficient goals in their business strategies (Anonymous 2002; Preston, 2001). Actions by forward-looking firms and adoption of material flow analysis, product life-cycle analysis and front-end life-cycle designs will become cornerstones of sustainable marketing, competitive advantage and become industry standards. Preston (2001) makes an impressive statement saying, "Sustainability has to become a strategic imperative for all businesses in the 21st century. It has become a fundamental market force affecting long-term financial viability and success."

Sustainability is a major issue at the Fortune 100 Company, Hewlett-Packard (HP) and ranked eleventh in 2003. HP actions are beyond baseline market expectations level. What HP found is that the transition from conceptual sustainability marketing toward action is formidable. They became interested in product stewardship promotion and corporate social-responsibility in the 1990's. HP anticipates significant future changes in fundamental economics, customer pricing policy adjustments and social responsibility issues. They want positive solutions impacting environmental challenges. The reasons is clear: they want to meet customer and marketing expectations; access markets effectively; reduce cost; expand markets; boost brand image; leverage competitive advantage; increase shareholder values and solidify management reputation (Preston, 2001).

Another Fortune 100 company developing eco-efficient goals is Du Pont and ranked fifty-ninth in 2003. Du Pont is developing a triad-approach in sustainable development. Their primary focus is on leadership, employee awareness and dependence on scientific developments helping provide new answers to old problems. Lastly, they wish to increase knowledge-intensity in their organization using technological and information systems typical of a learning organization (Anonymous, 2003). The marketer is significantly affected, due to connections with internal and external stakeholders and takes the lead in this new paradigm shift. Sustainable development once fully formed, will cut across social, cultural and knowledge organization marketing (Kotler, 1998). Social marketing is in essence, "planned social change." Possible areas of involvement where sustainable marketing meets social marketing includes: product planning, pricing, communication, distribution and market research.

The connection of sustainable development, internal or external stakeholders and marketing is undeniable. In this case, the micro or group-level will be the area where society change takes place. The individual or micro-level requires changes in marketing tactics for consumer tastes, due to manufacturing of new markets and products. The group or organizational level may elicit organizational changes, using a matrix or hybrid organization to get the most from horizontal communication flows. The macro-level of society should witness policy changes, such as the Netherlands manufacturer's take-back programs or twists in socio-cultural

evolution of sustainable development or marketing (i.e. conforming to new tasks, behaviors, etc.).

Conclusion

In summary, sustainable development and marketing right now are ubiquitous concepts, even to experts in the field (Castro, 2004). But, there is clear and multi-faceted involvement from different disciplines, such as: philosophy, economics, social science, business strategy, product design and environmental. Now, forward-looking companies, like Hewlett-Packard and Du Pont who are both heavy-hitters in the Fortune 100, recognize sustainable development and marketing are not window ornamentation, but critical toward long-term business strategies and infra-structure, economic dynamic shifts and philanthropic efforts. These changes will influence radical innovation development. When these major changes occur, the marketer will have a new place within the company, due to their connection to internal and external stakeholders.

There will be no doubt philosophical influences, such as social marketing will help change the cultural mindset. Many businesses are already converting over to this new structure, even though there is a difficult conversion from planning to implementation. Future changes in economic structures are forecast but just how the changes will be influenced by government policies is yet to be determined. In summary, if firms' have not heard about sustainable marketing, they will. Without a doubt it is a strong combination of forces forming between economics, environment and population growth creating the perfect storm. And, it is this storm that will place sustainable marketing on most firms' maps in the 21st century.

References

- Anex, R. P. (2000). Stimulating innovation in green technology: policy alternatives policy alternatives and opportunities. *The American Behavioral Scientist*, 2000, 188-214.
- Anonymous. (2003). People, Places, and Sustainability. *International Journal in Higher Education*, 4, 182.
- Anonymous. (2002). Eco-efficient goals at Du Pont. *Strategic Direction*, 18, 23-27.
- Anonymous. (1999). The political economy of economic theory. *Business line*. !!
- Anonymous. (1997). Enviropreneurial strategy is a free-market approach. *Marketing News*, 31, 22-33.
- Beekman, V. (2004). Sustainable development and future generations. *Journal of Agriculture and Environmental Ethics*, 17, 3-22.
- Bhat, V. N. (1993). Green marketing begins with green design. *The Journal of Business and Industrial Marketing*, 8, 26-32.
- Bond, S. (2005). The global challenge of sustainable consumption. *Consumer Policy Review*, 15, 38-45.
- Brown, D. (2004). Rethinking sustainability: power, knowledge, and institutions. *Journal of Economic Issues*, 38, 290-293.
- Carnillat, F.A. Fernando, J. and Locander, W.B. (2004). Market-driving organizations: A framework. *Academy of Marketing Science Review*, 2004, 1.
- Castro, C. J. (2004). Sustainable development: mainstream and critical perspectives.

- Organization & Environment*, 17, 195-226.
- Crotty, J. R. (1990). Keynes on the stages of development of the capitalist economy: The institutional foundation of Keynes's methodology. *Journal of Economic Issues*, 24, 761-780.
- Daniels, P. L. (2003). Buddhist economics and the environment: material flow analysis and the moderation of society's metabolism. *International Journal of Social Economics*, 30, 8-34.
- Faucheaux, S., Muir, E. and O'Connor, M. (1997). Neoclassical natural capital land theory and "weak" indicators for sustainability. *Land Economics*, 73, 528-552.
- Fuller, D. A. and Gillett, P. L. (1999). Sustainable marketing: strategies playing in the background. *American Marketing Association Conference Proceedings*, 10, 222-224.
- Ginsberg, J. M. and Boom, P.N. (Fall, 2004). Choosing the right green marketing Strategy. *MIT Sloan Management Review*, 46, 79-84.
- Goldstein, D. (2002). Theoretical perspectives on strategic environmental management. *Journal of Evolutionary Economics*, 12, 495-524.
- Gross, N. and Port, O. (Jan, 1996). Green Product Design. *Business Week*, New York, 109-110.
- Hilliard, R. (2004). Conflicting views: neoclassical, Porterian and evolutionary approaches to the analysis of the environmental regulation of industrial activity. *Journal of Economic Issues*, 38, 509-518.
- Hunt, S. D. (1999). The strategic imperative and sustainable competitive advantage: public policy implications of resource-advantage theory. *Academy of Marketing Science*, 27, 144-160.
- Kotler, P. (1998). A generic concept of marketing. *Marketing Management*, 7, 48-55.
- Kotler, P. and Rath, G. A. (1984). Design: a powerful but neglected strategic tool. *Journal of Business Strategy*, 5, 16-21.
- Lawrence, A.T., Weber, T. and Post, J.E. (2005). *Business and Society*. New York, New York, McGraw-Hill Irwin.
- Lumley, S. and Armstrong, P. (2004). Some of the nineteenth century origins of the sustainability concept. [abstract]. *Environment, Development and Sustainability*, 6, 367.
- Lyon, T. P., Maxwell, J.W. (1999). Corporate environmental strategies as tools to influence regulation. *Business Strategy and the Environment*, 8, 189-196.
- Magee, B. (2001). *The story of philosophy*. New York, New York: A Dorling Kindersley Book.
- Maignan, I. and Ferrell, O.C. (2004). Corporate social responsibility and marketing: an integrative framework. *Academy of Marketing Science Journal*, 32, 3-22.
- McDaniel, S.W. and Rylander, D. H. (1993). Strategic green marketing. *The Journal of Consumer Marketing*, 10, 4-11.
- Melloan, G. (2002). 'Limits to growth,' a dumb theory that refuses to die. *Wall Street Journal*, New York, A13.
- Menon, A. and Menon, A. (1997). Enviropreneurial marketing strategy: the emergence of corporate environmentalism as market strategy. *Journal of Marketing*, 61, 51-68.

- Mirvis, P.H. (1994). Environmentalism in progressive businesses. *Journal of Organizational Change Management*, 7, 82-101.
- Moorman, C. and Miner, A. S. (1998). The convergence of planning and execution: improvisation in new product development. *Journal of Marketing*, 62, 1-20.
- Miller, W. H. (1998). Carcks (sic) in the green wall. *Industry Week*, 247, 58-65.
- Murphy, R. and Crowther, D. (2002). *Management Decision*, 40, 302-310.
- Osterhus, T. L. (1997). Pro-social consumer influence strategies: when and how do they work? *Journal of Marketing*, 61, 16-30.
- Ottman, J. A. (2005). Beyond new and improved: new frontiers of design Innovation. *In-Business*, 27, 31-33.
- Ottman, J. A. (2003). Green marketing. *In-Business*, 25, 31-34.
- Ottman, J. (1998). Stonyfield farm exemplifies new green marketing model. *Marketing News*, 32, 20-21.
- Ottman, J. (1997). Green questions lead to golden opportunities. *Marketing News*, 31, p.11.
- Polonsky, M.J. (1996). Stakeholder management and the stakeholder matrix: potential strategic marketing tools. *Journal of Focused Management*, 1, 209-229.
- Polonsky, M. J. (1995). A stakeholder theory approach to designing environmental marketing strategy. *The Journal of Business & Industrial Marketing*, 10, 29-47.
- Polonsky, M. J., Rosenberger, P. J. and Ottman, J. (1998). *Asia Pacific Journal of Marketing and Logistics*, 10, 22-44.
- Preston, L. (2001). Sustainability at Hewlett-Packard: from theory to practice. *California Management Review*, 43, 26-39.
- Pronto, M. and Supino, S. (1999). The quality of environmental information: a tool in achieving customer loyalty. *Total Quality Management*, 10, S-679-684.
- Roberts, P. and Hills, P. (2002). Sustainable development analysis and policy in east and west – the cases of Hong Kong and Scotland. *Sustainable Development*, 10, 117-121.
- Rosen, S. (2000). *The philosopher's handbook essential readings from Plato to Kant*. New York: Random House Publishing.
- Ryan, P. (2003). Sustainability partnerships: eco-strategy theory in practice? *Management of Environmental Quality*, 14, 256-287.
- Singer, P. (1993). *A companion to ethics*. Malden, MA: Blackwell Publishing, Inc.
- Spangenberg, J. H. (2004). Reconciling sustainability and growth; criteria, indicators and policies. *Sustainable development*, 12, 74-86.
- Williams, C. C., and Millington, A.C. (2004). The diverse and contested meanings of sustainable development, *The Geographic Journal*, 170, 99-105.
- Yudelson, J. and Lunch, M. F. (2000). Marketing sustainable design services. *Consulting-Specifying Engineer*, 28, 13-19.