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Consumers and the Evolution of New Markets: The Case of the Ethical Foods

Vincent Amanor-Boadu and Casey Schnitz

Department of Agricultural Economics

Kansas State University

Manhattan, KS 66506

Tel: 785-532-3520

Contact Email: vincent@ksu.edu

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Abstract

Changes in consumer preferences have frequently created new markets for new products. This paper explores the antecedents of the changes in consumer preferences and the factors influencing the evolution of niche markets into commodity markets and its speed. The results show that the more embedded characteristics products have and more consumption is driven by attitude, the longer products are able to maintain their uniqueness and the slower their evolution to commodities.

Keywords: Ethical consumers, New Markets, Consumer choice

Introduction

New demand, driven by changes in consumer preferences, has often led to the creation of new products and new markets. The food industry is currently experiencing significant growth in demand for products that exhibit more than nutritional characteristics. For example, although conventional food products may have the same nutritional qualities as organic food products, a significant segment of consumers are choosing organic products because of their perception that they offer other benefits beyond nutrition (Klonsky and Tourte, 1998). These benefits may not accrue directly to the consumer making the consumption decision but they are seen as important benefits to society for which the consumer derives indirect satisfaction. Therefore, the consumer is willing to pay a premium for organic products in relation to conventional products, not because they have any intrinsic quality superiority to conventional products, but because of the extrinsic environmental protection value emerging from the production technologies used in their production.

The new markets that emerge as a result of the shifts in consumer preferences are not static. As with all innovations in a competitive market, the signals from the market frequently

influence and direct investments and create challenges for incumbents. The evolution of new markets is influenced by conditions on both the supply and demand sides of the market and the interactions of supply and demand over time. Thus, there are both dynamic and systemic factors that affect how new markets, once discovered and developed, evolve and sustain their ability to provide entrepreneurial profits to their developers. On the demand side, changes in consumer preferences as well as the rate at which those changes occur can positively reinforce the demand for the product or adversely lead to its demise. The changes in preferences are influenced by the nature of the products and their inherent characteristics that engendered the new markets in the first place as well as the emergence of competitive substitutes with comparable or superior value propositions. On the supply side, the entry and exit conditions in the market influence the ease with which competitors may retool or reposition themselves to provide competition to the products enjoying the new market environment and their ability to present incentives that significantly reduce switching costs for consumers already using the incumbents' products. Thus, the evolution of new markets may be as complex as the products being presented, the consumers and the suppliers of those products as well as the complexity of the market in which they operate. Natural monopolies and government regulations, for example may impede evolution of niche markets into commodity markets just as tacit knowledge and proprietary technologies may do the same. Smallness of the market may offer the incumbent a long reign because new entrants quickly recognize the negative sum outcome of entry into the same market which has little or no room for expansion.

The purpose of this paper is to define the factors defining the emergence of the ethical consumer, drawing on the New Theory of Demand developed by Lancaster (1966; 1971), Lipsey and Rosenbluth (1971), Auld (1972) and others in the economics tradition and motivations for

consumption preferences that have emerged in the psychology and sociology literature in the works of Maslow (1954), Baumgartner (2002), Csikszentmihalyi (1990; 1993) and Glaeser (2004). We develop a simple theory to explain the emergence and consumption decision framework of the ethical consumer integrating the results of these different disciplines. We then draw on the socio-evolutionary theories (Cullen, 2000) and market trends and evolution information to describe and assess the forces that influence the evolution of ethical products from their premium positions in new markets to competitive market positions. The final segment develops some strategic insights into how producers may take advantage of the motivations for ethical consumption and the factors influencing the evolution of ethical markets to position themselves competitiveness in such markets.

Overview of the New Demand Theory

Lancaster (1966, p. 133) challenges our perceptions of demand by arguing that “consumption is an activity in which goods, singly or in combination, are inputs and in which the output is a collection of characteristics.” He argues that by shifting away from the traditional approach of *seeing* goods as the direct objects of utility to the fact that it is their properties or characteristics that actually offered utility, Lancaster accelerated a conversation that had its beginnings in the literature on hedonic quality measurements (Griliches, 1971). Thus, according to Triplett (1973), the characteristics that Lancaster presents (1966; 1971) are a long-hand construction of quality, a concept which has been widely discussed in the literature (Abbott, 1956).

For illustration of the New Demand Theory, let us consider two products, say milk, x_1 , and yoghurt, x_2 , in the spirit of Lancaster’s presentation. Let us assume that a particular

consumer perceives two important characteristics in these products—fat content, z_1 , and antioxidants, z_2 . We may assume that the consumption of these products is driven by the consumer’s health consciousness about diet. Therefore, she values products with lower fat and higher antioxidant content. Suppose we frame it such that the milk has a comparative advantage of fat content, i.e., lower fat content, and the yoghurt has a comparative advantage of antioxidants (Figure 1). Now, let us formalize the consumer’s problem. The consumer seeks to maximize her utility function defined as follows:

$$U = U(z_1, z_2) \quad \dots (1)$$

The characteristics are defined as a function of the products through the intrinsic consumption technology coefficient matrix, b_{ij} , presented as follows:

$$\begin{aligned} z_1 &= b_{11}x_1 + b_{12}x_2 \\ z_2 &= b_{21}x_1 + b_{22}x_2 \end{aligned} \quad \dots (2)$$

The intrinsic consumption technology coefficient matrix is subjective in time and dependent on the consumer’s knowledge about the characteristics. Recent studies showing the benefits of consuming lower fat content products and high antioxidant products influence the consumption technology coefficients associated with the illustrative products under consideration here.

We finally assume that the consumer has a budget constraint which is the share of income, M , allocated to these products, defined as follows:

$$M \geq p_1x_1 + p_2x_2 \quad \dots (3)$$

We can solve for x in terms of z from equation (2) to get the following:

$$\begin{aligned}
x_1 &= \frac{b_{22}z_1 - b_{12}z_2}{Y} \\
x_2 &= \frac{b_{11}z_2 - b_{21}z_1}{Y} \quad \dots (4) \\
\text{where } Y &= b_{11}b_{22} - b_{12}b_{21}
\end{aligned}$$

Substituting Equation (4) into Equation (3) yields the ratio of prices in terms of the consumption technology coefficients and the characteristics, which is represented as follows:

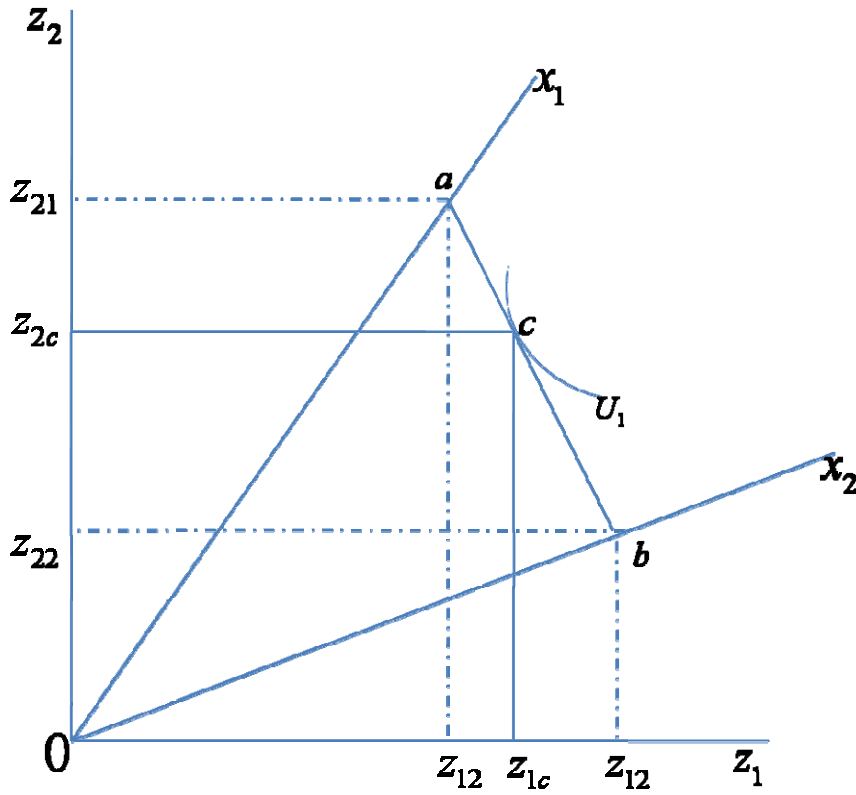
$$M = p_1 \left[\frac{b_{22}z_1 - b_{12}z_2}{Y} \right] + p_2 \left[\frac{b_{11}z_2 - b_{21}z_1}{Y} \right] \quad \dots (5)$$

which translates to:

$$\frac{p_1}{p_2} = \frac{-b_{21}z_1 + b_{11}z_2}{b_{22}z_1 - b_{12}z_2} \quad \dots (6)$$

It is important to recognize that the budget constraint in the New Demand Theory does not have the same interpretation as the one found in traditional consumer theory. Its interpretation here is an efficiency frontier describing the relative prices of characteristics derived from the different products based on relative product prices (Equation 6), defined by the line **ab** in Figure 1. Its slope defines the substitution between characteristics given the products under consideration. Optimal characteristics' combination for indifference may occur at any of the vertexes, **a** or **b**, implying that the value of the characteristics is derived from only one product, or anywhere along the efficiency frontier, say at **c**. If utility is maximized at **c**, then the corresponding levels of characteristics consumed are z_{1c} and z_{2c} .

Figure 1: Illustration of the New Demand Theory Solution



Changes in p_i will alter the implicit prices of the characteristics, thereby changing the shape of the efficiency frontier. Similarly, changes in b_{ij} will alter the angle of the product curve, thereby altering the shape of the efficiency frontier.

The foregoing illustrates how the Lancasterian consumer derives utility from the intrinsic characteristics of the product given the intrinsic consumption technology coefficients and prevailing prices. The ethical consumer also derives utility from the intrinsic characteristics as well as from the extrinsic characteristics of the product. We may think of this, in terms of Figure 1, as introducing a third axis that captures the products' extrinsic characteristics based on extrinsic consumption coefficients. Thus, the utility function of the ethical consumer is based on these ethical characteristics. Where does the ethical consumer come from?

The Emergence of the Ethical Consumer

We draw on Maslow (1954) and his model of hierarchy of needs to explain the emergence of the ethical consumer. Maslow's model has five factors or levels: physiological needs; safety needs; love and belonging; esteem; and self actualization. Physiological needs include hunger, thirst, and sensory needs such as taste, smell, and touch. When these needs are unmet, people will use all their psychic energy to meet them, leaving little or no energy for anything else. Safety needs involve living in a stable, predictable environment that is free of anxiety. Consumers will make consumption decisions that enhance their sense of safety—purchasing housing in locations they consider safe, installing security technologies, etc. In the end, safety is a sense of knowing one's physical being and property are secure from unwarranted violation. Belongingness and love needs are rooted in fear of isolation and the need for human contact and the need to belong to groups—families, friends, and organizations. This need explains why solitary confinement can be punishment for many people. There is a belief that belongingness and love, like survival and safety, are inherent to our needs as humans.

Esteem needs concern people's desire for a stable and high evaluation of themselves by others. It involves the need to feel competent, respected and superior or accepted as a peer in groups one considers are her peer group. Esteem needs, although already in children, become fully active after survival, safety and belongingness needs have been met, according to Maslow. From a consumption perspective, esteem involves the indulgence in conspicuous consumption—the purchasing of goods that *announce* achievements and accomplishments and separates the consumer from others. At this level in the hierarchy, consumption is about showing that one deserves respect and/or acceptance by society.

Self-actualization needs are, perhaps, the most complex of the five. They may be seen as “the desire to become more and more what one is, to become everything that one is capable of becoming” (Maslow, 1954, p. 92). They can only be reached after fulfilling the first four needs in the hierarchy. According to Csikszentmihalyi (2000), self-actualization presents the most enigmatic predictions vis-à-vis consumer behavior. For example, having exploded in the esteem stage, showing off one’s accomplishments and success, self-actualization may cause frugality and a search for personal growth. The focus of consumption at the self-actualization stage is on becoming more, reaching the limit of one potential as a person. This focus drives attention from the self to the self in its space. Recognizing the role of economic incentives in behavior, people at the self-actualization stage will invariably make consumption decisions to educate or to elicit particular behaviors.

Let us illustrate the ethical consumption decision following the New Demand Theory format. Consider a two-product, two-characteristic and two extrinsic characteristics, say organic production and small farms. The consumer may place ethical value on products coming from small farms because of her inherent disapproval of corporate farming and its effects on maintaining a community’s way of life because of the competitive pressures it exerts on small farmers. The consumer may also believe that small producers pollute less and are therefore better stewards of the environment. Although the consumer may recognize that there are no nutritional and intrinsic differences between an organic product and its conventional counterpart, she may still choose to consume the organic product because of its extrinsic characteristic of being produced with pesticides and inorganic fertilizers because of their effects on non-target species and surface water and air pollution.

The ethical consumer seeks to use her choice preferences to influence society into making decisions in line with her ethical orientation. Therefore, the ethical consumer pays a premium for these extrinsic characteristics and in so doing attempts to alter the production function of suppliers. Thus unlike a consumer in search of self-esteem, the ethical consumer's directs her consumption decisions to values that are broader and tend to have more benevolent effects on society. What we see here is that, by definition, the ethical consumer has more wealth than the traditional consumer, or chooses to use her wealth to achieve ethical outcomes that satisfy her in intangible ways. This is akin to Smith's (2002, p. 11) observation that:

How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it. Of this kind is pity or compassion, the emotion which we feel for the misery of others, when we either see it, or are made to conceive it in a very lively manner.

The expression of these natural principles in ways that seek not just to derive pleasure but also to instruct in doing what is good for society, according to Maslow, results from having achieved the four lower levels and migrated to the self-actualization level in the hierarchy of needs.

Let us, therefore, suppose that our milk and yoghurt products have the same low fat and antioxidant intrinsic characteristics with the same intrinsic consumption technology coefficients. Let us superimpose on this the extrinsic characteristics small farm product, y_1 and organic production technology, y_2 . The consumer's utility is defined as follows:

$$U_e = U_e(y_1, y_2) \quad \dots (7)$$

These extrinsic characteristics are defined as a function of the products, x , and their intrinsic characteristics:

$$\begin{aligned} y_1 &= F(x_1, x_2, z_1, z_2) \\ y_2 &= G(x_1, x_2, z_1, z_2) \end{aligned} \quad \dots (8)$$

The consumer is constrained by a budget allocation to the products. However, the ethical consumer has a higher allocation to these ethical products than the traditional consumer.

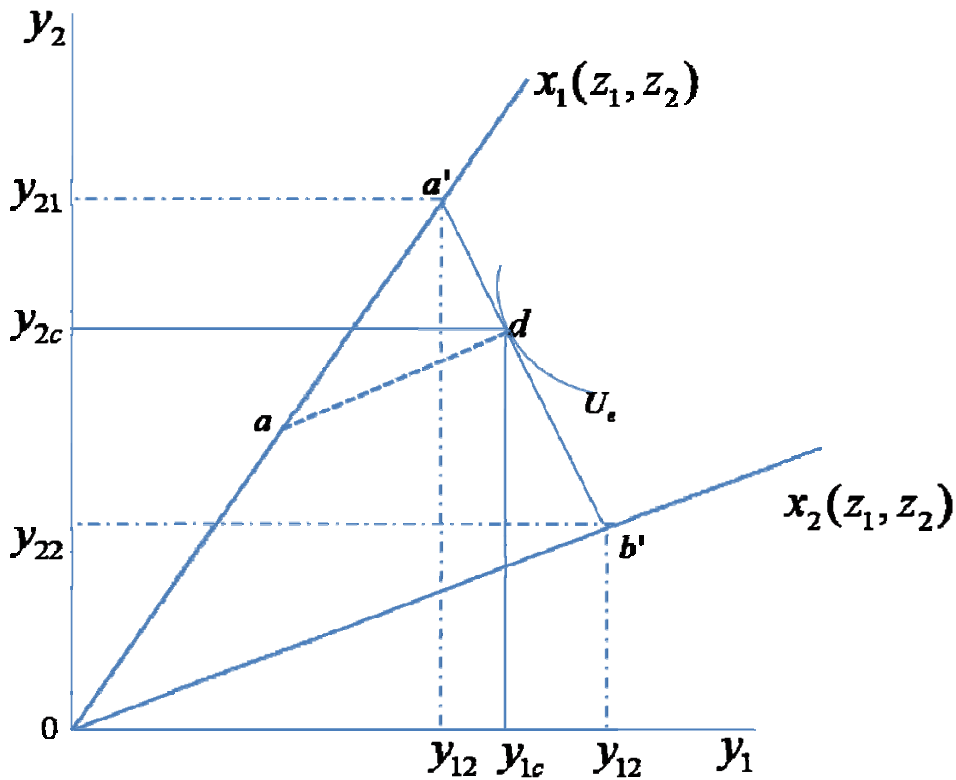
Therefore:

$$M < M_e \geq p_{e1}x_1 + p_{e2}x_2 \quad \dots(9)$$

and $p_{ei} > p_i$ from Equation (3).

Going through the similar transformations, we are able to develop Figure 2 to illustrate the ethical characteristic space for the consumer. In the figure, we recognize the fact that the selection of the ethical characteristics is based on both the quantity of x and their intrinsic characteristics.

Figure 2: Illustration of the Ethical Consumer Solution



The utility maximization combination over y_1 and y_2 may occur at the vertexes a' or b' where consumption is fully allocated to the x_1 or x_2 respectively, or somewhere in the extrinsic characteristic efficiency frontier, $a'b'$, such as point d . If utility is maximized at d , then we can, after Auld (1974), determine the associated quantities of x_1 and x_2 by drawing a line parallel to x_2 through d . The quantity of x_1 consumed is $0a$ and the quantity of x_2 consumed is ad .

Competitive Strategies for Ethical Product Producers

Demographic statistics show that the baby-boomer cohort has reached their highest earning power and at the same time have passed their esteem consumption stage. In their search for self-actualization, they are focusing on such social problems as poverty and climate change. This has fueled the growth in the organic products in the U.S., Europe and other developed countries, where the rationale for the consumption is beyond its intrinsic characteristics and encompasses ethical characteristics. The rents that accrued to early suppliers of organic products have engendered entry into the market such that many traditional grocery stores have larger selection of organic products than conventional products. As expected, this has put a downward pressure on prices and moved the organic product from a niche into a commodity space. This is to be expected of all successful niche products. Therefore, the markets for successful ethical products will eventually become the mainstream products as the ethical consumer succeeds in shifting the consumption patterns of traditional consumers to their worldview.

Conclusion

The primary purpose of this paper was to define the factors defining the emergence of the ethical consumer using the New Demand Theory as the analytical framework and the socio-

psychological literature as explanatory tools for its antecedents. We explained Lancaster's theory of demand and defined the Lancasterian consumer as one who derived utility from the intrinsic characteristics of the product and not from the product itself. We showed that ethical consumers emerged at the self-actualization stage of the Maslow's hierarchy of needs and cannot emerge prior. These consumers derive utility from the consumption of the extrinsic characteristics of the product and not from the product itself or its intrinsic characteristics.

Because ethical consumers are currently a smaller proportion of the total population in any market, ethical products tend to be niche markets. However, the economic profits that are earned by producers supplying ethical products will encourage entry and the adoption of cost-saving technologies. We have already seen this happening in the organic marketplace as well as the heritage foods market. This will dampen prices, expand production and make ethical products affordable to a larger proportion of consumers, which will move them from its niche space into the commodity space. At that point, they lose their ethical characteristics and become merely good products, bumping current traditional products from the market because they offer superior internalized and externalized benefits.

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