Unfolding a Product’s Ethical Bundle

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Abstract

The aim of the current paper is to examine the relative importance and trade-offs of the attributes that compose an ethical product as perceived by consumers. Conjoint analysis results reveal that supporting a philanthropic cause, the lack of minors in the production process and recycled materials are the features of the ethical product that present increased utility. Marketers could use such results in order maximise average utility of the ethical product given the cost constraint of its attributes.

Key Words: ethical consumer, ethical product, conjoint analysis
Introduction

Living in an “ethics era”, consumers are acutely concerned for ethical issues, which may include among others, environmental and social concerns (Shaw and Shiu, 2003). In the same time, consumers have shown great interest in ethics and expect companies to behave ethically (Schlegelmilch, 1997). Consumers expect, in general, a fair distribution of goods and services, quality in the working environments, consumers’ safety, and so on (Viriyavidhayavongs and Yothmontree, 2002). The above mentioned claims increase the necessity of business ethics. As a consequence, many companies incorporate social issues in their corporate culture (Balabanis et al., 1998). Such issues include equal opportunities for employees, protecting the environment and the fair treatment of minorities (Mc Williams and Siegel, 2001). According to Singhapakdi et al. (1995), the study of ethics has been crucial for companies in order to create profits in every business environment.

Ethics has a positive impact on companies as consumers, the most important stakeholders, in the long-term, they recognize and they support ethical companies (Laczniak and Murphy, 1993). Their support could be often translated into the rewarding of ethical companies. On the other hand, consumers may use their buying power in order to punish unethical companies (Lewis, 2001). Indeed, consumers tend not to prefer products or services promoted by “unethical” companies (Vinten, 1998). In the long-term, the lack of ethical sensitivity may threaten even the company’s surviving. In addition, Gelb (1995) argues that consumers reject or boycott unethical products.

Although academicians and researchers have shown great interest in ethical behaviour and ethical consumption, this area remains under-studied (Murphy and Laczniak, 1981; Folkes and Kamins, 1999; Maignan and Ferrell, 2001; Swaidan et al, 2003; Newholm and Shaw, 2007). Several researchers have discussed consumers’ interest in ethical products and their components (Auger et al, 2003). For example, Lewis (2001) showed that ethics is a critical parameter for consumers in their decision making process. Among 1000 British consumers who were used as a sample, 41% declared that ethics is a criterion for purchasing decisions. The research that the Co-operative Bank conducted in the U.K also revealed that one third of British consumers are strongly interested in corporate ethics (Carrigan and Attalla, 2001). Half of the respondents declared to have bought at least one product or to have recommended a product with the criterion of corporate ethical reputation during the previous year. Moreover, Simon (1995) showed that 85% of consumers surveyed have a more positive opinion for any company which supports a social programme.

On the other hand, some authors have expressed their thoughts about the gap between consumers’ attitudes towards ethical products and real purchasing behaviour. Folkes and Kamins (1999) revealed that despite their attitudes towards ethical products, only 20% had actually purchased a product during the last year because it was associated with a good cause. Vassilikopoulou (2005) also concluded that consumers’ actual behaviour sometimes may not be influenced by their ethical concerns. In addition, as Carrigan and Attala (2001) argue, when it comes to actual purchases, “ethics go out the window” for most consumers.

Creyer and Ross (1997) studied the impact of corporate behaviour on consumer’s intention to buy a product or a service. The results demonstrated a great association between ethical corporate behaviour and buying decisions. Ethical behaviour was expected by consumers who were willing even to pay more for an “ethical” product. On the other hand, consumers believe that lower price would be a punishment for the unethical behaviour. Moreover, according to the study the extent to which consumers will reward or punish behaviour is a function of both
expectations and the perceived importance of ethical behaviour. According to Gildea (1994), 47% of consumers would prefer an ethical product or service. Moreover, the same study showed that 57% of consumers would be willing to punish an unethical company.

Creyer and Ross (1997) argue that the price premium that consumers are willing to pay reveals their intent to reward the ethical behaviour. Furthermore, Simon (1995) showed that 15% of his study’s sample declared that they would be willing to pay more for a product or a service that would be connected to an important social issue and the higher price would help to its accomplishment.

Only a few studies have tried to deepen the statement that consumers would accept a higher price for an ethical product. Laroche et al. (2001) found that 57% would be willing to pay a higher price for environmentally friendly products. According to Coddington (1990) environmentally conscious individuals would pay 5-10% more for ecologically compatible products. Suchard and Polonsky (1991) also found that consumers would be willing to pay between 15-20% more for green products, while Myburgh-Louw and O’Shaughnessy (1994) argue that the female consumers of their sample would even pay up to 40% more of a product which is proved to be green. On the other hand, Carrigan and Attala (2001) suggest that consumers will purchase an ethical product only if there are no costs to the consumer in terms of added price.

Crane and Matten (2003) argue that the ethical consumption is difficult to be defined by a full range of activities as this term includes the choice to make certain consumption choices because of personal and moral beliefs. The present paper represents an initial attempt to distinct the attributes of the ethical product and to evaluate the importance value of each attribute influencing consumer utility. More specifically, the current study aims at investigating the tradeoffs and relative importance of the characteristics of an ethical product in order to construct a model which could be used by marketers to calculate the profits or the break-even point of selling the bundled ethical product.

Methodology

Since the relevant literature provides only limited insights into the characteristics of the ethical product, the attributes used in the current study are based on Vassilikopoulou et al’s (2006) study, which investigated, among others, the attributes of an “ethical” shampoo. The research used qualitative data and concluded that the most important traits that an ethical product should contain are the following:

1. Not be tested on animals
2. No use of minors during the production process
3. A proportion of the product’s profits should be donated to a philanthropic cause
4. Its package is made by recycled materials
5. Fair trade

Those characteristics have been also used in the study of Nijssen and Douglas (2008) who examined the consumer world-mindedness and social-mindedness and their relation to exposure to other cultures and to store image. Apart from those characteristics, price of the ethical product is of special consideration in this study. In order to provide the price levels included in the study, the scale procedure of Pricing Sensitivity Measurement (Travis, 1982) was used. During a pilot study, 12 consumers were asked about their perceptions of price.

In order to examine the relative importance of the different factors and to study variations in the consumer utility, conjoint analysis was used. Conjoint analysis has been broadly used to estimate how respondents develop preferences for products, services or idea (real or hypothetical)
and to measure the trade-offs consumers make when making a decision (Hair et al., 1995). By asking consumers to express among a number of different product profiles, marketing could determine the importance that consumers are attaching to those attributes. Conjoint analysis was preferred as it allows for a more realistic decision model, because it forces subjects to evaluate an ethical product as a whole (bundled). Also, it permits the statistical testing of the null hypothesis that all the attributes have an equal utility in the aggregate model (Bajaj, 1998).

The basic model in the conjoint analysis is: \[ Y = b_1 + b_2 + b_3 + \ldots + b_n + \text{constant} + \varepsilon, \]
where:
- \( Y \) = consumer purchase intention
- \( b_i \) = beta weights (utilities) for the attributes of the ethical product
- \( \varepsilon \) = an error term

The stimulus set is a combination of four attributes and attribute levels (independent variables) which is presented to each respondent. The stimulus set is presented in Appendix 1. The full-profile approach to data collection was used. Thus, in the present study, there are \( 2 \times 2 \times 2 \times 2 \times 2 \times 6 = 192 \) manipulations. Conjoint analysis decreases the number of manipulations considerably (in the present case, the number of product descriptions decreases to 16). In particular, 16 design cards, ready to be used for utility calculations, were prepared after the completion of the orthogonal analysis matrix. An alternative orthogonal analysis matrix was used to develop 4 holdout (control) cards. Thus 20 evaluation cards were developed in order to be used by respondents. A 100-point rating scale was used for dependent variable measurement (Future purchases). End points of the scale were identified as "definitely would not buy" and "definitely would buy". In conjoint analysis, for each respondent, the coded attribute combinations were regressed using Ordinary Least Square (OLS). The conjoint cards were distributed to respondents by the researchers. Each respondent was asked to evaluate the 20 cards.

A total of 157 usable questionnaires were returned from an effective sample of 320, representing a return rate of 49%. The cards were evaluated and used for further analysis. 58.6% of the sample were women, and 41.4% were men. The mean age of the respondents is 32.5.

Results

The findings from the conjoint analysis indicate that “donations” was the most important attribute in determining purchase intentions (28%). The “lack of minors” accounted for 26%, “recycled materials” 24%, “animal testing” 13%, price 8% and 1% was explained by the “fair trade” attribution. The relevant importance of the attributes is presented in Figure 1.
Figure 1: Importance of the Attributes of Ethical Products

The relative importance of the attributes is also reflected in the utilities presented in Table 1.

**Table 1: Utilities**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Utility Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not tested on animal</td>
<td>5.905</td>
<td>1.899</td>
</tr>
<tr>
<td>No minors are used</td>
<td>11.834</td>
<td>1.899</td>
</tr>
<tr>
<td>Donations</td>
<td>12.576</td>
<td>1.899</td>
</tr>
<tr>
<td>Recycled Materials</td>
<td>10.894</td>
<td>1.899</td>
</tr>
<tr>
<td>Fair Trade</td>
<td>0.323</td>
<td>1.899</td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1€ extra</td>
<td>-1.494</td>
<td>1.097</td>
</tr>
<tr>
<td>2€ extra</td>
<td>-2.987</td>
<td>2.193</td>
</tr>
<tr>
<td>3€ extra</td>
<td>-4.481</td>
<td>3.290</td>
</tr>
<tr>
<td>4€ extra</td>
<td>-5.974</td>
<td>4.387</td>
</tr>
<tr>
<td>5€ extra</td>
<td>-7.468</td>
<td>5.483</td>
</tr>
<tr>
<td>6€ extra</td>
<td>-8.961</td>
<td>6.580</td>
</tr>
<tr>
<td>Constant</td>
<td>53.565</td>
<td>3.799</td>
</tr>
</tbody>
</table>

For price, linear (less) relation to scores was used, while for the other attributes, discrete relation was preferred.
The utilities extracted could be used for further analysis in market simulators which are based on comparing total utilities or euro values of alternative offerings. It is assumed that consumers will select the offering that has the highest utility or net euro value. Conjoint analysis facilitates the optimization of prices and features which involves the examining all possible combinations.

Let:

- \( a \) = cost for the production of a shampoo that has not been tested on animals
- \( b \) = cost if not minors used
- \( c \) = cost of donations
- \( d \) = cost of a recycled materials package
- \( e \) = cost of fair trade certification
- \( v \) = sales volume

Cost per item = \( \frac{a}{v} + \frac{b}{v} + \frac{c}{v} + \frac{d}{v} + \frac{e}{v} \)

- \( X_1 \) = dichotomous variable: not tested on animals / tested on animals/
- \( X_2 \) = dichotomous variable: minors are not used / minors are used /
- \( X_3 \) = dichotomous variable: the product supports a charitable cause / the product does not support a charitable cause
- \( X_4 \) = dichotomous variable: recycled materials package/ not recycled materials package
- \( X_5 \) = dichotomous variable: fair trade certified / fair trade not certified

Max (Value of Product for the Customer) = 5.905X1 + 11.834X2 + 12.574X3 + 10.894X4 + 0.323X5 - 2.987P, where \( P = a/v \times X_1 + b/v \times X_2 + c/v \times X_3 \)

If the costs are known, then the company could estimate the optimal price for the bundled ethical product that wish to promote.

**Marketing Implications**

Most of the companies decide to adopt ethical marketing strategies as the benefits are numerous and they expect that business ethics would improve their market position compared to direct competitors. The basic competitive of ethical strategies implementation advantage is mainly connected to the improvement of the company’s social image (Foley & Jayawardhena 2001, Singhapakdi et al. 1995) and the increase of its profitability (Balabanis et al. 1998; Zairi & Peters 2002, Aupperle et al. 1985). According to Mescon and Tilson (1987), ethics ameliorates the company’s social image and, as a result, the number of consumers who prefer the socially responsible company’s products increases.

A stream of the research on ethical consumption have revealed that consumers the ethical components of products (Auger et al, 2003). Consumers are willing to incorporate ethical considerations into their purchase decisions (Mintel, 1994) and prefer companies that are perceived as socially responsible (Forte and Lamont, 1998). The current research demonstrated that donations, the lack of minorities during the production process and the preference of recycled materials increase consumer utility and increase the intention of future purchases. Previous studies have mentioned that charitable donations ameliorates corporate image (Cowton and Piercy, 1984). Apart from being an inextricable component of an ethical product, donations may also be considered as an opportunity for companies to meet their social responsibilities to their local community and in the same time to attract and retain ethical customers. Based on the results of the current study, donations are the most important characteristic of a product wishing to be
positioned as ethical. However, a company should give attention to both amount given and the selection of the donation’s recipient. Those two decisions for (i.e., deciding to whom, and how much to give) have been mentioned by previous studies as important to any retailer who aims at improving its image through charitable donations (Cowton and Piercy, 1984).

Furthermore, results of this study showed that the lack of minors in the production process is an important feature of ethical products. Minors are frequently used by multinational companies in order to decrease their costs. As Anderson (2000) notes, such factories pay their workers with very low wages. Mock (2000) adds that numerous children work in sweatshops, some of them in dangerous or tough conditions. Respondents of this study believe that the minors should not be involved in the production of an ethical product. Therefore, companies promoting ethical products should ensure consumers about this aspect.

A package made by recycled materials was also found to be an important trait of an ethical product as perceived by consumers. The recycling process has initially come about due to resources limitations. However, the growing of recycling continued because of a rapidly increased concern for the natural environment (Brodin and Anderson, 2008). Respondents of the current study consider a shampoo which package is made by recycled materials as ethical. Companies should evaluate the possibilities of preferring recycled packages, as this has a central impact on consumers. The avoidance of animal testing and the fair trade were ranked lower by consumers in this survey. Nevertheless, both are regarded as ethical products’ components.

Even though the five attributions of an ethical product as perceived by consumers were discussed separately, in the business environment it’s more realistic to talk about the ethical bundled product. A product may be consisted of two or more ethical characteristics, whereas companies would like to estimate the total value of the product to the customer in situation where various combinations of the ethical attributes are made. For this reason, this paper introduces the notion of the bundled ethical product. Conjoint analysis may contribute to the analysis of the total value of the product when cost are known or could be calculated. However, as detail costs are sometimes not available, the major limitation in doing these types of optimization is the need of precise estimations of marginal of variable costs of the proposed products. Furthermore, another limitation of the current study is the inclusion of only 5 important traits of an ethical product. This means that some other characteristics were not included in the analysis. Future research could examine the optimal allocation of the product budget through simulations. It would also be interesting to segment the ethical market and detect utilities and customer values for each segment separately. Also, further research could examine the impact of various levels of each attribute on customer value (for example different amount given as donations). Finally, results could be compared to other countries and cultures, so as similarities and dissimilarities could be discussed.
References


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Appendix

Appendix 1: Factors and Levels Used in the Conjoint

<table>
<thead>
<tr>
<th>Factor</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tested on animals</td>
<td>The shampoo has been tested on animals</td>
</tr>
<tr>
<td></td>
<td>No information is given about the testing on animals</td>
</tr>
<tr>
<td>Minors</td>
<td>No use of minors during the production process</td>
</tr>
<tr>
<td></td>
<td>No information is given about the using of minors</td>
</tr>
<tr>
<td>Donations</td>
<td>A proportion of the product’s profits is donated to a philanthropic cause</td>
</tr>
<tr>
<td></td>
<td>No donation is given to a philanthropic cause</td>
</tr>
<tr>
<td>Recycled package</td>
<td>Its package is made by recycled materials</td>
</tr>
<tr>
<td></td>
<td>Its package is not made by recycled materials</td>
</tr>
<tr>
<td>Fair trade</td>
<td>The shampoo is fair trade certified</td>
</tr>
<tr>
<td></td>
<td>The shampoo is not fair trade certified</td>
</tr>
<tr>
<td>Price</td>
<td>1€ extra</td>
</tr>
<tr>
<td></td>
<td>2€ extra</td>
</tr>
<tr>
<td></td>
<td>3€ extra</td>
</tr>
<tr>
<td></td>
<td>4€ extra</td>
</tr>
<tr>
<td></td>
<td>5€ extra</td>
</tr>
<tr>
<td></td>
<td>6€ extra</td>
</tr>
</tbody>
</table>