The Impact of Organic Certification Information on Consumer's Perceptions of Organic Products

David Wong, Claire Loh, Vanessa Quintal, Curtin University of Technology, Australia

Abstract

The Australian organic food industry is extremely dynamic in nature. From a consumer marketing perspective, an important area requiring further research is in the impact of organic certification on consumer product perceptions. This study examined the impact of organic certification, through the use of an experimental design, to measure consumer product perceptions derived from exposure to different levels of organic certification information on product labels. The analysis revealed organic certification information does impact ultimate consumer product perceptions – in particular with regards to the product's impact on the environment and its health benefits. Recommendations from this study include the importance of properly educating Australian consumers about organic certification, and developing consumer confidence in organic certification information.

Introduction

Organic products are one of the fastest growing food sectors in the world and are currently produced and consumed in over 130 countries (Leu, 2006; Krystallis & Chryssohoidis, 2005). Over the past twenty years, growth has steadily increased within the organic foods industry in terms of new farms, products and numbers of consumers. Market analysts currently forecast annual organic industry growth rates to be between 10-30% around the world (Leu, 2006).

Any organic food product sold in Australia must by law display a certification symbol or number (Kinnear, 2006). When the consumer sees an organic certification symbol, they can be sure that the product complies with minimum government standards. These standards are set by the Australian Quarantine and Inspection Service (AQIS) and meet international standards. There are several certification bodies that endorse products which are available in Australia, with each body having its own symbol. The most popular organic certification symbol is the "Bud Logo" created by the Biological Farmers of Australia (BFA). Currently the "Bud Logo" appears on over 70% of all certified organic foods sold in Australia, therefore it is generally considered to be one of the most trusted and valued organic certification symbols. Although in the Australian market the word 'organic' isn't legally protected, the organic industry recognises products certified by AQIS-accrediting organisations as 'genuine organic' (Wynen, 2006).

Significance and Scope of this Study

Currently, organic certification is in a state of flux in Australia (Harris & Cole 2003). The main issue is that there is no obvious/single certifier, which has resulted in the organic industry encountering a vast degree of marketplace confusion. Organic certification was intended to ensure integrity and authenticity in trade, delivering value for service for certified clients whilst protecting the rights and interests of consumers of organic products (Organic Annual Report, 2004). Currently, this is not what organic certification is delivering within Australia, with some manufacturers using the term 'organic' loosely, adding to the distrust and confusion of organic certification schemes among segments of the population. There is

therefore a need for a definite recognised standard through controlled organic certification schemes.

From a consumer marketing perspective, an important area requiring further research is in the impact of organic certification on consumer product perceptions. This study will examine the impact of organic certification, through the use of an experimental design, to measure consumer product perceptions derived from exposure to different levels of organic certification information on product labels. The dimensions of their product perceptions will include the overall quality of the product, the environmental impact of the product, and how healthy the product is to the consumer.

Relevant Literature

Product Label Design

Consumers seek a diverse range of information to reassure themselves that their purchase decisions will live up to their personal expectations. Dimara and Skuras (2005) argue that product labels, besides being a direct shopping aid, play an important role in that they are related to manufacturers' strategic choices and to the operation of regulatory and information policies. Therefore, product labels are considered vital to consumers because they are the primary source of information, regarding health, safety, nutrition, responsibility toward environment, product associations with geographic area, traceability, quality certification and methods of production.

Van Trijp et al. (1996) argues that an effective product label is a valuable asset because it assists imperfectly informed consumers in their decision making process by structuring their information environment. Additionally it adds value to the raw material, which may lead to higher consumption, higher prices, greater profit margins and competitive marketplace advantages. According to research conducted by Phillips and Bradshaw (1993), it is reasonable to suggest that unplanned purchase of grocery items might be as high as 51% of total purchases. This indicates that a significant opportunity exists when it comes to customer persuasion of purchase decisions. The modern marketplace is a highly competitive environment therefore it's important not to underestimate the value of accurately communicating product values on label design, as well as achieving an appropriate level of aesthetics.

When examining the importance of label design it's important to take into account the concept of trust. Hansen and Kull (1994) state that uncertainty about what a label means is often accompanied by mistrust, and that a consumer will only use a label (as intended) in decision making if he or she trusts the message it conveys. Recent research revealed that Australian consumers exhibit diverse levels of trust in organic product labels. A survey conducted by Nourish Foods Pty Ltd and Metier Consulting (Meldrum, 2006), researched the attitudes and intended behaviours of over 300 Australian organic consumers. According to James Meldrum (2006, p.59) "the subject of labelling integrity is a key issue for the organic industry, particularly as organics become more mainstream and newer manufacturers and producers enter the market." He further argues, "Consumers need to be able to buy with confidence that a product labelled 'organic' is legitimately and authentically organic.

The basic principle of eco-labels involves conveying information to consumers about the environmental implications of purchasing a particular product, so that consumers who care

about such effects can express their desires in the marketplace (Tang, Fryxell, Chow, 2004). Organic labelling is commonly classified as a type of eco-label.

Scholars like Thogersen (2002) encourage the promotion of 'green' consumer behaviour with eco-labelling. Therefore it may be suggested that the concept of eco-labelling is a subcomponent of green marketing. Green marketing has been a growing research area for the last three decades (Hartmann, Ibanez & Sainz, 2005). This importance is largely attributed to the growth in the environmental consumerism movement through-out the world (Polonsky & Ottman, 1998). According to Thogersen (2002) "Consumer decision making concerning eco-labelled products involves considerations about the label as well as the specific product itself. Through the eyes of the consumer, a product that comes with an eco-label is an innovation. It is deemed a new product that differs more or less from the non-eco-labelled products in the same category." In particular, low involvement products such as groceries, are experiencing the impact of this significant shift in consumer preferences (Thogersen, 2002).

Relationship of Organic Certification and Product Perceptions

The significance of organic certification schemes largely depends on consumer perceptions of whether or not they are comprehendible and effective. Certification schemes are viewed as promises or guarantees of quality, authenticity, and proper agriculture practice and producer protection. With regards to eco-labelling Thogersen (2002) acknowledged that there was a need for more systematic evaluation of eco-labelling schemes in the organic industry. That study concluded that future research should investigate the effect of label design on organic consumer perceptions and preferences. Special attention should be directed at design factors that influence how consumers use labelling when evaluating perceptions and decision making.

Methodology

The questionnaire was developed based on in-depth reviews of various secondary sources including international labelling practices, organic standards and consumer perceptions of certification schemes. The final questionnaire consists of five sections. The first three sections utilised seven-point Likert scales with 1 being 'strongly disagree' and 7 being 'strongly agree'. These three sections measured the consumer's perceptions of the product according to three major dimensions: (1) product quality, (2) the environmental impact of product and (3) product's health benefits. Scales for the first section included 16 items and was adapted from Shim & Gehrt, 1996; Bruner, James & Hensel, 2001. Scales for the second section on environmental impact included nine items and were adapted and modernised from studies conducted by Watts and Suter (2006), and Dunlap and Van Liere (1978). Scales for the third section on health benefits included 10 items and were adapted from a study by Peracchio and Tybout (1996). The fourth section measured the respondent's general shopping behaviour. The eight items in this section identified how experienced respondents were in shopping activities, and were adapted from Fortin and Renton (2003). The fifth and last section on demographics asks respondents four simple demographic questions on age, income, gender and postcode to assist in the classification during the final analysis.

The questionnaires were administered to judgmentally selected groups of undergraduate and postgraduate students in a large Australian University. The criterion for selection was to achieve an adequate representation of potential consumers of organic products. The experimental procedure for this study involved providing respondents with two stimuli. The first stimulus was one of the three proposed label design (non-organic – no organic

information, organic - product was indicated as organic and organic certified – product was indicated as certified organic). The second stimulus involved the respondent given a sample of the food product for tasting (one of non-organic, organic and organic certified olive oil). The decision to choose olive oil as the food product as oppose to other food products was because the appropriate product would need to be to something that most respondents had heard of and used at some point, it was known to have organic alternatives in the marketplace and it could be easily sampled. Olive oil met these criteria and was therefore an appropriate product choice. The importance of the visual and taste stimulus, as well as individual knowledge and attitudes was highlighted as the questionnaire was distributed. After which students were allowed the necessary time to complete the questionnaire. A total of 349 completed questionnaires were collected.

Results

The final sample sizes of each of the three label designs are shown in below in Table 1.

Label designs	Number of respondents	Percentage (%)
Label 1- non-organic	120	34%
Label 2 - organic	120	34%
Label 3 - organic certified	109	31%
Ν	349	100%

Table 1: Size of Sample Groups

Organic Certification Labelling on Product Perceptions

Organic certification information on product labels was found to impact on product perceptions on several items for environmental impact and health benefits of the product. These results are shown in Table 2. No significant relationships were found for perceptions of product quality.

Table 2 – One-way ANOVA for Label Design and selected Perceptions of Environmental Impact and Health Benefits

Variable	Group	Mean	ANOVA Sig.
It seems to me that there were no	Non-organic	4.42	
chemical/ pesticides used in making this product [Environmental Impact]	Organic	5.00	0.002
	Organic certified	4.82	
I would think this product has a	Non-organic	rganic 4.20	
long way to go to be considered	Organic	4.11	0.013
[Environmental Impact]	Organic certified	3.73	
This product is likely to reduce my cholesterol levels [Health Benefits]	Non-organic	4.03	0.360

Organic	4.48
Certified Organic	3.99

Discussion and Conclusion

Based on the literature it was predicted that organic certification information on label designs would have a positive influence on consumer product perceptions, as it is considered a valuable component of label design. The literature has revealed several indicators that label designs with organic certification information would be perceived more positively. The concept of trust is relevant as consumer confidence in labelling is vital in determining final product perception (Galleastegui, 2002; MAPP, 2001). The analysis revealed significant evidence which suggested that certain consumers have little confidence in current Australian organic certification structure. This lack of confidence is primarily derived from increased marketplace scepticism evidenced from the similar ratings across some items for organic and certified organic labels.

The analysis revealed organic certification information does impact ultimate consumer product perceptions – in particular with regards to the product's impact on the environment and its health benefits. The majority of individuals responded strongly to organic labelling and that organic certification information in label designs will positively influence environmental-friendliness product perceptions.

Recommendations from this study include the importance of properly educating Australian consumers about organic certification, developing consumer confidence in organic certification information, effectively conveying the standards of organic certification within the marketplace and utilising current social trends to increase organic awareness in Australia. In stating each of these recommendations it is apparent that this study supports the proposal put forward by the BFA and Macro Wholefoods, regarding the implementation of a unified Australian organic certification standard. Based on this position, these recommendations are anticipated to provide guidance to the Australian organic industry on how to effectively implement a unified Australian standard and ensure future growth.

Limitations and Further Research

Although this research provides an insight into a number of significant factors which impact on the effectiveness of organic certification, there were still some limitations which restricted the capacity of the study. Of note, the organic product used in this study was the same limiting the generalization of the findings. Therefore future studies should attempt to replicate the current results using different stimuli. Further research could also examine the moderating influence of product knowledge and familiarity on the relationship between organic certification information and product perceptions.

References

Bruner, G, James, K & Hensel, J 2001, Marketing Scales Handbook – A Compilation of Multi-Item Measures, American Marketing Association, Chicago.

Dimara, E & Skuras, D 2005, 'Consumers demand for informative labelling of quality food and drink products: a European Union case study' Journal of Consumer Marketing, vol. 22, no. 2, pp. 90-100.

Dunlap, R & Van Liere, K 1978, 'The New Environmental Paradigm', The Journal of Environmental Education, vol. 9, pp. 10-19.

Fortin, D & Renton, M 2003, 'Consumer acceptance of genetically modified foods in New Zealand', British Food Journal, vol. 105, no. 1-2, pp. 42-58.

Hansen, U & Kull, S 1994, 'Eco-labels as environmental information tool: Reasoning and interest' Marketing, vol. 4, no. 4, pp. 265-273.

Harris, J & Cole, A 2003, 'The Role for Government in Ecolabelling - On the Scenes or Behind the Scenes?', Australian Academy of Science, Canberra.

Hartmann, P, Ibanez, V & Sainz, F 2006, 'Green branding effects on attitude: functional versus emotional positioning strategies' Marketing Intelligence and Planning, vol. 23, no. 1, pp. 9-29.

Kinnear, S 2006, 'An Organic Standard for Australia', Biological Farmers of Australia Brisbane, Australia.

Krystallis, A & Chryssohoidis, G 2005, 'Consumers' willingness to pay for organic food – Factors that affect it and variation per organic product type', British Food Journal, vol. 107, no. 5, pp. 320-343.

Leu, A 2005, The Australian Organic Industry Unites, Organic News Ltd.

Leu, A 2006, Media Release - Organic Industry Booming, Organic News Ltd.

Lohr, R 1998, 'The impact of organic certification on the German meat industry', European Journal of Marketing, vol 24, pp.78-99

MAPP 2001, 'Den Forbrugerbaserede Værdi af en Mærkning: Med Fokus på Svanemærket', The Aarhus School of Business Centre for Research on Customer Relations in the Food Sector (MAPP).

Martin, B & Simintiras, A 1995, 'The impact of green product lines on the environment: does what they know affect how they feel?', Marketing Intelligence and Planning, vol.13, no. 4, pp.16-23.

Meldrum, J 2006, 'New survey reveals trust in organic food labelling standards is divided, with one-third of consumers lacking trust in labels' Nourish Media Release, January., pp. 1-5.

Peracchio, L & Tybout, A 1996, 'The Moderating Role of Prior Knowledge in Schema-Based Product Evaluation', JCR, vol. 23, pp. 177-92.

Phillips, H & Bradshaw, R 1993, How customers actually shop: customer interaction with the point of sale, Journal of the Market Research Society, vol. 35, no. 1, pp. 51-62.

Polonsky, M & Ottman, J 1998, 'Stakeholders' contribution to the green new product development process', Journal of Marketing Management, vol. 14, no.6, pp.533-57.

Shim, S & Gehrt, K 1996, 'Hispanic and Native American Adolescents: An Exploratory Study of Their Approach to Shopping', JR, vol. 72, no. 3, pp. 307-324.

Tang, E, Fryxell, G & Chow, C 2004, 'Visual and Verbal Communication in the Design of Eco-lab for Green consumer products', The Haworth Press, vol. 16, non. 4, pp. 85-105.

Thogersen, J 2002, Promoting "Green" Consumer Behaviour with Eco-Labels, New National Academy of Sciences, viewed September 20 2006, http://www.nap.edu/openbook/0309084229/html/83.html

Vaidyanathan, R & Aggawal, P 2005, 'Using commitments to drive consistency: Enhancing the Effectiveness of Cause-related Marketing Communications', Journal of Marketing Communications, vol. 11, no. 4, pp. 231-246.

Van Trijp, H & Meulenberg, M 1996, Marketing and consumer behaviour with respect to foods. In Food choice, acceptance and consumption', Blackie Academic & Professional, Melbourne.

Watts, M & Sutter, H 2006, A Role for organic farming in sustainable rural landscapes, Australian Conservation Foundation.

Wynen, E 2006, 'Organic beef production and marketing in Australia' Journal of Organic Systems, vol. 1, no. 1.