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Executive Summaries

RESEARCH

Who Should Certify the Safety of Genetically Modified Foods?

Gregory Baker and Michael Mazzocco

In this research we use conjoint analysis to evaluate two alternatives for assuaging consumers' fears regarding genetically modified (GM) foods. Two surveys were developed to determine the effectiveness of a familiar brand and government certification in addressing these concerns. Respondents to the surveys were asked to rank eight hypothetical products described by various levels of several attributes. In the brand survey, the attributes were brand (branded or unbranded), price, and type of production technology (genetic engineering or conventional). In the certification survey, the attributes were certification (government certification or no certification), price, and type of production technology.

The results of both the brand and certification models indicate that there is a fairly strong price penalty associated with the use of genetically modified organisms (GMOs). In the aggregate, only the government certification premium was sufficient to offset this price penalty; the brand premium was insufficient to offset the GMO price penalty. An analysis of individual level results supported the results of the aggregate analysis. The certification premium was at least as great as the GMO price penalty for over half (54.45%) of the survey participants, whereas the brand premium was sufficient to offset the GMO price penalty for only about a third (36.44%) of the respondents.

We also explored the factors associated with strong brand and certification preferences. Individuals with the strongest brand preferences tended to be the most risk averse, the least educated, and non-white. Those people with the strongest certification preferences tended to be the most risk averse and placed the most trust in government. These findings indicate that consumers may seek the assurance offered by government certification and brands when confronted with product choices they deem to be risky.

We conclude that government certification would likely be more effective than the use of a familiar brand in assuaging consumers' concerns over GMO technology. We speculate that this finding is explained by the high level of confidence that most U.S. consumers have in the government agencies charged with protecting consumer health and safety and the uncertainty over what brands offer with respect to product safety.

Strategy Development in a Turbulent Business Climate: Concepts and Methods

Michael Boehlje, Allan W. Gray and Joshua D. Detre

The accelerating speed of change in the food and agribusiness industries is resulting in more risk and uncertainty – the future is becoming much less predictable. Not only is the future more uncertain, the drivers of that uncertainty are also changing – strategic risk which generally has a low probability of occurrence, but large consequences is becoming an increasingly important component of the decision environment Managing these risks requires not only new assessment tools such as scorecarding and mapping, but also more systematic decision frameworks.

The risk assessment tools presented assist in determining what strategic risks the company is facing; the qualitative assessment of the likelihood and potential consequences of these strategic risks; the correct approach to manage those strategic risks (avoid, retain, reduce, or transfer/share) and the choice of a particular risk mitigation strategy. In many cases managing strategic risks is best approached with an options mentality- -in essence identifying and creating growth, divest, exit, and pause or follow-on options that truncate the loss exposure and allow the capture of profit potential. Thus, the option transforms strategy under uncertainty from a defensive posture of minimizing losses and protecting positions to an offensive posture of creating and capturing value.

Strategic Positioning Under Agricultural Structural Change: A Critique of Long Jump Co-operative Ventures

Peter Goldsmith and Hamish Gow

Structural change in US agriculture has disrupted the traditional organization of the supply chain. Not only does the scale increase of firms common during the industrial period (1970-1995) continue, but also with the rise of a knowledge-based economy, new organizational forms and supply chain linkages are proliferating. Examples are the radical transformation of the relationship between input suppliers and producers in the biotech arena, the dominance of the swine industry by the integrated model, the rise of marketing and production contracting, and the arrival of multi-member closed producer organizations such as the new generation cooperatives and limited liability companies. The focus of this research is these new integrated producer organizations.

Much of the activity and subsequent analysis of new producer organizations has focused on value-added opportunities through integration (i.e., Merrett et al, 2003). There are numerous examples from pasta plants and egg breaking, to cattle feeding, hog slaughter, and alcohol production. These value-added opportunities we define as long jump ventures. That is, they lie outside the core competencies of the principles in the firm, the producers. Strategic management theory (Quinn, 1977; Prahalad and Bettis, 1986; Mintzberg, 1987; Prahalad, 1990; Quinn et al., 1990; Prahalad and Hamel, 1993; Mintzberg, 1994; Mintzberg and Quinn, 1996) suggests that there may be alternative opportunities available to producer organizations that better leverage their core competencies; short jump ventures. Short jump ventures are value-creating opportunities that involve a minimum R&D, less capital, less risk, and less direct specialized knowledge.

The objective of this paper is to study strategic options for production agriculture in addition to the commodity business model. From this analysis of strategic positioning, the paper introduces relationship management as a viable strategic alternative for commodity producers looking add value. Finally, a case study of Atkins Ranch, a US brand of the Wairarapa Lamb Cooperative of New Zealand is introduced. The case serves not only as an example of relationship management in agriculture, but also demonstrates how producers can work within their own core competencies, leverage knowledge assets, and avoid highly specific fixed assets.

Consumer Preferences for Quality Foods from a South European Perspective: A Conjoint Analysis Implementation on Greek Olive Oil

Athanasios Krystallis and Mitchell Ness

Despite strong state financial support received during the 90s, the main problem faced by the Greek olive oil industry is associated with insufficient adoption of modern marketing strategies. Only 35-38% of domestic consumption is represented by well-known brands of bottled olive oil, packed according to EU legislation. On the other hand, many urban-based Greek families traditionally provide for their household needs with olive oil bought directly from producers. Yet, they know little about olive oil qualities and even less about how to distinguish among them: 30-33% of annual consumption relies upon this traditional source and an additional 30-35% is distributed regionally in bulk by individual farmers.

Contrary to the traditional approaches so far, study's objective is to prove that younger, more educated and of higher income Greek consumers prefer "quality" olive oil brands – quality being defined as a bundle of extrinsic quality cues such as quality assurance labels, health-related information, country-of-origin indication, bottling material and price. The aim of the research is, through conjoint analysis (CA), to describe and analyze consumer preferences using a stratified sample of urban consumers. Special emphasis is given to the development and evaluation of different quality marketing mixes and the analysis of the importance consumers attach to the series of extrinsic quality cues used. The identification of different consumer segments through cluster and discriminate analyses in terms of this importance and the development of their profile are also emphasized.

CA reveals that the most preferred or "ideal" product is an olive oil product that has a "best before date" on the label, both organic and PDO labels, both ISO and HACCP certification, is presented in a glass bottle, country of origin information, for a price of € 6.76/L. Average importance percentages indicate that the most important features are those indicating country of origin, organic labeling and health information, and that PDO labeling, price and glass bottle are of lesser importance. Cluster analysis led to the identification of five clusters, of which Cluster 1, termed "health and quality conscious", young, educated, wealthy consumer of both sexes, is the cluster that satisfies more than any other the hypothesis of the existence of a health and quality conscious consumer group. Cluster 1 attaches the highest importance of all clusters to health information, the second highest to the organic label and ISO certification, and an average importance to the country of origin and HACCP certification, overall indicating high level of health and quality consciousness.

Implementation of CA and its corresponding findings validate the managerial objective of the present study. The identification of a well-defined quality and health conscious segment in terms of size, socio-demographic composition and purchasing behavior, improves the state of knowledge of the segmentation of the Greek olive oil market. Further, it can serve as a positioning strategy guide. The fact that this quality and health conscious segment's purchasing motives and overall behavior can be accurately described should constitute a clear incentive for the highly competitive, market-oriented firms to target differentiated market segments. Having accurately measured potential market shares acquired by high quality, differentiated olive oil brands, the current work contributes to the survival and profitability of those firms of the sector that would adopt the corresponding marketing strategy. From this point of view, the present analysis reduces the observed deficiency of the Greek olive oil research towards a more effective marketing orientation and enhances Greece's effort to create quality food products with higher added value and worldwide competitiveness for the domestic and the global consumer.

An American BSE Crisis: Has it affected the Value of Traceability and Country-of-Origin Certifications for US and Canadian Beef?

Ruby Ward, DeeVon Bailey and Robert Jensen

With a BSE incident in the United States (US) in December of 2003, questions arose about the effect of the incident on consumers in the US. The purpose of this paper is to determine if traceability systems for beef can help preserve consumer demand following the discovery of BSE. We focus specifically on the US and examine whether consumer willingness to accept non-traceable beef either imported from Canada or produced domestically changed following the US BSE case in December 2003.

Auctions were conducted approximately 3 weeks before and after the December 2003 incident. Participants were given $15 and a lunch including a beef sandwich that originated in the United States and was traceable. Participants were then given an opportunity to bid on the bribe necessary for them to switch their sandwich for one of four others including sandwiches that were not traceable and from Canada.

It was found that overall there was no effect on the size of the bribes needed by the BSE incidence. However, for some groups there were important changes. The results indicate that information about traceability and country of origin is valuable to consumers. They also suggest that greater uncertainty about certifications and assurances for beef existed among the participants after December 23rd than before December 23rd. While this is not surprising, it indicates that US consumers, while not necessarily changing beef buying habits, were subject to some "shock" to their overall perceptions about beef and certifications and assurances about beef. Perhaps one of the most important findings was that participants' demand for Canadian beef was more adversely affected by the US BSE crisis than was the demand for US beef. This implies that US consumers have placed at least some of the "blame" for the US BSE incident on Canada because the subject animal was born there.

The results suggest that a large percentage of US consumers would support a mandatory animal ID system in the US and would be willing to pay something for it. Additional work is needed to confirm these results. However, they confirm that the US BSE case caused some important changes in American consumer attitudes. Consequently, the US beef industry should not assume that no noticeable change in US consumer attitudes about beef occurred after December 23, 2003. Consumers are more uncertain about beef products than they were prior to December 23rd. Additional BSE cases could exacerbate this uncertainty. The movement toward animal ID systems appears to be a good strategic move by the US beef industry and the US government, based on participants' stated support for such systems.

INDUSTRY INTERVIEW

Dan Dillon, CEO of Welch Foods

Vincent Amanor-Boadu and Michael Boland

Welch Foods saw its purpose as building long-term value in the cooperative and releasing that value back to the grower-owners over time and to provide a reliable market for their grapes through excellence in product quality, customer service, market responsiveness and consumer satisfaction. Welch's processed 50 percent of the Concord grapes and 80 percent of the Niagara grapes produced in the United States into juices, jellies, jams and other products.

Welch Foods (www.welchs.com) is a national farmer-owned food cooperative, with sales in all 50 states and more than 40 countries. Welch's, which had sales in 2003 of $579 million, is the world's leading marketer of Concord and Niagara grape-based products, including grape juice and jelly. The company produces a variety of other fruit-based products, including 100% juices, juice cocktails and drinks in the following forms: bottled, refrigerated, single-serve, and frozen and shelf-stable concentrates. In addition, Welch's produces a number of fruit spread products under both the Welch's and BAMA brand names.

Dan joined Welch's in 1981 as vice president of marketing, became senior vice president in 1991, chief operating officer in 1994, and chief executive officer in 1995. He describes the challenges and rewards of operating a cooperatively-organized branded packaged goods company in an interview which was done October 30, 2003 as part of the Farmer Cooperative conference in Kansas City.