Sustainable Business Model for Organic Agriculture –
Lee Zen Organic Corporation in Taiwan
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Abstract
Studies have shown that consumer goodwill is often renewable without much cost. Firms are more interested in direct marketing as it allows them to capitalize on consumer goodwill. Other studies have shown that firms which practice corporate social responsibilities, such as conservation, give them a marketing edge. Another body of research has emphasis of product quality being of utmost importance in earning consumer loyalty and goodwill. One difficulty for many consumers wishing to buy organic products is the veracity of firms’ organic claims. There are multiple channels for marketing organic products in Taiwan, including specialty shops, supermarkets and chain stores. Lee Zen is one successful supply-chain growing exponentially in Taiwan. It currently has 160 ha. of land, hundred and half contract and accredited farmers, three logistics centers and 68 stores, forming a holistic supply system in Taiwan and selling organic fresh produce and processed food. The purpose of this study is to investigate the factors contributing to sustainability of the chain, including aspects in production, marketing and distribution. In-depth interviews were conducted with Lee Zen contract farmers, logistic managers, and business unit managers. The results showed that Lee Zen was able to earn considerable consumer goodwill through its practice of corporate social responsibilities. At the supply side, Lee Zen was trusted by contract farmers, and by the consumers at the demand side for their organic practices. It is coincided with western scholars’ wheel of wellness theory, rule or principle of enlightenment business, Senge’s mental models, or Confucian individual success model. This study indicates that supplying, marketing and distributing organic products requiring the trust of producers and consumers may benefit from having a vision that is ethical and socially responsible.

Keywords: organic agriculture, sustainable business model, production, marketing and distribution.

Background
Koltiler (1972) found that the consumer movement was a phenomenon on the U.S. business scene. Consumerism was inevitable, enduring, beneficial, pro-marketing and profitable. So enlightened market theory was good in the long run for consumers as well as business. Mehrotra (1984) indicated that the goal of a business was to satisfy the needs of

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consumers. A new concept of societal marketing is a basis for earning increased consumer goodwill and profit. Businesses measured marketing productivity on the basis of building consumer goodwill, which was not generated on the basis of short-term profits, but through planning for long-term survival. Hawking (1987) used cost-benefit analysis to examine new approaches to marketing but found that although the list of costs was easy to compile, but the traditional approach to the analysis did not account for consumer goodwill. A dynamic model was presented for allocating retail space; it incorporated the effect of consumer goodwill, which is carried over when retailers satisfy consumer preferences over time (Hawkins, 1987). Like a renewable natural resource, consumer goodwill can be over-exploited (Hurst, 2008).

Johansson (1994) defined the notion of ‘greening businesses’ in response to the governance concept of environmentally sustainable economic development and indicated that for business to seek sustainability was not only a social responsibility, but also the key to the success of operation. The International Chamber of Commerce released 16 principles in a business charter for sustainable development in 1991. Corporate commitment within the larger domain of sustainable development was a profit generator that predicted share price appreciation. According to Dow Chairman Frank Popoff, those companies that could not adapt to sustainable development might go out of business (Feltmate & Schofield, 1999). In 2005, Wal-Mart launched a global environmental sustainability program focused on three top-line goals: to be supplied with 100% renewable energy; to create zero waste; and to sell products that sustain the world's resources and environment. Dealing with organic apparel has required the company to follow a completely different business model (Speer, 2007).

For modern business to become socially responsible and sustainable, one approach is to adopt green thinking in the operational strategies, business culture, and human resources management in order to save energy, reduce carbon emission, dispose waste and harmful materials and introduce green products (National Central University, 2009). The LOHAS model of the current sobering economy has demonstrated consumers’ willingness to pay extra money for green labeling goods (Toane, 2009). Some companies have profited from people wanting to do the right thing, but a lot of companies are bringing their green merchandise into comparable price points (Toane, 2009). Healthy Beverage Company is well-known and started with a mandate for a sustainable business model and to create healthy, organic beverages, and their mission has never changed (Slack, 2009). Companies built trust that leads to the retention of loyal customers. If they are experienced marketers, they will find new ways to think about and operational integrity (Beasty, 2007).

Previously, businesses only paid attention to the benefit of reducing costs for each division. Modern businesses integrate logistics, sought cooperation between upper and lower stream and form a coalition of value and supply chain. Based on mutual trust between business and their suppliers a new model of collaborative planning, forecasting,
replenishment (CPFR) emerged, in order to increase the level of customer services (Yeh and Lai, 2009).

Many Western people seemed to dignify the influence of non profit organization (NPO) as if third sector besides public and private sectors. This sector in Taiwan offered many public welfare activities under limited donations and government subsidies and the recognition of the value of the sector has gradually increased (Lo & Taiwan Public Welfare Information Center, 2006). The Fu Che Buddhist Association and its sub group Tze-Xin Organic Agriculture Foundation, TOAF founded by Master Monk Ze-Chang, because he saw conventional farming methods are cause for many concerns relating to chemical and pesticide use, soil degradation and non-sustainable production. It is feared that these problems may ultimately lead to a fall in agricultural production and subsequent food shortages and conflicts.

In response to these concerns, so he rented 160 hectares of land from Taiwan Sugar Corporation Ltd. for planting organic crops, and to start a simple selling room for organic vegetables and fruit in 1996. The theme unit of TOAF was a school, called Fu Che Primary and Middle School and also called the Fu Che Educational Park (referred to below simply as Park)-a place for incubating a new organic force. It was TOAF operated the large organic farm and directly ran a chain stores system called Lee Zen Shops around Taiwan. Until now sixty-eight convenience shops and three logistics centers have been set-up, spread in northern, middle, and southern of Taiwan, constituting a well structured produce, retailing, marketing and supply system.

Taiwan Agriculture Agency involved in standards setting, certification and accreditation since 1997. TOAF became the third certification authority of organic agriculture granted by Taiwan Government in 2003 (Wu, 2008). Some 433 peasants have passed Tze-Hsin accreditation and a total 810 hectares of land in 2010. Farmers were divided into transforming and organic levels. The TOAF organization is divided to 3 divisions:

1. Culture and Education Section– Fu Che Educational Park and Island-wide Buddhism seminar classrooms
2. Tze-Hsin Section–Promotion of organic agriculture idea and certification.
3. Lee-Zen Retail Section–Wholesale, retail and logistics of organic products and customer service.

The establishment and operation of Lee–Zen Retailing and Logistics Centers aimed to supply organic products to people, not for the pursuit of capital but in the interests of world peace. Each center composed of six sections: agriculture management, transportation, organic products, qualities management, accounting and system management. Three centers were united with Enterprise Resource Planning, ERP systems as a holistic supply chain. Centers mission is fluent and sell well organic products in order to construct an ethics disciplines,
profession and moral society.

Lee Zen sells organic vegetables, fruit, processed food products, cotton clothing, toilet and cleaning articles, condiments and relishes, and also promotes a culture of religion and praise through songs, etc. The unique dedicated and discipline full time logistics and supply chain workers who are learned and practiced Buddhism, and the feature of Lee Zen have continued to supply pesticide free products at an acceptable price although little higher than other organic stores because it is more cost to organic production. With continuing prosperity and support, Lee Zen have developed 68 retailing shops and three logistics centers in Taiwan and form an integrated organic product supply system. Legislation for Taiwan Organic Agriculture and Processed Products was also enforced in July 2009 (Tze-Hsin Great Earth, 2009). The framework of the Lee-Zen channel is shown as figure 1:

![Figure 1: Framework of Lee-Zen channel, TOAF](image)

Following on from the step of success of the Lee Zen agribusiness operation model, several large enterprises such as Taiwan Sugar Corporation Ltd., Taiwan Plastic Corporation Ltd., Foxconn Technology Group and big Buddhist Groups like Tzu-Chi Foundation, Fo-Guang Shan Monastery, and Fo Fa Shan are have also undertaken part in organic agriculture operation. A group of intentional well intentioned housewives with loving heart have imitated Japanese Cooperatives to start up organic food alliances and created organic channel cooperatives for island-wide consumers.

**A survey of Sustainable Business in Taiwan**

In order to investigate whether or not the headquarters of TOAF- Park should expand the existing logistics facilities. We (1) interviewed senior staff and logistics manager within TOAF-Park and business unit managers outside the Park. (2) Questionnaires designed around a quality function deployment matrix (Lewis, 2004), composed of eleven variable questions as qualities maintenance, service prices, distribution efficiency and safety, etc. were sent to 32 contracted farmers inside and mailed to 121 certified organic peasants outside the Park as list
in Wu (2008). A total 44 mail questionnaires were returned, rate of return was 29%. As to crave the sustainable niche in the organic agriculture market and to know the TOAF-Park strategy of logistics expanding in future. (3) As this study was the first time to investigate the Park’s logistics issue, a SWOT analysis was made using the interviews data for knowing if research was feasible. The research was directed at the following questions: 1. What was the need of customers for service, quality product and features? 2. What content and levels of the logistics service of Lee Zen offered? 3. How best to deploy the logistics service? and 4. How was a Lee-Zen’s sustainable business model?

**Result of Analysis**

1. Interview results:
In summary, the results of the interview of business managers and farmers both inside and outside the Park showed the following points:

Agreement to expand and change present logistics facilitate for benefit more people as community set up in future.

Support for the establishment of the logistics center in the Park for saving cost, time and convenience.

Agreement to increase liaison between businesses for greater convenience and reduced communication costs.

An expectation that the Park offer distribution, transportation, warehouse and referral services such that it may become the largest logistics center for supplying organic products island-wide (The Central News Agency, 2003, Nov.11). The logistics center of Park may also service outside organic retailers and wholesalers other than Lee-Zen system stores.

2. SWOT analysis of expanding Park logistics facilitate

| S - Multiple qualified personnel and low labour cost; Personnel and volunteer workers easily get along with each other as they are disciples of Fu Che Buddhist Association; Near great organic farm Park and convenience: Co-sharing risk with other three centers. |
| W - Fixed customers and operation time. No open doors on Sunday and holiday. |
| O - Adjust production quantity for seasons especially in Typhoon days; Park has expanding project of area: Park has ability to develop new products and living articles for use. |
| T - Typhoon damage; World climate and food crisis; oil price rise |

3. Since only 44 of the sample targeted for the mail survey and they were not living in the Park and less concerned this issue, but cronbach α is 0.99 as questions are simple words and clear. Descriptive statistics showed to supported expanding the Park logistics center. They accepted were in ranking: (1) good service attitude, (2) fluent mobility line, (3) cleanness in
The characteristics not accepted by respondents as being favorable for expansion were: (1) less parking area, (2) pricing acceptable but a little higher to pay more expensive organic products and (3) operation time shorter than other organic shops. (answer for the question No.1).

4. Choose the factors of Eigen values greater than 1 by factor analysis, 11 items of five points scale reduced to 4 factors, name and ranking as (1) Lee Zen dispatch, (2) trust and honest value, (3) good storage and logistics, and (4) mutual assistance. (answer of the question No.2 &3).

5. Their Spearman’s rank coefficients produced by SPSS 1.0 for Windows of above 4 factors were as:

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Coefficient between factor 1 and 2 was 0.233, means the fast Lee Zen dispatch, the more trust and honest value. Coefficient between factor 3 and 4 was 1.92 means the better storage and logistics the more mutual assistance (answer of the question No.4). But Coefficient between factor 1 vs. 3 was (-) 0.044 and factor 1 vs. 4 was (-) 0.094 both were slightly and might neglect. The correlations between the liking scores and the attributes in some reports of social science are mostly low due to nature of survey.

6. The result of T test of gender, there’s a 5% chance of being wrong in rejecting the null hypothesis so that their opinions were difference for Lee Zen’s dispatch and trust and honest value between male and female. But were no difference for good storage and logistics, and mutual assistance between male and female. They should be no difference for 4 factors.

**Discussion**

1. Lee-Zen success sustainable business model constructed on the basis of making incentives to goodwill of consumers, producers, and seller. All agricultural products from to farms be put on shelves of Lee-Zen shops must be carefully checked by inspectors to make sure there is no poisonous residue in the products. Foods stuff and other processed goods must be surely produced and distributed to ensure no chemical supplement. Articles for daily use must be no polluted or to polluted environment and retrieved. Vehicles and containers handled also to be checked in organic requirement. Even books and publishing material on shelf are restricted to spiritual rise or wisdom (TOAF, 2003).

2. When the Fu Che University and Village are established in future according Park
planning and imply from interviewing, the logistics center service of Park may expand to outside counties. Infrastructure for transportation facilities and service roads are suitable. If logistics center makes strategic alliances with distribution firms, its service area may reach island-wide.

3. Lee-Zen success sustainable business model is compatible with western scholars’ rule of mental imprints, or a successful awareness business model described by Roach (2003), Confucian success business model (Legge, 1985), theoretical wheel of wellness model of well-beings by Witmer, Seeney and Myers (2000) and the mental improving models constructed by Senge (Senge, 2007).

4. The Chinese meaning of Tze-Xin is mercy and charity. Lee-Zen was caring or looking after communities nearby. It honestly run and operated organic business won consumers goodwill and that take social responsibility. Lee-Zen business model is also an evidence of sustainable model which follows the karmic principle - imprint rule (Michael Roach, and Christie McNally, 2009).

5. Both Lee-Zen store managers and logistics center managers that we interviewed confirmed that all the staff members and volunteer workers are followers of Buddhist Master Ze-Chang of Fu Che Association. Most of the locations of Lee-Zen stores are at the downstairs of their weekly get together classes. Many of them brought home organic products from the stores downstairs after classes. In fact about Seventy percent of Lee-Zen’s businesses are from the Fu Che Association members. Some of the Fu Che members are volunteer workers for Lee-Zen organic stores in order to practice Buddhist teaching and to promote the idea of organic living and be socially responsible. This is one main reason of the success of Lee-Zen Organic Corporation in Taiwan.

6. This was the success case of Lee Zen corporation operated organic products by a NPO in Taiwan. We may conclude the more trust and honest value, the fast Lee Zen dispatch and the better storage and logistics and the more mutual assistance. This factor was the quantity proved Lee Zen as a sustainable business model. This study has also, through in-depth interviews with suppliers and consumers demonstrated that there is considerable solidarity, or internal marketing, among the members of the supplying organization and trust among their consumers. It is also demonstrated that, even under the current financial difficulties, organic consumers are still willing to pay premium prices for green products. In addition to operational efficiency factor, there are other several management areas that modern businesses must address properly. One of them is proper management of environmental related issues, including saving energy, and disposal of wastes and harmful materials. This is both creating sustainable profits and part of corporate social responsibility.
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