Strategic Alliance and Competitiveness in Taiwan Speakers and Amplifiers Firms

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Abstract: - Economic globalization has forced and is still forcing firms to develop new global manufacturing and distribution concepts. Through the development of economic globalization, every government and firms in the world is proceeding to reform and redevelop in order to deal with globalization to get competitiveness. Moreover, companies need to adapt their alliance approaches to succeed in the global market. This study searched a property strategic alliance of amplifiers and speakers manufacturers in Taiwan. In-depth interviews with top managers and based on Porter’s competitiveness theories, value-chain, and Yoshino and Rangan’s alliance theory, a specialist questionnaire was utilized to establish a complete evaluation framework for amplifiers and speakers manufacturers. Firms are able to apply their core competences with strategic alliances as main tools in technological development, globalization of the economy and competitive pressure to lower costs. Furthermore, companies have responded by introducing lean production and flexible organizations with a high innovation capability. Strategic alliance in the reorganization of the relations to the other actors, notably customers, and suppliers is important; therefore, interdependent relationships in this industry are emphasized. Finally, the framework and results can be used as a guide for the manufacturers to review, improve, and enhance in the near future.

Key Words: - Competitiveness, Strategic Alliance, Value Chain, Amplifiers, Speakers, Taiwan

1 Introduction
Taiwan audio industry works for the international companies, like REL, Sony, Kenwood, Polk, etc. as ODM/OEM factories no matter where the factories are located in Taiwan, China, or Southeastern Asia, etc. Audio industry is identified under consumer electronics. Amplifiers and speakers are two of the most important parts for audio products. Under the circumstances of the economic globalization, Taiwan audio industry faces with more challenge and competition. They must overcome the core challenges as they attempt to go global. Their immediate challenge is to break out of the mind-set that they could not compete successfully on the global stage. Growth of firms is important, thus, learn how to learn from the constant flow of new demands, opportunities, and challenges are main lessons for firms to make a property strategic alliance. This paper researched how the competition that firms faced, and how they overcome from falling into several traps under the competition by what kinds of strategic alliances.

2 Literature Review
Over the past two decades, a new global business environment has evolved. The vast majority of businesses now have some forms of global presence
through competitive, cooperation, and joint ventures. The international development of financial markets, of technology and of some manufacturing and services bring firms a new set of limitations upon the freedom of action of nations.

2.1 Porter’s Value Chain
Porter introduced a generic value chain in 1985. Value chain focus

The goal of these activities is to offer customers a level of value that exceeds the cost of the activities, thereby resulting in a profit margin. Using the value chain on Taiwan amplifiers and speakers manufacturers, we found that the primary value chain activities are:

1. Inbound Logistics: the receiving and warehousing of raw materials are required; the international raw material up rise or down effect upon this industry. Followed different customers’ needs to create different level products. Unit prices of materials depend on order quantity. For example, the rate scale for 1,000pcs/lot and 10,000pcs/lot are different around 30%.

2. Operations: the processes of transforming inputs into finished products and services. In this industry, not only R&D is important but also integrated testing equipments are needed. Sometimes, customers design the goods and the firms do the jog as ODM/OEM.

3. Outbound Logistics: Taiwan audio industry works for the international companies, like Sony, Aiwa, Pioneer, etc. as ODM/OEM factories; most of the firms do not need to focus on warehousing of finished goods, inbound logistics is much more important.


5. Service: the support of customers after the products and services are sold to them. In this industry, most of the firms do not touch finial consumers or distributors. They customize products to specific customers (selling to overseas distributors or international companies).

2.2 Typology of Alliance
As Buckley, Chapman, and Casson [2, 3] concluded, in business relationships, bounded rationality forces companies to work in the grey area where relationships and trust replace the fine calculation of costs, short term profits and returns. Therefore, cooperation is a substitute for the assurance of solid quantitative evidence. While people talk about cooperation, competition must be discussed. What important is that the goals are known and that it is agreed that the different goals can be fulfilled within one and the same strategy [8]. The primary driver of strategic alliances is the emergence of intense global competition, which has rendered simple but time-tested strategies, a staple of major corporations, less effective. By relating cooperation and conflict, Yoshino and Rangan [17] maintained Typology of Alliance.

| Table 1 Typology of Alliance |

Fig. 1 Michael E. Porter’s Competitive Advantage Value Chain Model[13]
By relating two concepts, four types of alliances were created. A pre-competitive alliance typically bring together firms from different, unrelated industries while pro-competitive alliances are formed by firms at different industries in the vertical value chain to further the competitiveness of the chain. Noncompetitive alliances are typically intra-industry alliances among non-competing firms. For example, firm caterings for different segments of the market, while competitive alliances where the partners are catering for the same customers.

Wu, Min-Yu, Industry & Technology Intelligence Services (IT IS) [18] identified that the competitiveness of a firm must be distinguished to be three parts:

(1) Vertical integration and division  
(2) Upstream and downstream supply relationship  
(3) Competition scenario of the same industry

This study was not only focus on one theory but also combine them to make a new framework and examine the relationships among them.

2.3 Defining Competitiveness and a Strategic Alliance

According to Chandler [4], from 1950s to 1970s, we witnessed a dramatic growth of the multinational companies which, by means of the multi-divisional form (M-form) of organization, internalized as many activities as possible. This, on the other side, led to bureaucracy and inflexibility and form the late 1970s onwards, the companies responded by starting to externalize activities, strategic alliances being one of the most popular means of response [6]. This popularity has made it necessary to redefine the role of not only governments to encompass alliances but also industries to re-think as a competitive mode of organization rather than as collusion [5].

Buckley and Chapman [2] agreed that a property strategic alliance must be defined for a given time. Assumed the partners have near complete information and thus are able to prepare a detailed plan for the strategic alliance, in contrast as a long-term arrangement will make it difficult to foresee the end; therefore, it should also be stressed that the partners of a strategic alliance need “not” have common goals. They may have different goals. What is important is that the goals are known and that it is agreed that the different goals can be fulfilled within one and the same strategic alliance [8].

A core for strategic alliance is that the firms possess resources attractive to others and that the partners have access to the resources and capabilities of each other [4]. In other words, firms cooperate to compete. They do not collaborate to circumvent competition [6].

In this study, we list the previous definitions for strategic alliance as below:

<table>
<thead>
<tr>
<th>Scholar</th>
<th>Content</th>
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<tbody>
<tr>
<td>Barney (1997)</td>
<td>Strategic alliance means two firms cooperate on research and development, manufacturing or marketing service. The purpose is to be source of competitive advantage.</td>
</tr>
<tr>
<td>Kale &amp; Singh (2007)</td>
<td>The knowledge sharing aspect of alliance learning process helps firms build their alliancing skills and thereby manage alliance more successful.</td>
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</table>

As more players from widely different cultures have entered the world economic stage, with them the acceptance of multiple and changing intentions, many theories of competitiveness and economic well being have emerged. Sustainability and appropriate ability are the two main items to examine in determining how long an organization will take to achieve competitiveness. Competition is at the core of the success or failure of firms; it determines the appropriateness of a firm’s activities that can contribute to its performance, such as innovations, a cohesive culture, or good implementation. Competitive strategy is the search for a favorable competitive position in an industry, the fundamental arena in which competition occurs. It aims to establish a profitable and sustainable position against the forces that determine industry competition [16]. According to the most references, we define competitiveness and strategic alliance for partners is a kind of strategy to apply a firm’s
self-innovation and technology to cooperate compete within partnerships in order to make benefits for each parties. At the meantime, a firm has to apply their core value to upgrade and get added-value in the partnerships.

3 Model Constructions

According to the statistics from MIC IT IS in 2004 [21], the ratio of Taiwan international vertical integration of electronics manufacturers is around 0.26, higher than the other industry. Firms import parts of goods and assembling then export to the other countries. It means Taiwan electronics industry is in the chain of international vertical integration. Moreover, IT IS shows the ratio of audio industry exporting in 2008 is higher than 2006 and 2007.

3.1 The Evaluation Framework

According to interview top managers of firms and the literature review above as decision a framework, this paper combine with Porter’s competitiveness theories, value chain (1985) [13], and Typology of alliance by Yoshino and Rangan (1995) [17].

We distinguish three sections of the strategic alliance for amplifiers and speakers firms to explain the vertical and horizontal relationships. Vertical integration means a style of manage control; it is a relationship from upstream to downstream that suppliers and buyers make a compact of control to each others, at the meantime, the potential competitive is not obvious. The strategic alliance is based on value chain. The advantageous position for firms are different, firms must develop their strengths on the value chain. It includes support activities, primary activities, price sensitivity from suppliers and buyers, R&D operations (including design with customers), and switching costs relative to each firms.

Competitive scenario of the same industry means at this industry, two firms make similar products and un-frequently compete on global (or local) market, the strategic alliance can improve two firms from organization activities, protect their core competences and study from each others. The conflict and organization activities are high.

Horizontal division is in the sense that firms cooperate in some missions. The conflict is high but organization activities may be low. For example, an amplifier manufacturer is pre-competitive new technology development with the other firm who advantages to digital sound R&D. Two firms expect to reap profit by flexible strategic alliance.

3.2 Hypotheses

According to the framework of this research, the hypotheses were as following:

H1: The correlation in vertical integration between firms and buyers is significant.

H2: The correlation in vertical integration between firms and suppliers is significant.

H3: The correlation in the same industry-conflict and competitive relationships is significant.

H4: There is a positive correlation in horizontal
division between firms and firms in the same industry.

3.3 Estimation Results

Regarding the evidence-based part and performance measures, we examined the detail of the firm’s average education of the employees in the firms, product orientation, and overseas location, etc. We combined the data from Ministry of Economic Affairs, R.O.C [19] and Bureau of Foreign Trade [20]. There were total 145 amplifier and speaker manufacturers also doing import or export trading in Taiwan. The totals of 145 questionnaires were mailed and 61 effective returns were received. The empirical evidence from the interview suggests that this industry was a keen competition. Frankly, firms worked on vertical integration strategic alliance but the micro environment factors for firms should be concerned carefully, and differentiation strategies changes through industry evolution.

<table>
<thead>
<tr>
<th>Table 3 International Expansion</th>
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<tbody>
<tr>
<td>Items</td>
</tr>
<tr>
<td>The company has located plants outside of Taiwan</td>
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<tr>
<td>The company has set up branch companies, office, or business units outside of Taiwan</td>
</tr>
<tr>
<td>The company has set up subsidiaries outside of Taiwan</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td>Non above</td>
</tr>
<tr>
<td>Source: This research.</td>
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<th>Table 4 the Number of Employees of Firms</th>
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<tbody>
<tr>
<td>The number of employees</td>
</tr>
<tr>
<td>Over 200 Employees</td>
</tr>
<tr>
<td>20~200 Employees</td>
</tr>
<tr>
<td>5~19 Employees</td>
</tr>
<tr>
<td>Less Than 5 Employees</td>
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<td>Source: This research.</td>
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<th>Table 5 Results of the Measurement Model Fit (Average)</th>
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<tbody>
<tr>
<td>Hypotheses</td>
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<tr>
<td>H1: Vertical integration between firms and buyers</td>
</tr>
<tr>
<td>H2: Vertical integration between firms and suppliers</td>
</tr>
<tr>
<td>H3: The same industry-conflict and competitive relationships.</td>
</tr>
<tr>
<td>H4: Horizontal division between firms and firms in the same industry</td>
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<td>* means P&lt;0.05</td>
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<td>Source: This research.</td>
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</table>

Firms over 200 employees thought that the vertical integration between firms and buyers is important than the other smaller firms. The conflict and competitive relationships in the same industry, firms on internal participation, and pre-competitive alliance are much more considered by firms who over 200 employees. As a result, H1, H3, and H4 were verified.

Over 93.80% of firms considered that their products are high quality-low price. Moreover, one of the results of this study indicates that the financial management is the most important factor for most firms. The global economic crisis makes from upstream to down stream review their credits to customers; cash flow becomes an important thing for most of the firms. In order to get orders to survival from the crisis, some firms cost down but make the order quantity or payment terms strictly. However, firms who doing strategic of vertical integration, the effects of the crisis is not obvious. At a view of vertical integration, a company cooperate with suppliers helps both companies prepare future more clearly and faithfully. Moreover, a company do strategic alliance with their customers will also help both of them understand the market clearly to identify how to prepare inbound and outbound logistics.

According to in-depth interviews, by forming...
an alliance, the partners aim to create and sustain a
new identity, which emerges from their interaction
through interpretation and communication like an
unspoken consensus. While a firm gets design from
a customer but they can not make it, the firm will
introduce the customer to their strategic alliance
company. This type of sometimes cooperate and
sometimes competitive relationship can help the
partners get more opportunities.

4. Conclusions

The objective of this paper is to analyze the
strategic alliance determinants of the frames of the
amplifiers and speakers firms in Taiwan. The one of
the notable finding is most of Taiwan amplifiers and
speakers firms consider about their products are
high class, but they also do low-end products but
almost no profit. The low-end segmentation is very
competitive; however, firms must satisfy customers.
We suggest they focus on market segmentation for
their products. Slowly, Abandon low-end products
prices competition; firm must apply their core
competences and focus on R&D to innovate new
design or new production method to growth.
Innovation is furthered by active interaction with
customers and suppliers rather than in in-house
isolated development departments. This operation
will get more profit than price competition.
However, most of the R&D persons in the firms
were educated from the offshore foreign investors in
Taiwan in 1980s. After the investors withdrawing,
no more educate. The sufficient technical staffs are
not enough, not only because the government does
not focus on audio industry but also less
industry-academy cooperation opportunity. It might
because R&D expense a lot of capitals and take a
long time to return; therefore, government has to
concern about this industry to support
industry-academy cooperate.

Because most of the firms do ODM/OEM for
their customers, as a result of Table 5, firms
preferred making strategic alliance with their
customers (buyers) rather than their suppliers in
order to know their target market. Learning from
alliances is much praised, but learning about
alliances can also yield dividends. In order to
growth and enhance the overall performance of
Taiwan amplifiers and speakers firms, the results of
this paper provide views for future improvement.

5 The Limitations and Future Study of this
Research

In this research, we did not estimate for the
customers of Taiwan amplifiers and speakers firms.
And we did not know if and where the firms do the
offshore migration of business activities. About the
threat of substitute products, this study had not been
placed importance on it. Therefore, we thought that
in different countries, the threat of substitute
products might be an important factor.

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