How can Asian advantage sustain longer

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Abstract

This paper attempts to find out why Asia enterprise are competitive in manufacturing, why less successful in brand building, and what is the hurdle to overcome if want to switch from OEM to branding. This is interesting for western to know eastern and for eastern to know itself as well by studying business model of manufacturing, branding and capability building.

Introduction

According to Porter's (1985) value chain, the enterprise can create value through primary activities of inbound logistics, operation, outbound logistics, sales, marketing and services, or through secondary activities of infrastructures such as human resources, technology development, and procurement management. The enterprise can gain margin through performing outstandingly in each one or even more activities. The point is how they can sustain longer or how they can create new one when their advantage was eventually out performed and no longer existing. Regarding these activities, most Asian firms are able to execute it better in operations than sales, marketing or services. In other words, they are likely good at manufacturing than marketing. Take 100 best global brands for example, there are only 8 from Asian (2012 Interbrand). The top 10 brands ranking from Coca-Cola, Apple, IBM, Google, Microsoft, GE, McDonald's, Intel, Samsung, to Toyota, only last 2 are Asian from Korea and Japan. This reveals that Asian enterprises are less competitive in term of brand management.

Meanwhile, the global brand can create more value or profit by cost reduction through outsourcing its manufacturing activity offshore. In this case, the contract manufactures are switchable if they are no longer competitive cost wise. Taiwanese contract manufactures have encountered this problem for years. They were doing OEM business models successfully by providing PC, Monitor, Motherboard, Power Supply, Chassis and even NB to first tier Brand such as IBM, Apple, Dell and HP. However, most OEM suppliers are facing serious setback by switching to Korea and China. When Apple developed new product, launched into market such as iPad, iPhone and occupied market share. The OEM suppliers had another hard time to survive. The OEM suppliers have ever tried turnaround to brand building, but very few did it. The fact is the total difference between the capability of contract manufacturing and brand building. For some firms even could sustain their cost advantage, they are still forced to operate at razor thin margins. Moreover, Building brand awareness requires continued investment over years. Success depends largely on how deep the pocket is. On the other hand, if you think about the country of origin of any global brand: Coca-Cola, Chanel, Mercedes, or Toyota. Of the top 100 global brands, you would probably get most of them right. Most people also have clear brand associations with entire countries: France is synonymous with luxury; German, with efficiency; Italy, with fashion; Japan, with precision. These associations

exist because of each country's history and culture (Chajet 2012). That means culture matters.

Value Creation of Manufacturing

Taiwan is a place with no names, at least no brand names that ring familiar in Western ears. Japan, of course, has plenty of names that thunder across the world, from Hitachi and Honda to Toshiba and Toyota. But Taiwan has long been an island where workers anonymously toil to produce components and often whole computers that other people put their famous company names on (Kraar, 1995). Most of the Taiwanese computer companies devote to making a few components on which their very survival depends. They have elevated to a fine art such seemingly workaday tasks as controlling inventory and overhead expenses. Everyone competes for management efficiency. Dell Computer in the U.S. considers itself lean with overheads equivalent to about 15% of sales, but by comparison, overheads of Taiwan computer companies appear almost anorexic, averaging less than 10% of sales. A fascinating Taiwan money-saving technique: 'modular manufacturing,' in which price-sensitive parts are left out of PCs and then shipped to distributors for installation at the last possible moment before the machines are sold (Kraar, 1994)

Many Taiwanese companies are OEM/ODM suppliers, designing and manufacturing machines, then selling them to the big-brand name players. The Taiwanese OEM/ODM suppliers have tiny margins. Their customers, Dell and HP of the world, are not about to allow them to widen those margins. If you are a Taiwanese tech executive, you have no pricing power (Einhorn, 2003)

The Characteristics of OEM Business

OEM contracting is a form of outsourcing where the activity contracted to a third party is a critical, high value-adding part of the process. Many IT companies like IBM, Apple, or Texas Instruments have outsourced the production of entire products like PCs to latecomers firms in East Asia, thereby securing their own strategic advantages in terms of low-cost production, but also offering the latecomers valuable learning and leverage opportunities. OEM contracting has been generalized to encompass the notion of 'global commodity chain' or 'global production networks' or, the term of preference, 'global value chains'. These global networks are created by well-established producer firms in such sectors as electronics industry, and by global brand buyer firms. Typical small-scale latecomer firms in Taiwan have been able to upgrade their production and innovation capabilities through such linkages, thus revealing how extensive are the dissemination of the complementary strategies of outsourcing (OEM buyers) and contract manufacturing (OEM suppliers). It is through inserting itself in such a global value chain, taking advantage of initial low costs, that the latecomer firm secures an initial linkage with the global economy that leads to leverage possibilities (Mathews, 2002).

In 1981 IBM introduced its Personal Computer (PC) and quickly won market share because it functioned as a stand alone computer that could execute multiple functions. Apple had already

demonstrated how advances in micro-processing made possible a general purpose, decentralized computer. IBM's revolutionary contribution resided in the PC's open system. Rather than building the PC from in-house production units, IBM outsourced nearly all the PC's components. In part, IBM chose this strategy to reduce the time it took to bring this new product to market. By relying on OEM suppliers which had manufactured high-quality, reliable components, IBM did not have to acquire in-house the equipment and skills needed for this new venture. The OEM buyers found it strategically cost effective to let sophisticated suppliers both invest in the latest production technologies and devise ways to improve performance. So long as the OEM buyers had governance mechanisms to coordinate suppliers, they only needed design engineers to work with suppliers to meet functional design requirements. Process innovation thus moved down the value chain (Kaufamn, Merenda & Wood, 1996).

OEM, a specific form of subcontracting, evolved out of the joint operations of buyers and latecomer suppliers and became the most important channel for export marketing during the 1980s. Under OEM, the latecomer produces a finished product to the precise specification of a foreign TNC (Transnational Corporation). The foreign firm then markets the product under its own brand name using its own distribution channels (thereby capturing the post-manufacturing value-added), enabling the latecomers to circumvent the need for investing in marketing and distribution. OEM often involves the foreign partner in the selection of capital equipment and the training of managers, engineers and technicians as well as advice on production, financing and management. Successful OEM arrangements often involve a close long-term technological relationship between partner companies, because the TNC depends on the quality, delivery and price of the final output.

OEM is also to be contrasted with ODM (own design and manufacture). The nature and complexity of the OEM system evolved considerably during the early-1980s. According to companies interviewed, many of the electronic systems purchased under OEM were designed and specified, as well as manufactured, by the local firm, rather than the TNC. In 1988 and 1989 this system began to be called in Taiwan. Under ODM the latecomer carries out some or all of the product design and process tasks needed to produce a good according to a general design layout supplied by the foreign buyer or TNC. In some cases the buyer cooperates with the latecomer on the design. In others the buyer is presented with a range of finished products to choose from, defined and designed by the latecomer firms with its own knowledge of the international market. The goods are then sold under the TNC's or buyer brand name as in OEM. ODM signifies the internalization of system design skills, and sometimes complex production technologies and components design abilities on the part of the latecomer.

ODM offers a mechanism for latecomer firms to capture more of the design value-added while still avoiding the risk of launching own-brand products and the costs of investing in foreign marketing and distribution channels. Under early forms of OEM, the latecomer would be confined to value-added related to assembly services. Under ODM the local company could add value in production engineering, design for manufacturing and product design itself. ODM indicates an

advance in technological competence, although it applied mainly to incremental (follower) designs, rather than leadership product innovation based on R&D.

The OEM/ODM system, however, has several disadvantages. Strategically, the latecomer partner is often subordinated to the decisions of the buyer, and often dependent on the foreign company for technology and components as well as market channels. The TNC will often impose restrictions on the sales activities of latecomer supplier. Without their own distribution outlets, the post-manufacturing value-added is limited. Moreover, OEM and ODM make it difficult for local companies to build up the international brand images needed for high quality goods (Hobday, 1995).

Taiwan's involvement in the OEM business has gone through different stages. It started with very simple OEM arrangement that covered low-end desktop PCs and labor-intensive peripherals. During the early 1990s, a number of Taiwanese computer companies have tried to expand their share of own brand-name manufacturing (OBM) sales. Most of them failed and are now content to consolidate and upgrade their position as OEM suppliers.

Taiwan's entry as a supplier for the international computer industry dates back to mid-1960s. The breakthrough came in 1966 when IBM set up its International Procure- ment Office (IPO) and started to purchase computer parts and components from Taiwan. IBM's demanding procedures for product development, production ramp-up and quality control as well as its grueling requirements for vendor qualification forced Taiwanese firm to radically upgrade their product quality. It also forced them to develop a broad spectrum of capabilities required for manufacturing as well as product design. In the process of qualifying as an IBM supplier , countless Taiwanese firms learned how to improve quality and to speed up product development cycles and delivery.

In contrast to mainframe and mini-computer, PC design is based on standard microprocessors and operating system. As a result, computer became mass-produced, standardized products (Commodities). Barriers to entry to final assembly are low and the key to success of any 'cloning' strategy lies beyond manufacturing. A critical factor is time-to-market: the PC vendor needs guaranteed access to reasonably price key components and the most up-to-date operating system; and its supply base for motherboards and other components must be able to respond fast and flexibility.

There is broad consensus that Taiwanese firms were able to reap substantial benefits form OEM. However, suppliers became 'locked into' OEM relationships that hindered independent brand name recognition and marketing channels. Profit margins are thinner in OEM sales than in own brand sales, which in turn makes it difficult for suppliers to muster the capital needed to invest in R&D required for the development of new products (Ernst, 2000).

OEM contracts come in large orders and typically generated low profit margins. Economies of scale & scope are of critical importance, and large firms are better placed to reap such economies. Thus, OEM orders for desktop computers are concentrated on a select group of large companies: Tatung, Acer, DEC Taiwan, FIC and MITAC (Ernst, 2000). The characteristics of OEM business are as follows:

Management is to determine how best to improve and exploit firm-specific resources (Mahoney & Pandian, 1992).

Value Creation of Brand Building

Taiwanese companies are making serious headway, racking up design prizes and gaining market share over foreign competitors. Some companies, such as BenQ, aim to emulate the success of South Korea's Samsung Electronics, using sharp design to leverage their contract manufacturing business into a global brand. Acer, BenQ's former parent, has surpassed big names like IBM and Toshiba to become the second-best-selling notebook PC brand in Europe, after HP. Others, such as Quanta Company and Lite-On Technology, while not pushing brands, are pouring resources onto product innovation to win more profitable contracts from their customers.

Taiwan companies still have plenty of distance to go to catch design leaders like Samsung, Sony and Apple Computer. Another problem for Taiwan companies to build their own brand is to take risk of competing with their contract customers. BenQ was the biggest outside supplier of mobile phones to Motorola, but the U.S. company has shifted orders elsewhere as BenQ's brand profile has risen. Asustek, wary of alienating its contract customers, does relatively little advertising for its PCs (Dean, 2002).

With the exception of Acer, most major Taiwanese companies do not have their own brand-name businesses. They are equipment providers, not selling directly to consumers but to companies such as Dell and IBM (Einhorn, 2002).

Due to high cost and high failure rate in brand building, manufacturing is preferable in terms of short term efficiency. The recent example is BenQ, once one of Taiwan's top consumer-electronics brands. In 2005 management bought the money-losing cellular division of giant Siemens and paired the BenQ and Siemens name on phones. The German subsidiary was liquidated, and now BenQ, renamed Qisda, focuses on contract manufacturing (Einhorn, 2007).

Due to the characteristics of OEM business, most of firms have to 'lock in' specific investment and organizational routine and make endeavors to pursue efficiency for their large quantity purchase order. Since PC is already in the stage of commodity, price and delivery become the major competition factors. OEM firms will lose purchase order if they are not best in efficiency.

Lorimer (2006) reveals that the big challenge for Taiwanese companies is to develop the kind of profitable and well-regarded global brands that can ride out typical boom-and-bust cycles and the non-stop pricing pressure from companies as Dell in desktop and notebook computers. In order to combat this squeeze, more and more of these tech companies have been branching out their plain vanilla contract operations and building up products under their own names. But the real question remains to be answered. As these Taiwanese companies look to build their own brands, how will industry giants respond to the dual roles of both supplier and potential challenger?

The other strategy that ODMs have pursued to increase their profit margin and leverage in the industry has been to develop their own brand products. As new product categories emerge, there is a constant searching at many ODMs for opportunities to develop their own brands, as with new

product categories such as Internet appliances that are just beginning to be established. Clearly, if managed successfully, maintaining both contract manufacturing and own-brand businesses can improve a company's financial performance. For example, ASUSTek and Gigabyte sell their own brands of motherboards, especially in Europe, where custom-assembled, or clone, PCs are popular. However, ODM efforts to develop own-brand businesses have inevitably created competitive tension with their major buyers. Acer generates about 30 to 40 percent of its revenues from its own PC brand, but has historically struggled with combining its branded PC and contract manufacturing businesses. To alleviate this tension, Acer has undergone a series of moves to separate the contract manufacturing and branded segments of its business, most recently by spinning off its contract manufacturing arm (as Wistron) and turing to other Taiwan ODMs (including the leading notebook computer ODM, Quanta) as a source for notebook computers (Sturgeon & Lee, 2005).

Einhorn (2007) reports that under pressure from low-wage competitors based on mainland China, more Taiwanese electronic companies are exploring ways to win acceptance as global consumer brands. Taiwanese tech giants are employing as they move away from their manufacturing roots. Taiwanese engineers are coming up with innovative products that carry names of local companies such as PC maker Asustek Computer rather than multinationals like HP. Some Taiwanese companies are investing in design. And the most prominent of them, Acer, is buying its way into the U.S. On Oct. 17, Acer announced it ad completed a $710 million acquisition of Gateway, which is tenth-largest globally but No. 5 in the U.S. Acer has shed its manufacturing arm and now focused exclusively on name-brand products. Acer has been strong in Europe and parts of Asia. It also sells two lines in the U.S., but Chief Executive J.T. Wang admits Acer still has low awareness there. That's why he is banking on Gateway. Acer is likely to keep the Gateway brand in the U.S. 'Building a brand is very different in the U.S.,' says Wang. 'The investment at the initial stage has to be very big – otherwise there is almost no impact'.

Acer's biggest Taiwanese rival, ASUSTek, also is spinning off its low-margin manufacturing business. CEO Jonney Shih and other executives will focus on the more lucrative brand business. One of the world's top producers of PC components, ASUSTek enjoyed a 418% jump in sales from 2003 to 2006 – but with only a 66% rise in profits. That reflects the shrinking margins in PC manufacturing as Dell, HP, and others have pushed suppliers to hold down prices.

Acer spun off its design, manufacturing and services unit into a newly independent company called Wistron. The move signaled Acer's desire to make good on a promise to shake up and streamline its organization structure. The main purpose of the separation is to avoid the appearance of potential conflict between OEM and Acer-brand business efforts. Stan Shih said: "In the future, the new Acer will become a marketing and service company, while Wistron will remain focused on OEM.'

By spinning off Wistron, Acer's brand-name operations will also be freed up to seek more competitive contract manufacturers, thus driving down costs. What's more, Wistron will no longer be under an obligation to produce Acer-brand products. Perhaps the most significant benefit will be the end of conflict-of-interest issue, in which the company was sometimes seen as competing

against its OEM buyers, such as IBM, with its own brand of PC products (Clendenin, 2001).

The concentration of ODM firms in PC industry, and its dependence on several extremely large buyers such as Dell and HP/Compaq, comes with several potential threats and challenges placed a great deal o pressure on ODMs to lower costs. The second risk comes from the fact that spending on PCs accounts for a shrinking portion of overall IT spending worldwide. These risks highlight an urgent need for Taiwanese ODMs to diversify their product and customer scope beyond PC-related products, and major ODM firms have sought to do so, with some success. ASUSTek, a leader in motherboard design and production, has successfully diversified into notebook computers, VGA cards, optical disk drives, and the manufacturing of the PS2 video game console for Sony. Revenues have increased dramatically, while motherboard sales have dropped to only one-third of total sales. ODM firms such as Hon Hai (Foxconn), Quanta, Compal, and ASUSTeK have allocated significant resources to the design and production of mobile-phone handsets. Mobile-phone handsets provide a logical migration path for ODMs because, like personal computers, they have rapid postarchitectural design cycles based in standard chipsets, and like notebook computers require industrial design expertise related to miniaturization. However, because neither detailed design competencies nor the PC-specific supply base in Taiwan are easily adaptable to a wide range of electronics products beyond PCs, product and customer diversification has been slow and the ODM firms remain quite narrowly focused on PCs, mobile phones, and similar products. Still, except for the near monopolies held by Intel and Microsoft in CPUs and operating software, severe downward pressure on prices and margins is felt at all levels of the PC value chain: lead firms, contracts manufacturers, and components suppliers alike (Sturgeon & Lee, 2005).

Conclusion

If Porter's (1985) value chain could end up margin, each activity contributes different value. Taiwan contract manufactures created competitive advantages in manufacturing in past decades. It is difficult to sustain the manufacturing advantage which was taken over by China, Korea or ASEAN countries. The consensus for Taiwan contract manufactures to sustain advantage is to create a new advantage by building their own brands. However, the capability of manufacturing and brand building is totally different. They have to change their mindset, adapt culture difference, and cultivate marketing sense as well as having deep pocket. Secondly, the capability of manufacturing and brand building is not easy transferable. How to transform organizational culture to encourage innovation and overcome the inertia of resist change is a big challenge. Thirdly, it is good to develop niche market by using own brand in Blue Ocean instead of competing in the throat-cut market. Finally, if the contract manufacture is still likely to exploit its manufacturing capability, the better way is to focus on manufacturing unique component such as engine or core parts which rivals are unable to duplicate in terms of quality or cost. In short, it is a must to create new advantage in order to gain sustained advantages. Taiwan is a typical case for Asian countries to experience from under developed, through developing, to developed country and its insight is very worthwhile to lean.