Capability-based Cost Leadership Strategy of Japanese Firms

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Abstract: A strategy that uses the productive performance of a manufacturing site (or genba), noted as a strength of Japan’s manufacturing industry by Fujimoto (2003), might also be called a capability-based cost leadership strategy (CBCL strategy). In the 1990s, this strategy ceased to function due to environment changes, and the international competitiveness of Japan’s manufacturing industry declined. As a means of breaking through those circumstances, Fujimoto emphasized strengthening market performance and choosing a differentiation strategy for appealing to consumers based on high product quality. In the end, however, the performance of Japan’s manufacturing industry is restored after the environment changed to become favorable to a CBCL strategy such as rising labor costs in newly developing countries and a shift to a weaker yen. This suggests that many Japanese manufacturers could not shift to differentiation strategies based on enhanced competitiveness in the market, and CBCL strategies were left in place.

Keywords: multi-layer concepts of industrial performance, productive performance, capability-based cost leadership strategy

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Introduction

Japan’s manufacturing industry demonstrated a high level of international competitiveness in the 1970s and 1980s. However, in the 1990s, Western firms captured de facto standards in the personal computer and IT service areas. Furthermore, newly developing nations entered markets with low prices in home appliances such as televisions and washing machines. Because of these factors, the international competitiveness of Japanese firms were declined, particularly in the electrical equipment industries. How is it that the highly competent Japanese manufacturing industry lost its competitiveness? Some have taken the pessimistic view that the organizational capabilities of Japanese firms were overtaken by firms in the West and in newly developing nations, while Fujimoto (2001, 2002a, 2002b, 2003, 2004, 2012a, 2012b)\(^1\) dismissed this notion, proposing instead multi-layer concepts of industrial performance. Fujimoto noted that the productive performance of a manufacturing site (or *genba*) in Japanese manufacturers and the organizational capabilities that strengthen this performance are still at a high level. At the same time, market performance that attracts consumers is low. Thus, Fujimoto pointed out that manufacturing capabilities fell into a situation where they did not lead to profits. He further asserted that if a way could be created to tie manufacturing capabilities to profits, Japan’s manufacturing industry could be resurrected.

Fujimoto’s assertion had a major impact on Japan’s business administration researchers, and in recent years, there have been many studies on Japanese manufacturers using Fujimoto’s multi-layer concepts of industrial performance (Fukuzawa, 2015; Fukuzawa & Inamizu, 2017; Inamizu & Fukuzawa, 2017; Shintaku,

\(^1\) Abbreviated hereinafter simply as “Fujimoto”.

The practice of manufacturing based on Fujimoto’s productive performance can also be called a capability-based cost leadership (“CBCL”) strategy. However, this does not fit well with an added value or differentiation strategy that aims for market performance. Because organizational capabilities that support market performance are different from a CBCL strategy, companies cannot easily make the shift.

Multi-layer Concepts of Industrial Performance Model and Competitive Strategy

The multi-layer concepts of industrial performance by Fujimoto attribute sources of corporate profitability to the multiple factors of market performance that causes consumers to make purchases, the productive performance of manufacturers, and organizational capabilities that support productive performance.

Market performance is composed of (i) design quality, (ii) conformance quality, (iii) advertising, (iv) delivery, and (v) variety. If there are products with equal appeal in (i) design quality and (iii) advertising, then consumers will make choices based on (ii) a high level of conformance quality, (iv) speed of delivery, and (v) amount of variety.

On the other hand, productive performance is composed of the elements of (a) productivity, (b) manufacturing quality, (c) development lead time, (d) production lead time, and (e) flexibility:

(a) Companies with a high level of productivity can achieve lower costs when they can capture material costs and labor under the same conditions as competitors.

(b) Companies with high manufacturing quality can have higher conformance quality, and can therefore reduce costs of
responding to post-sales breakdown complaints and brand
damage, as well as the costs of in-factory quality inspections
and manually fixing defects low.

(c) Companies with short development lead times can keep
development costs lower with fewer man-hours spent in
development.

(d) Companies with short production lead times can keep safety
stock low while achieving short delivery times and can also
control costs of adjusting supply and demand through planned
production.

(e) Companies with a high level of flexibility can control
changeover costs, etc. needed for product variety.

Differences in inter-firm costs that are tied to differences in
profitability if the level of market pricing are such that even
companies with the highest costs can gain a normal profit. The
higher a company’s productive performance and the lower the cost of
its production, the higher will be its profitability. In Fujimoto’s
multi-layer concepts of industrial performance, the differences in (a)
to (e) are said to cause superiority or inferiority in the organizational
capabilities of companies, and thus, the advantage of Japanese
manufacturers can be seen as coming from a CBCL strategy rather
than the normal cost leadership strategy relying on scale of their
production.

A differentiation strategy through market performance by
manufacturing capability is in contrast to this. Clark and Fujimoto
(1991) pointed out that luxury automakers have high profits despite
low development productivity. These firms sacrifice productivity to
manufacture attractive products. In addition, low productivity
increases the rarity of products and creates added value. For example,
one company produces only five supercars per year with workers
performing manufacturing and assembly by hand rather than on a
mass production line. Admittedly, such companies continuously exhibit competitive advantage because they heighten market performance using organizational capabilities other than cost improvements.

**CBCL Strategy is Effective Only with Specific Environment**

What are the causes behind Japanese firms falling into difficulty, or rather, the CBCL strategy no longer functioning?

First, Fujimoto viewed productivity as a proxy variable for manufacturing cost and noted that procurement costs of raw materials, labor, and other inputs should not be bought at excessively negotiated prices from a long-term perspective but should be purchased at the same price as other companies. In other words, his theory does not assume cost reductions via mass procurement or through geographical locations with low pay zones or input factor costs. There is no guarantee that an advantage for a CBCL strategy is created in circumstances where there are companies that compete on cost advantages not due to organizational capabilities.

In addition, a CBCL strategy assumes efficiency improvements and cost reductions in the development and production processes due to organizational learning. In contrast, build-to-order PC manufacturer Dell built a system that does not rely on manufacturing capabilities, with procurement of generic modules and final assembly that requires almost no experience. Fujimoto (2001) gave just-in-time, short delivery times, and the ability to adapt to model and quantity changes as conditions for excellent manufacturers, though Dell is great at all of these. Just as with Dell’s PCs, a CBCL strategy does not work effectively with products that have a highly modularized architecture.

Moreover, even if product architecture continues to be integral, the more development and production processes are improved, the less
room for further improvements is left. Thus, the passage of time causes cost differences with other companies to become insignificant. For a CBCL strategy to be used over the long-term, there must be additional room for improvement by continuous pressure to make development and production more complex. For example, society is constantly demanding that cars have better rides and fuel consumption, reduce environmental load, and be safer. Solving these issues requires more complexity in products and also continual room for improvement. Semiconductor products as well have pressures for complexity such as narrower line widths, reduced area through multi-layered, three-dimensional circuit designs, and development and mass production with new materials. As a result, Japanese companies have an advantage in these product areas.

Thus, we see that a CBCL strategy only works in specific environments, and Japanese companies that have built organizational capabilities to conform to this type of strategy have an extraordinarily low ability to adapt to environmental changes.

**Can CBCL Strategy Be Changed?**

The 1990s saw the modularization of product architecture in home appliances, which did away with the preconditions for a CBCL strategy, causing Japanese companies to lose their competitiveness (Fujimoto, 2002b, 2004; Ogawa, 2009).

Fujimoto pointed out that the organizational capabilities and productive performance of Japanese manufacturers are still in a high state and provided two means for maintaining and using these capabilities to overcome hard times.

The first is to get rid of current businesses that place a firm at a disadvantage and move to businesses that leverage a firm’s capabilities. For example, this could be retreating from assembly of
modularized final products and switching to a component or materials business, or a business in the manufacturing equipment industry that requires advanced production capabilities. This requires that a company aims for Intel’s position in personal computers, displays leadership in the overall structure of products, and sets industry standards (Gawer & Cusumano, 2002), and may not be possible for all companies.

Another way is to appeal to markets with high functionality and quality based on production capabilities and to improve market performance and capture profit by moving to a capability-based differentiation strategy (Fujimoto, 2004). However, just as Porter (1980) noted that the simultaneous pursuit of a cost-leadership strategy and a differentiation strategy could cause a company to be stuck in the middle, organizational capabilities for reducing costs are vastly different from those for differentiating through improving added value and, hence, require a broad rebuilding of capabilities. In actuality, Japan’s automakers have adopted a CBCL strategy, though western companies that have tried a differentiation strategy have monopolies in the luxury car market, and it seems there may be barriers in organizational capabilities to moving between these strategies.

Discussion

At present, the performance of Japanese manufacturers is returning. However, this is not due to firms changing businesses or differentiating as Fujimoto proposed but is rather the result of the performance of companies not being disturbed by temporary environmental changes, and continuing to build capabilities prior to the environment finally turning more favorable.

The fact that Japanese manufacturers were not able to shift to a strategy of improving profit through differentiation can be seen
indirectly in Fujimoto’s research. Fujimoto made many measurements against various metrics to prove the underlying organizational capabilities. High added value relies on high quality and is created over time through development and production (Clark & Fujimoto, 1991); thus, even if we say that there is a Japanese company that aims to have a high added value just as Fujimoto proposed, according to traditional metrics, that company would likely be seen as having lower productive performance. However, Fujimoto continued to measure the productive performance of Japanese companies, even after the 1990s, and concluded that they had not lost their organizational capabilities. The flip side of this is evidence that Japanese companies have continued with a CBCL strategy just as they always have.

In response to the decrease in international competitiveness among Japanese manufacturers, Fujimoto has actually recommended for more than 10 years that manufacturing capability be tied to profits. However, signs of rebirth in Japanese manufacturing began to be seen with corrections to the ultra-high yen exchange rate and changes in environmental conditions in China, with soaring labor costs, which enabled Japanese firms to demonstrate their advantage once again with a CBCL strategy (Fujimoto, 2012b). While western and Korean firms have been successful with differentiation, the fact that Japanese firms have not been able to shift to a high added value path for more than 10 years can only be seen as organizational capabilities creating market performance in the former, with the latter not having such organizational capabilities.

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