

Should Your COO Learn Japanese?

By Bill Waddell©2006

The terms “Lean Manufacturing” and “Japanese” are hardly synonymous. This may come as a shock to a number of manufacturers, and even more consultants, who seem to think that a prerequisite to becoming lean is rote memorization of the Japanese language. In fact, the originators of the Toyota Production System were very forthcoming that they learned it all from Henry Ford. Most Americans think that Ford’s great contribution to manufacturing was the assembly line, but there is no mention of assembly lines in Shigeo Shingo or Taiichi Ohno’s writings about the Toyota manufacturing powerhouse. Rather, the principles learned from Ford that made an impression with Ohno and Shingo are based on the relentless pursuit of continuous flow, absolute quality, and effective synchronization. The economic objective Ford, and later Toyota focused on was continually improving real cash flow, rather than the theoretical objective of Return On Investment.

But while Americans are memorizing the seven types of ‘muda’ (waste) and proclaiming their lean experts to be ‘sensei’, these principles learned from Ford were lost on the American manufacturing community. It turns out they were lost on much of the Japanese manufacturing community, as well.

Today, the big Japanese electronics firms, Sony, Casio and NEC, are outsourcing manufacturing as rapidly and in volumes comparable to Motorola. They are even outsourcing to the same companies – Solectron, a US firm, and Flextronics, a Singapore based manufacturer. These two companies have proven they can make money manufacturing just about anywhere, including the U.S. and Japan. In the 1990’s, Japanese electronics firms built almost 250 plants in China. The Japanese diesel engine maker, Yanmar, and bearing manufacturer, NTN, a couple of billion dollar plus outfits, are a lot like Delphi in that they cannot seem to build plants outside of their homeland fast enough.

On the flip side, Toyota continues to build plants in North America and elsewhere around the world, and make an incredibly consistent profit in the process. What is becoming increasingly apparent is that there are not two competing national or cultural manufacturing philosophies: Japanese versus American. Instead, there are two very different theories of manufacturing economics: The theory pursued by Toyota and Henry Ford versus the traditional Alfred Sloan/GM/ROI theory, which is almost universally pursued in the U.S. The first works, and the second doesn’t.

The truly lean manufacturers make money no matter where they operate, as Solectron and Toyota consistently demonstrate. Their choice of manufacturing location is driven by logistics and proximity to customers, without much concern for labor costs. On the other hand, the traditional manufacturers cannot make money anywhere. General Motors and the big Japanese and American companies are traveling companions in the journey through Mexico and China, and now off to India, in their endless pursuit of cheap labor.

Muda', 'sensei', 'kanban' and 'gemba' are all terms the management and employees of Sony, NTN, NEC and the rest have known since they were toddlers. Yet that immersion in Japanese culture has not enabled them to manufacture at the level of Toyota and Solectron. Similarly, immersion in Japanese culture will not turn around the struggling manufacturers in the U.S. Only adoption of the Toyota/Henry Ford principles will save them.

It is also increasingly apparent that these principles are lost on many of America's lean manufacturing 'experts'. Many of the techniques used by Toyota have been confused with the underlying principles. Kanbans, U-Shaped cells and 5S programs are just as superficial as Japanese terminology, and as of little value to the bottom line when they are deployed by companies still driven by the old economic model. They enable a company to look lean, and maybe even think they are lean for a time, but in the end there is only good manufacturing and bad manufacturing and the language spoken by the people in the factory has nothing to do with it. Imitating Japanese techniques in an effort to further the wrong manufacturing objectives is equally useless.

American manufacturing is largely the victim of unfounded over-confidence. The decades following World War II were heady days for the great American manufacturing companies. As it turns out, however, their great success was due more to the fact that there was no global competition than it was due to good management. The U.S. Army Air Corps effectively assured that there were few plants standing in Europe or Asia in 1945. Unfortunately, we confused the lack of competition with good management. We thought we made money in staggering quantities because we were better than the rest of the world. That bubble burst in the 1970's, although many American managers want to hold on to the illusion of superior management by blaming their non-competitive manufacturing operations on labor costs, government regulations or unfair trade practices.

The Japanese have fallen victim to a similar false sense of accomplishment. The extraordinary success of a few Japanese automobile companies, the technical innovations of a few Japanese electronics firms, and the emergence of Japan's economy from its post-War rebuilding struggles all helped Japan's economy explode in the 1970's and 1980's. A rising tide lifts all boats and, like the U.S. in previous decades, quite a few mediocre Japanese manufacturers prospered. Riding Toyota's coattails, Japanese manufacturing managers were the idols of the world, even though most were not worthy of such admiration. As Naoki Kanamaru, head of Flextronics sales in Tokyo said, selling manufacturing outsourcing services in Japan was tough. "Don't tell me how to manufacture things. We are Japanese," was the typical reaction to his pitch, he says. Fifteen years of tough sledding is finally breaking through the false impression that Japanese and world class manufacturing meant the same thing. Mr. Kanamaru's sales in Japan are brisk these days.

The story has dual morals. First, is that there is no basis for viewing Japan's manufacturing sector with envy, fear or adulation. There is no mystery to it. To the extent that the experts in this country have wrapped lean manufacturing in a kimono, they have missed the mark and misled the manufacturing community.

Second, culture or country of origin have very little to do with manufacturing results. A manufacturer will fail if driven by the old Sloan/GM/ROI model, whether that company is American, Japanese, or from anywhere else. And it will fail whether its plant is located in America, Japan, Mexico, India or China.

Excellent manufacturing – that is, manufacturing that is consistently profitable - is not driven by anything uniquely Japanese, and it is not dependent on the superficial terminology or techniques espoused by much of the lean community. It is the product of the cash and production flow focus that propelled Henry Ford to create 'lean manufacturing', and propelled Toyota to take it to the art form they currently practice.