Figure 11.11c. PROCESS IMPROVEMENT STRATEGIES: Japanese Management 3

EM9326: The Globe and Mail, May 8, 1993, page B7

MANAGEMENT / *After spending billions of dollars to adopt Japanese manufacturing ideas, some U.S. firms are finding they don't travel well*

Japanese techniques lose shine in U.S.

BY AMAL KUMAR NAJ
The Wall Street Journal

Some American manufacturers are discarding billions of dollars of investment they made in the 1980s to adopt Japanese manufacturing ideas.

They haven't decided that the Japanese systems don't work. Rather, they realize that some of those systems, however useful in lifting productivity in Japan, haven't achieved much in their own plants.

Federal-Mogul Corp., deciding that automation had gone too far, has removed much of the fancy equipment at an auto parts plant, and **General Motors Corp.** is now relying more heavily on "people power."

Whirlpool Corp. has soured on Japanese-style "quality circles" as a means of tapping employee ideas, and **General Electric Co.** and **Corning Inc.** have turned to other ways of tapping employee ideas. Losing favour at some companies is the Japanese "just-in-time" system of mimimizing inventory by having suppliers deliver parts only as needed.

"We're relearning manufacturing," said John Welch, GE's chairman.

Not all U.S. companies have floundered in imitating the Japanese methods, of course. **Chrysler Corp.**, for instance, attributes its recent success partly to copying **Honda Motor Co.'s** approach to product development.

But these companies are in the minority. The current effort to redesign significant areas of the manufacturing landscape reflects a stunning admission of failure. Nearly 10 years after rushing to copy the Japanese, many American companies have failed to duplicate, let alone surpass, their efficiency. The Americans were hampered by cultural differences and, they acknowledge, by misapplication of what they saw in Japanese plants.

The upshot has been paltry gains in relation to the $800-billion (U.S.) in capital investment and the estimated $150-billion in worker training American manufacturers spent in the past decade to implement Japanese ideas.

One reason is that U.S. companies went overboard in copying Japanese automation. Federal-Mogul, for instance, mistakenly surmised that the Japanese got a major cost advantage from computers, robots and other automated equipment. The company revamped its Lancaster, Pa., auto parts plant in 1987 with state-of-the-art automation – and with ideas imported from Japan.

But before long, Federal-Mogul, based in Southfield, Mich., found that although the plant turned out parts much faster than before, it couldn't shift gears quickly.

About a year ago, Federal-Mogul revamped the plant again. Out went the robots, most production-line computers, the overhead conveyer belts that carried semi-finished parts along the production line, and "automated guided vehicles." The plant, which assembles 1,800 different parts, now produces three times as many different varieties as before in the same amount of time.

Also going out of style in the United States are "quality circles," in which workers drum up ideas to tweak the production process to improve quality. Kevin Cooney, a division vice-president with Whirlpool, which is based in Benton Harbor, Mich., recalled how, a decade or so ago, he was enamoured of the idea that "the suggestions from workers were driving quality in Japan."

Now, the company has abandoned quality circles. Mr. Cooney said meetings weren't sufficiently focused, and the workers didn't understand the objective. They ended up discussing a lot of "tangential" issues, including "the colour of paint in the restroom," Mr. Cooney said.

Instead, Whirlpool instituted "gain-sharing" plans, under which employees participate in savings resulting from quality improvements.

GE, based in Fairfield, Conn., found the Japanese system too rigid and narrow for free-wheeling American workers. In some cases it has replaced them with a system called Work-Out, under which workers and managers periodically meet in a freewheeling town hall-type atmosphere designed to encourage workers to offer radically new ideas.

So what's the right blend of technology and "people power" in the United States?

Corning, based in Corning, N.Y., thinks it has found one. In a 1989 refurbishing of a Blacksburg, Va., plant that makes ceramics for catalytic converters, it instituted "a people system" focusing on job satisfaction.

The company had copied Japan's extensive automation but found that it sapped employee motivation.

Studying how to avoid that problem, Corning executives came upon a Procter & Gamble Co. liquid-detergent plant in Lima, Ohio, that is "virtually run by workers," he said.

Corning adopted similar procedures: it let any of the 200 workers sign a purchase order, up to $500, without authorization; eliminated time clocks; created only one job classification, with one manager for 60 employees; and trained each employee to handle as many as 15 different jobs.

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