The End Of The Line For GM-Toyota Joint Venture



New United Motor Manufacturing Inc., in Fremont, Calif., is scheduled to close on April 1. Frank Langfitt/NPR

Next week, New United Motor Manufacturing Inc., a factory once run by both General Motors and Toyota, will close in Fremont, Calif.

The factory is called NUMMI for short and — on the surface — it's a familiar story about the fall of the American auto industry. But this is no ordinary plant.

In the mid-1980s, Toyota took over the Fremont plant, one of GM's worst, a factory known for sex, drugs and defective vehicles. And as part of an historic joint venture, Toyota turned the plant into one of GM's best, practically overnight.

Along the way — remarkably — Toyota even shared its production secrets.

But GM would take another decade and a half to begin seriously implementing those lessons in its own factories. That was too long and explains a lot about why it took GM and other Detroit companies so many years to improve the quality of their vehicles.

Some GM managers who worked at NUMMI see the joint venture as a lost opportunity and wonder what might have been.

Forging A Partnership

In 1985, after NUMMI opened, *Car and Driver* magazine ran the following headline: "Hell Freezes Over."

Back then, GM and Toyota needed each other. GM had to build small cars, but they were lousy and lost money.

Toyota had its own problems. The company was facing import restrictions from the U.S. Congress. So, it had to start building cars in United States.

It wanted a U.S. partner who would teach it how to deal with American workers. Toyota settled on the rough bunch in Fremont.



A car moves down the auto assembly line at New United Motor Manufacturing Inc., a joint venture between General Motors and Toyota that produces Toyota and Pontiac vehicles. Courtesy of NUMMI

"It was considered the worst workforce in the automobile industry in the United States," said Bruce Lee, who ran the western region for the United Auto

Workers and oversaw the Fremont plant. "And it was a reputation that was well earned. Everything was a fight. They had strikes all the time. It was just chaos constantly."

Sex, Drugs And The Assembly Line

How bad was it? Rick Madrid built Chevy trucks at the plant. "There was a lot of booze on the line," he said. "And as long you did your job they really didn't care."

Madrid said he drank when he was mounting tires. "I'd bring a thermos of screwdrivers with me."

And it wasn't just drinking and drugs, Madrid said. People would have sex at the plant, too. If you're wondering how people kept their jobs, here's why: Under the union contract workers practically had to commit fraud to get fired.

Some workers hated management so much, they sabotaged the vehicles.

They put Coke bottles inside the door panels so they would rattle and annoy customers. Absenteeism was rampant.

Billy Haggerty worked in hood and fender assembly. He said so few workers showed up some mornings, managers didn't have enough able bodies to start the line: They would " go right across the street to the bar, grab people out of there and bring them in," Haggerty recalled.

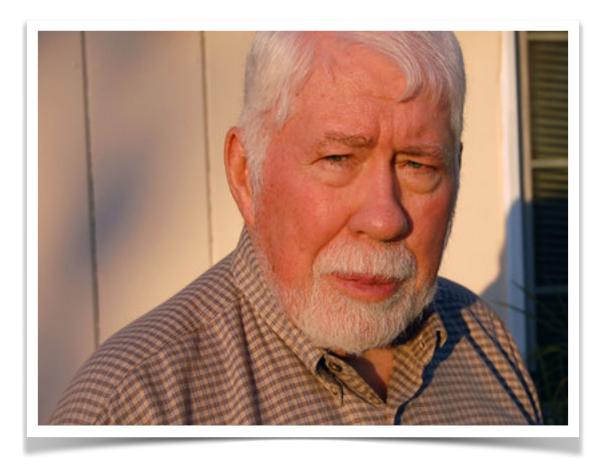
Learning The Toyota Way

By 1982, GM had had enough and put the Fremont factory out of its misery, Two years later, GM and Toyota reopened the factory with — incredibly — most of the same workforce.

But first, they sent some of them to Japan to learn the Toyota way.

The key to the Toyota Production System was a principle so basic, it sounds like an empty management slogan: Teamwork.

At Toyota, people were divided into teams of just four or five and they switched jobs every few hours to relieve the monotony. A team leader would step in to help when anything went wrong.



The United Auto Workers' Bruce Lee helped oversee the transformation of the plant from one of the worst under General Motors to one of the best in America. *Frank Langfitt/NPR*

At the old GM plant in Fremont, Calif., the system had been totally different and there was one cardinal rule that everyone knew: the assembly line could never stop.

"You just didn't see the line stop," Madrid said. "I saw a guy fall in the pit and they didn't stop the line."

Lee, the supervisor who oversaw the plant summed it up this way: "You saw a problem, you stopped that line: you were fired."

Defects Along The Line

As a result, vehicles at the plant had lots of defects. Haggerty saw all kinds of mistakes go right down the line.

"So we had Monte Carlos with Regal front ends and vice versa," he recalled. There were cars with engines put in backwards, cars without steering wheels or brakes.

Workers fixed them later in a yard outside – sometimes doing more damage to the vehicles.

At the NUMMI plant you can see Toyota's solution to this - a thin nylon rope that hangs on hooks along the assembly line. It's called the andon cord and when pulled, it will stop the line.

'One Bolt Changed My Attitude'

The first pull summons a team leader. Workers try to correct the problem on the line. If it takes too long to fix, the line stops. The andon cord also plays a surprisingly cheerful little song that workers can chose. For longtime GM workers who switched to the NUMMI system, all this was a revelation.

When Madrid trained in Japan, he saw workers stop the line to fix a bolt.



After two decades at the GM Fremont plant, Earl Ferguson flew to Japan to learn a whole new way of making cars. *Frank Langfitt/NPR*

"That impressed me," he said. "I said, 'Gee that makes sense.' Fix it now so you don't have to go through all this stuff. That's when it dawned on me. We can do it. One bolt. One bolt changed my attitude."

In December 1984, the first car, a yellow Chevy Nova, rolled off the assembly line at the NUMMI joint venture. At the opening ceremony a union rep named Joel Smith vowed that the new plant would be a big success: "Mr. Toyota, if you would please deliver this challenge to our friends in Japan: We intend to build the best quality cars in the world."

Early on the numbers coming out of the NUMMI plant were astonishing.

"The best measure they use is how many defects are there per 100 vehicles and it was one of the best in America," said Jeffrey Liker, author of *The Toyota Way*. "The same for Toyota cars made in California as the Corollas coming from Japan — right in the beginning."

General Motors sent 16 rising stars to start the NUMMI plant. Two Wall Street reporters dubbed them the "NUMMI commandos."

After the successful launch, these company the commandos wanted to spread the lessons of NUMMI throughout GM.

"We were ready, we were fired (up) and we had the mental condition that said: 'we're going to change the world,'" said Steve Bera, one of the commandos.

Bera said he and the other commandos were waiting to be deployed elsewhere, but the company didn't seem to know what to do with them.

"Instead of coming back to the 16 of us and saying, 'There's some secret sauce here, what is it? How can we use it to our advantage?' No one ever asked us that question," Bera said. Frustrated, he quit after putting in two decades at GM.

Attempts To Grow A Strategy

The next year GM did try to replicate NUMMI again at a plant in Van Nuys, 400 miles south of Fremont. But employees were skeptical from the outset. Unlike workers at NUMMI, they'd never lost their jobs and didn't think they would.

"The lack of receptiveness to change was so deep," said Larry Spiegel, one of the commandos who struggled to transform the Van Nuys plant. "There were too many people convinced they didn't need to change."

Spiegel said that even though GM had threatened to close the plant, workers believed it would never happen. And they stuck with their old ways.



More than 200 workers and family members turned out for a rally recently to try to persuade Toyota not to close the plant. *Frank Langfitt/NPR*

Quality at Van Nuys never did improve. And in 1992, GM closed the plant. With the market share collapsing at GM, executives did try to push the NUMMI concept across the company.

Geoff Weller's job was to help convert GM, factory by factory. But GM was a sprawling, highly decentralized company and plant managers were king.

Weller said some managers were responsive. Others weren't - like the one who asked him to leave his factory after Weller made his presentation about the NUMMI system.

When asked why the CEO wouldn't fire a plant manager who resisted a system that was producing better cars at lower costs, Weller said: "It's a big company ... and it doesn't work that way."

Some at GM tried to spread the lessons of NUMMI, but it was slow and difficult. In some plants, the union saw its traditions threatened by Toyota's team concept and refused to change. Back then, GM was a highly decentralized company where plant

managers ran their factories like fiefdoms. In at least one case, a plant manager threw out a GM executives who preached the Toyota system.

Over the years, GM executives did learn from NUMMI and lessons finally caught on. By the early 2000s, the company had developed a production model based on Japanese principles that became standard at every plant. And although GM quality still lags behind the Japanese, it eventually improved a lot.

"One of the ironies of GM was that at the moment it went bankrupt, it was probably a better company than it had ever been," said James Womack, co-author of *The Machine that Changed the World*, a book that compares the GM and Toyota production systems. "But it was too late. And that's really sort of hard to forgive. It you take 30 years to figure it, chances are you're going to get run over. And they got run over."

A Losing Battle

In the end, the Great Recession sank GM. It destroyed the car market. And in 2009, General Motors became the largest industrial bankruptcy in U.S. history — costing taxpayers more than \$50 billion.

Mark Hogan was one of the NUMMI commandos who rose to run GM's small car division in the U.S. He said GM might have avoided bankruptcy if it had moved in the late 1980s to implement the NUMMI system: "The productivity and quality changes that come with that would have been so profound, that this ever increasing loss in market share would have been stopped."

General Motors declined to be interviewed for this story.

Of course, quality and reliability weren't the reasons GM failed. Over the years, GM negotiated such generous contracts with the UAW that they crippled the company.

And, at first, some at GM dismissed hybrids like the Prius as a publicity stunt. Today, the makers of the Prius have their own problems. And Toyota executives suggest it's because they made one of GM's old mistakes — stressing quantity over quality.

A Production Legacy

For the last quarter century, the NUMMI plant has pumped out vehicles — 6,000 a week, on average. When GM went bankrupt, it pulled out of the joint venture. And Toyota says it didn't want to go it alone.

Next Thursday, Nummi will produce its very last car - a Corolla - and 4,500 people will lose their jobs.

Haggerty, the longtime NUMMI worker, remains proud of the vehicles that he built at the plant. Just the other day, he said he saw one: "And I just looked at it and said, 'Boy that one's old.' And I looked down and it was a Corolla. I know we built it right there. So it's still running. It's still kicking. It feels good."

This is also NUMMI's legacy.

In the end, it's not just a symbol for so many things that went wrong with GM and Detroit. It's also a really good car plant: One that turned out nearly 8 million high-quality cars and trucks.