

Why clever software — not expensive hardware is the key to a competitive future for America's auto manufacturing industry

Hardware upgrades are a viable option for some companies, but for most, the short-term costs (and there are many) outweigh the long-term gains.

By Vivian Shic

American auto parts manufacturers are at risk of becoming obsolete.

The big automakers are struggling to keep up with exploding consumer demand for higher quality, more technology-rich cars. In order to maintain market share against their rivals, they must deliver better quality with greater efficiency.

This forces efficiency down through their supply chains.

The problem is, automotive supply chains are burdened with aging systems and mainframe technology in desperate need of modernization. With limited capital and IT resources, the need to upgrade to entirely new platforms puts Operations Managers under extreme pressure.

So, what do you do when you don't have the time, budget or people to enact a strategy and make decisions to keep your factory competitive?

Software — not hardware — is the solution for American manufacturing.

A new breed of small, adept data logistics companies are providing innovative software solutions that renew legacy systems. This helps modernize American manufacturers by solving some of their most pressing problems quickly and cost-effectively.

But, because they're small, they're unknown, and tough to find.

Modernizing your factory therefore requires a change in mindset. You've got to pay attention and be on the lookout for innovative software providers that help you meet the demands Toyota and GM are putting on their downstream suppliers.

According to a recent McKinsey study, car manufacturers are in a constant race of innovation to create cars that are safer, better-connected, more fuel efficient, and cost-competitive.¹

To remain competitive, they need their suppliers to make parts better, faster and cheaper. But innovation doesn't stop at product.

Manufacturing efficiencies mean your customers, like GM and Toyota, want Just-in-time (JIT) information about product, inventory and logistics. This ensures the timely deliver of parts, keeping costs low and quality high.

If you're a mid-west nuts and bolts maker serving Toyota and you're still

using .pdf, email, fax and manual data entry to bridge the gap between disconnected systems, you've got a storm on the horizon.

When you have 20 tons of steel coming in and 20 tons of nuts and bolts going out every day, finding the time to search for software solutions isn't easy. But, you've got to get started, because delay only compounds your mounting problems and risk.

Increasing supply chain efficiencies is critical: "The major cost of the car is not the material in the car. It's the factory that builds the car."
— Tom Mueller, Chief Propulsion Technology Officer, SpaceX

Bottom line: if you're not modernizing your auto parts factory with JIT technology, you're at risk of becoming obsolete.

As an Operations or Plant Manager, what do you do?

Hardware and mainframe manufacturers, like IBM, would love to replace your aging systems with more computing power — or entirely new platforms that connect all of your systems. Redesigning your data systems from scratch is alluring.

But replacing your hardware isn't financially feasible. And replacement costs are just the beginning.

Often, it means shutting down your factory and halting production (and cashflow) for an unknown period of time.

Despite these costs, the potential impact to your people carry the greatest risks. The threat of big change can harm morale. The rumor mill can hurt your company's standing in your community. Uncertainty incites fear in people who rely on a mindset of consistency and dependability to do their job everyday.

But, there's no need to panic. This new breed of nimble and inventive companies offer a range of simple software solutions that can propel your factory into a competitive future.

HULFT, a data logistics company in Silicon Valley, recently saved one mid-west auto parts maker millions, by modernizing their legacy systems with software, instead of hardware. In 60 days, devices were upgraded and manual data entry was eliminated

to incorporate JIT product, inventory and shipping information — all without disrupting production or changing how people worked.

HULFT builds on its Japanese heritage of creating precise software solutions for complex manufacturing problems.

These solutions are tailored to each customer to find disconnected data and put it where it needs to be.

Machines that have gone decades without communicating with each other now update automatically — eliminating costly, error-prone manual workflows — in real time.

This gives your customers, like Toyota, the ability to reduce manual intervention and run production lines efficiently and with certainty.

The future is here.

Automated workflows, where data systems are connected for rich, actionable information in real time.

"HULFT partners with customers to understand and solve their business problem behind their technology problem — then we fix what we need quickly, with as little disruption as possible. Bottom line: our customers modernize their factories for a fraction of the price of replacing hardware — and these projects pay off in reduced operating costs within months."

— Dmitry Dukhan, Sr. Director Digital Manufacturing, HULFT

Scrapping and replacing hardware is only a 'solution' if you have millions to invest. But, if your company is like most in this sector, you don't have access to that kind of capital, or capacity to shut down production lines for new installs.

That's where companies like HULFT can help you modernize with simple, inexpensive software solutions.

With looming trade wars, the American auto manufacturing industry is at the crossroads. Recapitalize, redesign and retool with expensive hardware — or modernize quickly, with software that works?

One phone call to a company like HULFT may give you the answer you need. Why wait? These companies offer solutions to your problems — or you don't pay.

¹ "The 'How' of Transformation," McKinsey & Company, May 2016.