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Technology Strategies for Progressive Manufacturers

ONLY THE ADAPTABLE SURVIVE

DEEPDIVE agility

Have you noticed that business conditions seem to be changing faster than ever? It's not your imagination. Manufacturers now must not only survive change, but also embrace it with agility.

BY JEFF MOAD

Talk about a one-two punch. Just last summer, as soaring gasoline prices forced consumers to rethink their preference for large, fuel-hungry vehicles, Honda Motor Co., like most of its automotive OEM competitors, saw demand for SUVs and pickup trucks dry up. Then, last fall, the credit crisis and souring economy conspired to undercut consumer spending further. Suddenly, Honda and other car makers found they were spending a lot of money making product for which there was little demand.

"In the current market, the changes have all come so fast," says Honda spokesman Ron Lietzke. "We had to be agile enough to quickly shift product levels based on what people want to buy."

Fortunately for Honda, the company, over the past decade, has been laying the groundwork for reacting with agility. Honda, as part of what it calls a New Manufacturing System, designed its North American plants in places like Marysville, OH, and Lincoln, AL, to use common processes and equipment. The company replaced inflexible hydraulic welding systems with programmable robotic welding systems that can be easily used to produce a wide variety of cars and light trucks. And Honda cross-trained plant workers and deployed visual management systems, allowing workers to quickly shift from building one design to another.

The pressure to become more agile in order to deal with accelerating rates of change is pervasive among manufacturers.

As a result, Honda will be able to react relatively quickly to the unprecedented changes it faces. The company in November 2008, cut back production of its Pilot sport-utility vehicles in its Lincoln plant by 8,000, or 32%, and planned an additional 22,000-unit cut of Pilots and Odyssey minivans in the first quarter of 2009. At the same time, Honda took steps to shift production of most of the V-6 Accord sedans for the North American market from Marysville to Lincoln, which had never made Accords before. That will open up more capacity in Marysville for production of four-cylinder Accords and engines.

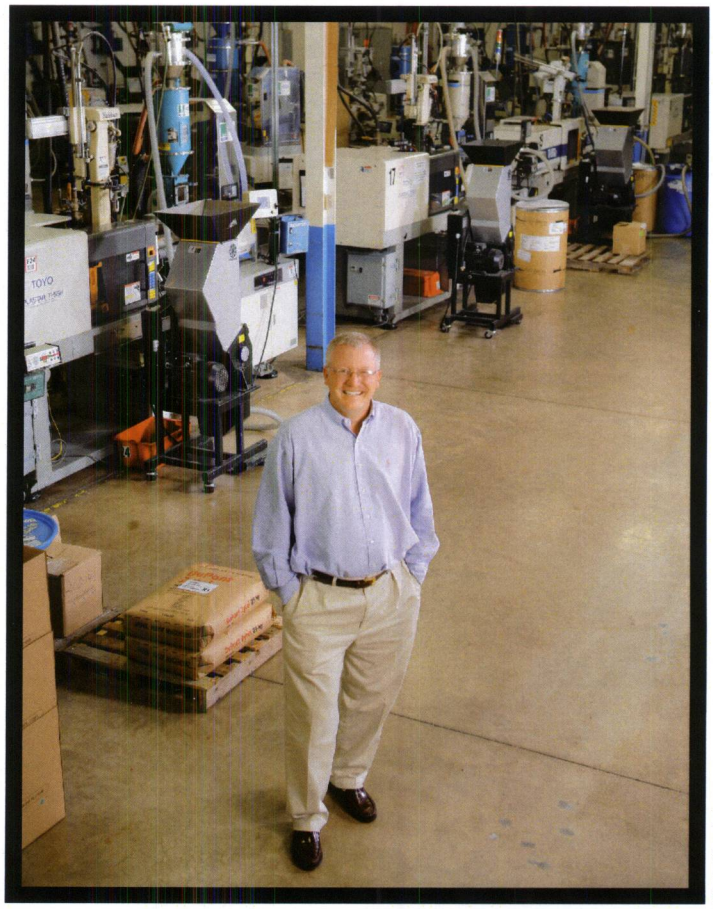


Photo: Ricardo Azoury

"Those plodding along, like the dinosaurs, can't adapt strategically. They won't survive," says Tom Duffey, Plastic Components

While its traditional competitors often spend a year or more retooling for such major production line changes, Honda says it will complete its changes in about eight months.

"When you look at companies like Honda and how they are able to respond to changing market conditions, and you compare them to their North American competitors, you can see how important agility is for a manufacturer today," says Gordon Fleming, chief marketing officer at manufacturing software vendor QAD, which has a substantial presence in the automotive industry. "It can really be a matter of survival."

It was Charles Darwin who said, "It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change." That has never been truer than it is today across most vertical industries where manufacturers are being forced to cope with rapid — and in some cases unprecedented — rates of change.

Fluctuating economies, accelerating globalization, escalating customer demands, shrinking product lifecycles, and rising government regulation all are combining to force most manufacturers to get much better at quickly recognizing market shifts and responding to them. They are being required, for example, to move production from one plant to another, adjust product prices, or revamp short-term demand plans and production schedules on the fly.

"In our industry right now what's happening is that companies that are agile and have the ability to adapt to rapidly changing market dynamics are those who'll survive what is looking like a serious recession," says Tom Duffey, president and owner of Plastic Components Inc., a maker of injection molded thermoplastic parts. "Those plodding along, like the dinosaurs, can't adapt strategically. They won't survive."

The pressure to become more agile in order to deal with accelerating rates of change is pervasive among manufacturers. In a recent survey of manufacturers by *Managing Automation*, 94% said their companies need to become more agile, and 60% said agility is a greater focus today than it was a year ago. Cost pressures and increasing customer demands are driving the rapid changes that are forcing increased agility, manufacturers said (see charts).

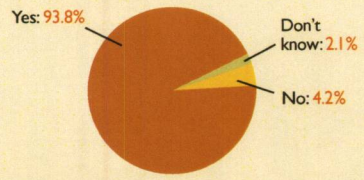
But, according to the survey, many manufacturers are struggling to streamline business processes fast enough to cope with the accelerating pace of change they face. Only 13% of manufacturers responding to the *MA* poll said they have substantially improved agility over the past year, while 25% said their agility has remained the same over the past 12 months.

A similar recent survey of CEOs by IBM showed that 83% expect their business to face substantial change over the next three years. But only 61% said their companies had demonstrated the ability to cope with rapid change in the past.

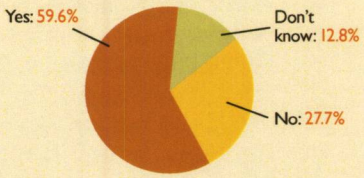
ma poll focus

MANUFACTURERS HAVE THE BEST INTENTIONS FOR BECOMING MORE AGILE

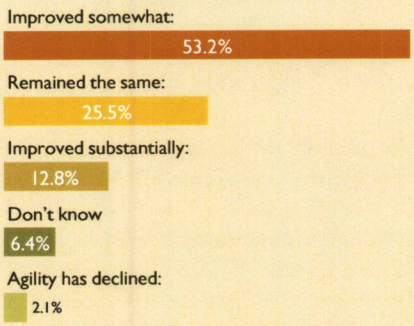
Q: Is your company interested in becoming a "more agile" business, one that can respond to customers faster, develop and bring products to market more rapidly, and adapt to changing business conditions with greater flexibility?



Q: Does agility have a greater focus for your company today than one year ago?



Q: Over the past 12 months, to what extent has your company improved its agility?



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