



The Outlook for Motors and Drives in 2010: *Strategies for Success*

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For manufacturers that were paying attention, the recent economic crisis gave aggressive motor and drive manufacturers a unique opportunity to gain competitive advantage. For those that weren't, the crisis ran hard and deep and may have caused a serious setback.

It's the Economy, Stupid

The severity of the economic crisis was intense. The size of stimulus packages around the world, especially in the US and Europe, will cause public policy angst for years to come. The current Greek debt and possibly bankruptcy debacle is emblematic of the debt overhang that burdens some sovereign nations.

We are not out of the woods yet. Only half of EU bank bad loans have been written off so far (\$365 billion of \$650 billion). Loan default rates will peak in 2011 (banks will lose \$4 trillion in bad loans during the debacle) and then float down to 2003 levels throughout 2012 to 2015, according to the IMF. By the time they recover, the top 19 banks will have lost 7 to 8 percent of their total assets. The US deficit will triple between 2008 and 2009, and US public debt will rise from 39 percent to 78 percent of GDP by 2012, according to Economist Intelligence Unit estimates. Top economists figure that the average government debt of the G20 countries will have jumped from 40 percent in 1980 to more than 100 percent in 2014. The risks are large: banks may hold onto reserves rather than distribute them as loans, public debt might cause national bankruptcies, and the massive monetary infusion may cause hyperinflation. Most significantly, unemployment is projected to remain above 8 percent through 2013, and there is a very real chance of a double-dip recession.

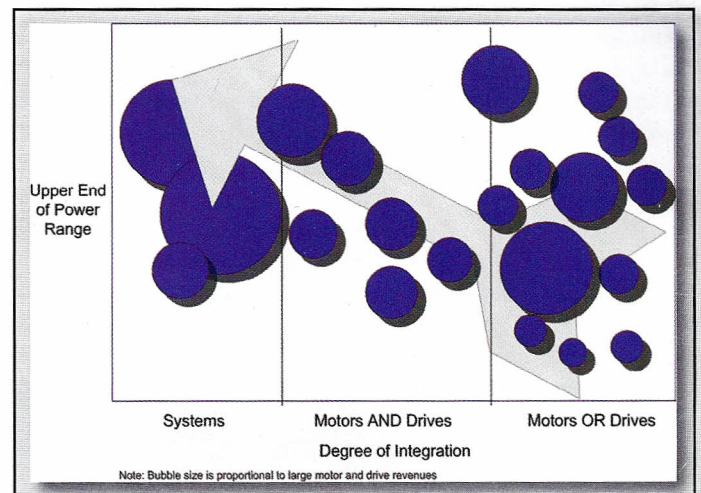
2009: A Bad Year for Motors and Drives

Motor sales fell by close to 15 percent in 2009 as all sources of demand dried up. The housing market was down. Companies postponed capital investment in light of economic uncertainty. Consumers opted to save instead of spend. And most of the government stimulus money had not been issued yet.

As the weight of the recession crushed demand throughout 2009, manufacturers removed capacity. One major company closed multiple plants, consolidated production in its more efficient plants and underwent a rationalization program, reducing the number of platforms and stock-keeping units (SKUs) at a cost of millions of dollars. Despite this huge restructuring, the company still has too much capacity and is hoping for a resurgence of orders to cover its fixed costs. Other manufacturers furloughed workers and took other measures to reduce the number of working hours, typically overcompensating by cutting capacity by more than the drop in sales in order to hedge against further sales declines and to be even more resilient financially than their competitors. Nearly all cut back on their capital ex-

penditure budgets, which will sadly defer technological development in the industry.

While orders have fallen, costs have increased. The price of copper, a major cost driver, more than doubled between 2005 and 2009, and while copper price crashed the current price is beginning to rise again. Simultaneously, the price of component costs increased while orders were falling, as did the cost of labor: ironically, the more companies shed staff, the better they paid the employees who remained. Employers were loathe to release their best and brightest employees onto the job market where they would likely be snapped up by competitors, so now many of the remaining employees are working longer and harder than before and getting better compensated for it.



A Shift in the Playing Field

Prices fell with demand during 2009, and most of the decrease cut directly into suppliers' profit margins, so cost-cutting, which had previously been reserved for times of austerity, became a "new normal" way of operating. Even major manufacturers with the best brand recognition faced a tough pricing environment in 2009. Most kept busy by consuming their backlogs rather than filling new orders. Therefore, backlogs and lead time shrank. Trying to avoid dropping prices, many manufacturers competed on low lead times since they had extra capacity anyway, which drove lead times even lower.

Demand and Sales Outlook

In 2010 and beyond, there are promising signs of recovery in the macro economy. Asian growth will pull the world along, although it may not be a smooth recovery. China grew at 8 percent in 2009 and all of Asia grew at over 3 percent in 2009, despite the downturn. The US dollar doesn't seem to be falling apart (which says more about the weakness of the other currencies than the greenback itself). Meanwhile, savings have

Boston Strategies continued on page 10



Boston Strategies continued from page 8



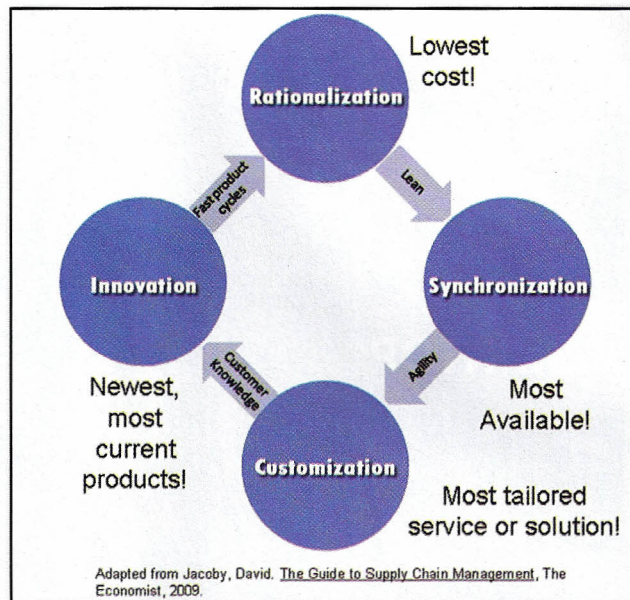
Price Outlook

Along with the recovery of the global economy, demand for motors and drives will start to increase, but it will take years to win back the losses of 2009. Sales will benefit from stimulus spending and infrastructure investment but will be restrained by a stalled housing market and relatively weak consumer spending. Demand in the US will increase throughout the year as businesses regain confidence that the worst of the recession is over. Sales in Europe typically trail the US pattern.

Manufacturers and distributors will get a boost from new NEMA Premium efficiency standards. The MG1 efficiency standards have been embedded in US legislation that applies to single-speed; polyphase; 1 to 500 horsepower; 2, 4 and 6 pole; squirrel-cage; induction motors of NEMA Design A or B that are continuous-rated. It also offers a 20 percent subsidy from matching grants on "Smart Grid" investments that include motors and drives.

Emerging economy countries including Eastern Europe, the

become fashionable in the US. The savings rate has risen from 0 percent in May 2008 to 6 percent in May 2009, and while in the short run, this might hurt consumption, it should make spending more consistent and reliable in the future.



Gaining Operational Advantage

Middle East and India, will grow rapidly and will increase their share of the market dramatically in the coming years. Asian manufacturers and manufacturers that have a global footprint will benefit from growth in their home markets to export and extend their capacity abroad. The residual effect of government stimuli will help construction and infrastructure industries continue to buy motors and drives.

Prices have leveled off, but buyers will be reluctant to concede to price increases due to the slower growth rate and heavy debt burdens. The Asian demand environment will be stronger than in the US, recovering close to pre-recession levels, which may allow some upward price movement.

Strategies for Success

Given the turmoil, what is the best way to gain competitive advantage during this period of realignment that will generate ongoing benefits when the market stabilizes?

Clearly, selling into Asian markets or specializing in premium motors would increase the prospects for growth in 2010 and 2011. Emerging economies and energy efficient applications are both consuming motors and drives faster than the market as a whole, so sales and prices may be attractive. However, since the opportunity is clearly visible, many companies are likely to pursue those markets, so the competition will be intense.

One way is to add more value through integrated motor and drive solutions that make total drive systems more efficient and effective than they otherwise would have been. Paired motor and drive sets are becoming more commonplace for this reason.

Another way is to acquire complementary capabilities to extend the product offering, geographic scope or after-sales service network. The multiple that needs to be paid for acquisition targets is historically low as low cash flow and a shortage of venture and private equity capital may make some companies amenable to reasonable offers of partnership or acquisition.

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A third way is to gain operational advantage. Low-cost production, low lead times, custom delivery and rapid new product innovation all deliver more value to the customer, frequently at lower cost, if done correctly. Major manufacturers have instituted ongoing and continuous cost reduction initiatives that will make them low-cost producers. Continuous and rapid product innovation enables premium pricing, and most of that flows directly to margin.

Many companies that are cautious about the economic recovery or are anticipating a double-dip recession or continued volatility are implementing flexible cost structures. While not an aggressive strategy to win, it certainly increases the chances of not losing, so it has become a very popular hedging strategy among business strategists and operations managers. Here are seven things you can do to ensure a flexible cost structure at your company:

1. Outsource peak load to a third party. Outsourcing helps keep capacity utilization steady and service levels reliable during troughs and also peaks in demand.

2. Increase temporary employees in proportion to the staff mix. This reduces the fixed cost base and therefore the break-even point. Temporary employees are easier to hire and let go when demand shifts and, if managed carefully, can eliminate expensive overtime.

3. Implement lean concepts including just-in-time, one-piece flow, level loading and make to order (MTO).

4. Postpone disposition, dispatching or finishing operations to as late a time as possible before the customer needs the product or service in order to reduce capacity requirements and inventory obsolescence.

5. Use demand planning techniques such as sales and operations planning (S&OP) and collaborative planning, forecasting and replenishment to reduce inventory variances.

6. Reduce cycle time in order to retract production more quickly once orders tail off and also to be able to be more responsive during periods of increasing demand.

7. Apply yield pricing to drain inventory before it becomes obsolete and, conversely, to earn extra margin on tight resources during peak periods. Once customers adapt their buying behavior to yield pricing, it has the effect of leveling capacity.

The great recession of 2008-09 has caused many firms to thoroughly rethink the way they add value to their customers and profit to their shareholders. Though this may have been an uncomfortable process, the resulting business will ultimately make for stronger competitors and happier customers.

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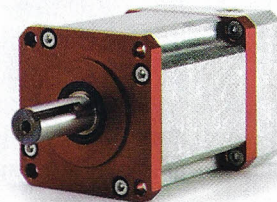
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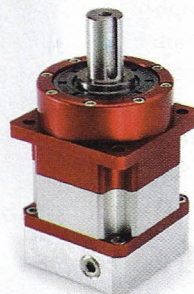
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