MANUFACTURING TRENDS BY DAVID KING

Manage Change With An **Effective Innovation Strategy**

Customer Engagement and Employee Involvement Are Key Elements



Today the manufacturing industry is undergoing a period of almost unprecedented change as new technologies disrupt traditional practices on a scale not seen since the industrial revolution. Yet even as this period of innovation becomes inevitable the companies in the industry face a new conundrum—not if they should change, but how fast they should.

Collaborate to leverage industry expertise ...

At its core this challenge stems from the difficulties of reconciling a macro view of the industry with a micro one. From a big picture perspective, the future is clear, the technological shift has already begun and can't be stopped. To a business owner, however, the issue is more complicated. The sorts of adaptations experts talk about often require substantial financial investments and workforce training or hiring that take years to successfully plan and implement. Given all that, it's not surprising that many mid-size companies would rather stay the course than

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blaze trails, but this approach still leaves businesses vulnerable to competition from younger enterprises. "For any manufacturing company especially in this part of the USA, innovation is about survival," says Tim Cunningham of Council member Bell Flavors & Fragrances, "Companies that don't continuously look for better ways to do things will be at a competitive disadvantage."

This is where it becomes important to differentiate between evolution and revolution. That is, between gradual change and abrupt overhaul. By taking things one step at a time a company is better prepared to manage its transition into the future of manufacturing. Several early steps a company can take include:

Define Innovation

There's a temptation to think of innovation as a free-flowing series of changes. A blank canvas waiting to be filled with the newest and most unexpected ideas. In reality, the most successful innovation programs tend to be the ones that come with a clear sense of purpose and parameters.

This means laying out what innovation will actually look like for your business, which is something that can vary greatly according to factors like size, product type, legacy, customer base and location. Is it advanced data analytics to streamline a supply chain or pricing strategy? Is it about introducing new automation? Is it 3D printing? Once you know what your business needs to do to adapt, the transition process gets that much smoother.

That's not to say creative thinking and pioneering spirit are ill suited to the process—they're both vital to changing any industry. Rather, it's about guarding against innovation for innovation's sake when time and resources would be better spent on adopting emerging technologies that can deliver clear benefits for the business and its customers alike.

Map It Out

After you've defined what innovation means on your terms, it's time to build a clear and concise road map through the process. It's extremely important that any manufacturing company have a clear road map for change that ties the overall vision of leadership to the actual steps the organization must take to get there.

As far as is possible, this plan should be transparent, accessible, and backed up by a team charged with evaluating ideas and prioritizing tasks to keep the day-to-day in check and innovation on track. This makes it easier for employees to understand and buy in to the outcomes leadership is working toward.



Operators preparing subassemblies at Ametek Rotron in Woodstock, NY.



Machine operator programming the APAS (Automated Pattern Assembly System) at MPI, Inc. in Poughkeepsie, NY.

Develop Talent And The Ability To Innovate

It is vital to focus on developing talent and skills to give employees the ability to innovate, and studies have shown that this ability is tied to the capacity for developing creative ideas. Dr. Nildeep Patel of Council Member AMETEK Thermal Management Systems explains what his company looks for in employees as "people who are problem solvers using either their own imagination or using their initiative in seeking the answers to the proposed questions from the wider community."

In this new manufacturing model of real innovation in manufacturing, companies need to understand that there are certain capabilities in Scientists, Engineers, Technology Managers, Technicians, and skilled trades people associated with the manufacturing of certain advanced products. If manufacturers lose those skills it can affect, not only their own productivity, but the overall competitiveness of the nation's economy. Therefore, a key priority for manufacturers must be to invest and engage in a skilled labor pool.

Collaborate

To spur innovation, manufacturers are taking a serious look at collaboration. Innovation is not going to happen in isolation. It is necessary to engage in collaborative arrangements with suppliers and partner companies.

In recent years there's been a major shift by manufacturers towards collaboration in the earliest stages of product development. Sometimes referred to as "coopetition," This new inclusive approach to innovation not only disperses potential risks, costs and rewards across the supply chain, but also allows manufacturers to focus on what they do best by leveraging the expertise of external partners and accelerating speed to market.

Keep The Customers Involved

This may seem obvious, but a great place to start with innovation planning is with customers themselves. After all, they're the ones who pay the bills. Before setting out on any program of organizational transformation, companies must understand how it will deliver better experiences for those they serve, both now and in the future. "This is key to our business model" says Patel, "we are a solutions provider and deliver innovative solutions to our customer's problems. Technical partnership on strategic plans and a mutually symbiotic technology road map are some examples of close relationships we share with our customers."

In many cases, this comes down to communication. Rather than innovating behind closed doors, manufacturers should work with customers to identify their needs, define what they see as added value, and understand their preparedness and appetite for disruption. For example, a growing number of manufacturers are forming co-innovation partnerships with customers to offer hands-on experience of new technologies and promote a sense of openness and best practice.

This allows their business to evolve at a speed customers are comfortable with while helping protect, even enhance, critical relationships by making them feel part of a shared journey. Most importantly, it also helps manufacturers keep their eye on the ball when it comes to delivering the same quality of products and experiences that brought their customers to them in the first place.

Conclusion

It's understandable why this process is so daunting. More than any other sector, manufacturing is about outcomes, delivering the goods and materials that make the world's daily life go round. Yet it's also an industry with a long history of innovation, from the first moving assembly line to industrial robots. Striking a balance between those two poles has never been more important.



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