

14 Industrial Manufacturing Innovation Trends for 2014

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2013 is gone and 2014 is upon us. Before the new car smell fades, here are a few trends and new developments we – and you – should be looking out for in the New Year.

Strategy

1. Management teams will focus more on accelerated shareholder value creation through organic growth of core products or platforms
2. Management teams will look to execute innovation strategy directly through portfolio management enhancements

People

3. Manufacturing companies will try to do more with fewer employees by leveraging automated/virtual manufacturing and off/near shore resources
4. As older, experienced workers retire, along with their years of knowledge and experience, companies will continue to seek new and better ways to bridge the generation gap in the workplace
5. Greater utilization of online or virtual training tools will link users to certifications and allow specific employees to perform specific tasks
6. As costs of doing business in Asia (e.g. labor, transportation, regulation, etc.) continue to rise, manufacturers with heavy Asian operations will increasingly look in/near shore

Process

7. Continued refinement of product development, manufacturing, and supply chain processes will help industrial manufacturers realize business value from mass customization
8. Companies will continue to explore the question: Should process design or technology automation come first? Many product lifecycle management (PLM) systems now are being designed for configuration around generic processes. So some companies will opt to start with a PLM software overhaul first and then fix their processes

Technology

9. Fundamental changes in what companies must manage as product defining documents: models vs drawings. In light of designing to leverage additive manufacturing – like 3D Printing – or direct from model manufacturing, drawings are not sufficient. Models will be required
10. Manufacturers will need to bring more 3D printing tasks in-house as key patents expire in 2014 and high quality 3D printing becomes more economical
11. Increased need for more cross-functional technology integration to enable synergies between marketing, sales, engineering and manufacturing
12. Requirements management software will continue to grow as companies struggle to verify and validate how well their products actually meet customer needs
13. Continued advancement in electronic engineering notebook technology
14. Accelerated rationalization of disparate PLM information systems that are the result of mergers or acquisitions

What's your view? What did we miss? What trends are you dealing with?

Originally published on January 8th, 2014

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