DoD Cybersecurity Compliance Training Video

written by Lauri Moon | January 26, 2018

Are you a Department of Defense contractor? This video, created by our sister center in Georgia, provides a step-by-step guide on how government contractors can achieve compliance with the new cybersecurity requirements established by the U.S. Department of Defense.

Not sure if you're in compliance? Contact IMC, we can help.

Innovation as a Science and System

written by admin | January 26, 2018

A very good (and short – 3 pages big print) research-based article on innovation as a system. Very much supports the whole concept that is Innovation Engineering – that innovation is a systemizable business practice that any organization can on-board and benefit from. And consistent with IE concepts and ideas.

Whether CI or Innovation, it's all about the system or lack of it. The realization is that these management systems drive success because they activate and foster the "raw material" that's already there. People's creative horsepower.

Click here to check it out.

One Page Manufacturing Technologies Guide

written by admin | January 26, 2018

A rapidly evolving part of advancing your Continuous Improvement (CI) system, specific practices and initiatives is understanding the various technologies that can be applied to support solutions. This technology advancement is a big deal but can get messed up (lose money) or be very beneficial (make money). And your role can have much to do with it going well. That starts with emphasizing that without good "CI systems thinking and A-3 / PDCA type methodology", the selection and application of process improvement technologies is likely to be messy or even misguided and costly.

Click here for a one page illustration that I got from a McKinsey article. I like the concept, the way it's organized. You'll see that the "wheel" advises about what types of technologies (hard and soft technologies and practices) align with what type of applications starting with most general at the hub and then working out to more specifics. I'm finding it a nice resource for thinking about what applications might fit for what needs and opportunities. It could also be used to help identify what technologies and associated practices you and your organization might want to learn more about or not (people / skill development).

Keep in mind that being a "CI Manager" has much to do with getting your company to become more of a learning organization. And you have to be selective about that – as in advancing your knowledge primarily on things that will improve efficiency and effectiveness – i.e., business results.

Williamsport/Lycoming KIZ Companies Receive Nearly $130,000 in Tax Credits

written by Lauri Moon | January 26, 2018

Innovative Manufacturers Center (IMC), Inc. is pleased to announce three Williamsport/Lycoming Keystone Innovation Zone (KIZ) companies were awarded nearly $130,000 in KIZ Tax Credits. This round of tax credit awards takes the total of local companies receiving KIZ Tax Credits since 2007 to over $2.5 million dollars.

On December 28th, Governor Tom Wolf announced Keystone Innovation Zone (KIZ) tax credits for 273 early-stage companies. "Fostering an environment that allows technology and innovation to flourish in our private sector is one of this administration's top business priorities," Governor Wolf said. "By providing these tax credits, we're helping to reduce the burden placed on companies as they go through the early stages of growth, thereby helping new ideas take root while pushing both our economy and the thriving tech sector forward." The Program is designed to support and encourage entrepreneurship in and around Pennsylvania's colleges and universities by providing young Pennsylvania companies with vital working capital to meet critical needs, including covering capital expenditures, workforce expansion, operational expenses and making companies more attractive to venture investment.

The program provides tax credits for companies within the Williamsport/Lycoming Keystone Innovation Zone that have been in operation for less than eight years, whose gross revenues have increased over the previous year and are operating within a targeted industry sector such as advanced manufacturing, plastics, wood and information technology.

"Since 2007, the KIZ Tax Credit program has provided valuable access to local resources and state tax credits for qualified local companies. These unique credits can be applied to business liability or sold for cash, which offers financial support during the critical first years of business, allowing the companies to grow," stated Lauri Moon, Coordinator of the Williamsport/Lycoming KIZ. "KIZ companies have

utilized these credits to fund new product development, staffing, marketing and other business needs," Moon said.

PA Department of Community & Economic Development Press Release

For individuals and businesses interested in learning more about the benefits and services of the KIZ Program, click here or contact IMC at 570-329-3200×8085. The Williamsport/Lycoming Keystone Innovation Zone is managed by the Innovative Manufacturers Center (IMC).

Manufacturing USA Annual Report, Fiscal Year 2016

written by Lauri Moon | January 26, 2018

The Manufacturing USA Annual Report for Fiscal Year 2016 describes the program's work in helping to move discoveries in the nation's universities and research laboratories to the shop floor here in America. It highlights the nine *Manufacturing USA* institutes that were active in Fiscal Year 2016, and documents the network's progress toward increasing the competitiveness of U.S. manufacturing.

The *Manufacturing USA* network is a public-private program designed with a vision of U.S. global leadership in advanced manufacturing.   Its institutes have a mission to develop game-changing technology and the skills needed to equip our future U.S. manufacturing workforce. Institutes also provide education and training so that American workers have "improved job opportunities and increased economic opportunity in promising technology areas that result in higher wages."

Highlights of the Manufacturing USA network in 2016 include:

- 830 industry members, two-thirds of which were manufacturing firms, including 361 small businesses.
- Non-federal funding exceeded the original goals of a 1 to 1 match, with federal funds being matched at a 2 to 1 ratio, indicating the value of the network to industry, academia and the states. In addition to manufacturing companies, the partnerships included a variety of academic institutions and federal, state, local agencies, laboratories, and not-for-profit organizations.
- A portfolio of diverse programs for students in high schools, community colleges and universities; educators from kindergarten to twelfth grade; manufacturing employees; and transitioning veterans, so that the nation's workforce will be prepared for a renewal of advanced manufacturing. Institute-led programs have reached about 28,000 people.
- AIM Photonics, based in Rochester, New York, developed a shared toolkit that has helped members speed up the design and development of photonic devices, which use light instead of electricity to enable faster performance and new capabilities.
- PowerAmerica, in Raleigh, North Carolina, helped keep 400 highly-skilled manufacturing jobs at a facility, X-FAB Texas in Lubbock. The company was able to update its capabilities to become an "open foundry" that semiconductor companies can use to produce next-generation electronic products.

The annual report also highlights an assessment by Deloitte, which found that the first eight institutes, established between 2012 and 2016, have "reached a critical mass of valuable connections among participating companies, universities, and other entities. Those connections are accelerating the innovations needed to develop new products and markets, helping alleviate a shortage of technically trained manufacturing workers and building a sustainable national manufacturing research infrastructure."

There are now a total of 14 *Manufacturing USA* institutes, sponsored by the departments of Energy, Defense and Commerce.

Read the full Manufacturing USA Annual Report, Fiscal Year 2016

Citation information:

Manufacturing USA Annual Report, Fiscal Year 2016, Advanced Manufacturing National Program Office, National Institute of Standards and Technology, Department of Commerce (2017),
https://www.ManufacturingUSA.com/resources/Manufacturing-USA-Annual-Report-Fiscal-Year-2016

Contact: Advanced Manufacturing National Program Office – (301) 975-2830

Deloitte 2017 Study – How Manufacturers Can Create Positive Perceptions with the US Public

written by Lauri Moon | January 26, 2018

In Deloitte's recent study on the perception of manufacturing, the vast majority of Americans surveyed continue to view manufacturing vital to economic prosperity. However, less than 5 in 10 believe manufacturing jobs are interesting, rewarding, clean, safe, stable, secure. Less than 3 in 10 are likely to encourage their children to pursue a manufacturing career. Yet, when asked what future jobs in manufacturing will look like, those surveyed have overwhelmingly optimistic views – future manufacturing jobs will require high-tech skills (88 percent) and will be clean and safe (81 percent), as well as more innovative (77 percent). Given these findings, manufacturers could benefit from uplifting current perceptions in order to attract talent. Click to read how manufacturers can help change the perception of manufacturing.

Click here for the full study and supporting information.

Collaborative Robots and Lean/Continuous Improvement

written by admin | January 26, 2018

I attended a collaborative robots (cobots) event yesterday that IMC cosponsored with the PA CareerLink for Columbia/Montour Counties and thought it worth a few observations within the context of lean/ continuous improvement.

The Perfect Process

Let's ask ourselves… What is the perfect production process? Well, a process that's being performed the "current one best way" (standard work) in a way that is 100% repeatable and predictable with no variation _AND_ that can adapt if there are changes required _AND_ can be continually improved.

We'd all love to have that, right? As we say, Lean/CI is about aiming for perfect yet knowing it isn't achievable (a golf score of 18). It's in the CI efforts that we keep getting closer and succeed as a result.

How Cobots Might Help

Cobots are a developing technology that can be an important part of our CI efforts. They're designed to work alongside people and to be able to do specialized tasks that may be mundane (lower value work) or unsafe (repetitive motion) or need to be very precise. They're small enough that they can be picked up and moved around easily and safe enough that they don't usually need guarding.

So if you think about Problem – Causes – Solutions (PDCA or DMAIC). Cobots can be a solution **in the right situation**. But the key to successful application is to start by doing a great job of identifying the right problem, getting to root cause and then considering and prioritizing solutions. _Not_ jumping to an assumed solution that a robot will save the day (oh yeah, we never do that).

<u>Lean/CI More Than Ever</u>

Like anything new, these technologies have the potential to separate winners from losers. And the winners will be the ones who have that CI operational culture and practices first and then apply cobots and other technologies as solutions to effective Lean/CI efforts.

<u>Consider Getting to Know Cobots</u>

My advice would be to identify an internal resource to stay attuned to this continually emerging and developing technology. Below is a link to an organization and a book called "*Lean Robotics*" that was mentioned yesterday by the presenter from Universal Robotics. I haven't read it but plan to check it out. https://leanrobotics.org/.

How Teams Can Overcome Hesitancy about Lean

written by Lauri Moon | January 26, 2018
A manager tasked with introducing a lean approach should not downplay the challenge, writes Peter Anthony, CEO of UGN. Face-to-face communication is valuable, as is developing ambassadors for lean among the staff.

Read more

Cybersecurity Requirements for DoD Contractors

written by Lauri Moon | January 26, 2018

Today, more than ever, the Department of Defense (DoD) relies upon external contractors to carry out a wide range of missions and shares sensitive data with these entities. Under an interim rule issued in 2015 by the Defense Federal Acquisition Regulation Supplement (DFARS), **DoD contractors (including small businesses) must adhere to two basic cybersecurity requirements:**

(1) They must provide adequate security to safeguard covered defense information that resides in or transits through their internal unclassified information systems from unauthorized access and disclosure; and

(2) They must rapidly report cyber incidents and cooperate with DoD to respond to these security incidents.

Failure to comply with the above requirements may prevent you from being able to conduct business with the DoD as of January 1, 2018!

Read DoD Article

NIST Interagency Report 7621 Rev. 1

If you are a supplier to DoD and have questions regarding compliance, contact IMC at info@imcpa.com or call 570-329-3200×8074.

Keystone Wood Products

Association Releases Video Featuring Products Made with PA Hardwoods

written by Lauri Moon | January 26, 2018

Check out this great video released by the Keystone Wood Products Association featuring a number of IMC clients and the products they make using Pennsylvania hardwoods.