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NIST and NSF Launch New Consortium to Support Advanced Manufacturing
by Bob Bengel, NWIRC President/CEO

The U.S. Commerce Department’s National Institute of Standards and Technology (NIST) and the National Science Foundation (NSF) announced in October that the University of Michigan will lead a consortium to identify new and emerging areas of advanced manufacturing that would benefit from shared public-private investment in research and development, education and training.

The consortium, called MForesight: the Alliance for Manufacturing Foresight, will help save government time and money by providing a channel for industrial, academic, and other private-sector input on manufacturing priorities. Its work will also align advanced manufacturing research with national priorities and challenges to ensure efficient use of federal funding for the greatest possible return on investment.

“This consortium will provide a continuous channel to draw on the perspectives, knowledge and insights of not only industry but also academia,” said Under Secretary of Commerce for Standards and Technology and NIST Director, Willie E. May. “Having this access to private-sector viewpoints and studies on urgent questions related to manufacturing technology R&D will help us better coordinate and prioritize research and funding.”

Herrick Professor of Engineering, Sridhar Kota, will lead the University of Michigan’s work on the consortium, which has already partnered with 30 thought leaders from industry, non-governmental organizations, and academia. The consortium will commission teams of national subject matter experts to provide technology road maps and reports on selected emerging technologies that outline projections for development, application, and economic impacts.

For further information and to learn how to participate, visit www.mforesight.org.

Key Strategies for Revenue Growth in the New Year
by Mike Smiley, Consultant and Marketing Practice Leader, Decision Associates

With just a month left in the year, now is a critical time to ensure that your plans and budget for 2016 includes key initiatives that support revenue growth.

Market Research. Regardless of your industry, you need an ongoing understanding of your market, customers and prospects. With this data in hand, you can differentiate your company from the competition and better align with customer needs.

Corporate Strategy. Your corporate strategy encompasses allocations of budget, staff and time. It is the foundation for all your functional strategies and the pursuit of organizational growth.

Product Strategy. As you might suspect, this strategy defines the direction of your company’s products and sets up your marketing and sales strategies for success. It may include potential solutions to solve market problems, as well as plans to launch products.

Marketing Strategy. Building on the insights you garner of your external market, a solid marketing strategy drives demand and generates leads for products and services. In this part of your plan, you are required to understand which marketing channels deliver the best returns.

Sales Strategy. Like the marketing strategy, your sales strategy must build on the insights of the external marketplace. It also must remain aligned with the corporate strategy. The sales strategy requires you to make choices about which sales programs to pursue.

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Key Strategies for Revenue Growth (Continued from page 1)

Prior to committing resources to these strategies, be sure to take stock of your brand’s overall situation via a thorough SWOT analysis. Also, take time to review your customer profiles to confirm how they make purchasing decisions and their preferred channels for interaction with your company. Then establish your goals, create your marketing campaign, and define the budget needed to support your plans. Remember to develop targeted initiatives for cold, warm, and hot prospects using proven tactics for each stage of your cycle:

- Cold Prospects: Focus on brand awareness across the board, integrating thought leadership, content creation, advertising, and public relations.
- Warm Prospects. Build your relationship with relevant messaging and content via email, blogs and white papers that address their pain points.
- Hot Prospects. Close the sale with in-person visits and phone calls supported by action-oriented content and discounts.

Side Bar: New Year, New Trends

If there is a constant in marketing today, it is change. Consider how you can take advantage of these evolving trends.

Content Marketing Goes Visual
The shift to video continues to accelerate. Both B2C and B2B companies are allocating bigger budgets to create and distribute video and other visual content across multiple channels.

Keywords Become Passe
Search engines are favoring websites with useful, authority-driven content (including video) with page quality measured by time on page and click-through to additional pages.

User Generated Content Grows
Build trust by embracing those online reviews, social media posts and other co-created content to strengthen your relationship with your customers.

Wearable Technology Means More Data
User adoptions of wearable technology will increase by as much as 30 percent next year, yielding massive amounts of data to further target your marketing efforts.

Contact Mike at MikeSmiley@DecisionAssociates.net for additional insight on strategies for 2016.

CYBERSECURITY SERIES
Part 4: The Link between Cybersecurity and Cybercrime
Jay Markey, President, Green Seven Technologies

Cybersecurity is like insurance, a proactive approach to protecting data from cybercrime. Left unprotected, your technology systems may serve as a gateway for hackers to also access larger companies, client information, and vendor accounts. Imagine running your business without technology. No email, document files, client and vendor data, remote access, or online calendar.

Your technology plays a vital role in the way you work and communicate with your clients. Consider that breaches occurring within manufacturing can expose both internal and external intellectual property. Older manufacturing legacy systems are often the workhorse still used for operations and production. So, what happens if proprietary information is stolen or your manufacturing plant comes to a complete stop?

Protecting yourself and your organization starts with a strategy, a plan and implementation of strong policies and procedures. Here are four things to consider so you don’t leave yourself open to cybersecurity threats.

1. Keep anti-virus and anti-malware updated, implement regular monitoring, and review procedures to anticipate challenges before they become problems. Have a backup plan in place and test the plan before disaster strikes to ensure your data is protected. Schedule automated backups to ensure regular data protection.

2. Establish a Bring Your Own Device (BYOD) policy. Mobile devices create significant security and management challenges.

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TechFest 2016

TechFest: Manufacturing Technology Days is scheduled for December 9 and 10 at Erie’s Bayfront Convention Center. The first day (Dec 9) is geared for those working in manufacturing. The exhibit hall will be transformed into a trade show to showcase the latest equipment and technology, as well as encourage networking among manufacturers who can offer products to one another. Educational breakout sessions will include topics to help manufacturers increase business, improve operations, and enhance their workforce. That evening, a dinner for manufacturers features keynote speaker, Will Knecht, President of Wendell August Forge. For more details and to register, visit www.madeinnwpa.org/techfest.
Install security apps to prevent criminals from stealing information while working on public networks, set reporting procedures for lost or stolen equipment, and establish protocols for employee separation. Institute a locked device procedure and wipe data clean on lost devices.

3. Require strong passwords for all employees that consist of upper/lower case alpha, numbers, and/or symbols. Avoid obvious passwords, like 12345 or birthdays. Consider a mandatory password update every three months.

4. Clean your system of ghosts haunting your networks. Inactive users or unused computers that remain part of your network can reflect open accounts that could present security holes for unauthorized access. Logins and inactive emails from separated employees or files on devices no longer used on inactive machines are a loophole and a crack in the security of your technology system.

An essential part of practicing secure computing is educating employees on how to make smart decisions, especially when it comes to file sharing through unsecured channels and public Wi-Fi networks when working remotely.

From across the hall or around the world, no matter the size, every business is a target for attack. Cybersecurity and security awareness should be a top priority and part of your company’s culture by 1) establishing strong policies and procedures, 2) implementing regular automated backups, 3) creating an emergency response protocol in the event of an attack or act of nature, 4) educating employees on awareness when working remotely, and 5) practicing execution of data recovery from a mock disaster.

For more information on network vulnerability assessments and IT services, contact your NWIRC Strategic Business Advisor or Jay Markey (jmarkey@teamgreen7.com).

Learn the Basics of R&E Tax Credits

Manufacturers often think of “research and experimentation” as ground-breaking innovations and inventions. They may overlook the Credit for Increasing Research Activities, commonly known as the “R&E Tax Credit”, not realizing that time and resources used for prototyping and developing molds, tooling, and new products can be used to reduce their tax burden. NWIRC will host a free program to review how companies can take advantage of this benefit, featuring the R&E Tax Team from McGill, Power, Bell & Associates. The session will cover an overview of the federal and state R&E tax credit, recent regulatory changes, qualifying expenditures, examples of industries that typically qualify, documentation requirements, analysis of our region, and more. The program will be held on December 15 from 8:30-10:00am at the Knowledge Center, 5240 Knowledge Parkway, Erie. To register, visit the events schedule at www.nwirc.org or call (814) 898-6888.
YOUR STRATEGIC BUSINESS ADVISORS

If you have questions, or would like to speak with someone from NWIRC about services, please contact your Strategic Business Advisor:

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Ed Barthelmes  
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Erie & Warren Counties

UPCOMING EVENTS

Cybersecurity 101 for Manufacturers  
February 16  
Location: Erie  
Manufacturing companies are becoming more and more vulnerable as they rely on software, the cloud, and the internet of things (IoT) to manage and integrate data from many sources. For this free session, NWIRC has assembled a panel of experts to review the basics of what you need to know to protect your business.

AS9100 Internal Audit  
February 24-25  
Location: Meadville  
AS9100 is a widely adopted and standardized quality management system for the aerospace industry. The course will provide you with a detailed overview of the AS 9100 (Rev C.) requirements and prepare you to conduct internal audits to the AS 9100 standard.

ISO 9001:2015 Internal Audit  
March 8-10  
Location: St Marys  
(Spring sessions also scheduled for Erie and Meadville)  
The revised ISO 9001:2015 was recently published, so this course will provide a detailed review of the quality standard and all the changes. Participants will learn how to conduct an audit, write the audit report, and take corrective action.

HACCP Certification  
March 22-23  
Location: Erie  
Geared for food manufacturers, this course will prepare a Safe Quality Food (SQF) practitioner with an understanding of the SQF Code and provide detail to implement and maintain an SQF System. Participants will earn the NSF International Certification.