Eyes on Advancing Technology
by Bob Zaruta, President/CEO, NWIRC

In past articles I’ve mentioned that NWIRC’s mission is focused on improving competitiveness for small to mid-sized manufacturers in northwestern PA.

And, also that our project work with manufacturers includes identifying resources who can address a company’s key business issue, developing a scope for the project, and seeing it through for desired results. In the coming months and beyond, we will continue that work specifically with projects pertaining to advanced manufacturing technology (AMT).

Some recent examples of projects that companies have embarked on with NWIRC to advance technology include:

- Tapping into the capabilities of an M1 enterprise resource planning (ERP) system that had the capability to do much more than accounting. The result was working with a service provider for additional programming to improve data accuracy, monitor inventory, and job costing/estimating. The improved data provided more accurate information for key decision making.
- Welcoming a robotic arm to work alongside an operator to increase efficiency of high-volume production and improve safety, with assistance of a special grant.
- Developing cost adjustment programing to efficiently and easily update an ERP system that comprised of over 30,000 raw material items that needed constant monitoring.
- Enlisting an ERP support program for JobBoss to learn more about current capabilities, and options for increased capabilities in the future and develop skills for accessing quoting and scheduling components.
- Developing requirements, vetting service providers, and decision analysis for a new ERP system integration.

The great news is that these types of projects produce significant impact for companies, including tens of thousands in increased revenue and cost savings, and ability to create new jobs. However, technology also relies heavily on access to the internet and for many small, rural manufacturers who are looking to advance their technology, this can present another problem altogether. This is an important issue throughout many regions of PA, so there is now a Governor’s Office of Broadband Initiatives, led by Acting Executive Director, Sheri Collins. She is responsible for advancing this initiative to ensure that all Pennsylvanians have access to high-speed internet by the end of 2022. She has traveled the Commonwealth talking with manufacturers, educators, and other business owners about their concerns related to broadband access. She recently stated, “From a business perspective, companies in rural areas are having trouble recruiting, marketing themselves, and even completing day-to-day operations without reliable high-speed internet, which hurts their ability to grow. That needs to change – and that’s why Restore Pennsylvania is so critical for these areas.” A maple syrup manufacturer she recently visited in Potter County very poignantly said (as tweeted by Sheri), “high speed internet is as important as having wheels for your car.”

NWIRC looks forward to continuing the mission of helping small and medium-size manufacturers (especially in the vast rural areas of our region) to move their technology forward as we are fast approaching another new year. Take a look at some brief videos on our website that outline basics of the 9 disciplines of AMT (Cloud Computing, Big Data, Cybersecurity, 3D Printing, Software Integration, Internet of Things, Robotics, Simulation 3D Modeling, and Augmented Reality). Find them at [www.nwirc.org/amt](http://www.nwirc.org/amt).
Lean Accounting Expert Returns to the Region

Jean Cunningham, author of *Real Numbers* and, her most recent book, *The Value Add Accountant*, will return to the region to offer her signature training. She is widely recognized as a pioneer of lean business management having led her companies and client companies through the lean transition into non-production functions since the early 90’s.

If your company has embarked on applying lean thinking and practices, you may not have thought about the role of management reporting information and the accounting team in supporting this transformation. Jean will be teaching two classes on this topic.

On October 16 (8:30am-4:30pm), during the one-day Lean Accounting workshop, Jean will share with you her experience and insights regarding 1) five sources of financial improvement with lean; 2) improving cost management reporting to improve usefulness while simplifying at the same time; 3) utilizing information in the accounting records to help identify upstream process improvement opportunities; 4) using metrics for performance monitoring; 5) applying lean concepts to reduce waste in accounting operations, and more.

The following day, October 17 (8:30am-4:30pm), she will teach Lean Accounting: Deeper Dive. This class will take a more in-depth look at ‘Accounting for Lean’, including changing your financial statements (so they can be understood by non-financial personnel and to reflect your lean efforts) and how to implement.

Both classes are eligible for 8 CPE credits. Class size is limited, so please be sure to register early. More information and registration is at www.nwirc.org/events. Receive a $100 discount if registered by September 13.

The Importance of Planning

by Susan Hileman, Strategic Business Advisor, NWIRC; Galliard trained Family Business Advisor

“I have no intention of ever leaving my business!” These were the words of a 52-year old business owner I recently met with. It wasn’t a flippant remark; he loves his work, has great customers, employees and doesn’t ever plan to leave.

However, because none of us will live forever…eventually, regardless of intentions…he will no longer be in charge. Thomas Edison once noted, “a good intention, with a bad approach, often leads to a poor result.”

While there are owners ready to transition to the next chapter now, there are others who will continue to work in their business long past retirement age. This is particularly true for first generation owners as the business is ‘their baby’ and understandably they may be reluctant to release the reigns or step away. Financial considerations may prompt others to stay. There are also owners who simply love what they do, as well as those who can’t imagine what they would do with their time otherwise.

A problem occurs when the intention is firm, but no proper planning is conducted. Who will determine what happens to the company? Who will assume leadership of the company after you are gone? What are the gaps in skills between what you know and do—and what the next-in-command knows and does? If the business sells, will new owners want to move the business out of the area? If you hire leadership from the outside, will you lose current employees? What about voting stock, decision-making processes, and tax implications? Will transition affect sales, operations, or employee morale? What about relationships with bankers, vendors or suppliers? In essence—what risk does the business assume by not having a written plan in place?

As owner, you are in charge of the big picture. If your business is currently successful and you’d like it to stay that way far into the future, the informal plan you’ve been turning around in your head for some time now needs to be put on paper. Regardless of your age, regardless of the length of time you’ve been in business, regardless of your intentions...work with someone now to determine the best approach to maximize business profits, minimize tax issues, ensure legal issues are addressed and continue operations without disruption. This approach will provide the greatest benefit to your business, your family, and ultimately achieve the best result.

**Side Note:** There are upcoming workshops scheduled for 10/29 and 11/19 on Developing Your Exit Plan, however these are available ‘By Invitation Only’. Please contact Molly Reichard at mreichard@nwirc.org with questions.
Your PASSWORD: A First Line of Cyber Defense
by Gerry Schneggenburger, Chief Operating Officer, NWIRC

What do the following have in common: Yahoo, Marriott, Equifax, Capital One, and Facebook? Personal data, like customer name, address, birth date, and even social security numbers, were stolen from these companies’ repositories. Which corporation or government agency is next is anyone’s guess, but you personally can take a strong first step to fortifying your personal data defense. How?

1. Use passwords at least 12 characters or longer, varying cases and utilizing numerical and special punctuation characters where possible. Know password length always trumps complexity – so if you have to weigh the two, choose a longer one!

2. Use unique passwords for financial websites or sites requiring personal data. It can be acceptable to re-use the same password for websites which don’t store your personal data, however, do not cross-use them for data sensitive sites.

3. When given an option for two-factor authentication, in addition to a username and password, take it!

4. Consider using a password manager like LastPass, DashLine, or 1Password.

5. Finally – use a Master Password within your browser so prying eyes won’t see your list of saved passwords! For example, in Firefox go to: Options; Privacy & Security; Logins and Passwords; Use a Master Password; then follow the directions. If not used, prying eyes can view your password list via the ‘Saved Logins’ option. For websites holding financial and/or personal data, it’s advised that you decline the ‘save password’ option to keep it off the login list altogether.

Do I personally follow these rules? Yes - except I haven’t adopted a password manager. Like others, I struggle with security versus convenience. Due to the complexity of dozens of passwords I keep, and while it may not be a best practice, I physically write a list of financial and personal websites with user-ids and passwords on paper, take a picture of it to be viewed on my secure iPhone when I need to enter a password [but not uploading the pic to the cloud], and also place the paper list in a safe.

Regardless of tactics, please consider how you’re managing sensitive website application passwords versus those websites with less personally intensive data.

Gerry Schneggenburger has 30 years’ experience in business operations, IT systems development and engineering, database administration, and IT lean continuous improvement.

GR8T Manufacturing
Congratulations to the Next Generation Manufacturing Partnership on their new name. Since launching last November, over 45 manufacturing companies, representing 8 counties of northwestern Pennsylvania, have been involved with partnership meetings and action team activities. Their next in-person meeting is scheduled for Friday, September 20 from 9:00am-11:00am at the Advanced Manufacturing and Innovation Center at Knowledge Park in Erie, PA. Those interested in attending can contact NWIRC (the Convener) at lknoll@nwirc.org. Manufacturers can also request to join the partnership’s LinkedIn private group for making connections and sharing information.

Supply Chain Workshops
Workshop sessions are scheduled in October focused on optimizing and risk management for your supply chain. Supply Chain Optimization for Leaders is a 1/2 day session on October 22 to provide an executive level overview about the importance of understanding the inter-dependencies in a supply chain. The full day session on October 23 is encouraged for anyone who touches or is affected by the supply chain because it steps through five elements of preparing for risk. The workshops will be led by Dr. Steve Brady, Executive Director of the Covation Center, who has more than 30 years’ experience as a Logistics and Supply Chain professional, researcher, and educator. You may be eligible for a scholarship to attend.
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 (SBA):

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UPCOMING EVENTS

Failure Modes & Effects Analysis
Sept 12
Location: St Marys
A failure modes & effects analysis (FMEA) is a helpful tool for companies to identify and manage risk (a critical aspect of the new ISO 9001:2015 standard). You will learn how to uncover potential failures before they occur, while investigating at-risk processes, components, or products.

IATF 16949:2016 Internal Auditor
Sept 17-19
Oct 8-10
Location(s): Erie / St Marys
Training of the IATF 16949 automotive standard will provide understanding of quality management principles in context with ISO 9001:2015, along with techniques of process-based auditing with hands-on activities.

Lean Accounting
Oct 16
Location: Erie
If your company has embarked on applying lean thinking and practices, you may not have thought about the role of management reporting information and the accounting team in supporting this transformation. Lean concepts from the shop floor apply in every area of the company, including accounting. ($100 discount for registering by 9/13)

ISO 9001:2015 Internal Auditor
Oct 22-24
Location: Erie
The 3-day course provides a detailed review of the ISO 9001:2015 quality standard. Participants will learn how to conduct an audit, write the audit report, take corrective actions and more.

For more information or to register for training, visit www.nwirc.org