As Howard Zemsky and Christina Orsi move on to new roles with New York State and UB, respectively, I’d like to take a moment to thank them for championing WNY economic development, particularly WNY manufacturing. They forged a tremendous partnership between the WNY Regional Economic Development Council (REDC) and the WNY Region of Empire State Development Corporation (ESD). That partnership was able to assemble a diverse and powerful team from the public and private sectors to craft the strategic plan that brought WNY an initial $100 million award (the largest of any Regional Council) and ultimately was the genesis of Governor Cuomo’s Buffalo Billion, which continues to dramatically transform WNY. In the process, both Howard and Christina proved themselves stalwart supporters of WNY manufacturing.

From the start, advanced manufacturing was a key aspect of both the REDC plan and the Buffalo Billion. Only a few years later, a $45 million, cutting-edge manufacturing institute—Buffalo Manufacturing Works (BMW)—is being stood up, and ground has been broken at Riverbend for what will be the largest solar panel manufacturing plant in North America. The linkage between these manufacturing initiatives and their short-term and long-term potential are a good example of the quality of the economic planning for WNY on Howard and Christina’s watch. BMW targets WNY’s existing manufacturing base, those companies that have proven their commitment to our area over the years and have provided the lion’s share of our gross regional product, as well as over 50,000 direct jobs.

At the same time, the Riverbend project catapults us into the alternative energy Big Leagues, taking WNY from a minor player at best to a clear leader in a rapidly emerging industry with the potential to radically transform the whole Energy sector. Some energy market pundits believe that solar power is on a trajectory to become a lower-cost power source than oil or even natural gas in a few short years. There is a reason that Elon Musk, a visionary and incredibly successful entrepreneur with PayPal, Tesla, SpaceX and now SolarCity, is betting heavily on electric and solar technologies. Now he is partnering with us to make SolarCity a reality. Yes, Elon Musk is investing in Buffalo. Not many people could have imagined such a scenario, even as recently as three years ago.

Either of these threads would represent an exciting prospect for WNY. Together, their potential is even greater. Combine that with the Buffalo Billion’s other initiatives in health/life sciences, tourism, innovation/entrepreneurship, human capital, efficient infrastructure and livable cities and you can begin to appreciate the staggering scope and size of the economic development program that Howard and Christina have helped set in motion. The best thing we can do to thank them and honor them is to pitch-in ourselves, to do our own small part to keep this dramatic program moving forward to completion and success.

Case Study: Napoleon Engineering Services

**COMPANY** Napoleon Engineering Services (NES) is a custom manufacturer of high-performance specialty bearings and the largest bearing test and inspection facility in North America. Their products and services support aerospace, agriculture, heavy-duty truck and medical applications nationally and internationally. Customers include high-profile, recognizable companies, such as SKF, John Deere, Boeing and Moog.

**SITUATION** A significant investment in plant and equipment was made based on the belief that the company could double sales over a four-year period. It was less clear which products, markets or customers offered the best opportunities to achieve that growth. Due to the complexity of that task, Insyte Consulting was engaged to develop a clear direction, priorities and specific action plans to achieve the growth.

**SOLUTION** The company tracked sales to its 300 customers as one consolidated list, allocating attention to customers in proportion to their annual purchases. Insyte showed via detailed analysis that NES really had three distinctly different product businesses with different potentials for growth and profitability. The largest product businesses also contained several distinct customer categories with different potentials for growth.

The company’s first action was to reconfigure its accounting system to separately track each of the three businesses. This permitted better tracking of relevant costs for more accurate price quotations. Customers within each business were grouped into application categories and prioritized by sales potential. The result was a prioritized 80-20 list for the 300 customers. NES could now focus its attention on an easily managed short list of applications, customers and products offering the highest potential for growth and profitability. To facilitate that highly focused sales effort, Insyte developed the sales messaging and website content that would appeal to targeted customers and applications. Finally a prioritized list of sales activity action plans was developed to focus the sales efforts where they would have the greatest long-term impact.
How do you incorporate your history as a quality engineer into safety regulation?

I aim to take it a notch beyond regulatory standards, so that performance improvement reflects on the strength of the safety program itself, rather than just compliance. Manufacturers can do incident investigations more robustly to drive down to the actual root cause and verify that their fixes are working. It’s a consideration of quality. That can make an enormous difference. Culture assessment can also help immensely, making sure the work culture is receptive to working together to make for a safer organization. In a lot of cases, safety is seen as adversarial.

Beyond injury prevention, why is safety important in the workplace?

Safety influences the health of a business in more ways than one. It has a huge impact on productivity. If people are hurting, their productivity goes down. It affects morale, which also brings productivity down. Injury increases cost, and it increases defects. If not addressed, insurance costs go up, so it’s a huge impact on profitability, as well as just whether employees enjoy going to work or not. It’s hard to focus on your work when you have to focus on avoiding injury at every turn. Workers need to be assured that the systems, equipment and facilities are setup in such a way so that it’s highly unlikely that they will ever be injured.

What are common safety concerns in Western New York manufacturing?

Ergonomics is not regulated by OSHA [the Occupational Safety and Health Administration], so people are seeing more repetitive motion disorders because of the high use of electronics now. Western New York, in particular, has an aging workforce, and that has two implications in safety. First, the aging workforce is more inclined and more sensitive to ergonomic issues. Second, as a big portion of that group begins to retire, a younger workforce comes in; they are the generation that has been texting for years. So while it would have normally taken them 20 years or more to develop a potential repetitive motion disorder, they may be prone to have it in even the next five or 10 years.

You’ve shared that in your personal time, you enjoy taking Argentine tango lessons. How has dance informed your management skills?

In management training, they teach you about leadership and how to work with staff under you. It’s kind of a one-sided perspective. With tango, however, I start off as the person who follows rather than leads. As a woman who has been in management for many years, it’s a completely different experience to not dictate what’s going to happen. To not dictate, and to just listen to what the leading dancer wants, interpret it properly, and conduct it in an elegant manner. It quickly reveals the difference between a good leader and a mediocre leader. As a leader, you can look at how those following you behave, and how they struggle if you haven’t communicated effectively as the leader. You’ve got to be crystal clear in how you communicate.

Why is collaboration important in the workplace?

It’s about connecting people—“It takes two to tango.” If there’s not a good connection between two people, they’re not going to work effectively together. Whether it’s executing an Argentine tango dance or collaborating in a workplace, if you don’t have a connection that allows you to communicate effectively, you’re not going to get the best possible result. Collaboration is important in innovation, and that’s something I apply to safety consultation. I integrate lean concepts and quality concepts into safety. It’s a must for innovation and achieving high levels of performance.
While exciting innovations are catapulting progress all around us, approaches to workplace safety have stagnated due to a focus on compliance. The mediocre results are costly, in many ways, for injured employees, their families and employers.

Break out of this humdrum routine by using innovation to invigorate safety systems and achieve unprecedented levels of performance. With innovation, we can foresee an organization where safety incidences are a circumstance of the past and employees are passionate about staying injury-free.

Borrowing Ideas

Stephen Johnson, author and host of PBS’s “How We Got to Today,” has explored the environments where innovation flourishes. Johnson discovered that great innovation occurs when a successful technology or methodology used in one field is borrowed, possibly enhanced, and applied to another field.

With regard to safety, look to the fields of Quality or Lean Manufacturing. A defect in a product is very similar conceptually to an employee getting injured: both are the result of a failure in a supporting system. Quality gurus addressed these failures by developing Six Sigma methodologies. Couldn’t these be applied to reduce injuries as well?

Consider standardized work, used in Lean Manufacturing, which combines specific, concise instruction with pictures. Apply this methodology to safety tasks to minimize confusion in executing job tasks thereby reducing injuries. Standardized work may be used for lock-out/tag-out equipment-specific procedures, for charging forklift batteries, or for performing proper lifts.

This interdisciplinary borrowing of ideas can expand the possibilities of what may be achieved.

Looking for the Adjacent Possible

Another of Johnson’s findings echoes that of Stuart Kauffman’s concept of the “adjacent possible.” This phrase encapsulates the concept that systems evolve over time. At any given point in time, only a finite set of ways that a system can transform itself exists. This set of changes is the “adjacent possible.” These possibilities expand over time as new ideas are implemented the adjacent possible is expanded.

To be innovative with workplace safety, constantly look for the adjacent possible. Incremental improvements, small or large, can be made to safety systems to make them more robust.

Opportunities that use new technologies, such as eLearning, are surfacing every day. eLearning, which allows users to obtain on-line instruction, has been incredibly successful in providing safety training to contract workers. Contractors receive safety training compatible with their schedule, in their own designated learning environment, at their own pace, and prior to arriving at the work site. Only when eLearning was developed in the IT world did this type of training become an adjacent possible of workplace safety.

Getting Connected

Johnson also discovered that innovation occurs in environments rich with a diverse range of expertise and in those that are densely populated, and ripe for collaboration.

This year’s Western New York Safety Conference is the ideal environment for collaboration within the discipline. Learn how other organizations are being innovative in their safety programs and share your successful ideas. Erik Wahl will inspire you to bring your authentic creative abilities to work to generate innovation.

RECENT PROJECTS

- Analyzed the layout of a Clarence automotive tool producer to improve the workflow and reduce transportation or travel time within the facility. The improvements will result in an anticipated 10% annual increase in volume over the next four years.
- Introduced a project management methodology into a Buffalo plastics manufacturer’s new product development process to better meet product launch dates, provide consistency in the management of the process, and reduce overall time to market.
- Worked with a cross-functional team at an Erie County thermal processing manufacturer to assess, and improve, using value stream mapping tools, the company’s processes for creating quotations through order delivery to identify opportunities for eliminating wastes.
- Worked with the employees of a Chautauqua County sheet metal manufacturer to identify critical success factors associated with their new enterprise resource planning (ERP) system. These factors were incorporated into their ERP implementation plan for the system that will support projected revenue growth of 25% within the next year, as well as sustained growth in subsequent years.
- Helped an Erie County contract manufacturer develop a strategy for growth through the development of its own new products. A structured new product development process was introduced and a marketing strategy and implementation plan created to develop and introduce new products to the marketplace.
- Updated a Tonawanda industrial packaging manufacturer’s safety self-inspection system and provided training and coaching sessions focused on identifying hazards to the employees.
- Provided AS9100 Internal Auditor training to staff members at a Chautauqua County tool and die manufacturer to help the company maintain its AS9100 QMS certification and retain sales that would be in jeopardy if the certification was lost.
- Presented a Principles of Lean Manufacturing with Live Simulation Workshop to the employees of a Buffalo packaging manufacturer to demonstrate the concepts and benefits of lean manufacturing compared to tradition batch methodology.
- Provided ongoing executive coaching and operations management support to a Southtowns manufacturer of antennae systems to help drive continued growth.

EVENTS

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<tr>
<th>Date</th>
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<tr>
<td>MAR 18&amp;19</td>
<td>WNY SAFETY CONFERENCE</td>
<td>8:30 A.M.</td>
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<tr>
<td>APR 23</td>
<td>PRINCIPLES OF LEAN MANUFACTURING WORKSHOP</td>
<td>8:00 A.M.</td>
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<tr>
<td>MAY 12</td>
<td>INCREASE YOUR COACHING EFFECTIVENESS</td>
<td>8:00 A.M.</td>
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SAFETY ISN’T EXPENSIVE, IT’S PRICELESS.