Business magazines have lately trumpeted the labor savings and other cost efficiencies provided by Smart Manufacturing. Such modern age machines are imbedded with sensors integrated with data analytics that inform how the equipment is performing, providing such benefits as improved asset utilization, predictive maintenance and demand-based forecasting. A leader in providing such industrial automation solutions is Rockwell Automation.

The name Rockwell probably resonates, as it is an old one in business. The organization was founded in 1903 as Compression Rheostat Company. Through an astonishing array of mergers and acquisitions over the decades, including a period when it was part of Rockwell International, the company has focused on automation assisting businesses to operate better. It was an early champion of Enterprise Risk Management, which has returned the investments in it, especially with regard to managing the risks posed by Rockwell Automation's far-flung supply chain. RIMS sat down recently with Bob O'Connor, the company's director of insurance and risk management, to elaborate on the value of the ERM program.

RIMS: We see from your bio that you began your career in the insurance industry as a claims manager at Crawford and Company, a large independent insurance agency. Was this important to your later work as a risk manager?

O'Connor: Actually, it surprises me that a lot of risk managers don't have a claims background. In my work at the agency, I handled the claims for major corporations like Marriott and Sunbeam. You learn an enormous amount about different kinds of risk when you see where a company's claims come from. In fact, when Sunbeam lost its risk manager, they asked me to come on board in the position, as I had a pretty good handle on its risks already. I later was the risk manager at two other companies before hiring on at Rockwell.

RIMS: Now that you've been a risk manager for three companies, are there similarities in their ERM programs?

O'Connor: ERM means something different to every single company. Consequently, the programs are somewhat different. The process of structuring the program might be similar, with an ERM champion and focused teams, but each company ends up managing risks that are different than the risk other companies confront. For instance, I sat in once on an ERM presentation given by Harley-Davidson. He said one of the company's biggest concerns was the sound of its motorcycles outside the U.S. Apparently, the distinct roar of a Harley that is considered an asset here is not the case overseas. I found it fascinating, but there wasn't much in that presentation that affected our approach to risk.

RIMS: What is this approach at Rockwell Automation?

O'Connor: When I first got here, a formal ERM program was already in place. Not that it was static—it had evolved before I came on board and continues to evolve. For example, the responsibility for ERM has changed. Today, it is shared by the CFO and General Counsel, who report to the Board of Directors, which tells you just how important this program is to the company. While they share responsibility for ERM, every employee here is expected to have ownership of risk in their respective spheres.
RIMS: How have the risks identified through the ERM process changed through the years?

O’Connor: Before I came here, the program did what many do—various individuals in the organization sat down and plotted strategic, financial, operational and other risks on a matrix. The biggest risks were ranked. Back then a key risk was the possibility of a plant going down—the physical risk. Today, there is greater concern about the supply chain and our intellectual property being stolen or leaked. It is interesting how the rankings of risk went up and down—what landed in tier one of the matrix versus tier three.

RIMS: Can you provide an example?

O’Connor: I’d like to but we believe this information is competitive and proprietary, as it distinguishes us among our peers. I will give you one risk that was not considered much of an issue in the past—cyber risk. Ten years ago, it didn’t register. Today it is up there as a big risk. This explains why we’ve hired a lot of security professionals lately, to ward it off.

RIMS: Can you tell us where you believe the ERM program has made a difference for Rockwell Automation?

O’Connor: What springs to mind immediately is our global supply chain. We’ve put a lot of effort and money into identifying what could go wrong and what we would do in that event. As long as you can identify risk, like where there is a sole source supplier, you can manage the risk, in this case establishing relationships with redundant suppliers. It is when you can’t identify the risks that it becomes scary.

RIMS: Would you provide an example?

O’Connor: Sure. Say there is only one supplier that can provide a critical component, due to its patented technology. If that company goes under financially or experiences a fire at its plant, this can have profound impact on our ability to manufacture. This is the stuff we roll up to the board, saying we have this one exposure at this plant that creates more risk for us than any other (supply chain) risk. We then posit ways to moderate or mitigate the risk—for example, ensuring the supplier has the highest standard of fire protection to reduce the impact of a fire.

RIMS: How do you rate risks for frequency and severity? And how do you determine which risks are indeed the biggest?

O’Connor: That’s a great question. We use the same four quadrants that everyone uses, each with a different degree of risk severity and risk frequency. So the risk with really big severity with no frequency will go into one quadrant. This is all Risk Management 101. When we have a risk that poses a frequency issue, this is the stuff we self-insure. We know it’s coming and it’s pretty easy to measure (the cost). It’s the ‘sink the company’ kind of stuff that we consider the big risks. Sometimes this is predictable in a sense. You know certain regions are earthquake-prone and can do some scenario tests to posit the outcomes and mitigating actions.

RIMS: Did you do this in advance of the Japanese earthquake and tsunami?

O’Connor: In fact we did. We did really well, supply chain wise. We had previously bought more supply because we were concerned about shortages and we doubled up our bench strength, in the sense that we identified backup suppliers and contracted them. As soon as the disaster occurred, we knew who our backup suppliers in Japan were and were able to reach out to keep supplies flowing.

RIMS: And ERM was critical to this success?

O’Connor: Yes, that and our Enterprise Resource Planning (ERP) system. We are able to know at any given time how much product we use from across the globe to make decisions on the fly. What might have taken us weeks to respond to the disaster with alternate sources of capacity literally took hours. But it was the ERM program that helped us identify the suppliers of our suppliers and then their suppliers. Had we not gone through that exercise—evaluating our contingent business interruption exposures—we’d have endured problems. We didn’t, though. We had extra inventory in the warehouse and backup suppliers in the wings waiting—just in case.