

Patti Perspective

September 30, 2014

Greetings!

Big or small, automation projects can slide off course with budget overruns, unanticipated technical glitches, miscommunications, and/or unwelcome downtime and delays. So, how does one avoid the unwanted project pitfalls?

In this month's feature article, our Vice President of Operations, Ken Kutchek, will give you the top ten attributes of a "good" plan. Armed with 17 years of lessons learned through overseeing project execution, Ken shares his knowledge on this topic. We also polled our engineers for feedback; we think you will find their responses insightful as well.

Our Patti Personnel Spotlight is on one of our dependable and seasoned Senior Engineers, John Jowski. When there is a challenging and demanding project at hand, John never disappoints!

Successful Deployment/Implementation of an Automation Project: It's all about Project Management



"A goal without a plan is just a wish," Patti Engineering VP of Operations Ken Kutchek reverberates, from French writer and poet Antoine de Saint Exupéry, to his audience at various industry conferences. The starting point for any end user expecting to successfully deploy an automation project, is to collaborate with its integration partner on a project management plan and choose all team members based on experience, availability and skillset.

As an end user, it's not always clear what pieces are going to fit together to make the perfect puzzle complete for a successful automation project. To make it a bit easier for those folks, we'd like to share our perspective of the top ten attributes of a "good" plan:

- 1. Clear Scope of Work / Requirements
- 2. Select Hardware / Software Technologies
- 3. Select the Right Team
- 4. Plan for Training
- 5. Determine Budget Required
- 6. Schedule Resources/Establish Time Line
- 7. Evaluate Risks (technology, staffing, schedule, requirements, startup issues, etc.)
- 8. Make Communications a Priority (for all involve parties)
- 9. Test for Quality
- 10. Close and Evaluate Performance/Execution

In addition to these facets of a plan, Kutchek advises a little pessimism goes a long way. That's not to say you shouldn't expect the best from your project; rather, the intended lesson here is to anticipate the issues, questions and drawbacks you may experience throughout a project. Once you do that and address the issues, you'll only have a stronger plan.

And because the bottom line for most projects is budget, it's important to keep "Scope Creep" top of mind throughout the planning, execution and conclusion of any project. Scope Creep accumulates slowly, subtly, and

you often don't realize it's happening until it's too late and you're way too far over budget to repair the damages.

Lastly, before you approve that an installation has been completed, make sure the integrator partner thoroughly tests the system. "It may sound obvious," explained Kutchek. "But it's something that happens all too often with automation projects. While we want you to trust our team of expert integrators and engineers, we also want you to know that you can question us. We're exhaustive in our work, and will always perform the necessary tests after completing an installation, but we do like to take note of when the customer asks and doesn't ask for it. It's omitted from their questions all too often."

We polled a group of Patti Engineering engineers on what they would advise to be the most important factors in terms of minimizing downtime and completing deployment/implementation for an automation project. To read the 15 critical factors our engineers gave us straight from the trenches, click on the blog button below:



Patti Personnel - John Jowski

This month's Patti Personnel Spotlight is on Senior Electrical Engineer, John Jowski. John started his career with our company in 2010 and has proven time and time again, we can count on him for excellent completion of complicated and challenging projects. His very first project was working on a robotic system that put inserts into blade roots of wind turbines in Denmark - how's that for your first day at work?

For twelve years prior to joining Patti Engineering, John worked as a senior controls engineer at FANUC Robotics where he climbed the ranks with his high level



programming skills and dependability. "John is a talented engineer with extensive controls and robotics experience; at this point in his career, he has basically seen it all. With this wide-range of experience combined with

his exceptional work ethic and love of a good challenge, we are fortunate to have him on our team," commented Vice President of Engineering, Dave Foster.

One challenging project John enjoyed a few months back, took place on the historical Great Lakes steam ship, the SS Badger. We were hired to assist with the SS Badger's boiler upgrade project. A very unique project, John's work included pre-installation review of the project design and Siemens software program, followed by assisting on board the SS Badger for start-up, commissioning and debug. Seeing how labor intensive keeping 1940 technology running was interesting for John. As John explained, "On the ship, engineering teams of two walk around to check and correct every pressure and fluid level on the ship. Today we would just install sensors and valves to handle this automatically and only involve people if necessary. The crew was having a hard time leaving the new equipment alone, not trusting the new technology to properly adjust damper positions and not understanding that the automation could properly control the motor speeds. It was also cool to be called to the different areas of the ship, such as the 'aft starboard boiler' or 'engine room HMI'."



When not hard at work on one of Patti Engineering's projects, John is currently consumed by the FIRST Robotics Competition. He is mentor to two Goodrich High School teams (70 and 494) and the Goodrich Middle School team (5289). Both 70 and 494 made it to the quarter finals of their division in the world championships where 494

eliminated 70. Team 494 ended their very impressive run in the competition at the semifinals. While John notes that winning is always fun, he says the best part of this competition is watching the kids learn. At the inception of the competition, the kids look to the volunteer engineers supporting them for nearly every decision they make. In the end, John says "they get to the point where it seems they are pushing you away to do it themselves!"



John grew up in Livonia, MI where he lived for more than thirty years before moving to Goodrich, MI. John lives in Goodrich with his wife Pamela, daughter Elizabeth and son Zachary. With owning 50 acres of land, John enjoys outdoor hobbies including riding ATVs, practicing shooting and hunting. John earned his Bachelor's Degree in Electrical Engineering from Michigan Technological University.

John Jowski is an engineer who works tirelessly for us and our clients. Thanks for your hard work, John!



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We work as partners to our clients. When you need an expert to help solve automation challenges, we are here to add value to your solution - enhance efficiency, increase productivity, and work with your team as a trusted resource. Visit our **website** for more information on our areas of expertise, or call us (248)364-3200 for a free initial consultation.

Thank you for your interest in Patti Engineering.

Best regards,

Georgia H. Whalen Director of Marketing Patti Engineering







Did you see our News Release?

Patti Engineering and McClellan Automation Systems Expand Relationship as Demand Escalates from U.S. Manufacturers Looking to Gain a Competitive Advantage with Custom Automation Solutions

With successful completion of a large contract to build state-of-the-art high-precision custom machine lines utilizing Mitsubishi robots and automation controls, McClellan Automation Systems and Patti

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