


Whitepaper

Benchmarks for Selecting the Right Systems Integrator

The Future of Automation



The right systems integrator for an automation project can make or break a company.

Selecting the right systems integrator for an automation project can be a daunting task. You'll most likely meet with multiple companies to review your project scope, requirements, and price range. Many times, the cost of the system determines which company is awarded the job. You must look at the bigger picture when making this decision, as you want to ensure the integrator has the capability, resources, and knowledge to complete the job successfully.

No one wants to start an automation project that will be filled with price-hikes, mistakes, and delays. Since there are no known technical standards for integrators, setting up your own benchmarks can help you make a wise decision that your entire company will be happy with.

We've put together a list of benchmarks to help evaluate each system integrator you interview to help complete an automation project. We will go through why you should use an integrator, what the most important criteria are, how to go about making the decision, what tools to use, as well as some challenges and considerations that you should be aware of.

Why Use a Systems Integrator?

Time Savings

Working with an experienced systems integrator can help you get your project up and running quickly. Simple, stand-alone systems can be designed, built, and installed in as little as 8 – 12 weeks. Larger, more complex systems and full production lines can take anywhere from 1-2 years.

Reduce Overall Cost

When you attempt to complete an automation project on your own, you must absorb the cost of any issues that arise. Such problems that could come up are lack of staff availability, unavailable resources, or technical roadblocks. Hiring an integrator typically secures a set cost for the project. The capital expense and schedule of the project is now the responsibility of the integrator. These are typically very predictable as long as there aren't changes in the product or fabrication process scope.

Reduce Risk

When you think you have a team of in-house engineers that can accomplish the job, you are taking on a lot of risk for your company. They most likely don't have the same resources and experience that integrators do. When your team runs into trouble, a systems integrator may have to step in regardless of your internal resources.



The Most Important Criteria

Past Projects

Evaluate the past projects that have been completed by each integrator. It is important that they have done something similar in the past and have supporting evidence such as case studies, testimonials, or videos to prove themselves. They may not have done a system just like the one you are looking for before, but may have done something similar for a different industry. This is a great indicator that they have the means to successfully fulfill your needs.

Technical Sophistication

The world of industrial automation is constantly evolving. Hiring an integrator that uses old technology will most likely cost you more than you think. Make sure they are current with the latest technology such as vision systems, sensors, servo motors, PLC controls, Human Machine Interfaces (HMI) and data acquisition.

Location

The location of your integrator can sometimes be a deal breaker depending on the project you have and how much travel will be necessary. It is a nice option to be able to visit your integrator's factory during the building stage and completion to keep up to date with progress and collaborate with the team.

Current Work Load

A bigger integrator doesn't always equal better. How does your integrator allocate resources and do they have the availability to complete your job on time? Get the number of managers, engineers, and builders that will be assigned to your job and make sure the integrator has direct relative experience with your application including customer references for you to visit with to determine their capability.

Price & ROI

Evaluate the bigger picture value of what you're getting from an integrator. Your system should be set up to increase productivity, reduce costs, labor, injuries, and so much more. You may be given quotes that vary from high to low, but there is a reason why. In the end you get what you pay for, which is nothing new.

Project Process

Every integrator should have a project management process that walks through the steps for successfully implementing automation equipment. This process should describe the procedures that are taken to manage every element of the project from start to finish. Such processes should consider things like time, cost, quality, risk, and change within the workflow.



How to Make the Decision

Get Educated

As stated previously, research past projects completed by the integrator. They might not be able to give you exact details due to confidentiality agreements, but they can provide you general information about successful projects that have similar capabilities. Do they have videos you can watch, project photos, or other resources that reassure you of their work history?

Deep Dive into Each Integrator's Post-Project Offerings

This decision should not be solely based on the current project, but should also consider the future support for the life of the system. When making the selection decision, there are post-project service considerations to be made that are sometimes offered by the integrator such as 24/7 support, technical training, and preventative maintenance services. Ensuring that your systems integrator can support your system throughout its life is crucial to maximizing your equipment and your ROI.

Evaluate Your Relationship

Integrators are in the 'people business.' The relationship you have with your integrator is vital to the success of the project. What kind of company culture does the integrator have? Do they answer your phone calls and emails in a timely manner? Do they show a sincere dedication to completing the job? It's important to have a good relationship with not only the day to-day contacts but with management as well.

What Tools to Use

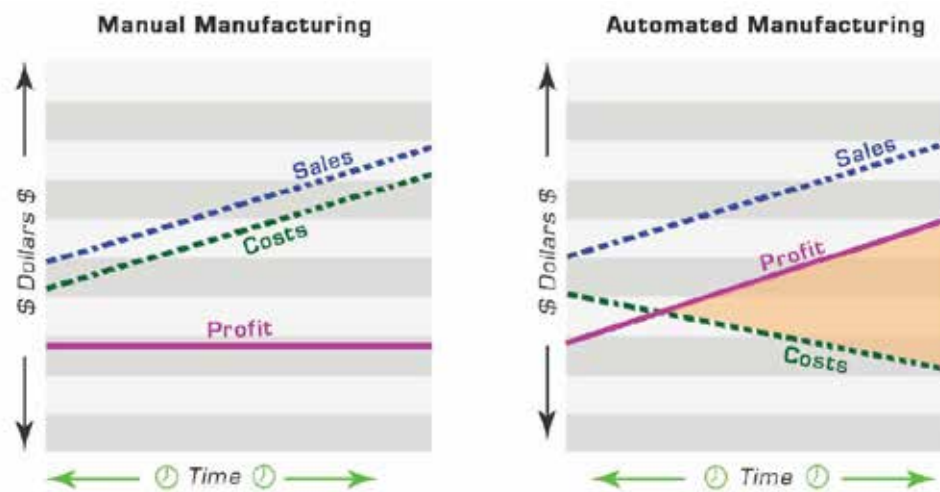
3rd Party Endorsements

Can your integrator supply you with testimonials, case studies, and referrals? How active are the integrators in the automation community? Are they RIA Certified? Just like any other big purchase decision, you want to buy from the expert.



ROI Calculations

It's very important to do an ROI calculation before hiring an integrator to evaluate if the project is going to be worth it to your company's bottom line. Look at your current costs, plan for the long-term life of the new system, and calculate the automated performance costs.



Challenges & Considerations

Collaboration

You will know if you've made a good decision if the new equipment design and functionality is a collaboration of engineering efforts between you (the end user) and the integrator. It is important to find the genuine industry experts to solve your problems but this will require you to do your own homework so that you can develop an understanding of such project elements as ease of use, reliability, durability, current technology, and multi-function capability. The more you understand about the alternative solutions available for your manufacturing problems, the better equipped you will be to collaborate with the integrator to develop the most efficient solution.

Communication

Be upfront and have full communication with your integrator. Share your factory floor layout, the sequence of operations of your application, the expected throughput requirements, and any other pain points of your manufacturing process. Just like any relationship, a failure to communicate is a recipe for disaster.

Organize Success Factors & Identify Risks

Before beginning a project, compare notes with your integrator and see how you both see the bottom line of the project. No one knows your manufacturing process like you do, so be open to sharing your knowledge and organizing what needs to be done in order to consider this project successful.



Final Thoughts

There is no right or wrong way to select an integrator, but you can be assured of a good outcome when you do your homework. Incorporating benchmarks, criteria, selection tools, and applying industry knowledge will help you make the most appropriate decision. The most successful users of automation are those users that embrace the technology. In an ideal scenario, the integrator will gain knowledge about the production process from the manufacturing experts and the manufacturer will gain automation experience and knowledge from the integrator.



About Midwest Engineered Systems

MWES provides integrated systems, custom automation machines, robotic solutions, and production lines to manufacturers globally. Our staff of over 75 engineers has technical expertise, a diverse knowledge base, and has built thousands of integrated systems for over 30 years. Additionally, MWES provides new process development, training, support, equipment maintenance, and retrofits for all aspects of a factory's manufacturing equipment.

Need more information regarding your manufacturing application? Contact MWES to review your specific requirements, help you determine what equipment would be the most successful, and get a custom quote.



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