

How to Upgrade When Times Are Tough: Tips for Successful System Integration in a Recession

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1. Run the Retrofitting Numbers.

Determine the cost-benefit of upgrading your existing equipment vs. buying new. Often the existing machine is sound, and you can realize significant benefits with an intelligent control system upgrade. At AMS, we regularly see throughput benefits of 30-50% and savings in the hundreds of thousands after updating control hardware and implementing a better user interface. You can eliminate—virtually overnight—problems that you have lived with for years with a well planned drive and control system upgrade. Retrofitting a machine will extend a proven asset's life while improving production rates and reliability.

2. Involve the Integrator Early in the Process. Good Partnerships Build Success.

By involving the integrator early in the evaluation process, you have a better chance of getting the best solution for your production challenges. Good integrators look at the “big picture” and suggest cost-effective improvements to the entire production line that your team may not have realized were possible. Choose an integrator that you would like a long-term relationship with. They will look out for your best interests and help you achieve your budget targets through effective and experienced design efforts early in the project, instead of cost-cutting and features reductions when the money runs out.

3. Get the Whole Package.

Make sure your integrator is providing the PLC/Motion programming, HMI software design, drives, control hardware, panel building, field acceptance and testing, start-up, training, and documentation. You want the whole system from one point of responsibility. That way nothing gets left out and there is less opportunity for miscommunication. This saves you time, money, and headaches.

4. Understand Upgrade Project Management.

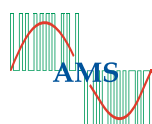
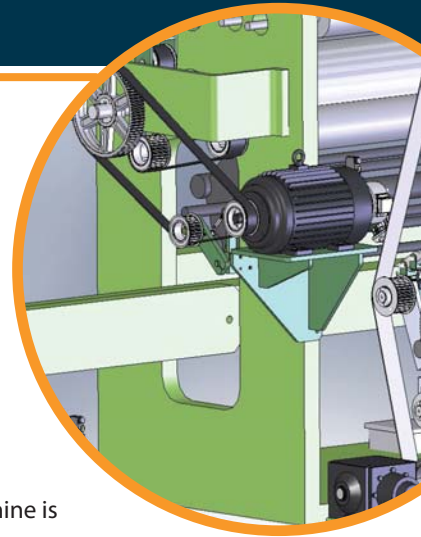
Field retrofits of existing equipment are inherently different from installations of new equipment. The project management activities for upgrades go far beyond coordination of vendors and equipment arrival schedules. The project management tasks will fall primarily upon the integration partner that you have chosen for the project. Upgrade planning tasks include:

- On-site research to determine the current state of the equipment prior to the upgrade
- Equipment measure-ups for mechanical modifications
- Gathering and verification of electrical documentation for controls upgrades, and
- Interviewing operation personnel to determine how to address operational pain points.

Your integrator should have the ability to coordinate both the schedule and the technical aspects of the project. You as the customer will also need to play an active role in the gathering and analysis of information for the current and future configuration of the equipment.

5. Fix What's Broken.

The performance of your equipment after the upgrade will be directly affected by its mechanical condition at that time. Now is the time to replace worn parts and perform other maintenance tasks that perhaps have been overlooked or delayed. If you expect throughput or speed increases after the upgrade, pay special attention to bearings and roll balance to prevent failures after you return to production.



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How to Upgrade in a Recession CONTINUED

6. Support the System Remotely.

Industrial Ethernet now makes remote support a snap so that you can receive timely assistance if your production is interrupted or troubleshooting is required. Remote support is a cost-effective solution and a service that every system integrator should be offering now. Your total cost of ownership is reduced when problems are solved quickly and your machine availability is maximized.

7. Be Flexible when Considering a Controller.

All controllers are not created equal. While most are quite capable for general, everyday tasks, a qualified system integrator may advise you to consider a particular controller, depending on the complexity of the application. This is especially true when dealing with motion control applications. Most motion controllers can perform basic motion control tasks in a competent manner. However, for applications requiring precise coordination of highly variable processes, some controllers may not measure up. If your system integrator offers experience and good counsel regarding hardware choices, seek to understand why these suggestions are being made and why your first choice of controller might not be optimal.

8. Evaluate Service and Experience.

Attentive and immediate customer service will save you money. Ask for references and to see other projects like yours that were successful. Reputable firms will be happy to show off their projects. The bitter taste of a poorly implemented project lasts far longer than the sweetness of the lowest price. The system integrator that you want to select is the one that customers return to, time and time again. The best way to achieve the value return on your project is to ensure that it is successful the first time. It is easy for an integrator to have a low price if they do not recognize what it will take to achieve success. You never want to select the one who left the most out.

9. Read the Documentation. Get the Training.

Easily overlooked, but critically important. Do you know where your manuals and drawings are? Does the company supply drawings and manuals and provide updates when changes occur? Is this documentation available online for your technicians 24 hours a day? Can your integrator effectively train your personnel on the updated operation and maintenance of the equipment? Save your staff time and frustration by making sure that your integrator provides documentation that is easily accessible and training that is effective.

10. Consult Your Current Integrator.

If you have developed a relationship with a good integrator, be sure to get a bid from them, particularly if they have demonstrated a commitment to system perfection even when it cost them money. Leveraging your existing relationship with your integrator can lead to the greatest overall project value. You as the customer are best served when your integration solution partner is looking out for your best interests.

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