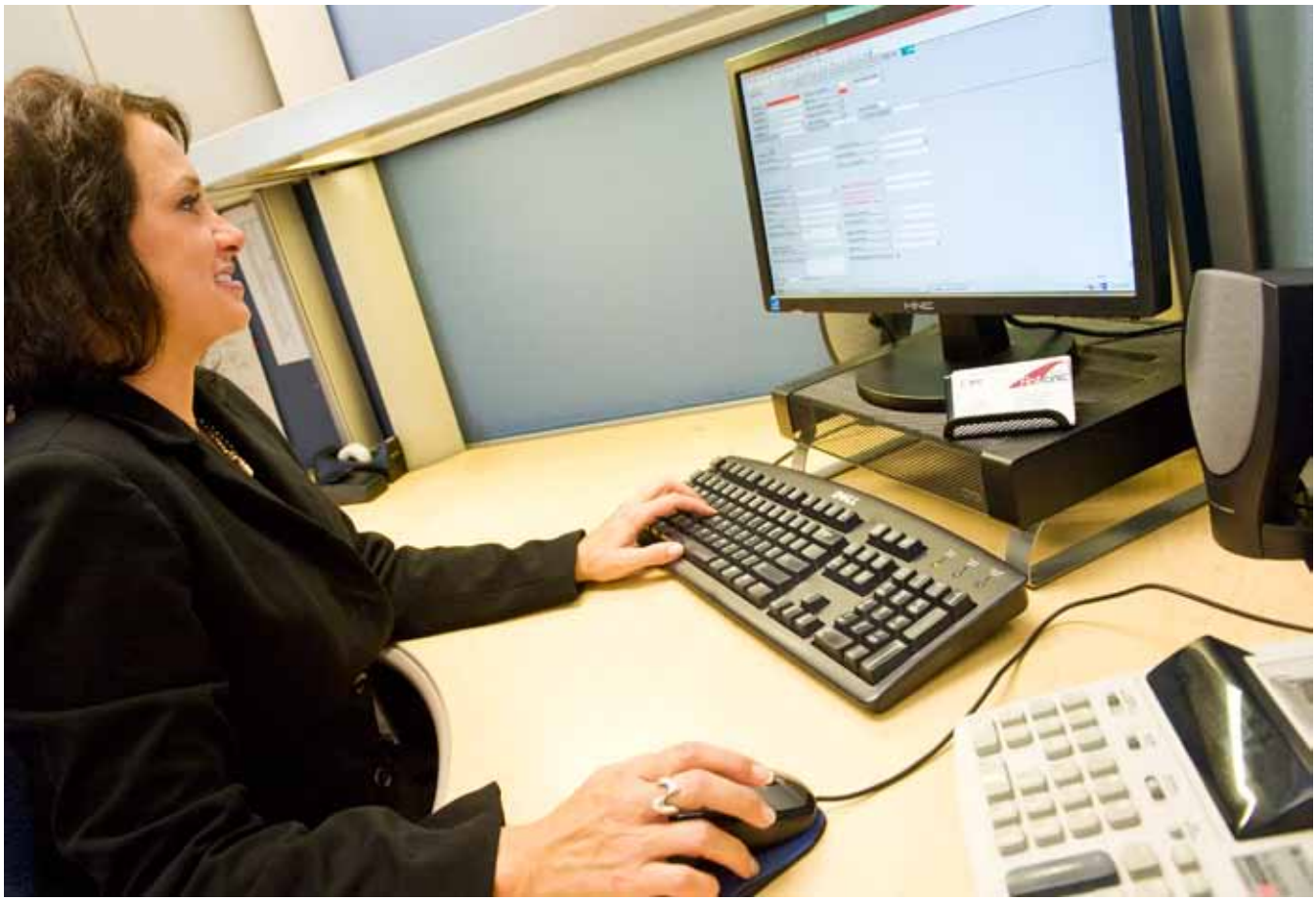
Case Study

A systems approach to reducing time and cost in project launch



Project launch is typically the most costly phase of any outsourcing project. Both the customer and electronics manufacturing services (EMS) provider have a learning curve. There are both known costs such as non-recurring engineering (NRE) and tooling, and costs driven by unanticipated issues. Tight deadlines, stretched resources and communication overload can make it easy to miss open action items. A defined process for project launch can help improve efficiency, but typically the quality of project launch is dependent on the expertise of the EMS provider's program manager and project team.

These challenges motivated Firstronic to develop a proprietary system to manage critical EMS processes including project launch. ProManage is a relational database that automates many of the day-to-day tasks and monitoring activities that otherwise consume a large share of program management time. Any member of the team can log on to the system and find out exactly what open action items they have on any project 24/7. Team members are emailed as new tasks are assigned and the system is preprogrammed in each of the processes it manages to assign standard tasks as the project progresses. The program manager has the time to better evaluate project trends and look at longer term project issues instead of getting bogged down in day-to-day tactical tasks.

The team that developed ProManage created four basic project launch templates

which are customized to meet specific customer requirements:

- Engineering (for customers with design requirements)
- Prototyping
- New product launch (applies to both transfer of new and existing product)
- Older assembly review (for products that haven't been produced in at least a year).

Each template automates approximately 90% of the project launch plan and the remaining items are added by the program manager. The customer reviews the proposed plan and modifications are made. The plan is then launched to all relevant parties and the system sends specific action items to each participant.

If a deadline is missed, the system automatically escalates that series of activities to a supervisor for resolution. This ensures that bottlenecks are immediately addressed before they impact additional action items. Additionally, the system creates full documentation and post-mortem history to allow for process improvement.

This level of automation addresses a number of issues that can create inefficiencies in project launch:

- Lack of project launch process standardization.
- Real-time visibility into project status and issues—team members can access the system 24/7 to check the status of the project issues they are tracking.
- Learning curves associated with new employees—employees simply follow a roadmap.
- Project management vacation or travel schedules—the program manager can delegate to a team member with the assurance the system is tracking all activities.
- Communication overload—action item assignments are only sent to the responsible participant(s).
- Resource constraints—ProManage is a force multiplier that can enable a single program manager to do the work of four-to-five people.
- Detailed project history to support product qualification reviews, regulatory recordkeeping requirements or process improvement initiatives.

However, truly efficient project launch is a team effort. While a system such as ProManage can help ensure that no project slippage goes unnoticed, there are a number of ways that customers can help streamline the process as well. These include:

- Authorize the long lead-time materials recommended by the EMS provider.
- Adopt design for manufacturability/testability (DFM/DFT) recommendations whenever possible.
- Expand the approved vendor list (AVL) to include multiple sources.
- Share any known quality issues on existing product.
- Provide a solid test specification.
- Provide clear packaging and logistics requirements.
- Forecast as accurately as possible and listen to the EMS provider's recommendations in that area as well.

Supply chains compete against supply chains. Issues caught in the initial stages of a project are much less costly to fix than issues found in the field. Combining a systems approach, such as the one outlined above, with a focus on eliminating potential quality and supply chain issues before they occur, reduces time, cuts cost and results in superior quality.

Firstronic LLC (www.firstronic.com) provides advanced electronics manufacturing services and optimized supply chain solutions for the electronics industry. Headquartered in Grand Rapids, MI, Firstronic has a 35,000 square foot facility, state-of-the-art equipment and a seasoned management team with an average tenure of 20 years. For more information, contact: info@firstronic.com.