42Q

SMART CONNECTED MANUFACTURING

Case Study

Escalating Risks and Costs of Sustaining Software Engineers with Legacy Technology Skills – Eliminated!

"Working with the 42Q team was a breath of fresh air. They are highly dedicated and very easy to work with. They focused on our business and were open to making changes and improvements that we needed."

Mike Schultz
Vice President, Manufacturing

About Bedford Industries:

Bedford Industries, a family owned business established in 1966, is a leading manufacturer of twist ties and customized tags for the retail industry. They manufacture over 20,000 product configurations using more than 100 complex manufacturing processes and ship millions of products to customers daily. The manufacturing processes must comply with stringent food safety regulations.

Goal:

Bedford Industries' wanted to future-proof their manufacturing operation. They needed to replace their home grown MES system with a cloud-based, secure and mobile enabled alternative. The existing system had been developed in-house and served the business well for over thirty years. However, it required on-site IT support and a team of programmers proficient in outdated software languages. Recruiting software engineers with expertise in these languages when possible had become cost prohibitive. Changes to the system required software development skills in legacy languages and took months to implement. It was essential that the new system could be maintained by the production team without the need for software engineers.

Why 42Q?:

Bedford Industries had conducted a comprehensive evaluation to select a new ERP and MES system. They wanted an industry leading solution with access to the latest technology and cyber security. 42Q's simple user interface was attractive. 42Q was also highly recommended by Netsuite, which Bedford had selected as their new ERP. Having successfully conducted a proof of concept with 42Q in only 3 months, Bedford Industries chose 42Q as their MES system.

Approach:

- The 42Q implementation framework was used to manage deployment.
- Bedford Industries assigned a manager to lead the project.
- 42Q and Bedford Industries analyzed the manufacturing processes and a plan was developed for the 42Q implementation.
- To ensure seamless integration with different systems 42Q and Bedford Industries collaborated with multiple suppliers.
- An extensive hands-on training program was developed which included the establishment of a training center with multiple workstations and delivery of over 36,000 hours of training to 300 people.
- Rigorous test scripts were developed representing the most complicated customer orders together with the most complex manufacturing processes.
- Tests were executed; issues were identified and resolved in a thorough conference room pilot and verification program.
- Production floor testing was completed before the system was turned on for manufacturing.

Results:

- 42Q, being cloud-based has eliminated the requirement to recruit software engineers with experience in out-dated software languages and on-site IT hardware.
- The production team is now self sufficient in making configuration changes in hours that would previously have taken months.
- Although Bedford Industries never had a product recall, food safety regulations require mock recall testing. The lead-time to identify products which need to be recalled during the test has reduced from 6 hours to under an hour.
- Traceability has significantly improved with real-time data access.