



MARSAN

PREPARED FOR IMPROVEMENT

In an increasingly competitive market, Marsan Foods invested in a new manufacturing facility with the latest high speed production lines, and introduced a program of continuous improvement (CI). But to maximize efficiency improvements, it needed to replace its manual performance management system with a state-of-the-art IT solution. Ronan Martin-King reports.

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Founded in 1970, Marsan Foods is a family owned and operated company, preparing and packaging food for large retail, food service and healthcare customers. As well as its own range of ready meals, the company is the ‘partner of choice’ for some of the most significant commercial food businesses in North America, for which it has won industry awards for the quality of its products and services.

Following a period of significant business growth, Marsan moved to a new plant in 2000, investing in new high speed production lines. The company pursues a policy of continuous improvement and had got the lines to perform as well as it could, using its existing manual systems. It wanted to take the organization to the next level of efficiency but was unable to identify precisely where the opportunities lay to further unlock the potential of its people and practices, and improve Overall Equipment Effectiveness (OEE). Marsan turned to mvi technology’s eventsengine, real-time performance management (RPM) system – an out-of-the-box solution offering the dual benefits of rapid implementation and ROI.

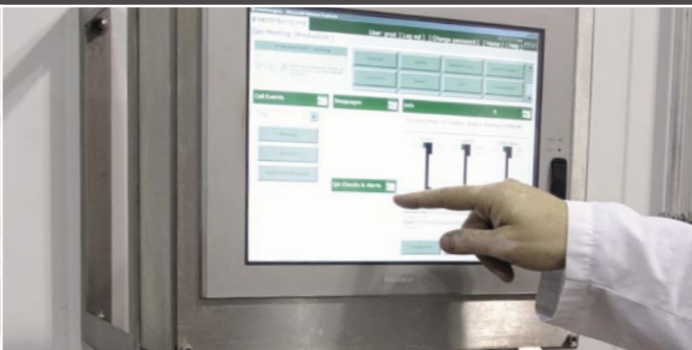
The system was implemented in just six weeks and, crucially, received immediate buy-in from the shopfloor personnel as real-time feedback and removal of the paper-based collection systems instantly made their jobs easier. The system is now providing a sustainable framework for driving improvement.





CASE STUDY

Graeme Jewett, president (left) and Kristoffer Scoderlind, director of operations



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**Graeme Jewett
President**

Graeme Jewett, president of Marsan: “The software, in combination with the training from mvi, has changed behavior and, to a degree, the culture of the business. The training has been critical – previously, we were looking for reasons why the line would not work; now we are continuously looking for ways to make the line work better – and this is all coming from the shop floor up; it is not continuously being pushed down. It’s given the shop floor a sense of control over their own lines and they own the responsibility for improving them.”

Director of operations, Kristoffer Soderlind says eventsengine has become an integral part of the business inside six months. Marsan has been tracking the data continuously since the system went live and can see the trends in overall equipment effectiveness (OEE). He says the company ‘knows exactly where it is’ and is seeing the results coming back from its first improvement campaigns.

The eventsengine system works by allowing performance data (on people as well as plant and process issues) captured at the shopfloor level to be instantly visible via a KPI dashboard. This alerts the operators to take any necessary remedial action as well as feeding back to them real-time measurements against performance targets. The information is also accessible

via a web browser elsewhere in the company and is role-based to ensure information is deployed in the right manner to the right people in real time. From a strategic perspective the information is modeled in a way that enables organizations to identify specific opportunities for improvement through ‘slice and dice’ and ‘what if’ analysis on a continuous basis, comparing shift, crew and product performance over time.

“The results from the system showed that the biggest contributor to downtime was changeovers,” says Soderlind, “and you can’t improve changeovers unless you can measure them in the first place. Utilization is the key issue for us. The eventsengine system allows us to break downtime into different events; looking at the different assets on the line and then the specific issues causing downtime on each asset. That’s where you can identify and focus on recurring problems – rather than just say ‘changeover is the problem’, it might be three or four steps, or more.”

One such example was with the ‘sealer’, the machine that seals the food trays after filling. Data from the eventsengine system revealed that the sealer film breaking was not only a recurring problem (it was responsible for nine percent of all downtime) but that it only happened at the start of the morning shift.

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Director of Operations**

A workshop session with mvi established that the film breaking was caused by excess moisture left after the machine was cleaned down and sanitized overnight. Marsan installed a more powerful air gun to dry the equipment and the problem was resolved.

“That’s the key; you see the trends and come up with the ideas. That’s why this principle of continuous improvement is so good; you get a bunch of people together from different departments and brainstorm different solutions and root causes – ‘why do we only break the film in the morning?’”

Increasing line speed was the objective of another improvement campaign and the eventsengine system identified that incorrect settings following an equipment change, was making one of the lines run slower than it should have been. Rate improved immediately from 79 percent to 85 percent as a direct result.

The company now holds campaign meetings every month, lead by a newly appointed CI coordinator. The team, which includes operators, changeover and maintenance personnel, supervisors and the production manager (Soderlind, himself), uses data from the eventsengine system to assess its progress on existing campaigns and to build new ones as appropriate.

The campaign team then reports at the monthly management meeting, which Soderlind says is essential for the company to keep focused on the CI program.

Graeme Jewett, supports that view: “The performance data from eventsengine is objective information, and it is accurate – the manual system we used previously could only take us through the low hanging fruit, whereas eventsengine allows us to drill down so much further. As a business owner that objective information gives me great comfort when making investment decisions, setting goals and conducting, performance reviews.”

The system has already helped the company resolve many of the problems in its processes and Kristoffer Soderlind, says recent results have really shown the potential: “OEE has increased on average, from 65 percent to 74 percent, inside eight months and we’ve just had a couple of amazing runs when we ran a double shift at 95 percent OEE.”

What’s more, the productivity improvements have happened at a time when the company was making major changes in production scheduling, which could have adversely affected OEE; Soderlind explains: “During the summer months, customers were demanding much shorter runs, so we had to incorporate

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FAST FACTS >>>>**MANUFACTURER TYPE**

Prepared, packaged food.

BUSINESS GOAL

To take the organization to the next level of efficiency in line with a policy of continuous improvement.

PROBLEM

Using manual systems to record and track efficiency; so unable to identify opportunities for improvement and unlock the potential of its people and processes to improve Overall Equipment Effectiveness (OEE).

SOLUTION

mvi eventsengine® real-time performance management (RPM) system.

IMPLEMENTATION TIME

Six weeks.

TIME TO BENEFIT

Six weeks.

BENEFITS

Complete visibility of the operation; identification of downtime issues; root cause analysis and improvement action; OEE increased from 65 percent to 74 percent on average and a best performance of 95 percent; changeover times reduced from 60 minutes to 34; management admin time halved; positive behavior and culture change in the organization.

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more changeovers – four or five when previously it would have only been one or two. But because our improvement campaigns were focused on changeovers, not only did we maintain OEE, we improved it.”

Another change brought about by the eventsengine data was in the machinery used for handling the packaging trays – the company was using different sizes for different size trays and that was impacting on changeover times. It developed a one-size-fits-all solution and changeover times were reduced by a further five minutes.

Overall, the average changeover has improved from somewhere between 45 and 60 minutes (there was no accurate measurement prior to the eventsengine system) to 34 and the next target is to get them down to 30 minutes. Marsan now has a set of standard operating procedures for changeover and Soderlind says that although much of the improvement so far has come from becoming better organized, the next uplift will come from its recent investment in capital equipment – again prompted by the eventsengine data.

“We had one sauce pump on the line, which has to be cleaned down and sterilized at each changeover. That could take one person twenty minutes to do. We’ve

invested in a second pump, which will not only enable us to hit the new target time for changeovers but also free up that person for other tasks – on the basis of five changeovers a day, that creates an extra five man-hours a week.”

The final word goes to Graeme Jewett: “We are getting dramatic improvements in line performance and expect to continue building on that. We have seen behavior change throughout the organization, with the shopfloor talking the same language as the management team – the operators love it and the management team’s admin time has been cut in half.

“The software and training have given us real financial benefits; we have reduced our direct labor cost on all products run through the line; increased throughput; raised production standards – twice – and we can spread fixed costs across more units, driving down cost per unit and making our products more competitive. The ability to track changeovers and startup times and then reduce them has been incredibly valuable, allowing us to decrease inventories to meet customer requirements. We now feel we now have true real-time control over our operation.” 