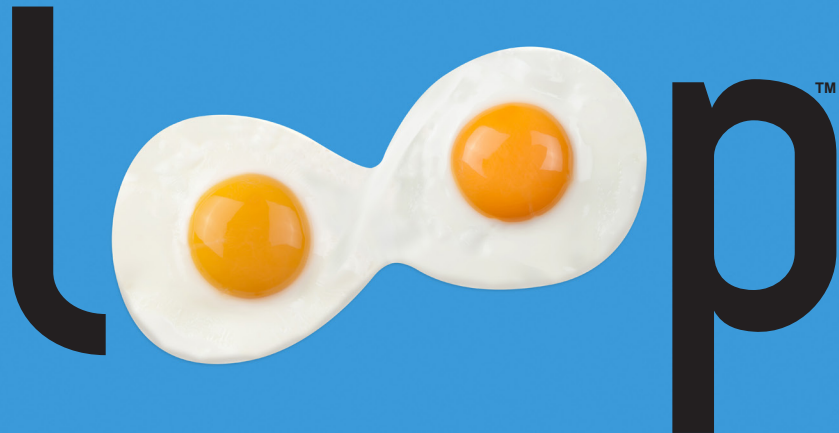


Feeding Operational Intelligence to Those Who Can Take Action

Michael Foods takes the guesswork out of planning for the future with data-based decision-making

Michael Foods
meets the
excellence



“The immediate impact that InfinityQS® ProFicient™ had and the awareness it created was tremendous, much more than I ever thought possible. Now we can look at operations as a whole and make big-picture decisions about what should be done going forward. Management is using data to make informed decisions and plan for the future.”

Jim Hunkins, Senior Manager of Quality Systems Development,
Michael Foods



Michael Foods Group Inc. is a multi-national producer and distributor of egg products, refrigerated potato products, cheese, and other dairy-case products to the foodservice, retail, and food-ingredient markets. With annual sales of nearly \$2 billion and more than 3,000 employees, the Minnetonka, Minnesota-based company offers a variety of valued and recognizable brands such as Papetti's®, Crystal Farms®, AllWhites®, and Simply Potatoes®. The company's 11 manufacturing plants are dispersed throughout North America with locations in Minnesota, Iowa, New Jersey, Pennsylvania, Nebraska, Wisconsin, Nevada, and Manitoba, Canada.

The challenge

As part of its ongoing commitment to deliver safe, wholesome and trustworthy products, Michael Foods maintains a strong focus on the wants and needs of its customers, introducing innovative, value-added food technology and customer solutions across the enterprise. In its manufacturing facilities, the quality assurance teams were practicing Statistical Process Control (SPC) to improve the operational efficiency of processes and machines. However, data collection was largely performed manually; the analysis software was developed for quality assurance rather than statistical analysis and didn't offer the necessary capabilities to truly understand the value of the collected data. The Michael Foods quality assurance team wanted to improve its overall statistical approach to quality and reduce the amount of product that was being lost through overpacking.

- > The company paid for the enhanced SPC project through resulting productivity gains.
- > Real-time monitoring and alerts maintain process control to reduce overpack and waste.
- > Graphical displays, extensive charting, and real-time feedback empower operators to make data-based decisions.
- > Operational intelligence identifies and eliminates variation between shifts.
- > Removing guesswork and streamlining communications among operators improves production efficiency.
- > Manufacturing Intelligence helps plant managers and quality executives identify overarching trends.
- > Reduced startup time required to stabilize a process for normal production.

Welcome to the excellence loop



The solution

To take its data collection and analysis to the next level, Michael Foods selected InfinityQS ProFicient, a real-time quality and Manufacturing Intelligence platform powered by an SPC analysis engine. The software was deployed with a central database and server in Minnesota that is accessed from each plant through a thin client via remote desktop or terminal services.

Individual lines at each plant have integrated scales and calipers to collect weight and dimension data, and those lines are now beginning to track temperature and set-point data on the machines.

The Lenox, Iowa, facility, which was first to deploy ProFicient, is also collecting data to evaluate packaging performance and to track gas checks, leaker checks, line speeds, and machine settings.

In addition, Michael Foods is using InfinityQS Dynamic Sampling Workflow across its operations to ensure that operators are completing certain checks on schedule. This feature provides operators with a timed checklist for scheduled quality checks and automatically reminds users when it is time to collect data. Operators have appreciated not having to watch the clock themselves.

The results

InfinityQS ProFicient has helped Michael Foods obtain operational intelligence, which the company has converted to effective action. Its production lines now run within tenths of a gram of target for weight control. In fact, Michael Foods set – and met – the goal of paying for the enhanced SPC project through resulting productivity gains. The efficiency improvements speak to the larger gains that can be realized from the transition to a more data-driven culture.

The platform facilitated a shift in emphasis to continuous improvement from tribal knowledge, with approaches that could vary by line, shift, and facility, toward a global culture of evidence-based decision-making – one that relies on statistical methodologies to attain greater operational efficiency. On the plant floor, the intuitive user interface, extensive charting options, and real-time feedback are empowering operators to make data-based, informed decisions.

On the company's cheese lines, the software has taken the guesswork out of choosing settings for each variety of cheese and has streamlined communication among operators. The software has also helped plant managers reduce inconsistency through identification of standardized settings.

At the corporate level, Michael Foods' operations and quality executives can now easily identify variation trends and can use control reports to help determine the root cause of variations. Desktop dashboards with control charts display exactly what is happening on the plant floor – or across multiple plants – in real time, so supervisors and executives can see whether a particular line or plant is running efficiently and consistently. This enables Michael Foods to proactively monitor and easily correct any out-of-spec processes.

By utilizing the software to its fullest extent, Michael Foods is moving toward a completely paperless environment on the plant floor. With 75% of its plants currently using InfinityQS ProFicient and effectively practicing SPC, this leader in food production and distribution is now using the operational insights and Manufacturing Intelligence it is gathering to develop new projects in its continuous improvement efforts.