

UNLOCKING OPERATIONAL POTENTIAL IS SWEET TREAT FOR DESSERT MAKER

The organization connected with USC Consulting Group intent on increasing revenue by improving productivity, increasing throughput, and reducing overhead expenses.

USC CONSULTING
GROUP™

Empowering. Performance.

THE CLIENT

A leading dessert manufacturer serving private consumers and commercial customers in North America.

THE CHALLENGES

The organization, which another dessert maker had recently acquired, connected with USC Consulting Group intent on increasing revenue by improving productivity, increasing throughput and reducing overhead expenses. USCCG consultants conducted a three-week feasibility study to determine the project scope. This initial research revealed issues distributed across the maintenance, operations, and quality assurance functions. The USCCG team followed up with additional due diligence work and nailed down some of the most prominent problems plaguing these areas of the business, which included:

Problem No. 1: Inconsistent oven operations

The dessert manufacturer maintains an intensive and complex production process, which unfolds as follows: An industrial mixer combines various dry and wet ingredients to make cookie crumbs. A dozen or so human workers then use cups to scoop the crumbs into cheesecake pans, where they compress the granulated batter using spinners to form crusts. An Apple Food Systems depositor pours the applicable filling into the pans — the company offers more than a dozen different flavors of cheesecake — which the staff then places inside an oven and bakes. Following the baking process, workers remove the finished cakes, inject additional filling if necessary and freeze them. When sufficiently set, the desserts are sliced and packaged. In all, this workflow requires around 125 employees per shift and several pieces of highly temperamental equipment — most notably, the Apple depositors and industrial-grade ovens.



The biggest operational issue the USCCG team pinpointed during the project centered on these filling and baking behemoths. Both of these shop floor assets suffered consistent starving due to sluggish upstream crumbing and panning execution. The ovens, for instance, were functioning only 15 hours per 24-hour workday, making it impossible for the company to keep pace with customer demand and ultimately achieve financial success.

Problem No. 2: Ineffective maintenance processes

The maintenance department grappled with multiple small-scale issues that prevented it from building and maintaining effective work schedules and making necessary mechanical improvements. For one, a single employee oversaw all maintenance functionalities, including parts and people management and scheduling. With their supervisor overwhelmed, staff technicians essentially did as they pleased, going out into production areas whenever they liked without direction. Additionally, most successfully avoided weekend work because the maintenance manager and leadership were wary of enforcing attendance policy and scaring away skilled machinists. As a consequence, the maintenance department could not execute important preventive work with mission-critical machinery switched off on Saturdays and Sundays. And when technicians came in during the week to work their 60-hour allotments, most devoted their time to addressing emergency equipment issues, altogether looking past important preventive maintenance tasks.

Secondly, the department did not maintain basic administrative processes, including the creation and management of an essential equipment list. The operation was filled with important and potentially volatile shop floor assets, including industrial ovens and ammonia compressors, that maintenance did not bother to track. On top of this, the existing spare parts inventory was sorely lacking — the client had just \$60,000 in backup equipment in stock.

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Problem No. 3: Serious quality assurance flaws

Product consistency and ingredient wastage were major areas of concern for the quality assurance team. Personnel were wasting large quantities of the two most expensive production resources: cookie crumbs and cake batter. For instance, the workers executing the crumbing process were using nonstandard cups to form the crust layer, leading to consistent overfilling and wastage. This sort of production variance also created quality issues, as cakes consistently entered ovens with inconsistent crust densities. Sometimes, these errors even skewed final product weight figures, causing serious compliance risks.

THE SOLUTIONS

Solution No. 1: Production line metric adherence

To address Apple depositor and oven starving, and the general production lethargy these issues caused, the USCCG team emphasized adherence to existing shop floor performance metrics and developed new processes to empower staff to meet these targets. USCCG consultants helped fill equipment knowledge gaps — particularly those related to the spinners — and made employees aware of production objectives, thus allowing them to become fully engaged on the shop floor and work to their potential. The upstream crumbing and pan preparation processes improved as a result, and made it possible for the dessert company to produce 2000 crumbed and filled pans per hour, drastically reducing the likelihood of Apple depositor and oven starving. The USCCG team also addressed the baking workflow and introduced SKU-based standards to ensure that every unit was allowed to cook for the proper time period. And in addition to implementing these specific fixes, USCCG consultants worked with employees at all levels, from executives to staff manning production lines, to encourage constant reflection and improvement.

Solution No. 2: Maintenance reformation

Reforming the maintenance department took considerable work, starting with the implementation of an aggressive, seven-strike-based attendance policy that incentivized technicians to approach their schedules with more thought. This

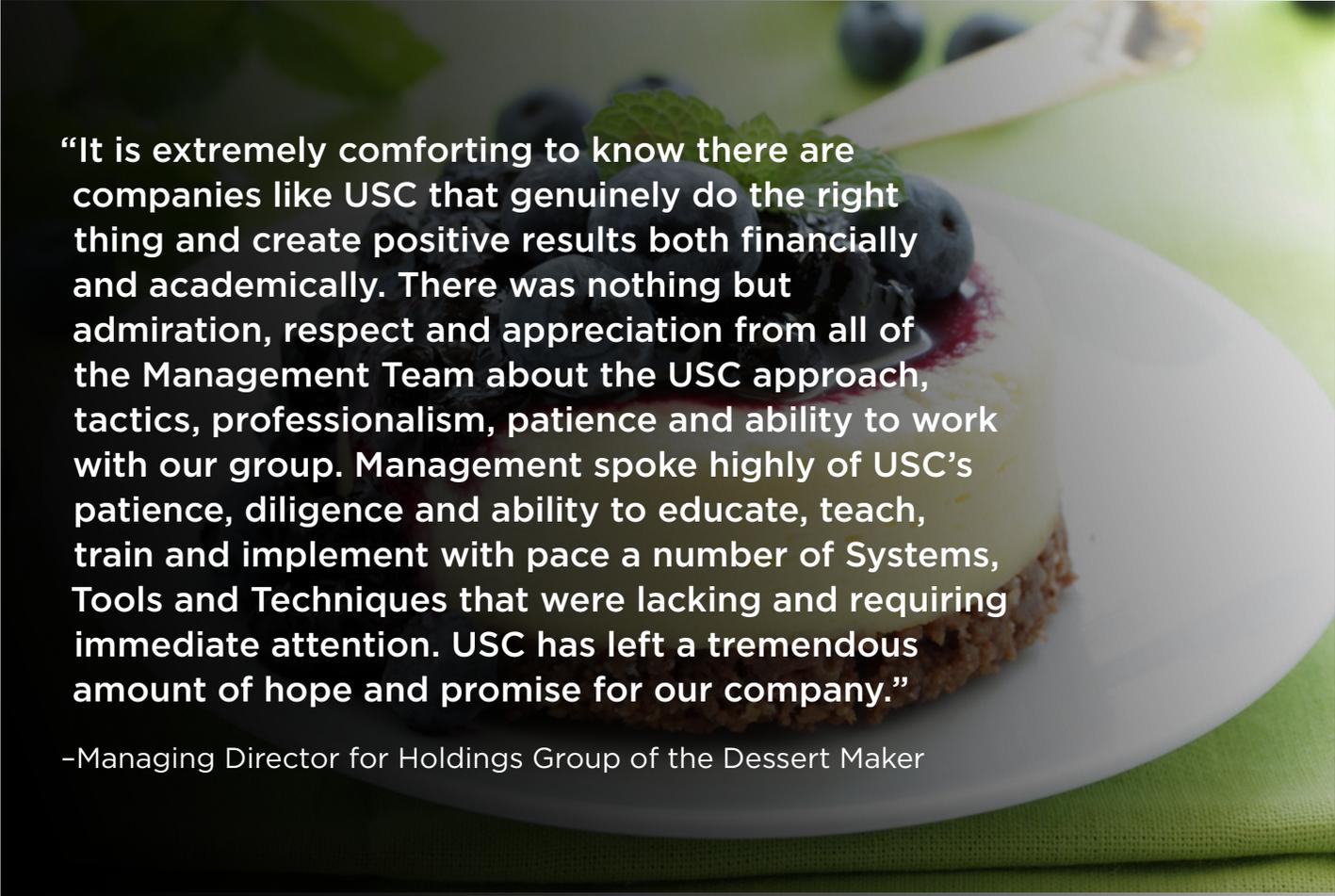
change allowed the company to restart weekend preventive maintenance work and focus on optimizing its equipment rather than warding off momentary mechanical disasters. The USCCG team also worked with the maintenance supervisor to create a formalized scheduling and work order system, and put together an exhaustive critical equipment list. Finally, they convinced the organization to triple its replacement part inventory, bringing the value of the backup component cache to \$180,000 — an appropriate level for a company of its size.

Solution No. 3: Ingredient usage standardization

USCCG consultants managed to fully mitigate the product wastage and quality issues through one simple solution: the distribution of standardized crumb cups and leveling tools. With these assets in hand, employees overseeing the crumbing process were able to turn out consistent crust densities, which in turn drastically reduced waste and quality issues.

THE OUTCOME

The operational improvements that materialized as a consequence of the project were significant. Annualized plant throughput rose from around \$49 million to \$58 million — an increase of 20%. Overall productivity saw a similar boost, growing an estimated 25%. The organization also experienced significant savings, as annualized labor expenses fell by more than \$2 million over the lifespan of the engagement.



“It is extremely comforting to know there are companies like USC that genuinely do the right thing and create positive results both financially and academically. There was nothing but admiration, respect and appreciation from all of the Management Team about the USC approach, tactics, professionalism, patience and ability to work with our group. Management spoke highly of USC’s patience, diligence and ability to educate, teach, train and implement with pace a number of Systems, Tools and Techniques that were lacking and requiring immediate attention. USC has left a tremendous amount of hope and promise for our company.”

-Managing Director for Holdings Group of the Dessert Maker

Businesses within the food and beverage space can achieve similar results by working with our seasoned consulting team. Connect with us today to learn more about our work and how we can position you for success.

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