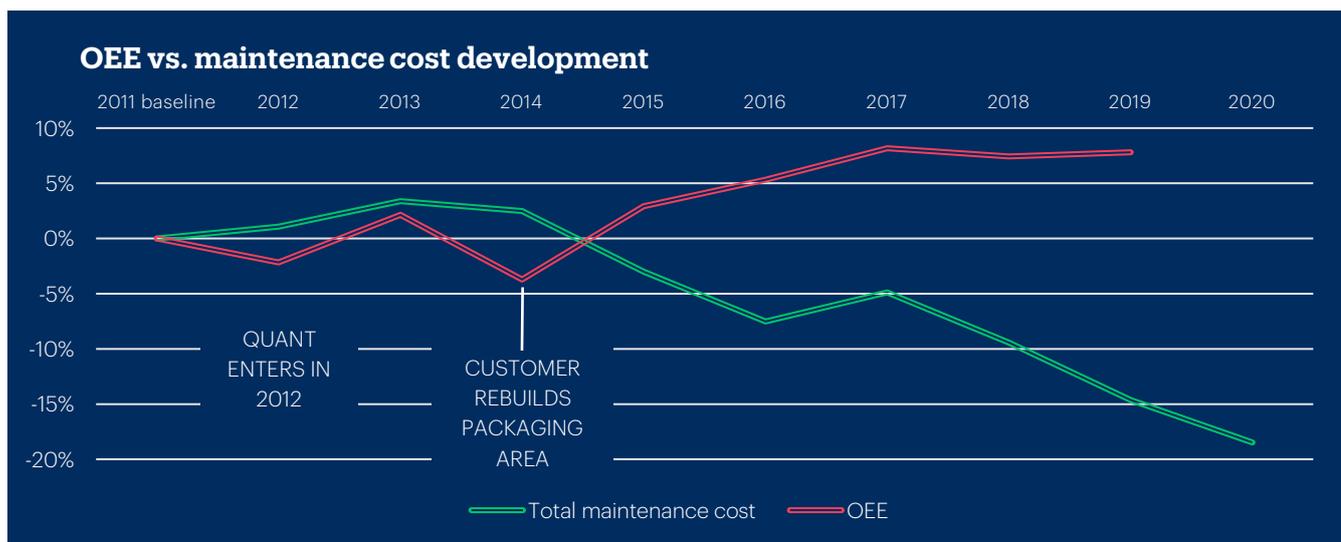


Improved OEE yields significant value for international bakery

Customer challenges

The customer, a food & beverage incumbent owning a chain of industrial bakeries in the Nordic region, needed to professionalize maintenance operations to increase the productivity of a particular bakery. Overall Equipment Effectiveness (OEE) was not bad, around 85%, but production capacity was an issue, and the hypothesis was that better maintenance among other improvements could support increased OEE through improved Technical Availability.

The rate of innovation in the maintenance organization was low and it was deemed that externalization to a third party would create a healthy customer-supplier relationship that would spur improvements and efficiencies and develop Service Culture. Furthermore, the customer wanted to minimize wasted raw material to reduce the environmental footprint and create a more cost-efficient production.



Quant Solution

The maintenance organization was outsourced to Quant that inserted its own site manager who, with the support of Quant's global network and Excellence teams, embarked on an ambitious journey of continuous improvements together with the Customer:

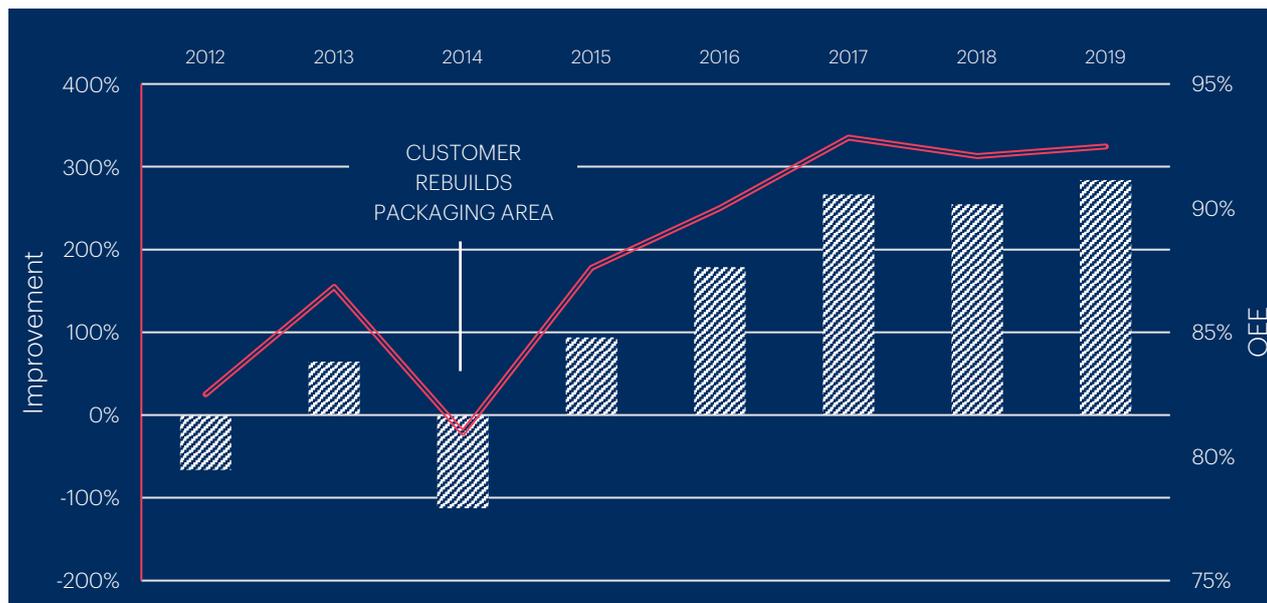
- **Quant implemented the Smart Maintenance framework with optimized work order management and a systematic elimination of recurring failures.**
- **A supply chain strategy was established to further optimize use of material and subcontracting.**
- **RCA analysis on failure resulted in a rebuild of a problematic section of the production line with several successful projects:**
 - **Reduced waste, improved site safety.**
 - **Improved productivity.**
- **Over the contract period Quant further developed the use of Computerized Maintenance Management System (CMMS) and digital tools.**

OEE steadily improved through joint efforts from Customer and Quant, except for 2014, when the customer ran a packing hall project that faced major challenges when a supplier of a new machine failed to deliver as agreed. From 2017 and onwards, OEE has been on a level >92%. Given the success and stable OEE, Quant then shifted focus to instead work with efficiencies to drive down Total Maintenance Cost and support the customer in their waste reduction programs.

Client value

OEE was improved, from 85% to 92%. This was achieved through joint collaboration where Quant focused on a Technical Availability improvement. As a benchmark, values created correspond to 2.8x total maintenance cost and more than 5.3x Quant's fee. In addition, maintenance cost has been reduced by 18% and waste in the production lowered, creating further values for the customer.

After eight years of partnership, Quant and the customer have achieved the main agreed objectives, the contract have been renewed and extended twice. In addition, the customer has decided to outsource a further 12 sites to Quant in a competitive process. One expectation will be that they follow similar value development patterns, and that the customer will have the benefit of benchmarking across sites, creating further values.



Estimated value of OEE increase / total maintenance cost (bars) OEE (line)