

OPERATIONAL MANAGEMENT PRODUCTION PLANNING OPTIMISATION

BUSINESS SITUATION

The go ahead for a green field project was given under the condition that the project should be an exact copy of the existing European facility to allow for an easy start-up. Consequently the entire production methodology was copied from Europe as well without consideration to the local situation.

Quickly planning problems arose as in Europe the plant produced at the same time liquid and instant coffee, allowing the difficult liquid product to be downgraded to instant product at any time. The factory in the United States was however only conceived to produce liquid products. No suitable buyer for instants could be found. As a consequence the factory was soon flooded with off-spec product downgraded to instant coffee.

PROJECT SCOPE

Phase 1: Analysed the entire production chain from green coffee to liquid product, highlighting and detailing all problem areas whereby down-grading of liquid product was necessary.

- Differentiated in each problem area between avoidable losses and unavoidable losses.
- Measured avoidable and unavoidable losses separately and determined the root cause of the problem
- Categorized problems and determined the value at stake for each

Phase 2: Decided on an action plan to reduce the amount of down-grading that took place.

- Prioritised according to the biggest impact on down-grading.
- Used Lean techniques to come up with out-of the box approaches to reductions in down-grading.
- Decided on one champion to spearhead and coordinate the effort.

Phase 3: Worked in various areas at the same time to advance progress as quickly as possible.

- Analysed planning sequence, reorganised to obtain the best possible sequence in production
- Modified standard procedures of production, assuring that the quality aspects of the product remained the same
- Where required modified production recipes to obtain standardisation of work.
- Invented new ways to rework product within the main stream without compromising quality.

RETURN ON INVESTMENT

- Reduced stock in rework powder within 4 months from 6 months stock level to 1 month.
- Applied new ways of working, saving costs also for the European facility.
- Made planning process a standard operation with transparency for all.
- Achieved buy in from all personnel as the complexity of their job diminished.

LOCATION

- United States of America

INDUSTRY

- Liquid Coffee Manufacturing

COST SAVINGS

- Saved 4% of raw material costs within a year of operation.