

INCREASE THE SHELF LIFE OF READY MEALS, THEREBY TURNING XXXX INTO A PROFITABLE BUSINESS

PROBLEM DESCRIPTION

PROBLEM STATEMENT

XXXX is a small food company that is losing money. If this situation continues, the company will not remain a viable business. Failure will be disastrous for local enterprise resulting in the closure of the plant and loss of employment.

PROJECT OBJECTIVE

Turn the company around from loss making by increasing ready meals Shelf-Life. This in turn will give increased Sales Revenue, Reduced Manufacturing Costs and increased Productivity.

SHELF LIFE IS THE KEY TO REDUCE COSTS AND INCREASE SALES

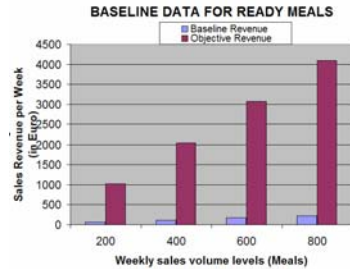
The Project Team produced a Thought Map showing that increase in Ready Meals Shelf Life is THE Central Issue.



SHELF-LIFE NEEDS TO INCREASE FROM 6 DAYS TO 12 DAYS.

DEFINE & MEASURE PHASES

DEFINE PHASE – Baseline Revenue versus Objective Revenue for Ready Meals

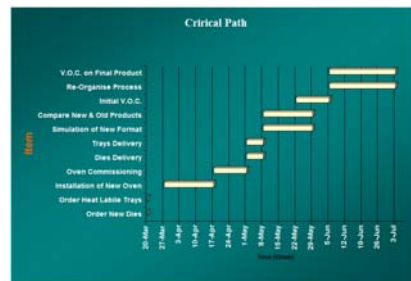


€27 PROFIT FROM WEEKLY SALES OF 4800 UNITS NEEDS TO INCREASE TO €3,500

From Process Flow Diagram, Team proposed to re-organise flow by first assemble food items in tray, then seal and cook. This should extend Shelf Life.

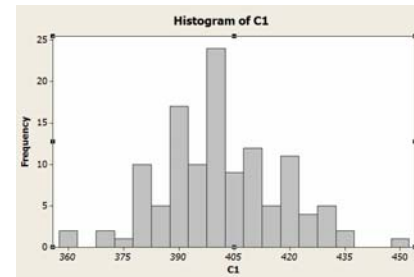
MEASURE PHASE

Process re-organisation chart prepared to show sequence of events for critical items. Got sensory Analysis, Micro Analysis and V.O.C. for 20 new concept meals which were produced offline.



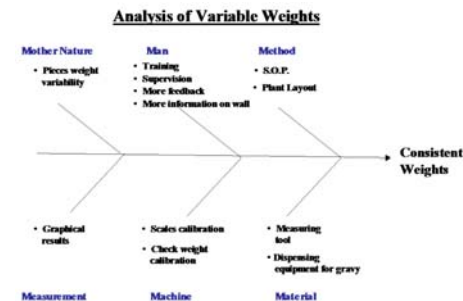
ANALYSE PHASE

Analysed new concept meals during shelf life on days 6,10,14,18 and 22. Overall data from V.O.C., Microbiological Analysis and in-house Sensory Analysis showed 12 Days Shelf-life was acceptable. Secondary issue of weights of Ready Meals being too variable was also analysed.



Histogram showed large variation in weights of meals.

“ANALYSIS OF VARIABLE WEIGHTS”
Fishbone diagram highlighted a large number of tasks that needed to be addressed to reduce variability.



IMPROVE & CONTROL PHASES

IMPROVE PHASE

Factory Process Flow was re-organised. Achieved 12 days Shelf-life for ready meals. Eliminated weight variability and reduced buckled trays from 15% to less than 1%.

Re-Organised Process Flow “Ready Meals” Line



RESULTS

In August, new format meals rolled out to all customers. Achieved reductions in Raw Material, labour, Transport, Packaging and Overhead Costs. Net Profit achieved of €4,088 from 4,800 units sold weekly.

With new “12 DAY SHELF LIFE” company won much new business from major Irish multiples and is now thriving.

CONTROL PHASE

A Control Plan was established to ensure improvements are maintained.

Control Plan					
ACTION	FREQUENCY	SPECIFICATIONS	METHOD	RESPONSIBILITY	EXPLANATION
Measure	Hourly	Weight per tray	Visual weight of 100g	Head Chef	Inspector
Control	Hourly	Weight per tray	Visual weight of 100g	Head Chef	Inspector
Adjust	Hourly	Weight per tray	Visual weight of 100g	Head Chef	Inspector
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