



Problem Statement and area of Opportunity

Voice of the Customer: "Again, XYZ Manufacturing's product costs are higher than your competitors. This is the reason you weren't competitive with this latest quotation."

Y (Product costs too high) = f (Material Costs too high + Process costs too high + Profit margins too high)

Y (Process Costs too high) = f (Incorrect product routing + Incorrect assumptions in product routing + Incorrect processes considered + Non-optimised Processes)

Y (Incorrect assumptions in product routing)

Business Need and Justification

Of 20 quotations submitted to customers from January 2019 to December 2019, 8 were unsuccessful due to product costs too high. 40% unsuccessful in 12 months. Reduce this to 10%.

Risks and Issues

Assumptions and Dependencies

Project Ownership / Approval

Project Manager Paul Dombey

Project Champion Florence Dombey

Approval Date

Project Number

Process Owner John Carker

Financial Benefits / Timing

Financial Benefits		
	Goal	Actual
Incremental Sales	+30%	
Profitability (% OI)	+12%	
Payback Period (yrs)		
Annual Savings	£180k	

Estimated Expenses / Investment		
	Goal	Actual
Expenses Incremental to Operating Budget		
Capital	Zero	
Other; 1.0FTE required. (4 people)	£60k	

Schedule		
	Goal	Actual
Measure	31-Dec-20	
Analyse	01-Feb-21	
Improve	15-Mar-21	
Control	16-Apr-21	

Project Team

Supplier Representatives		
Name	Supplier	Title

Internal Team		
Name	Function	Role
Paul Dombey	Sales	
Parker Peps	Finance	
Louisa Bagstock	Process	
Lucretia Tox	Quality	
Polly Toodle	Logistics	

Customer Representatives		
Name	Cust.	Title

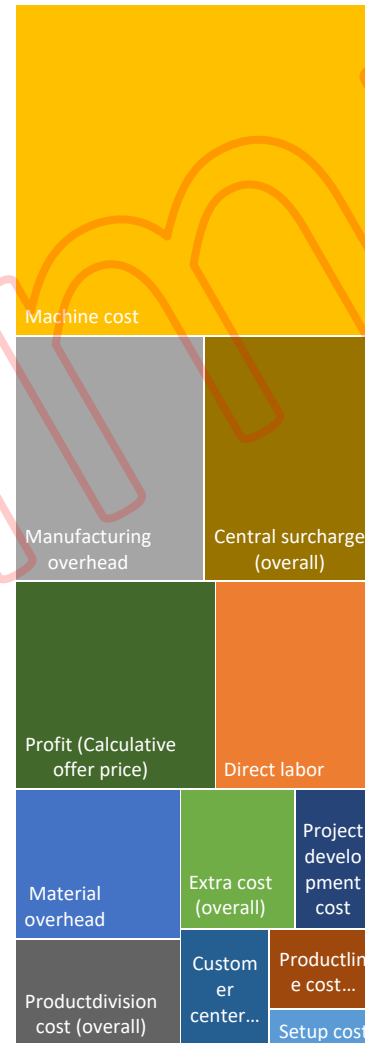
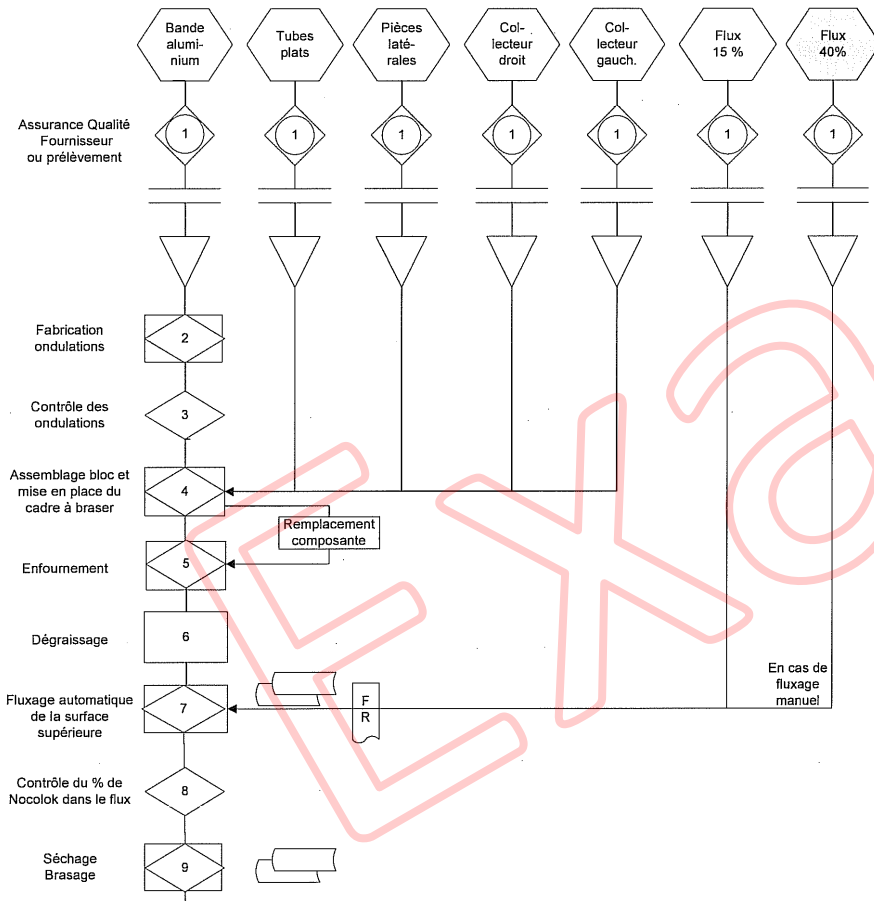
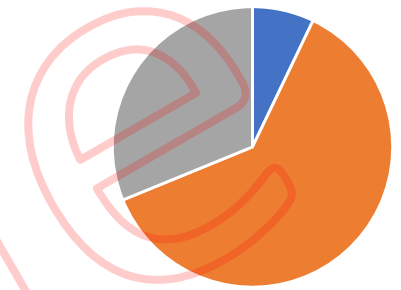
XYZ Alpha Heat Exchanger Assembly Product Cost Optimization Project

SIX PANEL DMAIC Project Review

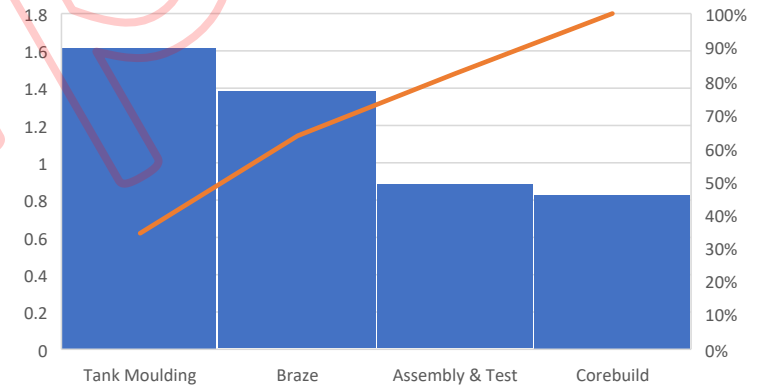


Materials	Net Usage	Price per UOM	Unit Cost
Procured Parts			1.08
Tubes	17	0.34	5.81
Fins	18	0.04	0.68
Header	2	0.55	1.09
Sidecasing	2	0.29	0.57
Granulate	0.4	3.04	1.21

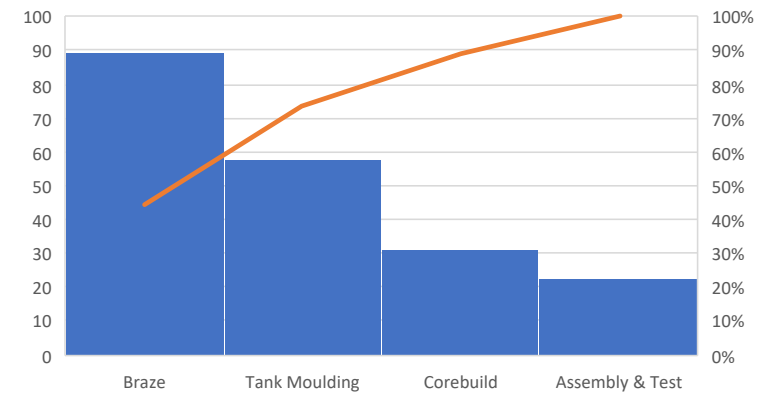
Process Costs	Working (Hrs./Wk.)	Heads	Tot._ Lab. Cost	M/C (Rte./Hr.)	M/C Cost	Scrap (%)	Unit Cost
Tank Moulding	120	2	0.1838	58.15	1.439	0	1.6228
Corebuild	120	1.5	0.1766	31.07	0.6581	0	0.8347
Braze	120	5	0.4319	89.69	0.9545	0	1.3864
Assembly & Test	120	2	0.2944	22.47	0.5922	0	0.8866

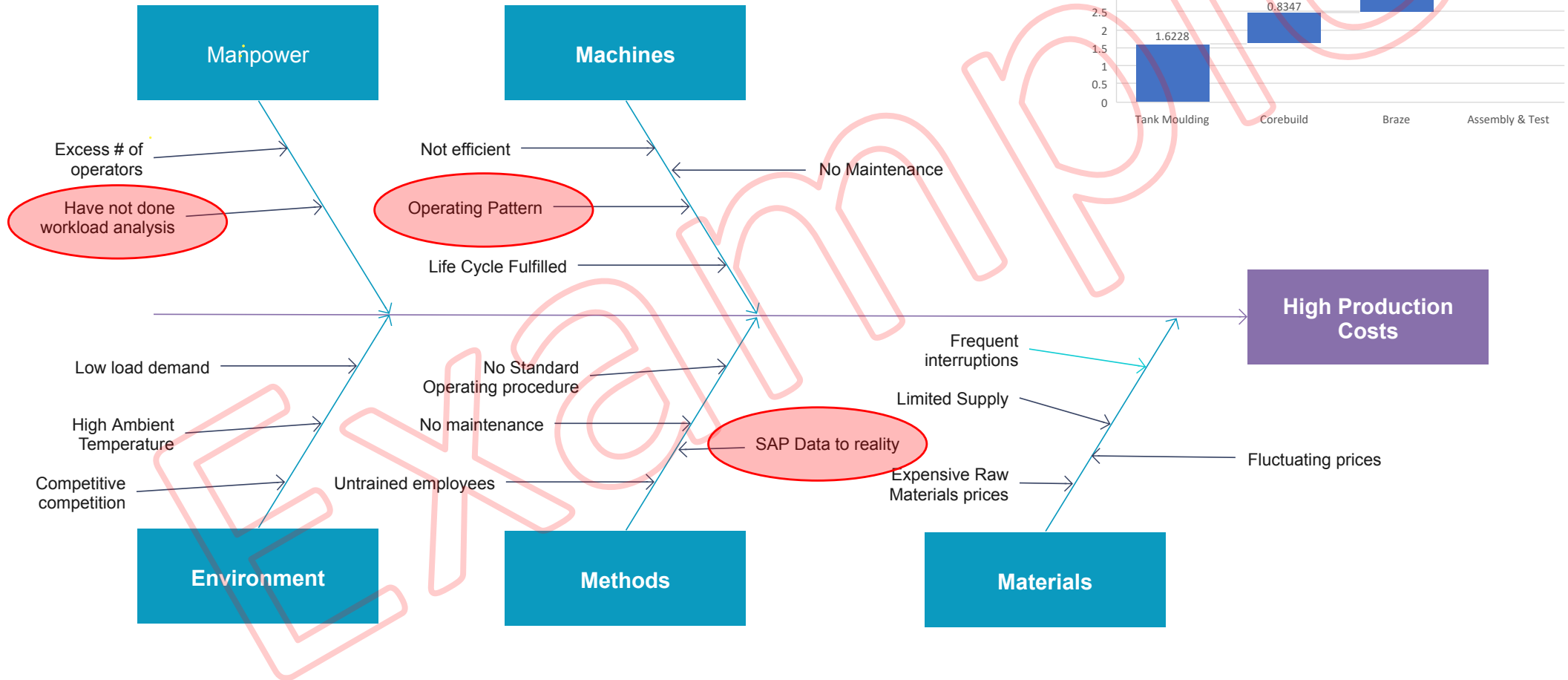


Process Cost Pareto

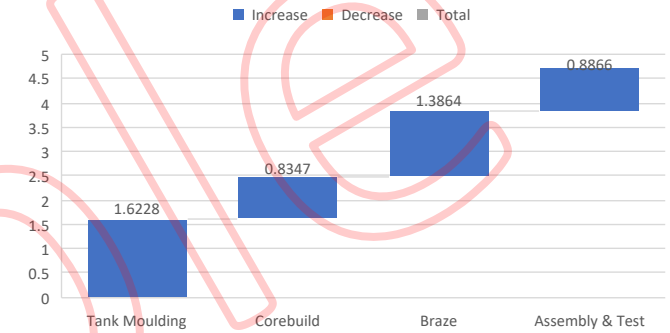


Machine Rate / Hour Pareto





Process Cost Waterfall





Materials



Customer

Order
Materials

Update
System

Take Order

Place order on
Production



Tank Moulding
Cycle Time: 3.5 mins
FTT Quality: 99%
Cost: €1.62



Core Build
Cycle Time: 2.5 mins
FTT Quality: 97%
Cost: €0.83



Braze
Cycle Time: 15 mins
FTT Quality: 93%
Cost: €1.38



Assembly & Test
Cycle Time: 3 mins
FTT Quality: 96%
Cost: €0.88