An Effective Uncertainty Based Framework for Sustainable Industrial Product-Service System Transformation

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Data used for Case Study 1:

Name of Lever: **People: Level 1**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	COST in £'000	EADS %	PLANNED COST	EADS % EQUIVALENT of the planned cost	BENEFIT RATIO
1	80.000	2.50	78.500	4.38	25.00%
2	78.000	5.00			11.54%
3	76.000	6.50			26.67%
4	75.500	7.50			71.43%
5	75.300	8.75			90.28%
6	75.000	12.00			1.25%
7	55.000	16.00			3.70%
8	52.000	18.00			4.55%
9	48.000	22.00			1.92%
10	40.000	26.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.50
	Max	ML	Suggested Min		
COST in £'000	80.000	78.500	78.000		
EADS %	2.50	4.38	5.00		

Capturing the cost and EADS %

Name of Lever: **People: Level 2**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS % EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	10.000	5.00	8.000	5.50	9.09%
2	9.000	5.50			10.71%
3	7.000	7.00			7.41%
4	4.000	9.00			60.87%
5	3.000	23.00			8.00%
6	2.000	25.00			7.41%
7	1.000	27.00			17.86%
8	0.800	28.00			33.33%
9	0.600	30.00			58.82%
10	0.400	34.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.05
	Max	ML	Suggested Min		
COST in £'000	10.000	8.000	7.000		
EADS %	5.00	5.50	7.00		

Capturing the cost and EADS %

Name of Lever: **People: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS % EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	6.000	1.00	5.900	1.50	250.00%
2	5.800	2.00			111.11%
3	5.500	3.00			83.33%
4	5.200	4.00			47.62%
5	5.100	4.20			114.58%
6	4.800	6.40			21.43%
7	4.400	7.00			25.64%
8	4.000	7.80			26.67%
9	3.500	9.00			16.67%
10	2.000	12.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	5.00
	Max	ML	Suggested Min		
COST in £'000	6.000	5.900	5.800		
EADS %	1.00	1.50	2.00		

			AGGREGATED EADS%		
	INPUT: Breakdown rate*time to fix	**Weighting**	Best risk	Most Likely risk	Worst risk
Level 1	50	0.24	3.71	4.54	5.66
Level 2	120	0.59			
Level 3	35	0.17			

Spares

Capturing the cost and EADS %

Name of lever: **Spares: Level 1**

Thresholds for levers	**Step 1: Insert the lever cost at different thresholds**	**Step 2: EADS % value for different thresholds**	**Step 3: Insert the target cost figure**	**Step 4. Evaluate the outcome in EADS %**	**Step 5. EVALUATE THE BENEFIT OF CHANGE**
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	34.000	0.75	33.000	0.93	15.91%
2	32.000	1.10			5.36%
3	28.000	1.40			5.56%
4	24.000	1.80			14.00%
5	22.000	2.50			37.50%
6	21.000	4.00			33.33%
7	20.000	6.00			12.50%
8	18.000	8.00			11.67%
9	14.000	15.00			10.53%
10	12.000	19.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.00
	Max	ML	Suggested Min		
COST in £'000	34.000	33.000	32.000		
EADS %	0.75	0.93	1.10		

Capturing the cost and EADS %

Name of lever: **Spares: Level 2**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	8.000	5.00	7.500	5.50	16.67%
2	7.000	6.00			4.76%
3	4.000	7.00			62.50%
4	3.800	8.00			27.78%
5	3.400	9.00			31.25%
6	2.600	12.00			71.43%
7	2.400	14.00			55.56%
8	2.000	18.00			26.32%
9	1.800	19.00			12.50%
10	1.400	20.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.20
	Max	ML	Suggested Min		
COST in £'000	8.000	7.500	7.000		
EADS %	5.00	5.50	6.00		

Capturing the cost and EADS %

Name of lever: **Spares: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	15.000	6.00	12.800	6.00	7.14%
2	13.000	7.00			12.50%
3	12.000	8.00			5.56%
4	10.000	9.00			25.00%
5	9.000	12.00			9.52%
6	7.500	14.00			8.33%
7	6.000	16.00			5.56%
8	4.000	18.00			10.53%
9	3.500	19.00			6.35%
10	2.000	21.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.000
	Max	ML	Suggested Min		
COST in £'000	15.000	12.800	12.000		
EADS %	6.00	6.00	8.00		

EADS % AGGREGATION ACROSS 3 LEVELS					
			OUTPUT; Lever LEVEL EADS %		
	INPUT: Breakdown rate*time to fix	Weighting	Min	Most likely	Max
Level 1	100	0.526	8.00	3.20	0.75
Level 2	50	0.263			
Level 3	40	0.211			

Information
Capturing the cost and EADS %

Name of lever: **Information: Level 1**

Thresholds for levers	**Step 1: Insert the lever cost at different thresholds**	**Step 2: EADS % value for different thresholds**	**Step 3: Insert the target cost figure**	**Step 4. Evaluate the outcome in EADS %**	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	15.000	5.00	8.000	5.00	0.08
2	13.000	6.00			0.08
3	10.000	8.00			0.17
4	8.000	12.00			0.07
5	5.000	15.00			0.21
6	4.200	18.00			0.91
7	4.000	22.00			0.07
8	2.800	24.00			0.06
9	1.600	26.00			0.36
10	1.400	28.00			
	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.0000
	Max	ML	Suggested Min		
COST in £'000	15.000	8.000	8.000		
EADS %	5.00	5.00	12.00		

Capturing the cost and EADS %

Name of lever: **Information: Level 2**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	20.000	3.00	19.000	4.00	25.00%
2	19.000	4.00			11.11%
3	16.000	6.00			12.50%
4	14.000	8.00			11.11%
5	13.000	9.00			9.09%
6	11.000	11.00			4.17%
7	9.000	12.00			3.85%
8	7.000	13.00			6.67%
9	5.000	15.00			6.25%
10	4.000	16.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.33
	Max	ML	Suggested Min		
COST in £'000	20.000	19.000	19.000		
EADS %	3.00	4.00	4.00		

Capturing the cost and EADS %

Name of lever: **Information: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	9.000	3.00	8.400	6.00	50.0%
2	8.500	4.00			333.3%
3	8.400	6.00			83.3%
4	8.000	9.00			36.4%
5	7.500	11.00			8.3%
6	6.500	12.00			15.4%
7	6.000	13.00			93.7%
8	5.800	16.00			7.4%
9	5.000	17.00			15.0%
10	4.000	20.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.83
	Max	ML	Suggested Min		
COST in £'000	9.000	8.400	8.400		
EADS %	3.00	6.00	6.00		

	INPUT: Breakdown rate*time to fix	Weighting	Aggregated EADS %		
Level 1	12	0.46	Min	ML	Max
Level 2	5	0.19	12.00	5.15	3.00
Level 3	9	0.35			

Test Equipment

Capturing the cost and EADS %

Name of lever: **Test equipment: Level 1**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	14.000	3.00	10.300	11.00	12.50%
2	12.000	4.00			42.86%
3	11.000	7.00			44.44%
4	10.500	9.00			83.33%
5	10.200	12.00			6.41%
6	9.000	13.00			8.89%
7	7.500	15.00			12.50%
8	7.000	16.00			11.11%
9	6.000	18.00			22.73%
10	5.200	22.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.833
	Max	ML	Min		
COST in £'000	14.000	10.300	10.200		
EADS %	3.00	11.00	12.00		

Capturing the cost and EADS %

Name of lever:

Test equipment: Level 2

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	18.000	3.00	14.500	5.50	13.33%
2	15.000	5.00			16.67%
3	14.000	6.00			12.50%
4	12.000	8.00			11.11%
5	11.000	9.00			12.50%
6	9.000	12.00			10.00%
7	7.000	15.00			11.76%
8	6.000	17.00			10.53%
9	5.000	19.00			17.39%
10	4.000	23.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.17
	Max	ML	Suggested Min		
COST in £'000	18.000	14.500	14.000		
EADS %	3.00	5.50	6.00		

Capturing the cost and EADS %

Name of lever: **Test equipment: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	15.000	3.00	14.500	3.25	14.29%
2	14.000	3.50			11.11%
3	12.000	4.50			8.33%
4	9.000	6.00			14.29%
5	8.000	7.00			1.39%
6	6.000	7.20			5.00%
7	4.000	8.00			3.61%
8	3.000	8.30			3.49%
9	2.000	8.60			6.52%
10	1.000	9.20			

	VALUES FOR THE MONTE CARLO SIMULATION				
	Max	ML	Suggested Min	Planned cost - change in benefit ratio by moving 1 unit	0.17
COST in £'000	15.000	14.500	14.000		
EADS %	3.00	3.25	3.50		

			AGGREGATED EADS %		
	INPUT: Breakdown rate	Weighting	Min	ML	Max
Level 1	4	0.17	12.00	5.29	3.00
Level 2	8	0.33			
Level 3	12	0.50			

Facilities

Capturing the cost and EADS %

Name of lever: **Facilities: Level 1**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	COST in £'000	EADS %	PLANNED COST	EADS EQUIVALENT of the planned cost	BENEFIT RATIO
1	18.000	3.00	15.000	3.75	6.25%
2	14.000	4.00			42.86%
3	13.000	7.00			4.17%
4	10.000	8.00			#DIV/0!
5					#DIV/0!
6					#DIV/0!
7					#DIV/0!
8					#DIV/0!
9					#DIV/0!
10					
	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.083
	Max	ML	Min		
COST in £'000	18.000	15.000	10.000		
EADS %	3.00	3.75	7.00		

Capturing the cost and EADS %

Name of lever: **Facilities: Level 2**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	20.000	4.00	18.000	6.00	16.67%
2	18.000	6.00			5.00%
3	13.000	8.00			#VALUE!
4					#VALUE!
5					#VALUE!
6					#VALUE!
7					#VALUE!
8					#VALUE!
9					#VALUE!
10					

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.250
	Max	ML	Min		
COST in £'000	20.000	18.000	13.000		
EADS %	4.00	6.00	6.00		

Capturing the customer requirement, exchange rate for the common currency and the current position.

Name of lever: **Facilities: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	10.000	1.00	9.000	3.00	66.67%
2	9.000	3.00			25.00%
3	8.000	4.00			#VALUE!
4					#VALUE!
5					#VALUE!
6					#VALUE!
7					#VALUE!
8					#VALUE!
9					#VALUE!
10					

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	2.00
	Max	ML	Min		
COST in £'000	10.000	9.000	9.000		
EADS %	1.00	3.00	3.00		

			AGGREGATED EADS %		
	INPUT: Breakdown rate*time to fix	Weighting	Min	ML	Max
Level 1	3	0.19	7.00	3.89	1.00
Level 2	4	0.25			
Level 3	9	0.56			

Case Study 2: Data input

Name of Lever: **People: Level 1**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS % EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	80.000	1.00	78.500	1.75	14.29%
2	75.000	3.50			13.89%
3	72.000	6.00			7.14%
4	70.000	7.00			11.11%
5	68.000	9.00			3.62%
6	62.000	11.50			3.33%
7	55.000	15.00			2.08%
8	47.000	18.00			2.04%
9	40.000	21.00			3.13%
10	36.000	24.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.50
	Max	ML	Suggested Min		
COST in £'000	80.000	78.500	75.000		
EADS %	1.00	1.75	3.50		

Capturing the cost and EADS %

Name of Lever: **People: Level 2**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	COST in £'000	EADS %	PLANNED COST	EADS % EQUIVALENT of the planned cost	BENEFIT RATIO
1	10.000	5.00	8.000	5.50	9.09%
2	9.000	5.50			10.71%
3	7.000	7.00			7.41%
4	4.000	9.00			60.87%
5	3.000	23.00			8.00%
6	2.000	25.00			7.41%
7	1.000	27.00			17.86%
8	0.800	28.00			33.33%
9	0.600	30.00			58.82%
10	0.400	34.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.05
	Max	ML	Suggested Min		
COST in £'000	10.000	8.000	7.000		
EADS %	5.00	5.50	7.00		

Capturing the cost and EADS %

Name of Lever: **People: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	COST in £'000	EADS %	PLANNED COST	EADS % EQUIVALENT of the planned cost	BENEFIT RATIO
1	6.000	1.00	5.900	1.50	250.00%
2	5.800	2.00			111.11%
3	5.500	3.00			83.33%
4	5.200	4.00			47.62%
5	5.100	4.20			114.58%
6	4.800	6.40			21.43%
7	4.400	7.00			25.64%
8	4.000	7.80			26.67%
9	3.500	9.00			16.67%
10	2.000	12.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	5.00
	Max	ML	Suggested Min		
COST in £'000	6.000	5.900	5.800		
EADS %	1.00	1.50	2.00		

			AGGREGATED EADS%		
	INPUT: Breakdown rate*time to fix	Weighting	Best risk	Most Likely risk	Worst risk
Level 1	50	0.24	3.34	3.90	5.29
Level 2	120	0.59			
Level 3	35	0.17			

Spares
Capturing the cost and EADS %

Name of lever: **Spares: Level**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	COST in £'000	EADS %	PLANNED COST	EADS EQUIVALENT of the planned cost	BENEFIT RATIO
1	34.000	0.50	33.000	0.55	6.25%
2	28.000	0.80			11.11%
3	27.000	0.90			8.33%
4	24.000	1.20			16.67%
5	22.000	1.80			35.71%
6	21.000	2.80			39.13%
7	20.000	4.60			19.33%
8	18.000	7.50			9.11%
9	14.000	11.80			4.66%
10	10.000	14.50			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.00
	Max	ML	Suggested Min		
COST in £'000	34.000	33.000	27.000		
EADS %	0.50	0.55	0.90		

Capturing the cost and EADS %

Name of lever: **Spares: Level 2**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	8.000	5.00	7.500	5.50	16.67%
2	7.000	6.00			4.76%
3	4.000	7.00			62.50%
4	3.800	8.00			27.78%
5	3.400	9.00			31.25%
6	2.600	12.00			71.43%
7	2.400	14.00			55.56%
8	2.000	18.00			26.32%
9	1.800	19.00			12.50%
10	1.400	20.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.20
	Max	ML	Suggested Min		
COST in £'000	8.000	7.500	7.000		
EADS %	5.00	5.50	6.00		

Capturing the cost and EADS %

Name of lever: **Spares: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	15.000	6.00	12.800	6.00	7.14%
2	13.000	7.00			12.50%
3	12.000	8.00			5.56%
4	10.000	9.00			25.00%
5	9.000	12.00			9.52%
6	7.500	14.00			8.33%
7	6.000	16.00			5.56%
8	4.000	18.00			10.53%
9	3.500	19.00			6.35%
10	2.000	21.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.000
	Max	ML	Suggested Min		
COST in £'000	15.000	12.800	12.000		
EADS %	6.00	6.00	8.00		

EADS % AGGREGATION ACROSS 3 LEVELS					
			OUTPUT; Lever LEVEL EADS %		
	INPUT: Breakdown rate*time to fix	Weighting	Min	Most likely	Max
Level 1	100	0.526	8.00	3.00	0.50
Level 2	50	0.263			
Level 3	40	0.211			

Information
Capturing the cost and EADS %

Name of lever:

Information: Level 1

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	COST in £'000	EADS %	PLANNED COST	EADS EQUIVALENT of the planned cost	BENEFIT RATIO
1	15.000	5.00	8.000	5.00	0.08
2	13.000	6.00			0.08
3	10.000	8.00			0.17
4	8.000	12.00			0.07
5	5.000	15.00			0.21
6	4.200	18.00			0.91
7	4.000	22.00			0.07
8	2.800	24.00			0.06
9	1.600	26.00			0.36
10	1.400	28.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.0000
	Max	ML	Suggested Min		
COST in £'000	15.000	8.000	8.000		
EADS %	5.00	5.00	12.00		

Capturing the cost and EADS %

Name of lever:

Information: Level 2

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	20.000	3.00	19.000	4.00	25.00%
2	19.000	4.00			11.11%
3	16.000	6.00			12.50%
4	14.000	8.00			11.11%
5	13.000	9.00			9.09%
6	11.000	11.00			4.17%
7	9.000	12.00			3.85%
8	7.000	13.00			6.67%
9	5.000	15.00			6.25%
10	4.000	16.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.33
	Max	ML	Suggested Min		
COST in £'000	20.000	19.000	19.000		
EADS %	3.00	4.00	4.00		

Capturing the cost and EADS %

Name of lever:

Information: Level 3

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	9.000	3.00	8.400	6.00	50.0%
2	8.500	4.00			333.3%
3	8.400	6.00			83.3%
4	8.000	9.00			36.4%
5	7.500	11.00			8.3%
6	6.500	12.00			15.4%
7	6.000	13.00			93.7%
8	5.800	16.00			7.4%
9	5.000	17.00			15.0%
10	4.000	20.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.83
	Max	ML	Suggested Min		
COST in £'000	9.000	8.400	8.400		
EADS %	3.00	6.00	6.00		

	INPUT: Breakdown rate*time to fix	Weighting	Aggregated EADS %		
Level 1	12	0.46	Min	ML	Max
Level 2	5	0.19	12.00	5.15	3.00
Level 3	9	0.35			

Test Equipment
Capturing the cost and EADS %

Name of lever: **Test equipment: Level 1**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	COST in £'000	EADS %	PLANNED COST	EADS EQUIVALENT of the planned cost	BENEFIT RATIO
1	14.000	3.00	10.300	11.00	12.50%
2	12.000	4.00			42.86%
3	11.000	7.00			44.44%
4	10.500	9.00			83.33%
5	10.200	12.00			6.41%
6	9.000	13.00			8.89%
7	7.500	15.00			12.50%
8	7.000	16.00			11.11%
9	6.000	18.00			22.73%
10	5.200	22.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.833
	Max	ML	Min		
COST in £'000	14.000	10.300	10.200		
EADS %	3.00	11.00	12.00		

Capturing the cost and EADS %

Name of lever: **Test equipment: Level 2**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	18.000	3.00	14.500	5.50	13.33%
2	15.000	5.00			16.67%
3	14.000	6.00			12.50%
4	12.000	8.00			11.11%
5	11.000	9.00			12.50%
6	9.000	12.00			10.00%
7	7.000	15.00			11.76%
8	6.000	17.00			10.53%
9	5.000	19.00			17.39%
10	4.000	23.00			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.17
	Max	ML	Suggested Min		
COST in £'000	18.000	14.500	14.000		
EADS %	3.00	5.50	6.00		

Capturing the cost and EADS %

Name of lever: **Test equipment: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	15.000	3.00	14.500	3.25	14.29%
2	14.000	3.50			11.11%
3	12.000	4.50			8.33%
4	9.000	6.00			14.29%
5	8.000	7.00			1.39%
6	6.000	7.20			5.00%
7	4.000	8.00			3.61%
8	3.000	8.30			3.49%
9	2.000	8.60			6.52%
10	1.000	9.20			

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.17
	Max	ML	Suggested Min		
COST in £'000	15.000	14.500	14.000		
EADS %	3.00	3.25	3.50		

			AGGREGATED EADS %		
	INPUT: Breakdown rate	Weighting	Min	ML	Max
Level 1	4	0.17	12.00	5.29	3.00
Level 2	8	0.33			
Level 3	12	0.50			

Facilities
Capturing the cost and EADS %

Name of lever: **Facilities: Level 1**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	COST in £'000	EADS %	PLANNED COST	EADS EQUIVALENT of the planned cost	BENEFIT RATIO
1	18.000	3.00	15.000	3.75	6.25%
2	14.000	4.00			42.86%
3	13.000	7.00			4.17%
4	10.000	8.00			#DIV/0!
5					#DIV/0!
6					#DIV/0!
7					#DIV/0!
8					#DIV/0!
9					#DIV/0!
10					

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.083
	Max	ML	Min		
COST in £'000	18.000	15.000	10.000		
EADS %	3.00	3.75	7.00		

Capturing the cost and EADS %

Name of lever: **Facilities: Level 2**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	20.000	4.00	18.000	6.00	16.67%
2	18.000	6.00			5.00%
3	13.000	8.00			#VALUE!
4					#VALUE!
5					#VALUE!
6					#VALUE!
7					#VALUE!
8					#VALUE!
9					#VALUE!
10					

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	0.250
	Max	ML	Min		
COST in £'000	20.000	18.000	13.000		
EADS %	4.00	6.00	6.00		

Capturing the customer requirement, exchange rate for the common currency and the current position.

Name of lever: **Facilities: Level 3**

Thresholds for levers	Step 1: Insert the lever cost at different thresholds	Step 2: EADS % value for different thresholds	Step 3: Insert the target cost figure	Step 4. Evaluate the outcome in EADS %	Step 5. EVALUATE THE BENEFIT OF CHANGE
Threshold	**COST in £'000**	**EADS %**	**PLANNED COST**	**EADS EQUIVALENT of the planned cost**	**BENEFIT RATIO**
1	10.000	1.00	9.000	3.00	66.67%
2	9.000	3.00			25.00%
3	8.000	4.00			#VALUE!
4					#VALUE!
5					#VALUE!
6					#VALUE!
7					#VALUE!
8					#VALUE!
9					#VALUE!
10					

	VALUES FOR THE MONTE CARLO SIMULATION			Planned cost - change in benefit ratio by moving 1 unit	2.00
	Max	ML	Min		
COST in £'000	10.000	9.000	9.000		
EADS %	1.00	3.00	3.00		

			AGGREGATED EADS %		
	INPUT: Breakdown rate*time to fix	Weighting	Min	ML	Max
Level 1	3	0.19	7.00	3.89	1.00
Level 2	4	0.25			
Level 3	9	0.56			