ENGINUITY 2019 COMPETITION

PERFORMANCE REVIEW FOR 'Mott's Tunnellers'

MANAGEMENT TEAM

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SPONSOR

Mott Macdonald

THE CHALLENGE



It is the **beginning of 2019**.

A UK-based **global construction business** that has only been in existence for one year needs a **new management team** to run the company for the foreseeable future.

The company **operates in a number of sectors**, with jobs, clients, rival competitors, and people worldwide.

To grow the business the new management team will need to devise an effective business strategy.

Developing an effective strategy will involve acquiring an understanding of :-

- The economic environment in which the company is operating
- The strengths and weaknesses of the business as it currently stands

To implement the strategy decisions will have to be made in a number of key areas :-

- Financial management
- Overhead management
- Procurement
- Job progression



TIMEFRAME

Decisions are made for a **period**, representing 3 months, or a quarter, in the real world.



The new management team were in charge for two different stages.

THE EARLY YEARS (PERIODS 5-12)

During the Early Years the competition for jobs comes from a number of simulated companies. Each one has their own unique profile and bidding history, and a careful assessment of the opposition is required to formulate an effective procurement strategy.

THE LATER YEARS (PERIODS 13-18)

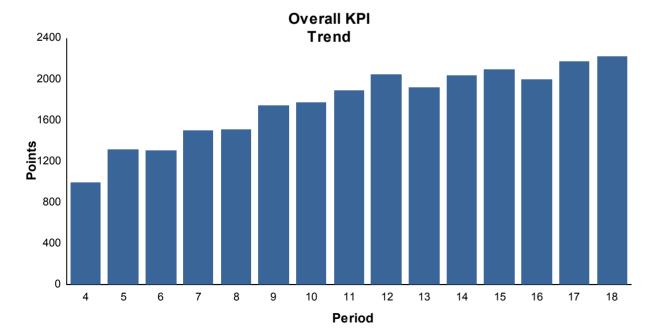
During the Later Years the teams compete 'head to head' against each other for work. This creates an even more uncertain and pressurized environment in which the skills and team dynamics formed in the early years are really put to the test.

OVERALL PERFORMANCE (KPIs)

Performance Indicators were used to measure company progress, weighted at the end of the History to reflect their variability, initially to 1,000 points.

Overall company performance improved from 1,000 to 2,221 points

				Gross	Operating								
End				Profit To	Profit To	Company	Capital	Contract	Forward	Forward	Share	Client	Total
Period	Status	Year/qtr	Turnover	Turnover	Turnover	Value	Employed	Completion	Workload	Margin	Price	Satifaction	Rating
4	History	2018 (Q4)	40	170	120	170	130	80	70	100	70	50	1,000
5	Early Years	2019 (Q1)	52	175	123	171	172	105	154	204	86	75	1,317
6	Early Years	2019 (Q2)	68	159	116	173	196	117	130	171	73	102	1,305
7	Early Years	2019 (Q3)	86	172	152	187	219	137	140	188	89	130	1,500
8	Early Years	2019 (Q4)	98	172	156	193	227	161	112	150	85	158	1,512
9	Early Years	2020 (Q1)	104	181	160	198	240	174	179	233	95	178	1,742
10	Early Years	2020 (Q2)	116	180	164	209	251	198	155	194	98	209	1,774
11	Early Years	2020 (Q3)	126	181	171	224	260	230	163	194	104	239	1,892
12	Early Years	2020 (Q4)	132	190	182	232	267	247	192	218	123	265	2,048
13	Later Years	2021 (Q1)	135	192	182	245	265	247	116	132	115	294	1,923
14	Later Years	2021 (Q2)	142	193	178	259	270	274	186	107	113	316	2,038
15	Later Years	2021 (Q3)	142	191	160	249	274	286	221	126	92	350	2,091
16	Later Years	2021 (Q4)	145	191	165	262	273	286	135	78	99	366	2,000
17	Later Years	2022 (Q1)	148	191	165	268	278	303	226	101	106	384	2,170
18	Later Years	2022 (Q2)	153	189	167	271	283	333	206	86	115	418	2,221



TURNOVER

An indication of how much work the company has done

GROSS PROFIT TO TURNOVER

A measure of how profitable the company's jobs have been

OPERATING PROFIT TO TURNOVER

A measure of how profitable the company is after considering all operating factors

COMPANY VALUE

A measure of the asset value of the company

CAPITAL EMPLOYED

A measure of how well the company's infrastructure is being utilised

CONTRACT COMPLETION

An indication of how successful the company is in completing contracts

FORWARD WORKLOAD

The remaining turnover (value) of jobs still in progress

FORWARD MARGIN

The remaining profit of jobs still in progress

SHARE PRICE

A measure of the strength of the company's share price

CLIENT SATISFACTION

An indication of the strength of the relationship build up with the company's clients

PERFORMANCE SUMMARY

A		History	Since	Change Basis	Additional information
Agricult	Number of periods	4	14		
State price 1 0 0	FINANCIAL MANAGEMENT				
Note 1997 1998	Company value	4,748,393	7,557,963	59 % End of timeframe	
wenge quintown (990,588 1,910,850 1,91	Share price	1.06	1.74	64 % End of timeframe	
werage quintown (9.99,588 51,90.850 13 % Each period of timeframe ob profit (9.99,588 51,90.850 13 % Each period of timeframe ob profit (9.99,588 51,90.850 13 % Each period of timeframe ob profit (9.99,588 51,90.850 13 % Each period of timeframe ob profit (9.99,588 51,90.850	Average capital base	3,937,890	5,307,823	35 % Each period of timeframe	
Nernge tumover ob profit 6,996,588 16,190.80 131% 8a per point of timerfarme cet operating profit 1 2,4% 2.4% During whole timerfarme cet operating profit 1 7,7% 2.4% During whole timerfarme cet operating profit 1 7,7% 2.4% During whole timerfarme cet operating profit 1 7,7% 2.4% During whole timerfarme cet operating profit 1 7,7% 2.4% During whole timerfarme cet operating profit 1 7,7% 2.4% During whole timerfarme cet operating profit 1 7,7% 2.4% During whole timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 Find of timerfarme cet operating profit 1 7,7% 3.43,341 3.43,	Average capital base utilisation	49 %	92 %		
be profit	Average turnover	6,996,588	16,190,850	131 % Each period of timeframe	
Net operating profit Noticethal paid N	Job profit	4.7 %	5.2 %		As a % of job costs
Dividend paid of convard morkload 13,789,860 40,632,190 End of timeframe or convard morkload 13,789,860 40,632,190 End of timeframe or convard margin 50,057 431,341 End of timeframe or convard margin 50,057 441,341 End of timeframe or convaridation 50,057 441,	Overhead costs	2.4 %	2.4 %	During whole timeframe	As a % of job costs
Divided paid of croward oxificate or croward oxificate oxifi	Net operating profit	1.7 %	2.4 %	During whole timeframe	As a % of job costs after tax and interest
Forward margin 501,657 431,341 End of timeframe VERHEAD MANAGEMENT Market share split (UK) 44% 36% During whole timeframe after share split (UK) 44% 36% During whole timeframe after share split (UK) 44% 36% During whole timeframe after share split (UK) 46% During whole timeframe after share split (UK) 46% During whole timeframe after share split (UK) 46% During whole timeframe beassurement staffing level 100% 114% During whole timeframe beassurement staffing level 100% 115% During whole timeframe beassurement staf	Dividend paid	3.0 %	1.0 %	During whole timeframe	As a % of job costs
## Agree of share 11 % 30 % During whole timeframe % of the overall new work in the market identified % of the overall new work in the mark tall properties.	Forward workload	13,789,860	40,632,190	End of timeframe	
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Market share split (UK) 44% 36% During whole timeframe class flaring level 100% 102% During whole timeframe class flaring level 100% 114% During whole timeframe class flaring level 100% 114% During whole timeframe class flaring level 100% 40 During whole timeframe class flaring who	OVERHEAD MANAGEMENT				
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Market share split (OV) 56 % 64 % During whole timeframe 100 % 102 % During whole timeframe 100 % 114 % During whole timeframe 100 % ON Whole Tim	Market share split (UK)	44 %	36 %		% of the market share in the UK
lead office staffing level 100 % 102 % During whole timeframe Optimum level is 100% Opti	Market share split (OV)	56 %	64 %	During whole timeframe	% of market share Overseas (outside the UK)
DHSE staffing level 100 % 114 % During whole timeframe Optimum level is 100% Optimum lev		100 %	102 %		
Adeasurement staffing level 100% 114% During whole timeframe Valuation of jobs bid for 7 93 During whole timeframe bidding success rate 57% 27% During whole timeframe bidding success rate 57% 25,518 487,781 During whole timeframe bidding success rate 525,518 487,81 During whole timeframe bidding success	QHSE staffing level	100 %	114 %		•
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Number of jobs won didding success rate 57% 27% During whole timeframe obs finished array obs finished at the distribution of the properties o	PROCUREMENT				
Number of jobs won didding success rate 57% 27% During whole timeframe obs finished array obs finished at the distribution of the properties o	Number of jobs bid for	7	93	During whole timeframe	
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Project manager resignations Net gain from bonus payments to project managers Obs finished early Obs finished on time Obs finished late neffective labour on site Ob completion efficiency Ob completion efficiency Reduction in job costs (fisk) due to targeted investments Octoor D&B jobs, change in build cost due to consultant designer Measure of risk contingency included in bids Change in risk cost incurred due to mitigating factors 25,518 487,781 During whole timeframe Oburing whole timeframe Obaccuring whole	JOB PROGRESSION				
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obs finished early obs finished early obs finished on time obs finished on time obs finished late obs finished early obs finished early obs finished early obs finished early obs finished late in light lime frame obs finished late obs finished late in light lime frame obs finished late im	Net gain from bonus payments to project managers	25,518	487,781	During whole timeframe	
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neffective labour on site 0 % 1 % During whole timeframe Subcontractor labour used on site 0 % 8 % During whole timeframe Ob to ompletion efficiency 0 to 1, where 1 is the optimum level 0 to 1, where 1 is the optimum l	Jobs finished on time	0	6	During whole timeframe	
Subcontractor labour used on site 0 % 8 % During whole timeframe ob completion efficiency Reduction in job costs (build) due to targeted investments 0.0 % 0.5 % During whole timeframe Reduction in job costs (risk) due to targeted investments 0.0 % 0.1 % During whole timeframe For D&B jobs, change in build cost due to consultant designer Measure of risk contingency included in bids 1.0 1.0 During whole timeframe O=No contingency, 1=sensible level, 2=full risk cost As a % of total labour 0 to 1, where 1 is the optimum level	Jobs finished late	0	0	During whole timeframe	
ob completion efficiency Reduction in job costs (build) due to targeted investments Reduction in job costs (risk) due to targeted in	Ineffective labour on site	0 %	1 %	During whole timeframe	
ob completion efficiency Reduction in job costs (build) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (build) due to targeted investments Reduction in job costs (build) due to targeted investments Reduction in job costs (build) due to targeted investments Reduction in job costs (build) due to targeted investments Reduction in job costs (build) due to targeted investments Reduction in job costs (build) due to targeted investments Reduction in job costs (build) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments Reduction in job costs (risk) due to targeted investments During whole timeframe During whole timeframe 0=No contingency, 1=sensible level, 2=full risk cost As a % of the contingency in the bid Change in risk cost incurred due to mitigating factors -35.1 % -31.9 % During whole timeframe During whole timeframe D=No contingency in the bid As a % of the contingency in the bid	Subcontractor labour used on site	0 %	8 %		As a % of total labour
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Change in risk cost incurred due to mitigating factors -35.1 % -31.9 % During whole timeframe	Risk cost incurred before mitigating factors				
	Change in risk cost incurred due to mitigating factors	-35.1 %		During whole timeframe	
	Risk cost incurred after mitigating factors		23 %		As a % of the contingency in the bid