

## **ENGINUITY 2021 COMPETITION**

### **PERFORMANCE REVIEW FOR 'Whatever it takes'**

## MANAGEMENT TEAM

Dario Mansi

Luca Franchi

Vincenzo Brandonisio

Giulio Rebellato

Paolo Marcello

Andrea Casalone

## **SPONSOR**

Stantec

## THE CHALLENGE



It is the **beginning of 2021**.

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 :-

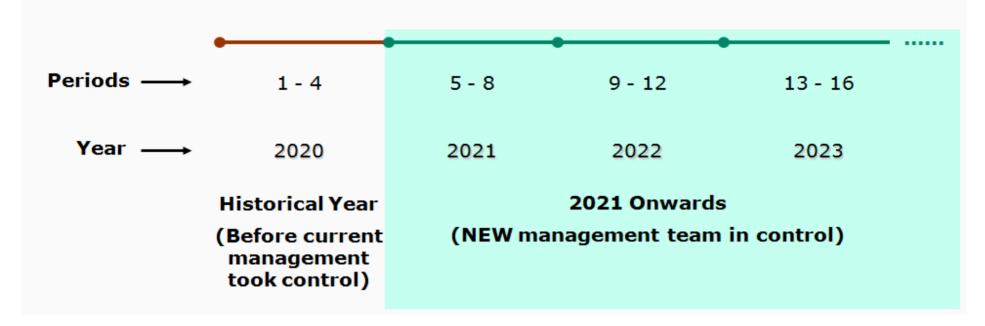
- The economic environment in which the company is operating
- The strengths and weaknesses of the business as it currently stands

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)

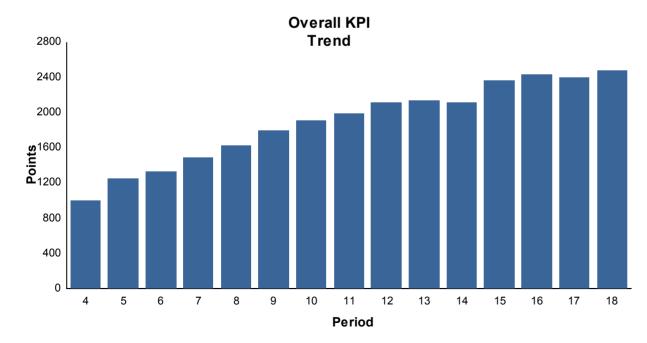
During the Later Years the teams compete 'head to head' against each other for work. This creates an even more uncertain and pressurized environment in which the skills and team dynamics formed in the early years are really put to the test.

## **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 2,476 points

				Gross	Operating								
End				<b>Profit To</b>	<b>Profit To</b>	Company	Capital	Contract	Forward	Forward	Share	Client	Total
Period S	Status	Year/qtr	Turnover	Turnover	Turnover	Value	Employed	Completion	Workload	Margin	Price	Satifaction	Rating
<b>4</b> I	History	2020 (Q4)	40	170	120	170	130	80	70	100	70	50	1,000
5 H	Early Years	2021 (Q1)	49	174	136	177	151	113	123	160	88	77	1,248
6 H	Early Years	2021 (Q2)	57	183	154	187	165	129	117	144	92	100	1,328
7 H	Early Years	2021 (Q3)	64	204	187	206	175	141	125	155	106	124	1,487
8 H	Early Years	2021 (Q4)	71	216	207	227	182	164	122	157	120	158	1,624
9 H	Early Years	2022 (Q1)	77	232	232	253	188	196	135	161	143	183	1,800
10 H	Early Years	2022 (Q2)	80	231	230	262	193	201	161	186	151	212	1,907
11 H	Early Years	2022 (Q3)	86	238	242	286	196	228	143	143	176	249	1,987
<b>12</b> H	Early Years	2022 (Q4)	91	238	243	298	200	252	168	152	196	282	2,120
<b>13</b> I	Later Years	2023 (Q1)	95	235	240	310	200	280	141	118	205	317	2,141
<b>14</b> I	Later Years	2023 (Q2)	98	233	237	319	197	300	96	71	215	352	2,118
15 I	Later Years	2023 (Q3)	100	236	235	330	197	336	165	117	258	388	2,362
16 I	Later Years	2023 (Q4)	100	233	227	331	200	336	231	112	245	423	2,438
17 I	Later Years	2024 (Q1)	105	220	215	344	201	356	176	81	246	455	2,399
18 I	Later Years	2024 (Q2)	110	209	201	338	203	415	187	88	241	484	2,476



#### 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

Para		History	Since	Change Basis	Additional information
Same price	Number of periods	4	14		
Share price   1.03   3.55   24.5%   Find frameworks   1.02.5%   1.02.5%   2.05%   Find frameworks   2.05%   1.02.5%   2.05%   1.02.5%   2.05%   1.02.5%   2.05%   1.02.5%   2.05%	FINANCIAL MANAGEMENT				
Author   A	Company value	4,953,073	9,838,913	99 % End of timeframe	
Newnge quinibase utilisation   73 %   94 %   Each period of timeframe   18.27/670   30.304.500   30.80 kelo period for inferfame   18.27/670   30.304.500   30.80 kelo period for inferfame   As a % of job costs   20.00 kelo quality mofit   19 %   3.3 %   20.00 kelo quality mofit   2.3 %   2.3 %   2.3 %   2.3 %   2.3 %   2.3 %   2.3 %   2.3 %   2.3 %   2.3 %   2.3	Share price	1.03	3.55	245 % End of timeframe	
Neerage tumover his profit 1827/670   19,303.450   63.8 kale priced of timeframe between the profit of the profit   4.2 %   5.2 %   During whole timeframe the toperating profit   1.9 %   3.3 %   During whole timeframe the toperating profit   1.9 %   3.3 %   During whole timeframe the toperating profit   1.9 %   3.3 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   During whole timeframe the timeframe the toperating profit   1.8 %   During whole timeframe the timeframe the toperating profit   1.8 %   During whole timeframe the timeframe the toperating profit   1.8 %   During whole timeframe the timeframe the toperating profit   1.8 %   During whole timeframe the toperating profit   1.8 %   During whole timeframe the timeframe toperating profit   1.8 %   During whole timeframe the timeframe toperating profit   1.8 %   During whole t	Average capital base	4,086,919	6,102,892	49 % Each period of timeframe	
Neerage tumover his profit 1827/670   19,303.450   63.8 kale priced of timeframe between the profit of the profit   4.2 %   5.2 %   During whole timeframe the toperating profit   1.9 %   3.3 %   During whole timeframe the toperating profit   1.9 %   3.3 %   During whole timeframe the toperating profit   1.9 %   3.3 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   1.4 %   During whole timeframe the toperating profit   1.8 %   During whole timeframe the timeframe the toperating profit   1.8 %   During whole timeframe the timeframe the toperating profit   1.8 %   During whole timeframe the timeframe the toperating profit   1.8 %   During whole timeframe the timeframe the toperating profit   1.8 %   During whole timeframe the toperating profit   1.8 %   During whole timeframe the timeframe toperating profit   1.8 %   During whole timeframe the timeframe toperating profit   1.8 %   During whole t	Average capital base utilisation	73 %	94 %	Each period of timeframe	
Derring accosts   1.8 %   1.3 %   During whole timeframe   As a % of job costs	Average turnover	11,827,670	19,303,450	63 % Each period of timeframe	
Net operating profit Orividend paid 1.8 % 1.4 % During whole timeframe Forward workload 17,800,340 47,528,680 End of timeframe Forward margin	Job profit	4.2 %	5.2 %	During whole timeframe	As a % of job costs
Divided paid forward workload 18.9%   14.9%   During whole timeframe forward workload 17.800,340   47.528.680   End of timeframe forward workload 17.800,340   End of timeframe forward workload 17.800,340   End of timeframe forward workload 17.800,340   End of timeframe forward workload 18.800   End of timeframe frame frame frame frame frame frame frame from the frame frame frame frame from the frame frame frame frame frame from the frame frame frame frame from the frame	Overhead costs	1.8 %	1.3 %	During whole timeframe	As a % of job costs
Dividend paid feward workload 17,800,340 47,528,680 End of timeframe feward timeframe feward workload 17,800,340 47,528,680 End of timeframe feward timeframe split (UK) 0% 0% 0% 0warket share split (UK) 0% 0% 0% 0warket share split (UK) 0% 114% 0warket share split (UK) 0% 114% 0warket share split (UK) 0% 114% 0warket share split (UK) 0% 118% 0warket share split (UK) 0% 0% 0warket share split (UK) 0% 0% 0warket share split (UK) 0% 0% 0warket share split (UK) 0warket share sp	Net operating profit	1.9 %	3.3 %	During whole timeframe	As a % of job costs after tax and interest
Forward margin 692,358 611,803 End of timeframe  DVERIEAD MANAGEMENT  Warket share Split (UK) 0 % 0 % During whole timeframe Market share split (UK) 0 % 0 % During whole timeframe Plated Office staffing level 100 % 114 % During whole timeframe Measurement staffing level 100 % 118 % During whole timeframe Measurement staffing level 100 % 118 % During whole timeframe Plated Office staffing level 100 % 118 % During whole timeframe Measurement staffing level 100 % 118 % During whole timeframe Plated Office staffing level 100 % 118 % During whole timeframe Measurement staffing level 100 % 118 % During whole timeframe Plated Office staffing level 100 % 118 % During whole timeframe Plated Office staffing level 100 % 118 % During whole timeframe Measurement staffing level 100 % 118 % During whole timeframe Plated Office Staffing level 100 % 118 % During whole timeframe Plated Office Staffing level 100 % 118 % During whole timeframe Plated Office Staffing level 100 % 118 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe Plated Office Staffing level 100 % During whole timeframe	Dividend paid	1.8 %	1.4 %	During whole timeframe	As a % of job costs
Forward margin 692,358 611,803 End of timeframe  DVERIEAD MANAGEMENT  Warket share Split (UK) 0 % 0 % During whole timeframe Market share split (UK) 0 % 0 % During whole timeframe Market share split (UK) 0 % 0 % During whole timeframe Measurement staffling level 100 % 118 % During	Forward workload	17,800,340	47,528,680	End of timeframe	
Market share Market share split (UK)  0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	Forward margin		611,803	End of timeframe	
Market share split (UK) 0 % 0 % During whole timeframe Charles share split (OY) 0 % 0 % During whole timeframe Charles staffing level 100 % 114 % During whole timeframe Charles staffing level 100 % 118 % During whole timeframe Charles staffing level 100 % 118 % During whole timeframe Charles staffing level 100 % 118 % During whole timeframe Charles staffing level in 100 % 118 % During whole timeframe Charles staffing level in 100 % 118 % During whole timeframe Charles staffing level in 100 % During wh	OVERHEAD MANAGEMENT				
Market share split (UK)  Market share split (UV)  0 %  0 %  During whole timeframe buring w	Market share	11 %	28 %	During whole timeframe	% of the overall new work in the market identified
Market share split (OV) 10 % 0 % During whole timeframe During whole timeframe PURINES taffing level 100 % 114 % During whole timeframe During whole timeframe PURINES taffing level 100 % 118 % During whole timeframe PURINES taffing level 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe PURINES taffing level in 100 % 118 % During whole timeframe P	Market share split (UK)	0 %	0 %		% of the market share in the UK
Head office staffing level 100 % 114 % During whole timeframe Optimum level is 100% QHSE staffing level 100 % 118 % During whole timeframe Optimum level is 100% QHSE staffing level 100 % 118 % During whole timeframe Optimum level is 100% QHSE staffing level 100 % 118 % During whole timeframe Optimum level is 100% QHSE staffing level 100 % 118 % During whole timeframe Staffing level 100 % QHSE STAFF QURING TO ST		0 %	0 %		% of market share Overseas (outside the UK)
PROCUEMENT Number of jobs bid for Number of jobs won Bidding success rate  8.2 8.7 Pouring whole timeframe Project manager resignations Net gain from bonus payments to project managers 10bs finished early 10bs finished late 10eneffoot no mile 10bs finished late 10eneffoot pour on site 10bs finished late 10bs finishe		100 %	114 %		
Measurement staffing level 100% 118% During whole timeframe Number of jobs bid for 11 56 During whole timeframe Number of jobs won 8 a % of jobs bid for 15 55% 57% During whole timeframe Number of jobs won 8 a % of jobs bid for 15 55% 57% During whole timeframe Number of jobs won 8 a % of jobs bid for 15 55% 57% During whole timeframe Number of jobs won 8 a % of jobs bid for 15 55% 57% During whole timeframe Number of jobs won 8 a % of jobs bid for 15 55% 57% During whole timeframe Number of jobs manager weighting 8.2 8.7 During whole timeframe Number of jobs finished early 100 11 During whole timeframe Number of jobs finished early 100 11 During whole timeframe Number of jobs finished late 100 10 10 During whole timeframe Number of jobs finished late 100 100 100 100 100 100 100 100 100 10	QHSE staffing level	100 %	118 %		•
Number of jobs bid for Number of jobs won 6 6 32 During whole timeframe Bidding success rate 55% 57% During whole timeframe Bidding success rate 55% 57% During whole timeframe Bidding success rate 55% 57% During whole timeframe Jobs won as a % of jobs bid for 55% 57% During whole timeframe Jobs won as a % of jobs bid for 55% 57% During whole timeframe Project manager weighting 8.2 8.7 During whole timeframe Project manager resignations 0 1 During whole timeframe Jobs finished early 0 29 During whole timeframe Jobs finished ate 1 During whole timeframe Jobs finished late 0 0 0 During whole timeframe Jobs finished late 1 During whole timeframe Jobs finished ate 1 Mark	Measurement staffing level				•
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Number of jobs won Bidding success rate 55 % 57 % During whole timeframe Project manager weighting Project manager resignations 0 1 During whole timeframe Project managers esignations 0 1 During whole timeframe Project managers and the spanned of the	Number of jobs bid for	11	56	During whole timeframe	
Bidding success rate 55% 57% During whole timeframe Jobs won as a % of jobs bid for SIOB PROGRESSION  Project manager weighting 8.2 8.7 During whole timeframe Project manager resignations 0 1 During whole timeframe Potes fairly 100 puring whole timeframe Potes fairly 100 puring whole timeframe Potes finished early 100 puring whole timeframe Potes finished on time 100 puring whole timeframe Potes finished late 100 puring whole timeframe Potes for Douring time Potes for Douring whole timeframe Potes for Douring Potes for	Number of jobs won	6	32		
Project manager weighting Project manager resignations Out of 10 During whole timeframe Net gain from bonus payments to project managers Not finished early Not finished early Not finished on time Not finished late Not finished l	Bidding success rate	55 %	57 %	During whole timeframe	Jobs won as a % of jobs bid for
Project manager resignations  O 1 During whole timeframe Net gain from bonus payments to project managers  A3,544  A3,	JOB PROGRESSION				
Project manager resignations Net gain from bonus payments to project managers 143,544 1763,151 1 During whole timeframe lobs finished early 0 29 1 During whole timeframe lobs finished on time 100 10 1 During whole timeframe 100 10 1 During whole timefram	Project manager weighting	8.2	8.7	During whole timeframe	Out of 10
Hobs finished early Hobs finished on time Hobs finished on time Hobs finished on time Hobs finished late Hobs finished on time Hobs finished early Hobs finished early Hobs finished on time Hobs finished late Hobs finished on time Hobs finished late in time finished late in	Project manager resignations	0	1		Due to insufficient bonus levels or being headhunted
Hobs finished early Hobs finished on time Hobs finished on time Hobs finished on time Hobs finished late Hobs finished on time Hobs finished early Hobs finished early Hobs finished on time Hobs finished late Hobs finished on time Hobs finished late in time finished late in	Net gain from bonus payments to project managers	43,544	763,151	During whole timeframe	
Jobs finished late 0 0 0 During whole timeframe Interfective labour on site 1 1 % 1 % During whole timeframe Interfective labour on site 1 1 % 1 % During whole timeframe Interfective labour used on site 8 % 12 % During whole timeframe Interfective labour used on site 8 % 12 % During whole timeframe Interfective labour Interfective Interfecti	Jobs finished early	0	29	During whole timeframe	
Interfective labour on site  Interfective labour on site I	Jobs finished on time	0	4	During whole timeframe	
Subcontractor labour used on site  8 % 12 % During whole timeframe  As a % of total labour  0 to 1, where 1 is the optimum level  1 to 2 to 1, where 1 is the optimum level  1 to 2 to 1, where 1 is the optimum level  1 to 3 to 1, where 1 is the optimum level  1 to 1, where 1 is the optimum level  1 to 1, where 1 is the optimum level  1 to 1, where 1 is the optimum level  1 to 1, where 1 is the optimum level  1 to 1, where 1 is the optimum level  1 to 2 to 1, where 1 is the optimum level  2 to 1, where 1 is the optimum level  3 to 2 to 3 to 4 where 1 is the optimum level  4 to 3 to 4 to 4 to 5 to 4 to 5 to 4 to 5 to 5	Jobs finished late	0	0		
Tob completion efficiency  Reduction in job costs (build) due to targeted investments  Reduction in job costs (risk) due to targeted investments  During whole timeframe  During whole timeframe  D=No contingency, 1=sensible level, 2=full risk cost  Risk cost incurred before mitigating factors  So a % of the contingency in the bid  Change in risk cost incurred due to mitigating factors  John So a whole timeframe  During whole timeframe  D=No contingency, 1=sensible level, 2=full risk cost  During whole timeframe  D=No contingency in the bid  D=No contingency in the bid  D=No contingency in the bid	Ineffective labour on site	1 %	1 %	During whole timeframe	
No completion efficiency  Reduction in job costs (build) due to targeted investments  Reduction in job costs (risk) due to targeted investments  Reduction in	Subcontractor labour used on site	8 %	12 %		As a % of total labour
Reduction in job costs (build) due to targeted investments  0.0 % 0.4 % During whole timeframe Reduction in job costs (risk) due to targeted investments  0.0 % 0.3 % During whole timeframe	Job completion efficiency	n/a	0.95		0 to 1, where 1 is the optimum level
Reduction in job costs (risk) due to targeted investments  0.0 % 0.3 % During whole timeframe  As a % of the contingency in the bid  During whole timeframe	Reduction in job costs (build) due to targeted investments	0.0 %	0.4 %		-
For D&B jobs, change in build cost due to consultant designer  0.0 %  -0.8 %  During whole timeframe  As a % of the contingency in the bid  During whole timeframe  During whole timeframe  As a % of the contingency in the bid  During whole timeframe	Reduction in job costs (risk) due to targeted investments		0.3 %		
Measure of risk contingency included in bids  1.0  0.9  During whole timeframe  0=No contingency, 1=sensible level, 2=full risk cost  During whole timeframe  As a % of the contingency in the bid  During whole timeframe	For D&B jobs, change in build cost due to consultant designer				
Risk cost incurred before mitigating factors  56 %  72 %  During whole timeframe  As a % of the contingency in the bid  During whole timeframe	Measure of risk contingency included in bids				0=No contingency, 1=sensible level, 2=full risk cost
Change in risk cost incurred due to mitigating factors -34.8 % -46.8 % During whole timeframe	Risk cost incurred before mitigating factors	56 %			
	Change in risk cost incurred due to mitigating factors			•	<del>-</del> -
	Risk cost incurred after mitigating factors				As a % of the contingency in the bid