

ENGINUITY 2020 COMPETITION

PERFORMANCE REVIEW FOR 'Mangineer'

MANAGEMENT TEAM

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THE CHALLENGE



It is the beginning of 2020.

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)

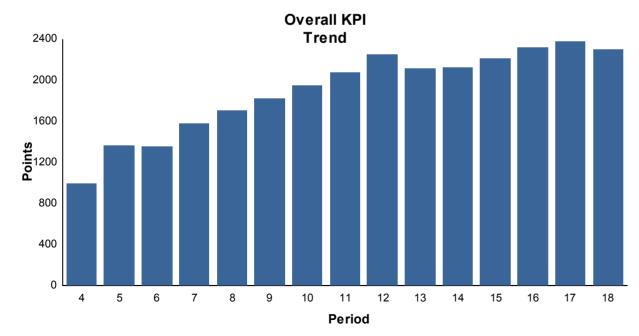
During the Later Years the teams compete 'head to head' against each other for work. This creates an even more uncertain and pressurized environment in which the skills and team dynamics formed in the early years are really put to the test.

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 2,303 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 | 2019 (Q4) | 40 | 170 | 120 | 170 | 130 | 80 | 70 | 100 | 70 | 50 | 1,000 |
| 5 Early Years | 2020 (Q1) | 53 | 192 | 207 | 178 | 158 | 85 | 138 | 198 | 91 | 66 | 1,366 |
| 6 Early Years | 2020 (Q2) | 72 | 175 | 208 | 185 | 174 | 105 | 108 | 151 | 88 | 89 | 1,355 |
| 7 Early Years | 2020 (Q3) | 85 | 186 | 247 | 200 | 188 | 135 | 134 | 180 | 99 | 122 | 1,576 |
| 8 Early Years | 2020 (Q4) | 94 | 193 | 269 | 213 | 198 | 143 | 146 | 193 | 107 | 153 | 1,709 |
| 9 Early Years | 2021 (Q1) | 105 | 199 | 293 | 232 | 206 | 176 | 134 | 173 | 121 | 188 | 1,827 |
| 10 Early Years | 2021 (Q2) | 113 | 205 | 310 | 250 | 212 | 186 | 152 | 171 | 134 | 215 | 1,948 |
| 11 Early Years | 2021 (Q3) | 120 | 214 | 334 | 274 | 216 | 211 | 146 | 155 | 153 | 250 | 2,073 |
| 12 Early Years | 2021 (Q4) | 127 | 220 | 351 | 295 | 220 | 241 | 166 | 170 | 183 | 282 | 2,255 |
| 13 Later Years | 2022 (Q1) | 132 | 217 | 344 | 300 | 216 | 253 | 95 | 95 | 174 | 290 | 2,116 |
| 14 Later Years | 2022 (Q2) | 136 | 215 | 335 | 301 | 212 | 294 | 85 | 57 | 163 | 323 | 2,121 |
| 15 Later Years | 2022 (Q3) | 133 | 216 | 327 | 291 | 209 | 306 | 137 | 77 | 168 | 349 | 2,213 |
| 16 Later Years | 2022 (Q4) | 133 | 213 | 314 | 278 | 211 | 311 | 209 | 107 | 173 | 371 | 2,320 |
| 17 Later Years | 2023 (Q1) | 137 | 207 | 305 | 275 | 214 | 335 | 201 | 112 | 186 | 404 | 2,376 |
| 18 Later Years | 2023 (Q2) | 143 | 192 | 276 | 254 | 217 | 340 | 192 | 106 | 153 | 430 | 2,303 |



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

| | History | Since | Change Basis | Additional information |
|---|------------|------------|--------------------------------|--|
| Number of periods | 4 | 14 | | |
| FINANCIAL MANAGEMENT | | | | |
| Company value | 4,682,259 | 6,983,747 | 49 % End of timeframe | |
| Share price | 1.05 | 2.29 | 118 % End of timeframe | |
| Average capital base | 4,075,584 | 6,036,985 | 48 % Each period of timeframe | |
| Average capital base utilisation | 64 % | 89 % | Each period of timeframe | |
| Average turnover | 8,114,228 | 17,455,060 | 115 % Each period of timeframe | |
| Job profit | 4.3 % | 4.9 % | During whole timeframe | As a % of job costs |
| Overhead costs | 2.7 % | 1.4 % | During whole timeframe | As a % of job costs |
| Net operating profit | 1.2 % | 3.0 % | During whole timeframe | As a % of job costs after tax and interest |
| Dividend paid | 2.8 % | 1.9 % | During whole timeframe | As a % of job costs |
| Forward workload | 17,285,100 | 47,334,440 | End of timeframe | |
| Forward margin | 617,535 | 651,630 | End of timeframe | |
| OVERHEAD MANAGEMENT | | | | |
| Market share | 12 % | 23 % | During whole timeframe | % of the overall new work in the market identified |
| Market share split (UK) | 0 % | 0 % | During whole timeframe | % of the market share in the UK |
| Market share split (OV) | 0 % | 0 % | During whole timeframe | % of market share Overseas (outside the UK) |
| Head office staffing level | 100 % | 108 % | During whole timeframe | Optimum level is 100% |
| QHSE staffing level | 100 % | 108 % | During whole timeframe | Optimum level is 100% |
| Measurement staffing level | 100 % | 108 % | During whole timeframe | Optimum level is 100% |
| PROCUREMENT | | | | |
| Number of jobs bid for | 14 | 54 | During whole timeframe | |
| Number of jobs won | 5 | 36 | During whole timeframe | |
| Bidding success rate | 36 % | 67 % | During whole timeframe | Jobs won as a % of jobs bid for |
| JOB PROGRESSION | | | | |
| Project manager weighting | 8.0 | 7.9 | During whole timeframe | Out of 10 |
| Project manager resignations | 0 | 4 | During whole timeframe | Due to insufficient bonus levels or being headhunted |
| Net gain from bonus payments to project managers | 29,596 | 518,345 | During whole timeframe | |
| Jobs finished early | 0 | 17 | During whole timeframe | |
| Jobs finished on time | 0 | 15 | During whole timeframe | |
| Jobs finished late | 0 | 1 | During whole timeframe | |
| Ineffective labour on site | 1 % | 2 % | During whole timeframe | |
| Subcontractor labour used on site | 0 % | 5 % | During whole timeframe | As a % of total labour |
| Job completion efficiency | n/a | 0.93 | During whole timeframe | 0 to 1, where 1 is the optimum level |
| 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 | |
| For D&B jobs, change in build cost due to consultant designer | -0.7 % | -0.9 % | During whole timeframe | |
| Measure of risk contingency included in bids | 1.0 | 0.9 | During whole timeframe | 0=No contingency, 1=sensible level, 2=full risk cost |
| Risk cost incurred before mitigating factors | 21 % | 61 % | During whole timeframe | As a % of the contingency in the bid |
| Change in risk cost incurred due to mitigating factors | -14.5 % | -38.0 % | During whole timeframe | č , |
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