

## **ENGINUITY 2022 COMPETITION**

## PERFORMANCE REVIEW FOR 'Electric Magic'

## **MANAGEMENT TEAM**

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## **SPONSOR**

Jacobs

## THE CHALLENGE



It is the **beginning of 2022**.

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 :-

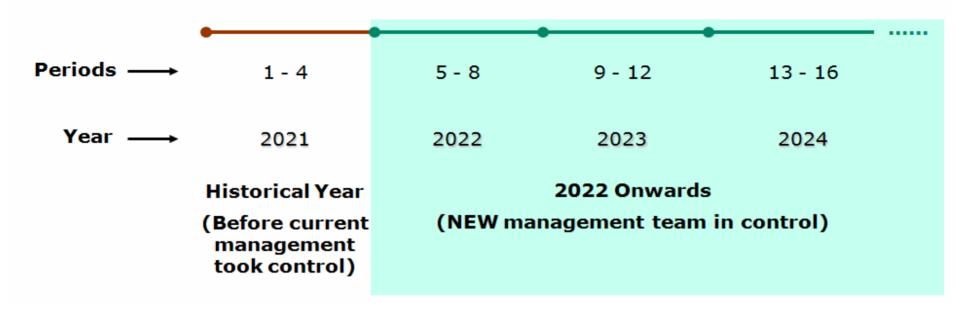
- The economic environment in which the company is operating
- The **strengths and weaknesses** of the business as it currently stands

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)

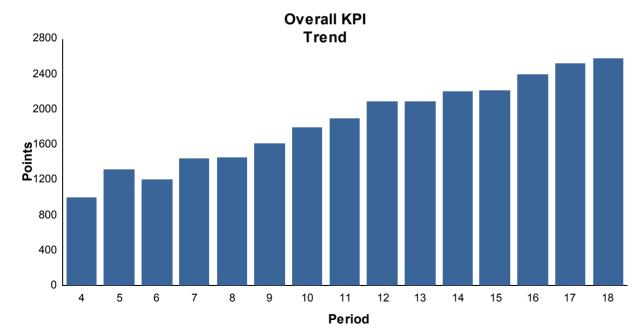
During the Later Years the teams compete 'head to head' against each other for work. This creates an even more uncertain and pressurized environment in which the skills and team dynamics formed in the early years are really put to the test.

## **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 2,576 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	2021 (Q4)	40	170	120	170	130	80	70	100	70	50	1,000
5	Early Years	2022 (Q1)	55	166	148	177	170	97	150	211	73	69	1,316
6	Early Years	2022 (Q2)	67	107	33	167	197	122	158	223	46	87	1,207
7	Early Years	2022 (Q3)	80	150	139	188	217	122	156	218	57	115	1,442
8	Early Years	2022 (Q4)	96	153	164	204	232	122	135	176	50	124	1,456
9	Early Years	2023 (Q1)	110	161	191	225	244	143	146	186	52	158	1,616
10	Early Years	2023 (Q2)	118	176	219	245	253	168	164	202	59	188	1,792
11	Early Years	2023 (Q3)	133	186	248	276	261	185	146	171	69	221	1,896
12	Early Years	2023 (Q4)	142	193	265	297	268	230	173	188	86	253	2,095
13	Later Years	2024 (Q1)	150	198	267	322	270	242	137	127	85	299	2,097
14	Later Years	2024 (Q2)	155	198	262	339	274	247	192	135	86	318	2,206
15	Later Years	2024 (Q3)	163	195	262	356	276	267	156	99	90	356	2,220
16	Later Years	2024 (Q4)	167	195	258	363	280	279	207	155	103	388	2,395
17	Later Years	2025 (Q1)	173	201	271	389	283	299	210	154	114	432	2,526
18	Later Years	2025 (Q2)	182	199	272	390	285	339	174	139	122	474	2,576



#### 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

NANCI   MANAGEMENT		History	Since	Change Basis	Additional information
1,000	Number of periods	4	14	- u	
Name	FINANCIAL MANAGEMENT				
	Company value	4,670,589	10,727,290	130 % End of timeframe	
verage curpover verage turnover verage turnove	Share price	1.07	1.86	74 % End of timeframe	
verage tumover by brinfi	Average capital base	4,087,638	5,889,699	44 % Each period of timeframe	
the profit should shoul	Average capital base utilisation	51 %	96 %	Each period of timeframe	
verhead coss   3,1 %   1.8 %   During whole timeframe   As a % of job costs   to operating profit   1.4 %   3.2 %   During whole timeframe   As a % of job costs   to operating profit   1.4 %   3.2 %   During whole timeframe   As a % of job costs   to operating profit   1.4 %   3.3 %   During whole timeframe   to operating profit   1.4 %   During whole timeframe   taket share   1.1 %   3.3 %   During whole timeframe   taket share   1.1 %   3.3 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   4.1 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   During whole timeframe   taket share split (UK)   3.5 %   3.5 %   3.5 %   3.5 %   3.5 %   3.5 %   3.5 %   taket share split (UK)   3.5 %   3.	Average turnover	6,976,444	19,354,580	177 % Each period of timeframe	
et operating profit vidend paid 33 % 08 % During whole timeframe vidend paid 133 % 08 % During whole timeframe broward margin 586.224 \$15.524	Job profit	4.8 %	5.6 %	During whole timeframe	As a % of job costs
invided paid orwind paid orwind paid orwind paid orwind workload 16,026,520 39,845,030 End of timeframe orward workload 16,026,520 39,845,030 End of timeframe orward margin \$86,224 \$15,524 End of timeframe orward margin \$86,024 \$15,524	Overhead costs	3.1 %	1.8 %	During whole timeframe	As a % of job costs
proverd margin 16,026,520 sp.845,030 End of timeframe roward margin 862,24 sp.845,24 sp.	Net operating profit	1.4 %	3.2 %	During whole timeframe	As a % of job costs after tax and interest
VERHEAD MANAGEMENT  larket share split (UK)  35 % 41 % During whole timeframe larket share split (UK)  35 % 59 % During whole timeframe larket share split (UK)  35 % 59 % During whole timeframe larket share split (UK)  35 % 59 % During whole timeframe larket share in the UK  36 % 59 % During whole timeframe larket share in the UK  36 % 59 % During whole timeframe larket share in the UK  36 % 59 % During whole timeframe larket share in the UK  36 % 61 % During whole timeframe larket share in the UK  36 % 61 % During whole timeframe larket share in the UK  36 % of the warket share in the UK  36 % of the warket share in the UK  36 % of the warket share in the UK  36 % of market share in the UK  36 % of the w	Dividend paid	3.3 %	0.8 %	During whole timeframe	As a % of job costs
Arket share after share and the share split (UK)  Asket share split (UV)  Asket share split (UK)  Asket share share in the UK  Asket share in the UK  Asket share share in the UK  Asket share in the UK  As	Forward workload	16,026,520	39,845,030	End of timeframe	
larket share larket share larket share split (UK) larket share split (UK) larket share split (UK) larket share split (UK) larket share split (UV) larket share in the UK larket share in	Forward margin	586,224	815,524	End of timeframe	
larket share split (UK)	OVERHEAD MANAGEMENT				
Laket share split (UK) 165 % 59 % During whole timeframe and afket share split (UV) 165 % 59 % During whole timeframe and office staffing level 166 % 122 % During whole timeframe teasurement staffing level 167 % 122 % During whole timeframe 168 Staffing level 168 Staffing level 169 % 122 % During whole timeframe 169 % 122 % During whole timeframe 169 % 120 % During whole timeframe 170 % 120 % Durin	Market share	11 %	33 %	During whole timeframe	% of the overall new work in the market identified
ead office staffing level HSE staffing level HSE staffing level 100 % 122 % During whole timeframe cleasurement staffing level leasurement staffing level leasurement staffing level ROCUREMENT umber of jobs bid for 12 56 During whole timeframe optimum level is 100% 152 56 During whole timeframe optimum level is 100% 155 34 During whole timeframe optimum level is 100% 155 34 During whole timeframe optimum level is 100% 155 34 During whole timeframe optimum level is 100% 155 34 During whole timeframe optimum level is 100% 155 34 During whole timeframe optimum level is 100% 155 000 Out of 10 Out of 10 155 000 Out of 10 1	Market share split (UK)	35 %	41 %	During whole timeframe	% of the market share in the UK
HSE staffing level 100 % 122 % During whole timeframe content staffing level 100 % 122 % During whole timeframe lumber of jobs bid for 12	Market share split (OV)	65 %	59 %	During whole timeframe	% of market share Overseas (outside the UK)
ROCUREMENT  umber of jobs bid for  umber of jobs won  of 5 34 During whole timeframe  umber of jobs won  of 5 34 During whole timeframe  didding success rate  42 % 61 % During whole timeframe  under of jobs won  of 5 34 During whole timeframe  of possession  Description of the support of th	Head office staffing level	100 %	112 %	During whole timeframe	Optimum level is 100%
ROCUREMENT  umber of jobs bid for  12 56 During whole timeframe umber of jobs won 15 34 During whole timeframe didding success rate  22 61 % During whole timeframe Under of jobs won 3  During whole timeframe Under of jobs won as a % of jobs bid for  3  During whole timeframe Under of jobs won as a % of jobs bid for  3  During whole timeframe Under of jobs won as a % of jobs bid for  4  Value of 10 Due to insufficient bonus levels or being headhunted  4  Value of 10 Due to insufficient bonus levels or being headhunted  4  Value of 10 Due to insufficient bonus levels or being headhunted  4  Value of 10 Due to insufficient bonus levels or being headhunted  4  Value of 10 Due to insufficient bonus levels or being headhunted  5  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value of 10 Due to insufficient bonus levels or being headhunted  6  Value o	QHSE staffing level	100 %	122 %	During whole timeframe	Optimum level is 100%
umber of jobs bid for umber of jobs won 5 34 During whole timeframe bidding success rate 42% 61% During whole timeframe bidding success rate 42% 80% During whole timeframe bidding success rate 42% 80% BRPROGRESSION  ***DBPROGRESSION***  ***DBPROGRESSION**  ***DBPROGRESSION**  ***DURING Whole timeframe bidding whole timeframe bids finished early be finished early bids finished early bids finished and time bids finished late at bids fin	Measurement staffing level	100 %	122 %		Optimum level is 100%
umber of jobs won idding success rate	PROCUREMENT				
DB PROGRESSION To ject manager weighting To ject manager weighting To ject manager resignations To ject manager sesignations To ject	Number of jobs bid for	12	56	During whole timeframe	
DB PROGRESSION Project manager weighting Project manager weighting Project manager weighting Project manager resignations Pouring whole timeframe Pouring whole timef	Number of jobs won	5	34	During whole timeframe	
roject manager weighting roject manager resignations roject whole timeframe roject manager roject manager roject timeframe roject manager roject manager roject timeframe roject manager roject timeframe roject manager roject timeframe roject manager roject timeframe roject man	Bidding success rate	42 %	61 %	During whole timeframe	Jobs won as a % of jobs bid for
To be the finished early and the feet gain from bonus payments to project managers and the gain from bonus payments the gain whole timeframe bonus payments to project managers and the gain from the gain fro	JOB PROGRESSION				
et gain from bonus payments to project managers  21,485  468,479  During whole timeframe bbs finished early bbs finished on time bbs finished late  0  19  During whole timeframe bbs finished late  0  1  During whole timeframe bbs finished late  0  1  During whole timeframe bbs finished late  0  1  During whole timeframe bbc contractor labour used on site bb completion efficiency bb completion efficiency bb completion efficiency cduction in job costs (build) due to targeted investments  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Project manager weighting	8.0	8.8	During whole timeframe	Out of 10
bbs finished early  bbs finished on time  bbs finished late  cbs finis	Project manager resignations	0	3	During whole timeframe	Due to insufficient bonus levels or being headhunted
bbs finished on time bbs finished late bburing whole timeframe bbs contingency included in bids bbs contingency included in bids bbs contingency included in bids bbs finished late bburing whole timeframe bbs finished late bburing whole timeframe bburing whole timeframe bburing whole timeframe bbs contingency, 1=sensible level, 2=full risk cost bbs a % of the contingency in the bid bbs a % of the contingency in the bid bbs finished late bbs finished late bbs finished late bbs finished late in bls buring whole timeframe bbs finished late in bls buring whole timeframe bburing whole timeframe bbs a % of the contingency in the bid bbs a % of the contingency in the bid	Net gain from bonus payments to project managers	21,485	468,479	During whole timeframe	
bbs finished late  0 1 During whole timeframe deffective labour on site  2 % 1 % During whole timeframe debcontractor labour used on site  0 % 5 % During whole timeframe bb completion efficiency  bc completion efficiency  cduction in job costs (build) due to targeted investments  0.0 % 0.7 % During whole timeframe eduction in job costs (risk) due to targeted investments  0.0 % 0.3 % During whole timeframe bc During whole timeframe cduction in job costs (risk) due to targeted investments  0.0 % 0.3 % During whole timeframe cduction in job costs (risk) due to targeted investments  0.0 % 0.3 % During whole timeframe cor D&B jobs, change in build cost due to consultant designer  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleasure of risk contingency included in bids  1.0 1.0 During whole timeframe cleas	Jobs finished early	0	13	During whole timeframe	
neffective labour on site  2 % 1 %  During whole timeframe subcontractor labour used on site  0 % 5 %  During whole timeframe subcontractor labour used on site  0 % 5 %  During whole timeframe Subcontractor labour used on site  0 % 5 %  During whole timeframe Subcontractor labour used on site  0 % 5 %  During whole timeframe Subcontractor labour used on site  0 % 5 %  During whole timeframe Subcontractor labour used on site  0 % 0.91  During whole timeframe Subcontractor labour used on site  0 % 0.91  During whole timeframe Subcontractor labour used on site  0 % 0.91  During whole timeframe Subcontractor labour used on site  0 % 0.7 %  During whole timeframe Subcontractor labour used on site  0 % 0.91  During whole timeframe Subcontractor labour used on site  0 % 0.91  During whole timeframe Subcontractor labour used on site  0 % 0.91  During whole timeframe Subcontractor labour used on site  0 % 0.7 %  During whole timeframe Subcontractor labour  0 % 0.7 %  During whole timeframe Subcontractor labour used on site  0 % 0.91  During whole timeframe Subcontractor labour used on site  0 % 0.91  During whole timeframe Subcontractor labour  0 % 0.7 %  During whole timeframe Subcontractor labour used in beta purple used in terms of the optimum level  0 % 0.7 %  During whole timeframe Subcontractor labour used in beta purple used in terms of the optimum level  0 % 0.7 %  During whole timeframe Subcontractor labour used in beta purple used in terms of the optimum level  0 % 0.7 %  During whole timeframe Subcontractor labour used in beta purple used in terms of the optimum level  0 % 0.7 %  During whole timeframe Subcontractor labour used in beta purple used in terms of the optimum level  0 % 0.7 %  During whole timeframe Subcontractor labour used in beta purple used in terms of the optimum level  0 % 0.7 %  During whole timeframe  0 = No contingency, 1 = sensible level, 2 = full risk cost  Subcontractor labour used in beta purple used in terms of the optimum level  1 % 0 % 0.7 %  During whole timeframe  0 = No continge	Jobs finished on time	0	19	During whole timeframe	
be completion efficiency  n/a  0.91  During whole timeframe be completion efficiency  n/a  0.91  During whole timeframe  of to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  11 to 1, where 2 is the optimum level  12 to 1, where 3 is the optimum level  13 to 1, where 2 is the optimum level  14 to 1, where 2 is the optimum level  15 to 1, where 2 is the optimum level  16 to 1, where 2 is the optimum level  17 to 1, where 2 is the optimum level  18 to 1, where 2 is the optimum level  19 to 1, where 2 is the optimum level  10 to 1, where 2 is the optimum level  10 to 1, where 2 is the optimum level  11 to 1, where 2 is the optimum level  12 to 1, where 3 is the optimum level  13 to 1, where 3 is the optimum level  14 to 1, where 2 is the optimum level  15 to 1, where 1 is the optimum level  16 to 1, where 1 is the optimum level  18 to 1, where 2 is the optimum level  19 to 1, where 1 is the optimum level  19 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  11 to 1, where 1 is the optimum level  11 to 1, where 1 is the optimum level  12 to 1, where 2 is the optimum level  13 to 1, where 2 is the optimum level  14 to 1, where 2 is the optimum level  15 to 1, where 2 is the optimum level  16 to 1, where 2 is the optimum level  18 to 1, where 2 is the optimum level  19 to 1, where 2 is the optimum level  19 to 1, where 2 is the optimum level  10 to 1, where 2 is the optimum level  10 to 1, where 2 is the optimum level  10 to 1, where 2 is the optimum level  10 to 1, where 2 is the optimum level  10 to 1, where 2 is the optimum level  10 to 1, where 2 is the optimum level  10 to 1, where	Jobs finished late	0	1	During whole timeframe	
bb completion efficiency  n/a  0.91  During whole timeframe  0 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  11 to 1, where 1 is the optimum level  12 to 1, where 1 is the optimum level  13 to 1, where 1 is the optimum level  14 to 1, where 1 is the optimum level  15 to 1, where 1 is the optimum level  16 to 1, where 1 is the optimum level  17 to 1, where 1 is the optimum level  18 to 1, where 1 is the optimum level  19 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  10 to 1, where 1 is the optimum level  11 to 1, where 1 is the optimum level  12 to 1, where 1 is the optimum level  13 to 1, where 1 is the optimum level  14 to 1, where 1 is the optimum level  15 to 1, where 1 is the optimum level  16 to 1, where 1 is the optimum level  17 to 1, where 1 is the optimum level  18 to 1, where 1 is the optimum level  18 to 1, where 1 is the optimum level  19 to 2, where 1 is the optimum level  19 to 2, where 1 is the optimum level  19 to 3, where 1 is the optimum level	Ineffective labour on site	2 %	1 %	During whole timeframe	
eduction in job costs (build) due to targeted investments  0.0 %  0.7 %  During whole timeframe  D=No contingency, 1=sensible level, 2=full risk cost  During whole timeframe  During whole timeframe  D=No contingency in the bid  During whole timeframe  As a % of the contingency in the bid  During whole timeframe	Subcontractor labour used on site	0 %	5 %		As a % of total labour
eduction 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	Job completion efficiency	n/a	0.91	During whole timeframe	0 to 1, where 1 is the optimum level
eduction 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 %	0.7 %	During whole timeframe	
leasure of risk contingency included in bids  1.0  1.0  During whole timeframe  0=No contingency, 1=sensible level, 2=full risk cost  buring 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	0.0 %	0.3 %	During whole timeframe	
isk cost incurred before mitigating factors  53 %  61 %  During whole timeframe  As a % of the contingency in the bid  During whole timeframe  During whole timeframe	For D&B jobs, change in build cost due to consultant designer	0.0 %	-0.9 %	During whole timeframe	
hange in risk cost incurred due to mitigating factors -9.0 % -37.8 % During whole timeframe	Measure of risk contingency included in bids	1.0	1.0	During whole timeframe	0=No contingency, 1=sensible level, 2=full risk cost
	Risk cost incurred before mitigating factors	53 %	61 %	During whole timeframe	As a % of the contingency in the bid
isk cost incurred after mitigating factors  48 %  During whole timeframe  As a % of the contingency in the bid	Change in risk cost incurred due to mitigating factors	-9.0 %	-37.8 %	During whole timeframe	
	Risk cost incurred after mitigating factors	48 %	38 %	During whole timeframe	As a % of the contingency in the bid