

INGENUITY TUTORIAL



Improving Job Profit



Improving Job Profit

The **profit** the company makes across all jobs progressed each period is **critical to the health of the business**.

The job profit should at least cover the company overhead costs not covered in the individual jobs, otherwise serious cash flow problems could occur.

Any **additional profit** can then be used to pay dividend to shareholders, and crucially to grow the business, such as by expanding the capital base (infrastructure) and targeted investments.

We will now look in detail at how job profit is defined, and how it can be improved.



Improving Job Profit

Job 4 (Completed early)

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/Job details"

Management consultants report Risk analysis

JOB SUMMARY

JOB PROGRESS



Period identified: 1
 Country: United Kingdom
 Location: Canary Wharf
 Type: Design & Build
 BIM model used: Yes
 Size: Medium
 Approx value: 9,000,000
 Duration: 3 periods
 Description: Extension to conference centre
 Sector: Building & Commercial
 Client: Madison Bank [Details](#)

PROCUREMENT DETAILS

BID SUBMITTED

Estimated design cost: 10 % of build cost
 Consultant used: **The PW Partnership** [Details](#)
 Estimated build cost: 7,091,780
 Estimated site cost: 1,418,356
 On cost: 163,436
 Mark-up: 4.7 %
 Bid: 9,823,740 [?](#)

BID RESULT

Job won

[Tender Report](#)

BIDDING

The client was satisfied with the bid: satisfactory
 The client was satisfied with the bid: 54,576

ESTIMATED COSTS / PLANNED LABOUR SCHEDULE

Job period	Estimated build cost	Estimated site cost	Planned labour	Cumul % complete
1	2,127,534	425,507	54	30
2	3,545,890	709,178	90	80
3	1,418,356	283,671	36	100

Consider the following example.

The company were successful in submitting a bid for job 4.

The **expected profit** to be made on the job was the markup (margin) of 4.7% of the job costs.

In monetary terms the expected profit is is the difference between the bid value to be earned from the client (9,823,740) and the expected costs (9,382,750) i.e., 440,990.

KEY POINTS

When progressing a job the **actual profit made can differ** from the expected profit due to factors that affect the bid value earned and the expected costs.



Improving Job Profit

Job performance

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance"

Management consultant report Graphical analysis

ALL JOBS IDENTIFIED

JOBS WON

Summary

- Risk analysis (Cost)
- Risk analysis (Delays)
- Retention analysis

TERMINOLOGY

[Completion Ratio] Measure of how efficiently a job is completed in its final period based upon the labour allocated (0=worse possible; 1 is perfect)

Job	In	Type	Size	Sector	Client	Status	Completion details			Progress details			
							In period	Schedule	Ratio	Periods Run	Cost incurred	Profit made	Profit % of cost
4	UK	DB	Medium	Building & Commercial	Madison Bank	Completed early	4	Early	0.97	2	9,185,998	686,861	7.5 %
5	UK	BO	Small	Transport	East Midlands County Council	Completed on time	4	On Time	0.96	2	2,099,767	67,147	3.2 %
29	UK	BO	Small	Transport	HS Rail Connection Group	Completed late	6	Late	0.37	3	1,332,505	-27,711	-2.1 %
32	US	BO	Small	Building & Commercial	FIFA North America 2026	Completed on time	5	On Time	0.96	2	5,768,797	27,000	0.6 %
34	UK	BO	Small	Energy	Breeze Energy	Completed on time	6	On Time	0.94	3	5,240,331	210,339	4.0 %
49	UK	BO	Small	Water & Sewage	English Waterways	Completed on time	6	On Time	0.98	2	1,624,010	72,299	4.5 %
52	UK	BO	Medium	Transport	HS Rail Connection Group	Completed on time	7	On Time	0.93	3	7,310,000	422,006	5.8 %
67	SYR	BO	Small	Energy	Syrian Pipelines	Completed on time	7	On Time	0.81	3	2,300,000	88,570	3.8 %
75	UK	BO	Small	Water & Sewage	Fenlands County Council	Completed late	8	Late	0.37	3	1,100,000	40,220	0.8 %
82	IRQ	DB	Medium	Building & Commercial	Iraq TranGen 2009	Completed on time	8	On Time	0.92	3	5,000,000	458,609	4.8 %
110	UAE	BO	Medium	Energy	Emirates Energy	In progress						732,417	8.4 %
118	UK	BO	Medium	Building & Commercial	Master Brewers UK	In progress						282,480	6.7 %
128	UK	BO	Small	Water & Sewage	Dales Water Services	Completed on time	8	On Time				76,554	3.7 %
137	UK	BO	Medium	Water & Sewage	The Environment Department	In progress					4,954	-51,329	-1.7 %
167	US	BO	Medium	Energy	First Wind USA	In progress							
181	UK	BO	Small	Water & Sewage	London Water Services	In progress							

Display details for job 4

After completing job 4, and reviewing the performance for the job, it can be seen that the **actual profit** made was 7.5% (686,861) of the job costs, far more than the expected profit of 4.7% (440,990).

We will now look at the factors that can affect the actual profit.




Improving Job Profit

Job 4 (Completed early) Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/Job details"

Management consultants report Risk analysis

JOB SUMMARY



Period identified: 1
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 On cost: 163,436
 Mark-up: 4.7 %
 Bid: 9,823,740 [?](#)

BID RESULT

Job won
[Tender Report](#)

BIDDING INFORMATION

The client relationship when bid submitted: satisfactory
 When progressing the job the expected value (turnover) for each man period is: 54,576

ESTIMATED COSTS / PLANNED LABOUR SCHEDULE

Job period	Estimated build cost	Estimated site cost	Planned labour	Cumul % complete
1	2,127,534	425,507	54	30
2	3,545,890	709,178	90	80
3	1,418,356	283,671	36	100
	7,091,780	1,418,356	180	

LABOUR PRODUCTIVITY

The job is progressed by allocating labour each period, and the total man periods needed to complete the job are 180.

If the bid value of 9,823,740 is divided by the total man periods (180), the **expected value (turnover) for each man period progressed is 54,576**. This is a measure of the **labour productivity**.

The bid value to be recovered from the client cannot be altered. However, **it is possible to improve, or reduce, the labour productivity** in a number of ways, with the following results :-

- If the labour productivity increases, the bid value is recovered quicker with less labour needed, and hence reduced overall costs, and a **higher than expected job profit**.
- If the labour productivity reduces, the bid value is recovered slower with more labour needed, and hence increased overall costs, and a **lower than expected job profit**.

We will not investigate the factors that can affect the labour productivity.



Improving Job Profit

Project Manager History

Navigate to "Main menu/Measuring performance/Assessing performance/Project manager history"

Gradings

Name	Where used							BIM	Basic grading	Improvement factors			Deterioration factors		Overall grading	Reason for leaving
	Base	Per	Status	Job	In	Sector	Affect of time with the company			%	Expectation level	Affect of bonus payment	Affect of job location	Affect of taking over from another		
Gordon Fitch	UK	6	On Job	75	UK	Water & Sewage	Yes	excellent	none	5 %	Still at History Level	noticeable	none	none	excellent	
		7	On Job	75	UK	Water & Sewage	Yes	excellent	marginal	5 %	Still at History Level	noticeable	none	none	excellent	
		8	On Job	75	UK	Water & Sewage	Yes	excellent	small	5 %	Above History Level	small	none	none	excellent	
Gordon Simcoe	UK	3	On Job	4	UK	Building & Commercial	Yes	very good	none	4 %	History Level	reasonable	none	none	excellent	
		4	On Job	4	UK	Building & Commercial	Yes	very good	marginal	4 %	History Level	reasonable	none	none	excellent	

LABOUR PRODUCTIVITY: PROJECT MANAGER PERFORMANCE

A project manager with well-matched experience for a particular type of job will improve the productivity of all the labour on site, own and subcontract, whereas a unsuitable project manager can reduce the productivity.

For job 4, Gordon Simcoe's performance was 'excellent' for the 2 periods of the job, which improved the productivity of the labour on site significantly.

How can we see this improvement ?



Improving Job Profit

Job 4 (Completed early)

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/Job details"

Management consultants report Risk analysis

JOB SUMMARY

JOB PROGRESS

Job progression											Profit analysis			
Planned schedule			Actual progress								By period		Cumulative	
Job period	Planned labour	Cumul % complete	Period	Status	Actual labour	Ineffect due to delays	Ineffect due to overman	Effective labour	Actual % complete	Completion status	Profit	Profit % of cost	Cumul profit	Cumul profit % of cost
1	54	30 %	3	Past	73	0.0	0.1	72.9	41.47 %	Ahead of schedule	316,803	8.4 %	316,803	8.4 %
2	90	80 %	4	Past	107	0.0	0.0	107.0	100 %	Completed early	370,058	6.8 %	686,861	7.5 %
3	36	100 %												

Total planned labour needed to complete the job is 180.

LABOUR PRODUCTIVITY: PROJECT MANAGER PERFORMANCE

During period 4 of the job Gordon Simcoe's performance was 'excellent'.

Clicking on the **'?' drill down** next to the measured value for the period shows that the **expected value (turnover) earned from the client, or labour productivity, was increased by 1.45% as a result of Gordon Simcoe's 'excellent' performance.**

EACH PERIOD THE JOB HAS BEEN PROGRESSED

VALUE AND PROFIT ANALYSIS

Measured value:	5,749,664	?
Early completion bonus:	49,119	
Total value:	5,798,783	
Total cost:	5,428,725	
Total profit:	370,058	(6.8 % of costs)

PROGRESS TO DATE

Measured Value for Job 4 in Period 4

Effective labour on site in the period:	107	x	
The value earned by a labourer each period:	54,576		(the bid submitted for the job 9,823,725 divided by the total planned labour for the job 180 labourers)
Expected value:	5,839,632		
Adjustments:	-1.539	%	Project manager expertise increases job value by 1.45%
			The level of own labour layoffs across the company increases job value by 0.5%
			The number of subcontractors used across the company reduces job value by 0.129%
			Completing the job before the end of the period reduces job value by 3.36%
Actual value:	5,749,664		
Adjustments:	0	%	
Measured value:	5,749,664		



Improving Job Profit

Job 4 (Completed early)

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/Job details"

Management consultants report Risk analysis

JOB SUMMARY

JOB PROGRESS

LABOUR PRODUCTIVITY: LABOUR RELATIONS POLICY

The **labour relations policy** of the company can affect the productivity of the company's own labour on all the jobs in progress.

The productivity will be improved by :-

- Less reliance on subcontractors
- Paying off less of the company's own labour

The productivity will be reduced by :-

- More reliance on subcontractors
- Paying off more of the company's own labour

Clicking on the **'?' drill down** next to the measured value for the period shows that the expected value (turnover) earned from the client, or labour productivity, was :-

- **Increased by 0.5% due to a low level of own labour payoffs**
- **Reduced by 0.129% due to using too many subcontractors**

Profit analysis				
By period		Cumulative		
	Profit	Profit % of cost	Cumul profit	Cumul profit % of cost
	316,803	8.4 %	316,803	8.4 %
	370,058	6.8 %	686,861	7.5 %

PERIOD THE JOB HAS BEEN PROGRESSED

VALUE AND PROFIT ANALYSIS	
Measured value:	5,749,664 ?
Completion bonus:	49,119
Total value:	5,798,783
Total cost:	5,428,725
Total profit:	370,058 (6.8 % of costs)

PROGRESS TO DATE

of the job completed: 100 %

Measured Value for Job 4 in Period 4

Effective labour on site in the period:	107 x	
The value earned by a labourer each period:	54,576	(the bid submitted for the job 9,823,740 divided by the total planned labour for the job 180 labourers)
Expected value:	5,839,632	
Adjustments:	-1.53%	Project manager expertise increases job value by 1.45%
		The level of own labour layoffs across the company increases job value by 0.5%
		The number of subcontractors used across the company reduces job value by 0.129%
		Completing the job before the end of the period reduces job value by 3.36%
Actual value:	5,749,664	
Adjustments:	0 %	
Measured value:	5,749,664	



Improving Job Profit

Job 4 (Completed early)

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/Job details"

Management consultants report Risk analysis

JOB SUMMARY

JOB PROGRESS

Job progression											Profit analysis			
Planned schedule			Actual progress								By period		Cumulative	
Job period	Planned labour	Cumul % complete	Period	Status	Actual labour	Ineffect due to delays	Ineffect due to overman	Effective labour	Actual % complete	Completion status	Profit	Profit % of cost	Cumul profit	Cumul profit % of cost
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3	36	100 %												

Total planned labour needed to complete the job is 180.

PERIOD 4 CLICK ON A LINE IN THE THE SUMMARY ABOVE TO SHOW THE DETAILS FOR EACH PERIOD THE JOB HAS BEEN PROGRESSED

LABOUR ANALYSIS		COST ANALYSIS			VALUE AND PROFIT ANALYSIS	
PLANNED SCHEDULE		BUILD RELATED			Measured value:	5,749,664 ?
Required labour:	90	Design cost:	414,869 ?	Early completion bonus:	49,119	
Overmanning of:	35 % permitted	Build cost:	4,060,472 ?	Total value:	798,783	
Effective labour limit (ELL):	121.5	Site cost:	834,222 ?		428,725	
		Risk cost:			370,058 (6.8 % of cost)	

JOB COMPLETION

The client pays a **bonus for early completion** of a job.

Early completion of a job means completing **at least one period** before the end of the planned duration e.g., if the planned duration is 4 periods, it must be completed in 3 periods or less to obtain the client bonus.

The bonus varies by client, and is expressed as a percentage of the tender value (bid entered) for the job; details are given in the **Industry parameters**.

For job 4 a planned 3 period job, the job was completed in 2 periods, and an early completion bonus of 49,119 was earned, which helped to boost the job profit significantly.

KEY POINTS

Completing a job late will incur a late completion penalty that will reduce the job profit.



Improving Job Profit

Job 4 (Completed early)

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/Job details"

Management consultants report Risk analysis

JOB SUMMARY

JOB PROGRESS

Job progression											Profit analysis			
Planned schedule			Actual progress								By period		Cumulative	
Job period	Planned labour	Cumul % complete	Period	Status	Actual labour	Ineffect due to delays	Ineffect due to overman	Effective labour	Actual % complete	Completion status	Profit	Profit % of cost	Cumul profit	Cumul profit % of cost
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Total planned labour needed to complete the job is 180.

PERIOD 4 CLICK ON A LINE IN THE THE SUMMARY ABOVE TO SHOW THE DETAILS FOR EACH PERIOD THE JOB HAS BEEN PROGRESSED

LABOUR ANALYSIS	COST ANALYSIS	VALUE AND PROFIT ANALYSIS
PLANNED SCHEDULE	BUILD RELATED	Measured value: 5,749,664 ?
Required labour: 90	Design cost: 414,869 ?	Early completion bonus: 49,119
Overmanning of: 35 % permitted	Build cost: 4,060,472 ?	Total value: 5,798,783
Effective labour limit (ELL): 121.5	Site cost: 834,222 ?	Total cost: 5,428,725
LABOUR ALLOCATED	Risk cost: 0	Total profit: 370,058 (6.8 % of costs)
Own: 107	Late completion penalty: 0	
Sub: 0	ADDITIONAL LABOUR COSTS	
Total labour allocated: 107	Ineffective labour due to overmanning: 0	
(less) labour lost by delays: 0 (ineffective)	Ineffective labour due to completing the job: 19,862 ?	
Effective level after delays: 107.0	Training new recruits (Own): 85,000	
(less) overmanning above the ELL: 0 (ineffective)	Labour payoffs (Own): 0	
Effective labour on site: 107	Subcontractor cost: 0	
	PROJECT MANAGER	
	Allocated: Gordon Simcoe	
	Overall performance: excellent	

JOB COSTS

The actual profit made on a job can be improved, or reduced, considerably by internal and external factors that affect the **costs incurred on a job**.

We will now look in detail at the factors that affect job costs.



Improving Job Profit

Gradings

Name	Job details						Factors affecting build costs			
	Base	Job	Country	Status	Sector	BIM being used	Expertise in sector	BIM experience	Location	% change so far
The Pw Partnership	UK	4	United Kingdom	Completed	Building & Commercial	Yes	noticeably reduces	noticeably reduces	has no affect on	-0.7 %
		82	Iraq	Completed	Building & Commercial	No	noticeably reduces	n/a	slightly increases	-0.1 %

JOB COSTS: CONSULTANT DESIGNER CHOICE FOR DESIGN & BUILD JOBS

The **choice of consultant** to produce the design on a design and build job can have a significant impact on the build costs.

Consultants with appropriate expertise and BIM experience produce designs that reduce the expected build cost when a job is progressed, which improves the profit margin on the job. Conversely inappropriate consultants can reduce the job profit.

In the example shown for job 4, the PWP Partnership were chosen, and their expertise and BIM experience reduced the overall build cost by 0.7%, a significant overall reduction that helped to increase the job profit.



Improving Job Profit

Investment Details

UK CRANE HIRE

Desc: Suppliers

Profile: From its base in Birmingham, and with depots throughout the UK, UK Crane Hire has emerged as one of the leading independent crane hirers to contractors working in all sectors of the Construction Industry, providing a diverse range of equipment such as crane barges, crawler cranes and tower cranes.

The company recently bought a stake in West Coast Cranes, a large American company that supplies specialist cranes for construction contracts, a move which the present board of directors hope will enable it to expand worldwide, although the investment has come under scrutiny when future profit warnings were recently revealed from a source within West Coast Cranes.

PERFORMANCE HISTORY

PERIOD RETURNS

Period	% return to investors	Company investment		Information for investors
		Amount invested	Investment return	
1	1.9 %	0	0	Nothing to report
2	1.4 %	0	0	Nothing to report
3	1.5 %	0	0	Nothing to report
4	1.6 %	0	0	Nothing to report
5	1.8 %	100,000	1,800	Nothing to report
6	1.8 %	201,800	3,632	Nothing to report
7	1.9 %	205,432	3,903	Nothing to report
8	1.8 %	209,335	3,768	Financial director resigns

BENEFITS - REDUCTION IN JOB COSTS

	Build cost	Risk cost	% of total
Industrial	0	0	0 %
Building & Commercial	98,903	0	98 %
Transport	2,442	0	2 %
Energy	0	0	0 %
Water & Sewage	0	0	0 %
	101,345	0	

JOB COSTS: TARGETED INVESTMENTS

Targeted investments can improve job profit by reducing build costs on work in progress in specific sectors due to preferential rates on materials, plant etc.

For example, investing in a crane hire company would potentially reduce build costs for jobs in any sector, as indicated in the investment profile.

In the example shown, overall build costs have been reduced by 101,345 by investing in UK Crane Hire.



Improving Job Profit

Job performance

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance"

Management consultant report Graphical analysis

ALL JOBS IDENTIFIED

JOBS WON

- Summary
- Risk analysis (Cost)
- Risk analysis (Delays)
- Retention analysis

Job details					Risk details			The bid	Risk status		Mitigation adjustments				Adjusted cost	
Job	Status	In	BIM job	Sector	Risk description	Chance occurs	Impact cost	Contin in bid	Struck	In period	Invest	QHSE staff	Project mgr	BIM model	Adjusted risk cost	% of contin
4	Completed early	UK	Yes	B&C	Loss of crucial staff	Medium	90,000	40,500	No							
					Personnel issues	High	60,000	45,000	No							
					Structural defects	Medium	90,000	40,500	No							
					JOB TOTALS			126,000							0	0%

JOB COSTS: RISK COSTS

If a risk does not strike on a job, the contingency built into the original bid as part of the oncost will improve the job profit considerably.

In addition, the risk costs incurred when a risk strikes can be reduced, and improve job profit by :-

- Targeted investments into appropriate risk management consultants
- Employing the best possible project manager
- Use of a BIM (Building Information Modelling) model

Conversely risk costs are increased, reducing job profit, by :-

- Employing unsuitable project managers
- An understaffed QHSE Department

For job 4 fortunately no risks actually struck, so no mitigation came into play



Improving Job Profit

Country information

Navigate to "Main menu/Industry information/Country information"

Id	Name	Subcontract cost
AUS	Australia	1,500
CAN	Canada	1,500
CHI	China	1,000
FRA	France	1,200
IND	India	500
IRQ	Iraq	500
JAP	Japan	1,000
LEB	Lebanon	500
NZ	New Zealand	1,500
QAT	Qatar	1,000
SA	South Africa	750
SIN	Singapore	1,000
SYR	Syria	500
UAE	United Arab Emirates	1,000
UK	United Kingdom	1,200
US	United States	1,500



Australia is a country in the Southern Hemisphere comprising the mainland of the Australian continent, the island of Tasmania and numerous smaller islands in the Indian and Pacific Oceans.

The population is approximately 22.6 million, with approximately 60 per cent concentrated in and around the mainland state capitals of Sydney, Melbourne, Brisbane, Perth and Adelaide. The nation's capital city is Canberra.

A developed country, Australia is the world's thirteenth largest economy, and ranks highly in many international comparisons of national performance such as human development, quality of life, health care, life expectancy, public education, economic freedom and the protection of civil liberties and political rights. Australia is a member of the United Nations, G20, Commonwealth of Nations, ANZUS, OECD, APEC, Pacific Islands Forum and the World Trade Organization.

Australia has a market economy with high GDP per capita and low rate of poverty. The Australian dollar is the currency for the nation. After the 2006 merger of the Australian Stock Exchange and the Sydney Futures Exchange, the Australian Securities Exchange is now the ninth largest in the world.

The service sector of the economy, including tourism, education, and financial services, accounts for about 70 per cent of GDP. Rich in natural resources, Australia is a major exporter of agricultural products, particularly wheat and wool, minerals such as iron-ore and gold, and energy in the forms of liquefied natural gas and coal. Australia's largest export markets are China, the US, South Korea, and New Zealand. Australia is the world's fourth largest exporter of iron ore, in an industry contributing \$5.5 billion per annum to the nation's economy.

JOB COSTS: USE OF SUBCONTRACTORS

Subcontractor cost variations between countries, and when allocating labour to progress jobs, the decision on where to use **subcontractors** can have a significant impact on the build costs.

For example, suppose a number of jobs are in progress, and subcontractors are being used on a job in Australia, where subcontractor costs are expensive. Another job is being progressed in India, where subcontractor costs are much cheaper. The most cost effective strategy is to move some subcontractors from the job in Australia to the one in India, and then replace them with the company's fully trained own labour from the job in India.



Improving Job Profit

Navigate to "Main menu/Measuring performance/Assessing performance/Performance summary/Summary information/Overheads"

The current management team have been in charge for 1 periods since the History

FINANCE

OVERHEADS

PROCUREMENT

JOB PROGRESSION

MARKETING DEPARTMENT

Market share: 21 %

Market share split by sector:

Industrial	8 %
Building & Commercial	47 %
Transport	13 %
Energy	18 %
Water & Sewage	14 %



By location:

UK	45 %
Overseas	55 %



HEAD OFFICE, QHSE AND MEASUREMENT

Department	% of required level allocated	Net affect
Head Office	81 %	-39,834
QHSE	41 %	-123,834
Measurement	41 %	-130,726

NON DEPARTMENTAL COST

Idle labour % total overheads
 Idle project management % total overheads

JOB COSTS AND VALUE: OVERHEAD DEPARTMENT STAFFING

Understaffing of the Head Office, QHSE and Measurement departments, below the required level, will have **negative affects** across all jobs being progressed, namely :-

- Head Office, an **increase in job costs** (build costs)
- QHSE, an **increase in job costs** (build and risk costs)
- Measurement, a **reduction in measured value** (turnover)

Understaffing is a false economy. It might reduce overhead costs, but will also reduce job profits, resulting in reduced operating profits for the company.

The example shown indicates that staffing in all 3 departments was insufficient i.e., below the 100% optimum level.

The company may have saved on overhead costs, but the reduction in job profit (increased costs and reduced value) is reflected in the overall **net affect (loss)**.



Improving Job Profit

World Events

Navigate to "Main menu/Measuring performance/Assessing performance/Impact of world events"

Period	Status	Year/qtr	Category	Job	Description	Nature
3	History	2022 (Q3)	JOB	4	The continued affects of the Russian Ukraine conflict increases fuel costs across the world, which increases build costs on jobs progressed by 0.54%	NEGATIVE
4	History	2022 (Q4)	JOB	4	Short term UK government training grants reduce site costs on jobs progressed by 1.06%	POSITIVE
4	History	2022 (Q4)	JOB	4	Reduced oil production by OPEC increases build costs on jobs progressed by 0.30%	NEGATIVE

THE CONTINUED AFFECTS OF THE RUSSIAN UKRAINE CONFLICT INCREASES FUEL COSTS ACROSS THE WORLD, WHICH INCREASES BUILD COSTS ON JOBS PROGRESSED BY 0.54%

The Russo-Ukrainian War is an ongoing war primarily involving Russia, Belarus, and pro-Russian forces in Ukraine. It began in February 2014 in the wake of the Revolution of Dignity and focused on the status of Crimea and parts of the Donbas, which

conflict began in February 2014 in the

JOB COSTS: WORLD EVENTS

World events can impact upon build and site costs for jobs progressed, which can have a significant affect on job profit.

Although world events are outside the company's direct control, the **marketing strategy** of the business can influence which world events have an affect, and careful analysis of the **ENGINUITY NEWS NETWORK (ENN)** will help in deciding upon the most effective strategy.



Improving Job Profit

Job 4 (Completed early)

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/Job details"

Management consultants report Risk analysis

JOB SUMMARY

JOB PROGRESS

Job progression											Profit analysis			
Planned schedule			Actual progress								By period		Cumulative	
Job period	Planned labour	Cumul % complete	Period	Status	Actual labour	Ineffect due to delays	Ineffect due to overman	Effective labour	Actual % complete	Completion status	Profit	Profit % of cost	Cumul profit	Cumul profit % of cost
1	54	30 %	3	Past	73	0.0	0.1	72.9	41.47 %	Ahead of schedule	316,803	8.4 %	316,803	8.4 %
2	90	80 %	4	Past	107	0.0	0.0	107.0	100 %	Completed early	370,058	6.8 %	686,861	7.5 %
3	36	100 %												

Total planned labour needed to complete the job is 180.

PERIOD 4 CLICK ON A LINE IN THE THE SUMMARY ABOVE TO SHOW THE DETAILS FOR EACH PERIOD THE JOB HAS BEEN PROGRESSED

LABOUR ANALYSIS		COST ANALYSIS		VALUE AND PROFIT ANALYSIS	
PLANNED SCHEDULE		BUILD RELATED		Measured value:	5,749,664 ?
Required labour:	90	Design cost:	414,869 ?	Early completion bonus:	49,119
Overmanning of:	35 % permitted	Build cost:	4,060,472 ?	Total value:	5,798,783
Effective labour limit (ELL):	121.5	Site cost:	834,222 ?	Total cost:	5,428,725
LABOUR ALLOCATED		ADDITIONAL LABOUR COSTS		Total profit:	370,058 (6.8 % of costs)
Own:	107	Late completion penalty:	0	PROGRESS TO DATE	
Sub:	0	Ineffective labour due to overmanning:	0	Amount of the job completed:	100 %
Total labour allocated:	107	Ineffective labour due to completing the job:	19,862 ?	Progress comment:	(Ahead of schedule)
(less) labour lost by delays:	0 (ineffective)	Training new recruits (Own):	85,000	Cumulative profit:	686,861 (7.5 % of costs)
Effective level after delays:	107.0	Labour payoffs (Own):	0	Completion ratio:	0.967
(less) overmanning above the ELL:	0 (ineffective)	Subcontractor cost:	0		
Effective labour on site:	107				

JOB COSTS: ADDITIONAL LABOUR COSTS

There are a number of **additional labour costs** that can impact upon the job profit :-

- Overmanning of a job beyond the effective labour limits incurs ineffective labour costs
- Not completing a job as efficiently as possible in its final period incurs ineffective labour costs
- Taking on own recruits into the company's own workforce incurs a training cost in their first period
- Paying off the company's own labour incurs a cost
- Subcontractors incur an additional cost each period they are used