

ENGINEUITY TUTORIAL



Forward Workload And Margin



Forward Workload And Margin

The **forward workload** (or potential turnover) of the company is the remaining value (monies) to be recovered from all the jobs in progress.

The **forward margin** is the anticipated remaining profit on all jobs in progress.

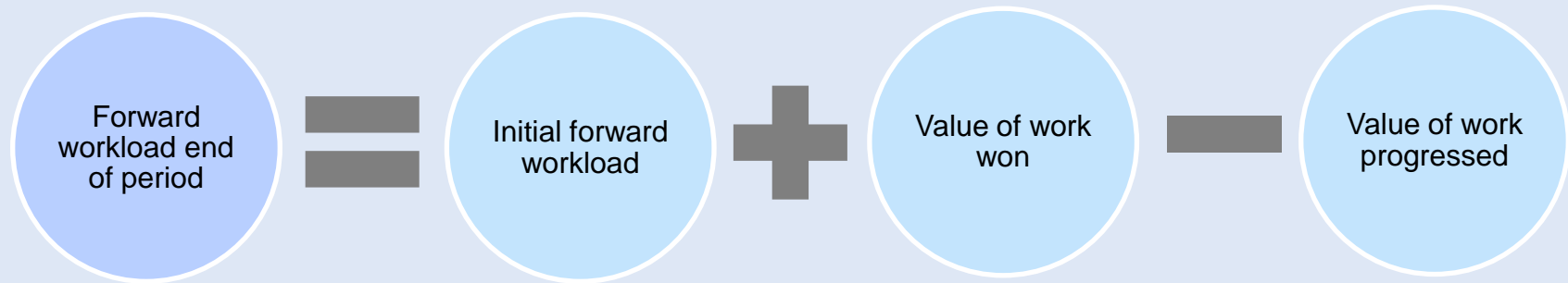
Both are calculated at the end of a period, after all the company's decisions have been processed for the period.



Forward Workload And Margin

The forward workload at the end of a period is based upon :-

- The initial forward workload at the start of the period
- The value of work won in the period during the bidding process
- The value of work progressed from jobs in progress





Forward Workload And Margin

Financial Performance

Navigate to "Main menu/Measuring performance/Assessing performance/Financial analysis"

Management consultants report Graphical analysis

OPERATIONAL

SHAREHOLDERS

INVESTMENTS

Summary

Assets and liabilities

			Job performance				Company performance				Shareholders		Future outlook		
Per	Status	Year/qtr	Total value	Total cost	Gross profit	GP % cost	Overhead costs	OVH % of cost	Net operating profit	NOP % cost	Share price	Dividend % cost	Company value	Forward workload	Forward margin
1	History	2024 (Q1)	0	0	0		34,080		-29,080		0.93		4,845,920	0	0
2	History	2024 (Q2)	0	0	0		70,000		-65,645		1.06		4,662,431	19,783,380	826,173
3	History	2024 (Q3)	6,904,933	6,780,843	124,090	1.8 %	127,720	1.9 %	-247	0.0 %	0.94	1.6 %	4,534,196	15,051,310	627,212
4	History	2024 (Q4)	11,039,530	10,451,260	588,273	5.6 %	129,000	1.2 %	350,539	3.4 %	1.09	0.9 %	4,781,791	20,822,000	886,934
5	Early Years	2025 (Q1)	11,037,440	10,801,880	235,563	2.2 %	204,270	1.9 %	30,162	0.3 %	1.12	1.5 %	4,630,569	30,512,920	1,265,528
6	Early Years	2025 (Q2)	13,261,360	12,764,620	496,739	3.9 %	201,170	1.6 %	221,333	1.7 %	1.20	0.9 %	4,717,664	28,166,920	1,130,604
7	Early Years	2025 (Q3)	11,878,210	11,106,770	771,437	6.9 %	209,310	1.9 %	424,535	3.8 %	1.39	1.1 %	4,997,540	30,131,270	1,219,148
8	Early Years	2025 (Q4)	17,959,820	17,206,740	753,074	4.4 %	237,720	1.4 %	393,603	2.3 %	1.42	1.2 %	5,159,831	25,775,640	1,024,003

PERIOD 8

CLICK ON A LINE IN THE THE SUMMARY ABOVE TO SHOW THE PERIOD DETAILS

JOB PERFORMANCE

Measured value:	18,118,240	?
Early completion bonus:	0	
(less) Retention held:	181,182	?
Retention repaid:	22,761	?
Total value:	17,959,820	
(less) Costs:	17,206,740	?
Gross profit:	753,074	(4.4 % of job costs)

COMPANY PERFORMANCE

(less) Overheads:	237,720	?	(1.4 % of job costs)
Gross operating profit:	515,354		
(less) Corporation tax:	118,798	?	
(plus) Credit interest:	0		
(less) Overdraft interest:	2,953	?	
Net operating profit:	393,603		(2.3 % of job costs)

FUTURE OUTLOOK

Forward workload:	25,775,640	?
Forward margin:	1,024,003	

Consider the following example where the forward workload at the end of period 8 is 25,775,640.

This is calculated from :-

- The initial forward workload at the start of period 8, which is the forward workload at the end of period 7 i.e., 30,131,270
- The value of work won in period 8
- The value of work progressed in period 8



Forward Workload And Margin

Procurement performance

Navigate to "Main menu/Measuring performance/Assessing performance/Procurement analysis"

Management consultant report

PREVIOUS BIDS

RIVAL BIDS

Procurement Restrictions

NUMBER OF JOBS IN PROGRESS

AMOUNT OF WORK THAT CAN BE WON

At the start of the period, the number of jobs in progress is: 3 (job progression screen)
The number of jobs in progress after bidding cannot exceed: 10 jobs
Hence, the maximum number of jobs that can be won is: 7 jobs during bidding

The initial forward workload is: 30,131,270 (job progression screen)
The current value of the capital base is: 4,575,688 (financial decision screen)
The current capital base can support forward workload of: 45,756,880 (10 x capital base)
Hence, the value of work that can be won cannot exceed: 15,625,610 during bidding

8

Full Tender Report

Job details

Bid details

Period	Job	Country	Type	BIM	Sector	Client	Bid submitted	Won	Comment	Cumulative forward workload
8	162	United Kingdom	BO	No	Energy	Electragen	6,163,620	Yes	Won on price	36,294,890
8	164	Iraq	BO	No	Transport	Iraq TranGen 2009	7,600,971	Yes	Won on price	43,895,860
8	170	United States	BO	Yes	Building & Commercial	Los Angeles Olympic Group	9,496,881	No	Capital base limits workload	43,895,860

Display details for job 162
Tender report for job 162

During period 8 the company won 2 new jobs :-

- Job 162 with a bid value of 6,163,620
- Job 164 with a bid value of 7,600,971

The value of work won (13,764,591) was added to the initial forward workload of 30,131,270 to give a cumulative forward workload of 43,895,861 after the bidding.



Forward Workload And Margin

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(plus) Credit interest:	0		
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Net operating profit:	393,603		(2.3 % of job costs)

FUTURE OUTLOOK

Forward workload:	25,775,640	?
Forward margin:	1,024,003	

During period 8 the company's measured value from jobs progressed was 18,118,240. The actual value is very close to the measured value, but not necessarily the same if the measurement department is understaffed in the period.

The cumulative forward workload of 43,895,861 after the bidding is adjusted by taking off the actual value of work progressed in period 8 (18,120,220) to give the forward workload at the end of period 8 of 25,774,660.

The ? can be used to drill-down to job-level detail for both the forward workload and margin values.



Forward Workload And Margin

Forward Workload and Margin Analysis for Period 8

SUMMARY

Initial forward workload prior to bidding:	30,131,270
Value of work won during bidding:	13,764,590
	43,895,860
(less) value of work progressed in the period:	18,120,220
	25,775,640

Job	Country	Desc	Sector	Type	Size	Client	Bid	% left	Forward workload	Remaining cost	Forward margin
78	QAT	Entertainment complex development phase B	Building & Commercial	DB	Large	Doha Development Group	20,643,380	4.74 %	978,496	938,444	40,052
108	US	Construction of temporary bus parks	Transport	DB	Medium	Los Angeles Olympic Group	11,021,140	21.14 %	2,329,870	2,239,865	90,005
135	UK	Extension to bus terminal	Transport	DB	Medium	North-West County Council	13,677,010	63.62 %	8,702,683	8,344,954	357,729
162	UK	Replace overhead transmission lines	Energy	BO	Small	Electrugen	6,163,620	100.00 %	6,163,620	5,915,680	247,940
164	IRQ	New aircraft hanger at Mosul Airport	Transport	BO	Medium	Iraq TranGen 2009	7,600,500	100.00 %	7,600,500	7,312,694	287,806
									25,775,640		1,024,003

The forward workload and margin values were formed from 5 jobs in progress.

Taking job 108 as an example :-

- 21.14% of the job was left to complete at the end of period 8, giving a remaining forward workload of 2,329,870 (21.14% of the bid value of 11,021,140)
- The forward margin figure comes from the forward workload less the remaining cost.

KEY POINTS

The remaining cost is based upon the anticipated **true cost** of the job, taking into account build cost, design cost, site cost, 'sensible' risk and project manager costs.



Forward Workload And Margin

Forward workload and margin are important because :-

- They are two of the **key performance indicators** upon which a company's progress is measured, indicating the potential future prosperity of the business.
- The forward workload provides the **starting point during the bidding process** for determining whether or not the client will allow the company to bid for a job based upon capital base limitations.

We will take a closer look at both these factors.



Forward Workload And Margin

Measuring Performance

Assessing performance Help

KEY PERFORMANCE INDICATORS

PERFORMANCE SUMMARY

CLICK ON THE DATA IN A COLUMN TO SEE HOW THE SELECTED KEY PERFORMANCE INDICATOR WAS CALCULATED

End of period	Status	Year/qtr	Turnover	Gross profit to Turnover	Operating Profit to Turnover	Company Value	Capital Employed	Contract Completion	Forward Workload	Forward Margin	Share Price	Client Satisfaction	Total
4	History	2024 (Q4)	40	170	120	170	130	80	70	100	70	50	1,000
5	Early Years	2025 (Q1)	51	141	84	165	157	105	103	143	72	70	1,091
6	Early Years	2025 (Q2)	62	147	102	168	175	110	95	127	77	85	1,148
7	Early Years	2025 (Q3)	68	177	147	178	188	122	101	137	89	101	1,308
8	Early Years	2025 (Q4)	80	178	156	183	199	122	87	115	91	114	1,325

Forward workload and margin form two of the **key performance indicators of the company**, and indicate the potential future prosperity of the business.



Forward Workload And Margin

MAKING Procurement decisions for period 9 in the Early Years

Change period Key information Help

PROCUREMENT RESTRICTIONS
Company Based Limitations

NUMBER OF JOBS IN PROGRESS

At the start of the period, the number of jobs in progress is: 5 (job progression screen)

The number of jobs in progress after bidding cannot exceed: 10 jobs

Hence, the maximum number of jobs that can be won is: 5 jobs during bidding

AMOUNT OF WORK THAT CAN BE WON

The initial forward workload is: 25,775,640 (job progression screen)

The current value of the capital base is: 4,517,090 (financial decision screen)

The current capital base can support forward workload of: 45,000,900 (10 x capital base)

Hence, the value of work that can be won cannot exceed: 1,526,000 during bidding

Job	Country	Type	BIM	Size	App Value	Duration	Description	Sector	Client	Group	Job	Bid	Bid value
193	United Kingdom	BO	No	Medium	7,000,000	3	Track connection works for HS2	Transport	HS Rail Cor	Group	193	No	0
195	United States	BO	Yes	Medium	10,000,000	4	Union Station modifications	Transport	Chicago C	ents	195	No	0
196	United Kingdom	DB	No	Large	17,000,000	5	New helicopter terminal building	Building & Commercial	Scottish		196	No	0
197	Iraq	BO	Yes	Medium	9,000,000	3	Upgrade Al-Shemal power plant	Energy	Iraq En		197	No	0
198	United States	DB	Yes	Large	25,000,000	5	New customer service centre	Building & Commercial	Dubai		198	No	0
201	United States	BO	No	Large	18,000,000	5	Conversion to high-speed line phase 1	Transport	Amr		201	No	0
203	United Kingdom	BO	No	Medium	7,000,000	3	A46 realignment	Transport	Ne		203	No	0
206	United Kingdom	BO	No	Medium	10,000,000	3	Replace onshore wind turbines	Energy	B		206	No	0
207	South Africa	BO	Yes	Small	6,000,000	2	Substation upgrade	Energy			207	No	0
208	Syria	BO	No	Small	4,000,000	2	Compressor/pump stations construction	Energy			208	No	0
212	India	DB	Yes	Medium	8,000,000	3	New fire station at Chhatrapati Shivaji Air	Building & Commercial		Group	212	No	0
215	United Kingdom	BO	No	Small	2,000,000	2	Old Oak Common Lane changes for HS2	Transport		p	215	No	0
216	United Kingdom	BO	No	Small	4,000,000	2	Phased demolition of barracks	Building & Commercial			216	No	0
217	United Kingdom	BO	Yes	Small	3,000,000	2	Refurbish retail outlets	Building & Commercial			217	No	0

When determining the **amount of work that the company can undertake** based upon the size of the capital base, the forward workload at the end of the previous period is the starting point for any calculations.

The value of any bids won during period 8 are added to the initial forward workload, and the cumulative figure is used to determine how much work the company can undertake.