# **ENGINUITY TUTORIAL**



# **Using The Key Performance Indicators**

**Copyright Virtual Management Simulations** 



#### 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	2023 (Q4)	40	170	120	170	130	80	70	100	70	50	1,000
5	Early Years	2024 (Q1)	52	179	142	177	140	108	66	94	74	80	1,112
6	Early Years	2024 (Q2)	56	203	163	181	154	113	106	148	86	98	1,308
7	Early Years	2024 (Q3)	63	203	173	188	168	125	114	155	93	118	1,400
8	Early Years	2024 (Q4)	76	204	188	205	179	137	102	129	103	139	1,462

10 key performance indicators (KPIs) are used to measure the success of the company.

The indicators are weighted according to their variability, totalling 1,000 at the end of the History.

As time progresses the weighting of each indicator will change, highlighting improvements or deteriorations in that area, but the **overall total** will be the measure by which the ultimate progress of the company is determined.



#### 👹 Measuring Performance

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The weighting for each indicator at the end of a period is based on a comparison with the position at the end of the History, and there are two types of comparison.

# TREND COMPARISON

Smoothes the calculations over the time the company has been operating i.e., from period 1 until the current period, and applies to :-

- Turnover
- Gross Profit to Turnover ratio
- Operating Profit to Turnover ratio
- Capital Employed
- Contract Completion
- Client Satisfaction

# **SNAPSHOT COMPARISON**

Compares the current indicator to the position at the end of the History, and applies to :-

- Company Value
- Forward Workload
- Forward Margin
- Share Price



#### Measuring Performance



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**Clicking on a particular column** will reveal how the chosen KPI has been calculated, and also enable an analysis to be undertaken of why the indicator has gone up or down each period.

For example, during period 8 the forward workload KPI weighting fell from 114 at the end of period 7 to 102 at the end of period 8.

Clicking on the forward workload data will reveal a detailed analysis of why this has happened.

### **KEY POINTS**

When clicking on a column click on the data, and not the column header.



#### 👹 How the Forward Workload KPI has been calculated

Further information

#### Foward workload is the remaining turnover (value) of jobs still in progress; a measure of the work in progress

				1	Affect of b	idding in	the period							
Pe	r Status	Yei tr	Initial forward workload prior to bidding	workload the capital base will	Number of jobs bid for		Bidding success	Value of work won during bidding	Forward workload after bidding	work progressed	Forward Workload	Benchmark	Multiple of the benchmark	KPI weighting
1	History	2023 (L	0	40,000,000	0	0	0%	0	0	0	0			
2	History	2023 (Q2	0	39,750,000	4	2	50 %	21,681,700	21,681,700	0	21,681,700			
3	History	2023 (Q3)	<sup>381,700</sup>	41,871,650	4	2	50 %	7,255,572	28,937,280	7,963,800	20,973,480			
4	History	2023 (Q4)	3,480	44,106,550	6	2	33 %	12,692,110	33,665,590	12,834,090	20,831,500	YES		70
5	Early Years	2024 (Q1)	007	46,460,730	6	1	17 %	11,633,630	32,465,140	12,925,200	19,539,940		0.9380	66
6	Early Years	2024 (Q2)	۲ ۲	48,270,350	3	2	67 %	21,569,560	41,109,500	9,697,732	31,411,770		1.5079	106
7	Early Years	2024 (Q3)	3	49,668,660	4	2	50 %	16,602,040	48,013,800	14,196,280	33,817,530		1.6234	114
8	Early Years	2024 (Q4)	33,	1,858,230	3	2	67 %	17,420,470	51,238,000	20,920,850	30,317,150		1.4554	102

#### TERMINOLOGY

The forward workload at the end of the µ. The position at the end of the history (perix The multiple of the benchmark is the forwark

#### vorkload after bidding - value of work progressed in the period • benchmark for calculating the kpi values for period 5 onwards • d of the period as a multiple of the position at the end of period 4

#### IMPROVING FORWARD WORKLOAD

The forward workload of the company can be inclosed on the company's infrastructure (capital base) to support in

business. This involves identifying a larger share of the new work in the market and expanding the Yive bidding to win more jobs.

# **DEFINITION OF THE KPI**

A brief description of the KPI is given at the top of the screen.

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#### W How the Forward Workload KPI has been calculated

Further information

#### Foward workload is the remaining turnover (value) of jobs still in progress; a measure of the work in progress

				4	Affect of b	idding in I	the period							
Per	Status	Year/qtr	Initial forward workload prior to bidding	Value of workload the capital base will support	Number of jobs bid for	Number of jobs won	Bidding success	Value of work won during bidding	Forward workload after bidding	work progressed	Forward Workload	Benchmark	Multiple of the benchmark	KPI weighting
1	History	2023 (Q1)	0	40,000,000	0	0	0%	0	0	0	0			
2	History	2023 (Q2)	0	39,750,000	4	2	50 %	21,681,700	21,681,700	0	21,681,700			
3	History	2023 (Q3)	21,681,700	41,871,650	4	2	50 %	7,255,572	28,937,280	7,963,800	20,973,480			
4	History	2023 (Q4)	20,973,480	44,106,550	6	2	33 %	12,692,110	33,665,590	12,834,090	20,831,500	YES		70
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#### TERMINOLOGY

The forward workload at the end of the period = forward workload after bidding - value of work progressed in the period. The position at the end of the history (period 4) is used as the benchmark for calculating the kpi values for period 5 onwards. The multiple of the benchmark is the forward workload at the end of the period as a multiple of the position at the end of period 4.

#### IMPROVING FORWARD WORKLOAD

The forward workload of the company can be increased by growing the business. This involves identifying a larger share of the new work company's infrastructure (capital base) to support more work, and competitive bidding to win more jobs.

# CALCULATING THE KPI WEIGHTING

# How was the KPI weighting of 114 calculated at the end of period 8 ?

- The forward workload of the company at the end of the History was 20,831,500. This is the BENCHMARK for future calculations, as indicated by the "YES" in the 'benchmark' column.
- The forward workload at the end of period 8 was 30,317,150. This was 1.46 times the benchmark level.
- The KPI weighting at the end of period 4, the benchmark period, is multiplied by 1.46 to give the KPI weighting of 102 at the end period 8 i.e., 70 x 1.46



#### WHOW THE Forward Workload KPI has been calculated

Further information

#### Foward workload is the remaining turnover (value) of jobs still in progress; a measure of the work in progress

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Per	Status	Year/qtr	Initial forward workload prior to bidding	Value of workload the capital base will support	Number of jobs bid for	Number of jobs won	Bidding success	Value of work won during bidding	Forward workload after bidding	work progressed	Forward Workload	Benchmark	Multiple of the benchmark	KPI weighting
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2	History	2023 (Q2)	0	39,750,000	4	2	50 %	21,681,700	21,681,700	0	21,681,700			
3	History	2023 (Q3)	21,681,700	41,871,650	4	2	50 %	7,255,572	28,937,280	7,963,800	20,973,480			
4	History	2023 (Q4)	20,973,480	44,106,550	6	2	33 %	12,692,110	33,665,590	12,834,090	20,831,500	YES		70
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# WHY DID THE KPI WEIGHTING FALL DURING PERIOD 8 ?

The forward workload at the end of period 8 was lower than the level at the end of period 7, and hence so was the KPI.

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#### W How the Forward Workload KPI has been calculated

Further information

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Per	Status	'qtr	Initial forward workload prior to bidding	Value of workload the capital base will support	Number of jobs bid for	Number of jobs won	Bidding success	Value of work won during bidding	Forward workload after bidding	work progressed	Forward Workload	Benchmark	Multiple of the benchmark	KPI weighting
1	History	2	0	40,000,000	0	0	0%	0	0	0	0			
2	History	2L 20.	0	39,750,000	4	2	50 %	21,681,700	21,681,700	0	21,681,700			
3	History		1.681,700	41,871,650	4	2	50 %	7,255,572	28,937,280	7,963,800	20,973,480			
4	History	202	73,480	44,106,550	6	2	33 %	12,692,110	33,665,590	12,834,090	20,831,500	YES		70
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#### TERMINOLOGY

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## **FURTHER INFORMATION**

The Further information menu option can be used to display even more detailed information.

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🎲 Fin	ancial Pe	rformance													_ 🗆 ×
Manag	ement con	sultants repor	t Graphical a	analysis											
	O	PERATIONA			SHAREHOL	DERS			INVESTME	NTS					
Sum			Т	he ? Dri	ll down s	hows	the mal	ke up c	f the forw	ard wo	rkload job	by job			
Asse	ts and liabi	ities													
				Job perform	mance		C	ompany p	erformance					Future ou	tlook
Per	Status	Year/qtr	Total value	Total cost	Gross profit	GP % cost	Overhead costs	OVH % of cost	operating profit	NOP % cost				Forward vorkload	Forward margin
1	History	2023 (Q1)	0 0	0	0		34,080		-30,580		U.,		420	0	0
2	History History	2023 (Q2) 2023 (Q3)	7,880,711	7,402,859	477,852	6.5 %	84,000 169,720		-80,522 237,934	3.2 %	1.06			1,681,700 0,973,480	937,916 903,198
4	History	2023 (Q4)	12,720,600	12,293,440	427,161	3.5 %	155,000			1.7 %	1.03	0.5		0,831,500	905,458
5		s 2024 (Q1)	13,025,620	12,384,630	640,992	5.2 %	231,070	1.9 %	314,339	2.5 %	1.10	0.8 %		\$39,940	853,289
6	Early Year		9,640,023	8,925,667	714,356	8.0 %	309,010			3.5 %	1.28		5,16		1,343,681
7	Early Year			13,523,850	738,800	5.5%	236,670			2.9%	1.38		5,365,80		1,399,489
8	Early Year	s   2024 (Q4)	20,819,720	19,725,490	1,094,224	5.5 %	247,720	1.3 %	656,926	3.3 %	1.53	0.7 %	5,865,802	50	1,170,757
뛝 Fo	rward Wo	Measured va rkload and f		,750 <u>?</u> vsis for Perio	d 8		(less) Overha	eads:	247,720 ?	(1.3 % of jol	b costs)	Fo	rward workloa	ad: 30,317,	150 <u>?</u>
					f period w				ore work	was	Ir		d workload pri of work won d	ior to bidding:	17,420,470
ρ	rogress	sed in pe	1100 8 (20	J,920,050	D) than wa	as wor	1 (17,42	.0,470)							<mark>51,238,000</mark>
											(less) v	alue of wo	rk progressed	in the period:	20,920,850 30,317,150
Job	Country I	)esc			Sector		Туре	Size	Client		Bid	% left	Forward workload	Remaining cost	Forward margin
102		2/3 bedroom re	etirement bunga	alows	Building &	Commerci	ial DB		Lowry Homes		13,482,740			3,083,146	132,488
103			nt plant modern		Water & S		BO		ANZ Water		8,086,820	3.51 %	283,848	271,244	12,604
147 151			o the MetLife S	tadium	Building &		ial BO BO		FIFA North Ame Queensland Wa		4,851,114			6,643,618	265,924
162		Vew pumping : Vew distributio			Water & S Building &				Queensiano wa Master Brewers		4,851,114			2,378,441 11,367,540	109,210 422,663
164		Jpgrade of loc			Building &				Madison Bank	OK	5,630,266				
													30,317,150	)	1,170,757