

PENGURUSAN KOS

- Cost Estimating
- Cost Budgeting
- S-Curve



key planning process for scheduling & estimating..



MICROSOFT PROJECT



Cost Estimating & Budgeting

Perancangan Kos Projek

Merupakan proses yang diperlukan untuk memastikan projek dapat disiapkan dalam lingkungan bajet yang diluluskan



Perancangan Kos Projek

Anggaran Kos

- Kos disediakan pada tahap sub task
- Berkaitan dengan kos sumber (disediakan oleh kontraktor)
- Berdasarkan kos BQ (diisi dalam column fixed cost (MSP))

Bajet Kos

- Bajet kontraktor untuk melaksanakan kerja berdasarkan anggaran kos sumber
- Bajet pelanggan berdasarkan harga kontrak (kos kontrak)
- Merupakan kos baseline/ S-Curve kewangan (kos kontrak)

Anggaran Kos (Cost Estimating)

1.0 specialist salary	1 x RM	70,000.00 x	4 /Month	= F	RM 280,000.00
2.0 Staff a) J54	1 x RM	9,000.00 x	20 /Month	= F	RM 180,000.00
b) J52	1 x RM	7,000.00 x	20 /Month	= F	RM 140,000.00
c) J48	2 x RM	5,000.00 x	20 /Month	= F	RM 200,000.00
d) J41	2 x RM	3,000.00 x	20 /Month	= F	RM 120,000.00
3.0 Workshop					
Nos of people attend	10 x RM	250.00		= F	RM 2,500.00
Fesilitator	4 x RM	200.00 x	8 /Jam	= F	RM 800.00
Venue	2 x RM	500.00		= F	RM 1,000.00
Refreshment	14 x RM	50.00		= F	RM 700.00
4.0 Meeting	10 x RM	350.00		= F	RM 3,500.00
5.0 Documentation Submission	5 x RM	2,500.00		= F	RM 12,500.00
6.0 Training					
a) Top Management	1 x RM	15,000.00		= F	RM 15,000.00
b) Project Team	4 x RM	1,000.00		= F	RM 4,000.00
c) Project Manager	1 x RM	10,000.00		= F	RM 10,000.00
 d) JKR's Profesional 	2 x RM	3,000.00		= F	RM 6,000.00
e) JKR's Supporting Staff	2 x RM	6,000.00		= F	RM 12,000.00
			TOTAL	= F	RM 988,000.00

Bajet Kos (Cost Budgeting)

Contoh:

- a) Kos keseluruhan projek = RM 270 juta
- b) Kos lain seperti kerja pengambilan tanah (LA) = RM 2.1 juta

Jumlah kos (a) & (b) merupakan bajet yang diperuntukkan (bajet kos)



MICROSOFT PROJECT



Value of Works

- Cost Of Works As Per BQ



Memasukkan Kos Aktiviti

Image: Solution of the second control of the second con			Marcar		Nava	*	eline ails	🔲 Timel	- 3	Timescale: [18] Days	[No Highlight] * [No Filter] *	2↓ Sort + ⊟ Outline	ige * eet *	esource Usa	Re		
WBS Task Task Cost 3 ration Start Finish Pr In '13 21 Jul '13 Cost 1 1 1 2 1 1 2 1 1 Pr In '13 21 Jul '13 Cost 3 1 1 Pr In '13 21 Jul '13 Cost 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 <			Macros	ow.	Window		Split View		om	Zo	Termination [No Group]	Built-In	•	ther Views e Views	ner + 📆 Ot Resourc	Plan	.
1 1 3 Me ✓ Entry 2 days Sat 01-06-13 Wed 30-10-13 6 2 1.1 3 1.2 3 ✓ Entry days Sat 01-06-13 Sat 01-06-13 6 3 1.2 3 1.2 3 ✓ Facking days Sun 02-06-13 Wed 30-10-13 6 4 1.2.1 3 ✓ ✓ Yariance	5:	C	Jul '13 S W	21. T	un '13 F	Pr	Finish 🗸	↓ F	Start	ation 💂	3	Cost	Task M	Task 🖕 Mode	WBS 🖕	0	
2 1.1 3 1.2 3 5 1.2 3 1.2 3 1.2 3 1.2							Wed 30-10-13	6-13 V	Sat 01-	2 days	nk	✓ <u>Entry</u> <u>Hyperlin</u>	- Me Ba	2	1		1
3 1.2 3 1.2 3 1.2 3 1.2 1.2.1 1.2.1 1.2.1 1.2.1 1.2.1 1.2.1 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.2 1.2.3 1.2.3 1.2.3 1.2.3 1.2.3 1.2.3 1.2.3 1.2.3 1.2.3 1.2.4 1.					6		Sat 01-06-13	6-13 5	Sat 01-0	ays	le	Schedu	1	3	1.1		2
4 1.2.1 Image Variance Variance <td>-1</td> <td>—</td> <td></td> <td></td> <td>_</td> <td></td> <td>Wed 30-10-13</td> <td>06-13 V</td> <td>Sun 02</td> <td>2 days</td> <td>1</td> <td>– Trackin</td> <td>E</td> <td>3</td> <td>1.2</td> <td></td> <td>3</td>	-1	—			_		Wed 30-10-13	06-13 V	Sun 02	2 days	1	– Trackin	E	3	1.2		3
5 1.2.2 S Work Mon 10-06-13 Wed 30-10-13 4 6 1.2.2.1 S Work days Mon 10-06-13 Sun 16-06-13 4 7 1.2.2.2 S Usage Idays Mon 17-06-13 Tue 29-10-13 Wed 30-10-13 28 8 1.2.3 S Usage Idays Mon 17-06-13 Tue 29-10-13 6 9 1.2.4 S Eset to Default Idays Tue 25-06-13 Mon 28-10-13 I <t< td=""><td></td><td></td><td></td><td></td><td></td><td>2</td><td>Sun 09-06-13</td><td>06-13 5</td><td>Sun 02-</td><td>ays</td><td></td><td>Varian</td><td></td><td>3</td><td>1.2.1</td><td></td><td>4</td></t<>						2	Sun 09-06-13	06-13 5	Sun 02-	ays		Varian		3	1.2.1		4
5 1.2.2.1 Image Mork days Mon 10-06-13 Sun 16-06-13 4 7 1.2.2.2 Image Jusage J	=	—					Wed 30-10-13	06-13 V	Mon 10	days	e	varianc		-	1.2.2		5
Summary days Tue 29-10-13 Wed 30-10-13 28 1.2.3 3 1.2.3 3 Usage I days Mon 17-06-13 Tue 29-10-13 6 1 1.2.4 3 Beset to Default I days Tue 25-06-13 Mon 28-10-13 6 1 1.2.4.1 3 Beset to Default I days Tue 25-06-13 Wed 26-06-13 1 1 1 1.2.4.2 3 More Tables More Tables days Thu 25-07-13 Sun 28-07-13 1 2 1.2.4.3 3 Progress Report 3 2 days Sun 25-08-13 Mon 26-08-13 1						4	Sun 16-06-13	06-13 5	Mon 10-	ays		Work		-	1.2.2.1		5
3 1.2.3 - Usage days Mon 17-06-13 Tue 29-10-13 6 4 1.2.4 - - Reset to Default I days Tue 25-06-13 Mon 28-10-13 I					E	28	Wed 30-10-13	0-13 V	Tue 29-	ays	ry	S <u>u</u> mma		3	1.2.2.2		7
9 1.2.4 2 Beset to Default I days Tue 25-06-13 Mon 28-10-13 I <					-	6	Tue 29-10-13	06-13 T	Mon 17-	days		Usa <u>q</u> e		₽	1.2.3		8
10 III III III III III III IIII IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			1	۵	I		Mon 28-10-13	06-13 N	Tue 25-	days	o Default	Reset to		3	1.2.4	0	9
11 III III III III More Tables days Thu 25-07-13 Sun 28-07-13 III 12 III III III Progress Report 3 2 days Sun 25-08-13 Mon 26-08-13 III					1		Wed 26-06-13	06-13 V	Tue 25-	ays	elds as a New Table	Save Fi		3	1.2.4.1		10
12 III 1.2.4.3 Progress Report 3 2 days Sun 25-08-13 Mon 26-08-13				٥			Sun 28-07-13	7-13 8	Thu 25-0	ays	ables	More Ta		-	1.2.4.2		11
			1				Mon 26-08-13	08-13 N	Sun 25-	ays	ess Report 3 2	Progre		-	1.2.4.3		12
13 III 1 2 1 1 2 1 1 III Drogroe Dor File Task Resource Project View Format					-		ormat	/ Form	Project Vie	Resource	File Task	Drogr		9	1211		13
	Vi	olit	Sp		Zoom		Data		ource Views	Res	Task Views						



ntt Task	Task Usage + Task Usage + Task Usage + Task Task Task Planner + Source Resource		urce Usage 👻 urce Sheet 👻 Views 👻 iews	2↓ Sort ▼	lighlight] 🔻 ilter] 👻 iroup] 👻	Timescale: [18] Days Zoom		etails Split View	Vir	ew Idow Windo
	Task Name	•	Fixed Cost 💂	Fixed Cost Accrual 🚽	Total Cost 💂	Baseline 💂	Variance 💂	Actual 🚽	Remaining 💂	in '18 F
1	Membina 2 Blo	k Banguna	\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	F
2	Projek Mula		\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
3	Preliminari		\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	H
4	Performar	nce Bond	\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
5	Est & reme	ove S.O.	\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	H
6	Establis	h S.O	\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
7	Remova	al S.O	\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
8	Maintain S	. o .	\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
9	Progress R	eport	\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
10	Progres	s Report 1	\$0.00	Prorated	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	

Memasukkan Kos Aktiviti

F	ile	Task F	Resource Proj	ect	View	F	ormat							
		- *	Re Re	sou	urce Usage 💌	<mark>A</mark> ↓ s	ort 🔹 💋	[No H	lighlight] 🔹	Timescale:	Q	🔲 Tii	meline	
		🛄 🗸	💷 🚳 Re	sou	urce Sheet 🔻	₽ <mark>_</mark> C	outline - 🍸	[No F	ilter] 🔹	Months	-	D	etails	
Cha	ntt Us	ask age v 🔜 v	Planner 👻 📆 Ot	he	r Views 🔻	📑 T	ables 🔹 🕂	[No G	iroup] *					
	Task	Views	Resourc	e V	iews		Da	ta		Zoom			Split Vi	iew
		Task Name		Ŧ	Fixed Cost 🖕	Fixe	d Cost Accru	al 🗸	Total Cost 🖕	Baseline 💂	Varian	ce 👻	Actual	•
	1	- Membi	na 2 Blok		RM0.00		Pror	ated	2,000,000.00	RM0.00	2,000,0	00.00	RM0	.00
	2	Daligui	dii Mula		DN40.00		Dror	atad	DMO O	D DMO 00	D	MO 00	DMO	
	2	Proje			RIVIO.OC	_	PIO	ateu	RIVIU.U	D RIVIO.00	R and a	10.00	RIVIO	.00
	э	- Preil	minari		RIMU.UU	·	Pror	ated	KIM50,000.00	J RIVI0.00	KIVISU,	00.00	RIVIU	.00
	4	Pe	erformance Bor	d	RM10,000.00		Pror	ated	RM10,000.00	D RM0.00	RM10,0	00.00	RM0	.00
	5	- Es	t & remove S.C	Ŀ	RM0.00		Pror	ated	RM20,000.0	D RM0.00	RM20,0	000.00	RM0	.00
	6		Establish S.O		RM15,000.00	Pro	rated	-	RM15,000.0	0 RM0.00	RM15,0	00.00	RM0	.00
	7		Removal S.O		RM5,000.00		Pror	ated	RM5,000.00	0 RM0.00	RM5,0	00.00	RM0	.00
	8	M	aintain S.O.		RM15,000.00		Pror	ated	RM15,000.00	0 RM0.00	RM15,0	00.00	RM0	.00
	9	🗆 Pr	ogress Report		RM0.00		Pror	ated	RM5,000.0	0 RM0.00	RM5,0	00.00	RM0	.00
:hart	10		Progress Repo 1	t	RM1,000.00		Pror	ated	RM1,000.00	0 RM0.00	RM1,0	00.00	RM0	.00
intt C	11		Progress Repo	t	RM1,000.00)	Pror	ated	RM1,000.00	0 RM0.00	RM1,0	00.00	RM0	.00

	Task Name 👻	Fixed Cost 🖕	Fixed Cost Accrual	Total Cost 💂	laseline 🖕	Variance 🖕	Actual 🖕
1	Membina 2 Blok Bangunan	RM0.00	Prorated	2,000,000.00	RM0.00	2,000,000.00	RM0.00
2	Projek Mula	RM0.00	Prorated	RM0.00	RM0.00	RM0.00	RM0.00
3	Preliminari	RM0.00	Prorated	RM50,000.00	RM0.00	RM50,000.00	RM0.00
4	Performance Bond	RM10,000.00	Prorated	RM10,000.00	RM0.00	RM10,000.00	RM0.00
5	Est & remove S.O.	RM0.00	Prorated	I RM20,000.00	RM0.00	RM20,000.00	RM0.00
6	Establish S.O	RM15,000.00	Prorated	RM15,000.00	RM0.00	RM15,000.00	RM0.00
7	Removal S.O	RM5,000.00	Prorated	RM5,000.00	RM0.00	RM5,000.00	RM0.00
8	Maintain S.O.	RM15,000.00	Prorated	RM15,000.00	RM0.00	RM15,000.00	RM0.00
9	Progress Report	RM0.00	Prorated	RM5,000.00	RM0.00	RM5,000.00	RM0.00
10	Progress Report 1	RM1,000.00	Prorated	RM1,000.00	RM0.00	RM1,000.00	RM0.00



Fixed Cost & Total Cost

	Task Name 👻	Fixed Cost 🖕 Fi	ed Cost Accrual	Total Cost 🖕	Baseline 🖕	r '13 9 Jun '13 21 Jul '13 1 Sep '13 13 Oct '13 24 No
1	[⊡] Membina 2 Blok Bangunan	RM0.00	Prorate	RM2,000,000.00	M2,000,000.00	
2	Projek Mula	RM0.00	Prorate	RM0.00	RM0.00	∳ <mark>_]1/</mark> 6
3	Prelinimaries	RM0.00	Prorate	RM50,000.00	RM50,000.00	ý v
4	Performance Bond	RM10,000.00	Prorate	RM10,000.00	RM10,000.00	Š
5	Est. & Remove S.O	RM0.00	Prorate	RM20,000.00	RM20,000.00	Ý.
6	Establish S.O	RM15,000.00	Prorate	RM15,000.00	RM15,000.00	•
7	Removal S.O	RM5,000.00	Prorate	RM5,000.00	RM5,000.00	l l l
8	Maintain S.O	RM15,000.00	Prorate	RM15,000.00	RM15,000.00	
9	Progress Report	RM0.00	Prorate	RM5,000.00	RM5,000.00	
10	Progress Report 1	RM1,000.00	Prorate	RM1,000.00	RM1,000.00	
11	Progress Report 2	RM1,000.00	Prorate	RM1,000.00	RM1,000.00	0
12	Progress Report 3	RM1,000.00	Prorate	RM1,000.00	RM1,000.00	I
13	Progress Report 4	RM1,000.00	Prorate	RM1,000.00	RM1,000.00	1
14	Progress Report 5	RM1,000.00	Prorate	RM1,000.00	RM1,000.00	
15	Land Acquisition	RM0.00	Prorate	RM0.00	RM0.00	→ ∲—1/6
16	Services Relocation	RM0.00	Prorate	RM0.00	RM0.00	↓ •()−1/6
17	Blok A	RM0.00	Prorate	RM1,050,000.00	M1,050,000.00	· · · · · · · · · · · · · · · · · · ·
18	Kerja Tanah	RM200,000.00	Prorate	RM200,000.00	RM200,000.00	
19	Kerja Struktur	RM400,000.00	Prorate	RM400,000.00	RM400,000.00	
20	Kerja Arkitek	RM250,000.00	Prorate	RM250,000.00	RM250,000.00	rchitectural 1
21	Kerja M&E	RM200,000.00	Prorate	RM200,000.00	RM200,000.00	
22	Blok B	RM0.00	Prorate	RM900,000.00	RM900,000.00	· · · · · · · · · · · · · · · · · · ·
23	Kerja Tanah	RM180,000.00	Prorate	RM180,000.00	RM180,000.00	
24	Kerja Struktur	RM290,000.00	Prorate	RM290,000.00	RM290,000.00	
25	Kerja Arkitek	RM200,000.00	Prorate	RM200,000.00	RM200,000.00	v v
26	Kerja M&E	RM230,000.00	Prorate	RM230,000.00	RM230,000.00	
27	Completion of Cable Laying by TNB	RM0.00	Prorate	RM0.00	RM0.00	41/10
28	T&C	RM0.00	Prorate	RM0.00	RM0.00	
29	Projek Siap	RM0.00	Prorate	RM0.00	RM0.00	30/10

Fixed Cost Accrual (Kaedah Pembayaran)



MICROSOFT PROJECT

Penyediaan S-Curve



Kegunaan S-Curve

Dari Perspektif Pelanggan

Dari Perspektif Kontraktor

- Progress/ Kemajuan Kerja
- Bayaran
- Untuk menyediakan peruntukan

- Anggaran Bajet / Sumber 4M
- Aliran Tunai
- Pelaksanaan
- Progress/ Kemajuan Kerja
- Tuntutan/ Bayaran
- Sebagai asas/bukti untuk menyokong tuntutan bayaran dan permohonan lanjutan masa.

Memahami S-Curve



- Financial S-Curve is based on cost.
 - Works Cost (RM) vs Project Duration (Months).
- Physical S-curve is based on duration.
 - Works Duration (days) vs Project Duration (Months)



A 100mil project shows the actual

physical progress of 50% and Client just

paid the Contractor 32mil.



Why? Why different? Not fair... Mostly.... Current practice



A project shows the <u>variances</u> for <u>financial</u> progress, physical progress and project finish date were -10%, -15% and +20days respectively.

Please explain.



MICROSOFT PROJECT



Penyediaan S-Curve Kewangan

Untuk menyediakan S-CURVE Kewangan menggunakan MS Project 2010

✓ <u>Method 1</u> – using Visual Reports.



✓ <u>Method 2</u> – using Task Usage View.

MICROSOFT PROJECT



Penyediaan S-Curve Kewangan (Method 1) - Menggunakan Visual Report

File	Task	Resourc	e Pro	oject View	Format							Ľ,			
Subproject Insert	Proj Inform	ect Cust ation Fiel	om Links ds Pr Pr	Between WBS rojects *	Change Working Time	Calculate S Project Basi	Set eline edule	Move Project	Status 25/	Date: 9/13 Updat Projec Stat	e t Pro	Sync to otected Actuals	Visual Reports	Reports Co Reports	
	0	Task 🖌	WBS 🗸	Task Name	*	Duration	¥	Start	*	Finish	•	Predecessor 🗸	Visual I	Reports	
1	🗟 1 🖹 Membina 2 Blok Banguna	🗧 1 🗧 Membina 2 Blok Bangun		🗧 1 🗄 Memł	📑 🗧 1 🗧 Membina 2 Blok Bangunan 10		1 E Membina 2 Blok Bangunan 102 days Sat 1/6		Sat 1/6/1	/6/13 Wed		ved 30/10/13		View	the project'
2		-	11	Drojek M	ula	0 days		Sat 1/6/1	2	Sat 1/6/13	· ·		Pivot	Diagrams in	

w report t	emplates creat	ed in: 📝 Microsoft	Excel 📝 Micr	osoft <u>V</u> isio	
Task Sum	mary Re	source Summary	Assignment	Summary	
All	Task Usage	Resource Usag	e Assignm	ent Usage	
Bacelin	e Cost Report	a 11	Recource C	oct Summ	New Template
Baselin Baselin	e Report (Met e Report (US)	ric) I	Resource Resource Resource Resource Resource Resource St	emaining \ tatus Repo	Edit Template
Baselin	e Work Repor	t (🔄 Resource St	tatus Repo	Manage Template
Budget	Cost Report		Resource W	/ork Availa	Sample
Budget	Work Report	3	Resource W	/ork Summ	
Cash F Critical Critical Earned Resour Resour	low Report (U Tasks Status Tasks Status Value Over T ce Availability ce Availability "	S) Report (Metric) Report (US) me Report Report (Metric) Report (US)	4		
ct level of	usage data to port templates	include in the repor from:	t: Weeks	•	Modify
					5



Ms Project will export the financial data into Ms **Excel format**

0		AA664 \$2	1333.33302.1	1 222 22208 1
7		Week 24	46632.52896	54632.52349
8		Week 25	44449.98901	99082.51904
9		Week 26	42614.82905	141697.3498
10	800340 - 0	Week 27	41614.82907	183312.1806
11	Q2 Total		183312.1759	183312.1806
12	EQ3	Week 28	33291.86926	216604 0452
13		Week 29	53736.0388	270340.0878
14		Week 30	103220.8877	373560.9778
15		Week 31	140887.5569	514448.5337
16		Week 32	120443.3873	634891,9115
17	1	Week 33	101395.7677	736287,6707
18		Week 34	132558.647	868846.3231
19		Week 35	162178.1164	1031024.435
20		Week 36	197646.5056	1228670.941
21	1	Week 37	154471,1865	1383142,123
22	1	Week 38	100376.9378	1483519.07
23		Week 39	126471.1872	1609990.253
24		Week 40	125471 1872	1735461.436
25	Q3 Total		1552149.275	1735461.436
26	III Q4	Week 41	125471.1872	1860932.619
27	- 방문()	Week 42	60818.42864	1921751.043
28		Week 43	54149.75879	1975900.799
29		Week 44	24099 15946	1999999.955
30	Q4 Total		264538.5341	1999999.955
31	2013 Total		1999999.985	1999999.955
32	Grand Total		1999999.985	1999999.955
33	Control of	1		
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44	السنز جا			
45				
	+ H Chartt Tast	Usage 🖉	2	
-			Tana Canada C	



To change alignment of X-Axis title description (weeks)



Financial S-Curve in Week



File Task Resource Project View Formation Subproject Information Internation Internation Internation Internation Internation Insert Task WBS Task Name	Calculate Set Move Project Baseline * Projet Status Date: Update Syncto Project Protected Actuals Status Duration Visual Reports - Create Report	×
1 Proiak Mula	an 102 day: Select Template Show report templates created in: Microsoft Excel Microsoft Visio Task Summary Resource Summary Assignment Summary All Task Usage Resource Usage Assignment Usage Baseline Cost Report Resource Cost Summ Resource Cost Summ Baseline Report (Wetric) Resource Status Repo Resource Status Repo Baseline Work Report Resource Work Numr Manage Template Budget Cost Report Resource Work Summ Task Status Report (M Budget Work Report Resource Work Summ Task Status Report (M Cash Flow Report (US) Task Status Report (M Task Status Report (M Cash Flow Report (US) Task Status Report (M Task Status Report (M Critical Tasks Status Report (Metric) Task Status Report (Metric) Task Status Report (Metric) Resource Availability Report (Metric) Resource Availability Report (Metric) Manage Template Resource Availability Report (Metric) Resource Availability Report (Metric) Manage Template Resource Availability Report (Metric) Resource Availability Report (Metric) Manage Template Resource Availability Report (Metric) Resource	
	Include report templates from: Help Save Data	Modify





A B C D E	A B C D
1 Tasks All 🔻	1 Tasks All
2	2
3 Data	2 Data
4 Year V Cost Cumulative Cost	4 Year V Month Cost Cumulative Cost
5 🗑 2013 2000000 2000000	5 = 2013 June 150020.32 150020.3193
6 Grand Total 2000000 2000000	6 July 334317.37 484337.7
7	August 546686.76 1031024.458
	8 September 629154.3 1660178.763
9 9 Untick	9 October 339821.25 2000000
	10 2013 Total 2000000 2000000
11	11 Grand Total 2000000 2000000
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43 10
44	
45	45
H 4 P M Chart1 Task Usage	H + H Chart1 Task Usage
Ready	Ready

Financial S-Curve in Month



MICROSOFT PROJECT



Penyediaan S-Curve Kewangan (Method 2) - Menggunakan Task Usage

Fil		Resour Cali	ce P bri	roject View	Format	Mark on	Track * Links	*		Inspect * 😜		
Gan Char Buil	t Paste 🚽 t-In	B	<i>Ι</i> <u>U</u> For	<mark>ð • ∆</mark> • nt ri	👎 률 Si)	e	Manual Schedul	y Auto e Schedule Tasks	Mode * Ta	sk Insert	Informat Prope
	<u>C</u> alendar		WBS.	, Task Name	Ŧ	Duration 💂	Start	•	Finish 🚽	Predecessor ,	012 Oct	Qtr 1, 20 Jan
~	<u>Gantt</u> Chart		1	- Membina	a 2 Blok Bangunan	102 days	Sat 1/6	/13	Wed 30/10/13			
	Network <u>D</u> iagram	1	1.1	Projek	Mula	0 days	Sat 1/6	/13	Sat 1/6/13			
	Resource <u>S</u> heet		1.2	- Prelim	inari	102 days	Sun 2/	5 /1 3	Wed 30/10/13			
	Resource <u>U</u> sage		1.2.1	Per	formance Bond	5 days	Sun 2/	5/13	Sun 9/6/13	2		
	Resource Form		1.2.2	Est 🤅	& remove S.O.	97 days	Mon 1	0/6/13	Wed 30/10/13			
	Resource Graph		2.	1 E	stablish S.O	5 days	Mon 10	0/6/13	Sun 16/6/13	4		
	Tesh Harna	4	2 2.	2 R	emoval S.O	2 days	Tue 29	/10/13	Wed 30/10/13	28		
_	Task Usage		1.2.3	Mai	ntain S.O.	91 days	Mon 1	7/6/13	Tue 29/10/13	6		

Gantt hart *	Paste	A Cal	ibri • 11 • ₩ ₩ ₩ ₩ ₩ <i>I</i> <u>U</u> <u>A</u> • A • Front 5	So 752 000	con Track * ect Links Wate	Manua Schedu	lly Auto lle Schedule	S Inspect	Task		Information	Sa to T	oll ask
	Cipos	Tack	Tark Nama	Work Duration	Details		8 Sen '13			in the second se	ropines		-series
	0	Mode	, Trask Matric			S	5	M	T	W	T	F	S
22		3	Blok B	3,592 hrs 97 days	Work		72h	72h	72h	40	h 40h		
23	1	8	Kerja Tanah	1,272 hrs 53 days	Work							4	-
			Earthwork Tean	1,272 hrs	Work					2	Detax 20	4	
24	ŧ	0	Kerja Struktur	960 hrs 30 days	Work		32h	32h	32h		Work		
			Structure Team	960 hrs	Work		32h	32h	32h		Actual Mark		
25	ŧ	8	Kerja Arkitek	688 hrs 43 days	Work		16h	16h	16h		Sugar work		
			Architectural Te	688 hrs	Work		16h	16h	16h		CURUIAEVEV	/ GEK ::	
26	1	00	😑 Kerja M+E	672 hrs 28 days	Work		24h	24h	24h		baseline wo	ĸ	
			M&E Team	672 hrs	Work		24h	24h	24h		Cost		
27	0	8	Completion of Cable L	0 hrs 0 days	Work						Actual Cost		
28		3	TnC	0 hrs 5 days	Work						r Timelir	e	
29		-	Projek Siap	0 hrs 0 days	Work						v Split		
					Work				_				
					Work			Rig	ght c	lick			

3	🖻 Blok B	3,592 hrs 97 day		72h 40h
3	Detail Styles	5	Select Cost &	x
3	- Usage Details Usag	ge Properties	Cummulative Cos	t 📄
B	A <u>v</u> ailable fields: Budget Cost Budget Work		Show these helds: Cost Cumulative Cost	
3	CPI Cumulative Percen Cumulative Work	t Complete	<u>Show >></u>	Move
2	C CV%	·		
10	T Field settings for C P Font: Calibri 1	Cumulative Cost 1 pt, Regular	6 Change Eo	nt
	<u>C</u> ell background:		•	
	Pattern:		7	
				Cancel

Ga Cha Vie	ntt rt *	Paste	a ∮ Band	Z <u>U</u> <u>∆</u> +A- ∎	i 🛱 i 😖 k Sche	⇒ Resp ⊖ ⊖ Inact sdule	ect Links ivate	Manually Auto Schedule Schedule Tasks	Move *	ask Inform insert Pro	nation Scroll to Tasl perties Edi	k 🛃
		0	Task _	. Task Name	Work _	Duration	Details		8 Sep '13			
		0	Mode					S	5	M	T	
	1		3	Membina 2 Blok Banguna	6,600 hrs	102 days	Cost		RM34,760.91	RM34,760.91	RM34,760.91	1
							Cum. Cost	RM1,228,670.97	RM1,263,431.87	RM1,298,192.78	RM1,332,953.68	RM
	2		8	Projek Mula	0 hrs	0 days	Cost					
							Cum. Cost					
	3		3	Preliminari	0 hrs	102 days	Cost		RM164.84	RM164.84	RM164.84	
							Cum. Cost	RM37,230.77	RM37,395.60	RM37,560.44	RM37,725.27	
	4		3	Performance Bond	0 hrs	5 days	Cost					-
							Cum. Cost	RM10,000.00	RM10,000.00	RM10,000.00	RM10,000.00	
	5		3	Est & remo			Cost					
							Cum. Cost	RM15,000.00	RM15,000.00	RM15,000.00	RM15,000.00	1
	Б		3	Establish S.O	0 hrs	5 days	Cost					
Des l						1999 1999	Cum, Cost	RM15,000.00	RM15,000.00	RM15,000.00	RM15,000.00	
¥,	7		3	Removal S.O	0 hrs	2 days	Cost					
2							Cum. Cost					
	8		3	Maintain S.O.	0 hrs	91 days	Cost		RM164.84	RM164.84	RM164.84	4
						315 - 1	Cum. Cost	RM9,230.77	RM9,395.60	RM9,560.44	RM9,725.27	7
	9	0	8	Progress Report	0 hrs	83 days	Cost					
						S.ª - 1	Cum. Cost	RM3,000.00	RM3,000.00	RM3,000.00	RM3,000.00	3
	10	-		Deserve Deserve	0.hor	a darie	Cart					

T	Chart ▼	* <	1 .	<u>z n</u> <u>m. u.</u> e	1 50		Right	click to		🗿 Mode 🔻	• 7	to 1
	View	Clipboa	rd	Font 🕞		ch	nange	timesca	l e _{Tasks}		Insert Pro	perti 2
		()	Task 🖕	Task Name 💂	Work	•	Duration	Details	S	8 Sep '13	Timescale	
	1			Membina 2 Blok Banguna	6,6	i00 hrs	102 days	Cost		RM34,7	Zoom	1,760
								Cum. Cost	RM1,228,670.97	RM1,263,4	- Change Working Ti	me 2,953
	2		3	Projek Mula		0 hrs	0 days	Cost				
								Cum. Cost				
	3		3	Preliminari		0 hrs	102 days	Cost		RM164.8	4 RM164.84	RM164
								Cum. Cost	RM37,230.77	RM37,395.6	0 RM37,560.44	RM37,725
	4		₽	Performance Bond		0 hrs	5 days	Cost				
l								Cum. Cost	RM10,000.00	RM10,000.0	0 RM10,000.00	RM10,000

Membina 2 Blok Bar	3 6,600 h	rs 102 day	s Cost		RM34,760.91	R
Timescale						x
Top Tier Mi	ddle Tier Bottom	Tier Non-wo	orking time			
Preli Middle tier fo	matting					
Units: Ye	ars 📉	<u>L</u> abel:	2009, 2010,	· •	🔽 Use <u>fi</u> scal year	
Pe Count: 1		<u>A</u> lign:	Left 👻 🔽	Tick lines		
Transformer	4					
I imescale op	lons					
Es Show: Tw	o tiers (Middle, Bot	tom)	▼ Sįze:	100 🔹 % 🔽	Scale separator	
Es Show: Tw	o tiers (Middle, Bot	tom)	▼ Sįze:	100 📩 % 🔍	Scale separator	
Es Show: Tv	o tiers (Middle, Bot	tom)	▼ Size:	100 🔹 % 🔍	Scale separator	
Es Show: Tv	o tiers (Middle, Bot	tom)	▼ Size:	100 🔹 % 🗷 :	Scale separator	
Es Show: Tv	o tiers (Middle, Bot	tom)	▼ Size:	100 🔹 % 🗷	Scale separator	
Es Show: Tv Preview	o tiers (Middle, Bot	tom)	▼ Size:	100 🔹 % 💌	Ecale separator	
Es Show: Tv Preview M Br Help	o tiers (Middle, Bot	tom)	▼ Size:	100 🔹 % 🗷	Scale separator	

(T	5	COST		111134,700.31
Proje	Tan Tan Middle Tan		asking time]		
😑 Preli	Bottom tier formatting		Jan, Feb,	-	🕼 Use <u>fi</u> scal year
Pe	Cou <u>n</u> t: 1	<u>A</u> lign:	Center 👻 💟] <u>T</u> ick lines	
E Es	Timescale options S <u>h</u> ow: Two tiers (Mic Preview	dle, Bottom)	▼ Size:	100 👻 % 🔍	cale separator
		Δυσ		Oct	Nov
_	lut	Aug	Sep	out	Her
M	lut	Aug	Sep	7	

Clipboa	ard	Font 🕞		Schedule		Tasks	Inse	ert Propertie	s Editing
0	Task Mode 🖕	Task Name	\ ب	Details					
					Jun	lut	Aug	Sep	Oct
	3	Membina 2 Blok Banguna	hrs	Cost	RM150,020.32	RM334,317.37	RM546,686.76	RM629,154.30	RM339,821.25
				Cum. Cost	RM150,020.32	RM484,337.70	RM1,031,024.46	RM1,660,178.76	RM2,000,000.00
	3	Projek Mula	hrs	Cost					
				Cum. Cost					
	3	Preliminari	hrs	Cost	RM27,648.35	RM4,626.37	RM4,131.87	RM4,461.54	RM9,131.87
				Cum. Cost	RM27,648.35	RM32,274.73	RM36,406.59	RM40,868.13	RM50,000.00
	3	Performance Bond	hrs	Cost	RM10,000.00				
				Cum. Cost	RM10,000.00	RM10,000.00	RM10,000.00	RM10,000.00	RM10,000.00
	3	Est & remove S.O.	hrs	Cost	RM15,000.00				RM5,000.00
				A A	DA 445 000 00	DA445 000 00	DA 445 000 00	DA 44 5 000 00	DA 100 000 00

Gantt Chart * View	Paste	∦ Cut ≧ Copy ∮ Form Clipboar	at Painter	Calibri • 11 • B 7 <u>U</u> 0 • A - Font 5			S 75 55 ∰ ⇔ š Sche	Respect Links	Manually Auto Schedule Schedul Tasi	S Inspect *	Task Jinsert	te bie >
		0	Copy (Ctr	I+Q		Wor	Details	- un	hil	Aug.	Sen	0rt
	1	-	Click he	re to copy a picture of the		6,	Cost	RM150,020	RM334,317	RM546,687	RM629,154	RM339,821
Calendar			VICE SI	e bor it ou tue olboosie	Į		Cum. Cost	RM150,020	RM484,338	RM1,031,025	RM1,660,179	RM2,000,000
	2		3	Projek Mula			Cost					
- 12							Cum. Cost					
Gantt	3		3	Preliminari			Cost	RM27,648	RM4,626	RM4,132	RM4,462	RM9,132
Gridet							Cum. Cost	RM27,648	RM32,275	RM36,407	RM40,868	RM50,000
먭	4		3	Performance B	lond		Cost	RM10,000				
							Cum, Cost	RM10.000	RM10.000	RM10.000	BM10.000	RM10.000

Copy Data From Ms Project to MS Excel

	9-6	- -						Book1 -	Micros
File	Hon	ne Inse	rt Page	e Layout For	rmulas Dat	a Review	View Acrob	oat	
Paste	Cut		Calibri	• 11 U • 🖽 •	• A • •	= <mark>-</mark> »	Wrap	Text	Gener
*	Clipboard	lat Painter		Font	ig.	A	lignment	<table-cell></table-cell>	
	F25	6. .	• (**	f _x					
	A	В	С	D	E	F	G	н	
1									_
2								1	
3									
4				RM150,020	RM334,317	RM546,687	RM629,154	RM339,8	21
5				RM150,020	RM484,338	RM1,031,025	RM1,660,179	RM2,000,0	00
6									
7									
8									



Financial S-Curve





Monthly Financial S-Curve And Cash Flow



MICROSOFT PROJECT



Penyediaan S-Curve Fizikal - Menggunakan Task Usage

					2								
F	ile	Task	Resource	e Pro	ject View		Format						
		°18	-) [😨 R	esource Usage 👻	Ag↓ s	Sort - 🛛 💈	[No Highlig	ht] ×	Timescale:	Q,-	🔲 Tin	neline
	ᆀ실	- 🗉	-	🖥 🛃 R	esource Sheet 🔻	≞(Dutline 👻 🏹		Ŧ	Months	-	🗌 De	tails
Cha	ntt Usa	ige v 📇	Planne	n er + 🛃 O	ther Views 👻	T 👘	Tables -	 p]	*				
	Task \	/iews		Resour	ce Views	Bui	lt-In			Zoor	n		Split View
		1	Task 🖕	WBS 🚽	Task Name		<u>C</u> ost			art 🚽	Finish	-	Predecessor
	1			1	Membina 2 B	\checkmark	<u>E</u> ntry			nt 1/6/13	Wed 30	10/13	
	2		3	1.1	Projek Mu		<u>H</u> yperlink			nt 1/6/13	Sat 1/6/1	.3	
	3		3	1.2	Preliminar		<u>S</u> chedule			ın 2/6/13	Wed 30	10/13	
	4		3	1.2.1	Perform		Tracking			ın 2/6/13	Sun 9/6/	13	2
	5		3	1.2.2	Est & re		Variance			lon 10/6/13	Wed 30/	10/13	
	6		3	1.2.2.1	Estab		Work			on 10/6/13	Sun 16/6	/13	4
	7		₽	1.2.2.2	Remo		Cummon			Je 29/10/13	Wed 30/	10/13	28
	8		3	1.2.3	Maintai		S <u>u</u> nnary			on 17/6/13	Tue 29/1	0/13	6
	9	0	3	1.2.4	Progres		Usa <u>q</u> e			ın 23/6/13	Wed 23	10/13	
	10		3	1.2.4.1	Progr	6	<u>R</u> eset to D	efault		ın 23/6/13	Sun 23/6	/13	
ť	11		3	1.2.4.2	Progr		Sa <u>v</u> e Field	s as a New Tab	ole	ıe 23/7/13	Tue 23/7	/13	
Š	12		3	1.2.4.3	Progr	1	More Tabl	es		ın 25/8/13	Sun 25/8	/13	
antt	13		3	1.2.4.4	Progr	ess l	Report 4	1 day	N	lon 23/9/13	Mon 23/	9/13	
U	14		3	1.2.4.5	Progr	ess I	Report 5	1 day	W	/ed 23/10/13	Wed 23/	10/13	

	Table Ballion Property Propert	ect View 1 southar blogge * nouthar Sherit * Her Views	Purmat 21 Sect + M ₂₁ Cruttine + n <u>≧</u> Tables +	Ø pia ra Ø pia ra Ø pia co Data	poligini) + (r) + Nati	Timescale: Months 200	- 31 - 31 - 31	C) Tenetime C) Detains Spirit V	New 2				Maon	
	Task Name 🔶 A	ct. Start 🖕 A	rt.Finish 🖕	N Comp	Phys. %	Art Dur	Rem Dur	Act. Cost 🔹	0 11411	tr 5, 2015	1 Sep	97 4, 3 Oct 1	1013 Qtr 1 Inty Occ Ian	
1	Membina 2 Blok Bar	NA	NA	100	0%	0 days	102 days	\$0.00				-77		
2	Projek Mula	NA	NA	0%	0%	0 days	0 days	\$0.00	1/6					Key In 100% in % Comp
10	Preliminari	NA	5	0%	0%	0 days	102 days	\$0.00	_			-9		
41	Performance Bond	NA		0%	ON6	0 days	5 days	\$0.00	1					Column
5	" Est & remove 5	NA	NA	0%	0%	0 days	97 days	\$0.00	-	_	-	-9		
-6	Establish S.C	NA	NA	0%	0%	0 days	5 days	\$0.00	+0-					
3	Removal 5.0	NA	NA	0%	0%	0 days	2 days	\$0.00	1			1		
8	Maintain S.O.	NA	NA	0%	0%	0 days	91 days	\$0.00	-		-	10		
9	Progress Repor	NA	NA	0%	0%	0 days	83 days	\$0.00	1	1 1	1	1		
10	Progress Rep	NA	NA	0%	0%	0 days	1 day	\$0.00	1					
11	Progress Rej	NA	NA	0%	0%	0 days	1 day	\$0.00		1				
17	Progress Rep	NA	NA	0%	0%	0 days	1 day	\$0.00		1				
18	Progress Rep	NA	NA	0%	0%	0 days	1 day	\$0.00			1			

Table Tracking With 100%complete

F	ile	Task	Resource Pr	oject View	Format							
2			-8	Resource Usage	A Sort ▼	💋 [No Hi	ghlig	ght] 👻	Timescale:	Q, -	Timeline	
1		Taali	🐼	Resource Sheet 🔹	🗄 Outline	Y [No Fill	ter]	*	Months	-	Details	
Ga Cha	art 🕶 U	Jsage 🛪 🛗 🎽	Planner 🕆 🚟	Other Views 🔻	📑 Tables 🔻	💾 [No Gr	oup]					
	Tas	k Views	Resou	irce Views		Data			Zoo	m	Split \	/iew
		Task Name	÷ 🗸	Act. Start 🖕	Act. Finish 🖕	% Comp. 🚽	Ph Co	's.% 🖕 np.	Act. Dur. 🚽	Rem. Dur. 🖕	Act. Cost 🖕	Qti Jun Ju
	1	Memb	ina 2 Blok Ban	Sat 1/6/13	Ved 30/10/1	100%		0%	102 days	0 days	2,000,000.00	<u> </u>
	2	Proj	ek Mula	Sat 1/6/13	Sat 1/6/13	100%		0%	0 days	0 days	\$0.00	⊳1/6
	3	Prel	iminari	Sun 2/6/13	Ved 30/10/1	100%		0%	102 days	0 days	\$50,000.00	—
	4	Pe Bo	erformance ond	Sun 2/6/13	Sun 9/6/1	100%		0%	5 days	0 days	\$10,000.00	
	5	Es	st & remove S	Mon 10/6/13	Ved 30/10/1	100%		0%	97 days	0 days	\$20,000.00	
	6		Establish S.C	Mon 10/6/13	Sun 16/6/1	100%		0%	5 days	0 days	\$15,000.00	₩-
	7		Removal	Tue 29/10/13	We	100%		0%	2 days	0 days	\$5,000.00	
			S.O		30/10/13							
	8	M	laintain S.O.	Mon 17/6/13	Tue 29/10/1	100%		0%	91 days	0 days	\$15,000.00	┝══
	0			a salalas	11 Looleole	4000/		-00/		~ 1	Ar 000 00	

ile	ᆸᅅ	Resource P	roject	View	Format							
			Resourc	e Usage	* A2↓ Sort *	💋 [No Hig	ghlight] 👻	Timescale:	Q.+	Timeline	*	
			Resourc	e Sheet *	🗄 Outline 🛪	Y [No Filt	er] -	Months	- 🛃	🔲 Details	*	
ntt rt • L	Taski Isage • 🔜 •	Planner *	Other V	iews *	Tables 🔻	He [No Gro	oup] *		-2			
Tas	k Views	Reso	urce Viev	NS		Data		Zoo	m	Split V	liew	
	Task Usage View all of the tasks and the resources assigned to them.			• •	Act. Finish 👻	% Comp. 🕳	Phys. % Comp.	Act. Dur. 🗸	Rem. Dur. 💂	Act. Cost 👻	Qtr 3, 3	201 Aug
1				/6/13	Ved 30/10/13	100%	0%	102 days	0 days	3 2,000,000.00	-	
2				/6/13	Sat 1/6/13	8 100% 8 100%	% 0% % 0%	0 days	0 days	\$0.00	► <u>1/6</u>	
3	day, week, or other time increment level.		2/6/13	Ned 30/10/13	102 days			0 days	\$50,000.00	-	=	
4			2/6/13	Sun 9/6/13	100%	0%	5 days	0 days	\$10,000.00	9		
	E	lond										
5	ΞE	st & remove S	Mon	10/6/13	Ned 30/10/13	100%	0% 0%	97 days 5 days	0 days	\$20,000.00	V	=
6		Establish S.C	Mon	10/6/13	Sun 16/6/13	100%			0 days	\$15,000.00	*8	
7	Removal		Tue 2	9/10/13	Wed	100%	0%	2 days	0 days	\$5,000.00		

F	ile.	Task	Resource	Project View I	Format	4.1.5294.1.52	N. 1994	1231 234	230 230			
Ga Cha Vi	ntt ert *	Paste Clipboa	A Calibri - B A and	i • 11 • 👷 👷 7 및 🏂 • 🗛 • 👼 🐺 Font	記 思 感 이 지 Mark 学 Resp 前 命 笑 一 Inact Schedule	i on Track + ect Links ivate	Manua Schedi	Auto Schedule Tasks	Sinspect Move *	• 🍋 Task Ins	ert	Information Properties
		0	Task 🖕	Task Name 🖕	Work 🖕 Duration	Details		8 Sep '13		- 1		
	22		Mode	E Blok B	3,592 hrs 97 days	Work	S	5 72h	72h	72h		8
	23	i	-	😑 Kerja Tanah	1,272 hrs 53 days	Work						
				Earthwork Tean	1,272 hrs	Work		0			0	Detail Styles
	24	1	3	Kerja Struktur	960 hrs 30 days	Work		32h	32h	32h	1	Work
				Structure Team	960 hrs	Work		3.2h	32h	32h		Actual Work
	25	1	3	🗄 Kerja Arkitek	688 hrs 43 days	Work		16h	16h	16h		Cumulative Work
				Architectural Te	688 hrs	Work		16h	16h	16h		Baseline Work
	26		8	🖻 Kerja M+E	672 hrs 28 days	Work		24h	24h	24h		Cost
				M&E Team	672 hrs	Work		24h	24h	24h		Artual Cost
	27	P	3	Completion of Cable L	0 hrs 0 days	Work						Picture Cost
8	2.8		3	TnC	0 hrs 5 days	Work				1		Show Timeline
Usaç	29		3	Projek Siap	0 hrs 0 days	Work						Show Split
놺						Work					7	
						Work		1		<	1	
						Work						
						Work			Ri	ght c	lick	
						Work						

Usage Details Usage Properties	1					Sele	ct Percent	Con	nplet	te &	Cum	ulat	tive		
Available fields:	10	Show these	fields:	2			Deer								
Cost CPI		Cumulative	e Percer	nt Comp	ete		Perc	cent	Com	ple	τε				
Cumulative Cost	Show >>								11.11.1.	8.0.8		13113	0.80		
CV						Move									
CV% Fixed Cost	<< Hide				-										
Field settings for Cumulative Percent Comp	lete														
Font: Calibri 11 pt, Regular				C	ange <u>F</u> ont										
Cell background:															
Pattern:															
Show in menu	7														
						8									
							40h								
					OK V	Cancel									
				-											
			_	-											
Luitimoin icun oremo	Trone	1													
Edition (Cun OVE Ind	Inone	Fi	e T	ask,	Resource Proje	d View	Format								
CONTINUE CONTINUE	(none)	E	e 1	ask	Resource Proje	d View	Format Sort * 🏾 🌌 [No Highlig	ghtį • Tur	nescale:	Q	Timeline		•	- .	
COLUMNOIN ICON OF THE	I WORK	H		ask	Resource Proje	d View ource Usage * ੈ ource Sheet * 문	Format Soft * Ø [No Highlig Outline * 7 [No Filter]	yhtj • Tim • Da	nescale: 195	• 33	Timeline		•	-3 °	
CONTINUENT CONTINUE	Work	Fil Gan Char	e T	ask	Resource Proje	d View ource Usage * 2 ource Sheet * E er Views *	Format Sort * Ø [No Highlig Outline * V [No Filter] Tables * P [No Group]	ght <u>;</u> • Tin • Da	nescale: NyS		Timeline		•	New Window	
Cartinion I Can 072 mg	TTOTK	Fil Gan Char	e T Task t Usage Task Vie	ask	Resource Projet Team Planner - Oth Resource	t View ourte Usage * 2 ourte Sheet * 문 er Views * 테	Format Sort * Ø [No Highlig 2 Outline * V [No Filter] Tables * P: [No Group] Data	ahti • Tim • Da i •	nescale: nys Zoom	4 19 17	Timeline Details	plit View	-	New Window	
Curtinwork (Cun 072 mg	TTOTK	Fil Gân Char	e T tt Task t Usage Task Vie	iask	Resource Projet Team Planner Oth Resource sk Task Nam	d View ource Usage * 2 ource Sheet * er Views *	Format Sort * Ø [No Highlig Qutline * P [No Fitter] Tables * P [No Group] Data	pht] • Tirr • Da •	nescale: nys Zoom	े. मि ब	Timeline	plit View	•	New Window	•
Eulenwork reun 072 mg	TTOTK	Gan Char	e T Task t- Usage Task Vie	ask	Resource Proje Resource Res Team Planner Oth Resource sk Task Name	d View ourte Usage * 2 ourte Sheet * er Views *	Format Sort * Ø [No Highlig Qutline * P [No Fitter] Tables * P [No Group] Data • Work • Duration	pht] • Tin • Da • Details	nescale: nys Zoom F	0.+ + 33 = 7 - 5	Timeline Details 8 Sep "13 S	plit View	· •	New Window Window	
Curtimon rean 072 mg	TTOTIC	Gan Char	e T tt Task t Usage Task Vie		Resource Proje Team Planner - Oth Resource sk Task Name ode - Memb	t View ourte Usage * A ourte Sheet * er Views * Views e ina 2 Blok Bangu	Format Sort + Ø [No Highlig Qutline + V [No Fitter] Tables + P [No Group] Data • Work • Duration ni 6,600 hrs 102 day:	phtj • Tur • Da • Details % Com	nescale: nys Zoom F	0. • 13 • 17 • 13 • 17 • 13	Timeline Details Sep [*] 13 S 1%	plit View M 1%	т 1%	New Window Window Window	•
Cartinwork rean 072 mg	TTOTIC	Gan Char	e T Task t Usage Task Vie		Resource Proje Team Planner - Oth Resource Sk Task Name ode - Memb	dt View ourte Usage * Å ourte Sheet * er Views * Views e ina 2 Blok Bangu	Format Sort + Ø [No Highlig Qutline + V [No Fitter] Tables + P [No Group] Data • Work • Duration n: 6,600 hrs 102 day:	phtj • Tim • Da 1 • Details • % Com Cum. 9	rescale: rys Zoom F 60%	Q.+ + 23 ₹ \$ \$	Timeline Details 8 Sep [*] 13 5 1% 61%	plit View M 156 62%	1% 64%	New Window Window Window	•
Cartinwork rean 072 mg	TTOTIC	Gan Char	e T Task t+ Usage Task Vie		Resource Proje Resource Resource Planner - Oth Resource sk Task Nam ode - Memb Proj	dt View ource Usage * 2 ource Sheet * 2 er Views * 2 ina 2 Blok Bangu ek Mula	Format Sort + Ø [No Highlig 2 Outline - V [No Fitter] Tables + P [No Group] Data • Work • Duration ni 6,600 hrs 102 day: 0 hrs 0 days	phtj • Tim • Da • Datails % Com Cum. 9 % Com	rescale: rys Zoom F 60%	Q.+ + ₩ ¶ \$ 5	Timeline Details Sep 13 S 1% 61%	plit View M 1% 62%	т 1% 64%	New Window Window Window	•
Curtanwork (Curt	TTOTK	Gan Char	e T Task Vie 1 v		Resource Proje Team Planner - Oth Resource sk Task Nam ode - Memb Proj	d View ource Usage * 2 ource Sheet * 2 er Views * 1 views e ina 2 Blok Bangu ek Mula	Format Sort + Ø [No Highlig 2 Outline - V [No Filter] Tables + P [No Group] Data • Work • Duration ni 6,600 hrs 102 day: 0 hrs 0 days	phtj • Tim • Da • Details % Com Cum. 9 % Com Cum. 9	rescale: rys Zoom F 60%	Q.+ • ∰ ¶ 5 60%	Timeline Details S S 1% 61%	plit View M 1% 62%	T 1% 64%	New Window Window Window 1% 65%	-
Luitinvoin ICun	TTOTK	Gan	e T tt Task t Usage Task Vie 1 V 2 V		Resource Proje Team Planner - Oth Resource sk Task Nam ode - Memb Proj - Prel	d View ource Usage * 2 ource Sheet * 2 er Views * 1 e ina 2 Blok Bangu ek Mula iminari	Format Sort + Ø [No Highlig 2 Outline - V [No Filter] Tables + P [No Group] Data • Work • Duration ni 6,600 hrs 102 day: 0 hrs 0 days 0 hrs 102 day	phtj • Tim • Da • Detaills % Com Cum. 9 % Com Cum. 9 % Com	rescale: rys Zoom F 60%	Q.+ • ∰ ¶ \$ 5	Timeline Details	M 1% 1%	т 1% 64%	New Window Window Window 1%	
cultimotit (cult	TINT	Gan Char	e T Task Vie 1 v 2 v		Resource Proje Resource Proje Resource Planner - Oth Resource Sk Task Nam ode Memb Proj Proj	d View ource Usage * 2 ource Sheet * 2 er Views * 1 tima 2 Blok Bangu ek Mula iminari	Format Sort * Ø [No Highlig Qutline * V [No Filter] Tables * P [No Group] Data • Work • Duration ni 6,600 hrs 102 day: 0 hrs 0 days 0 hrs 102 day:	phtj • Tur • Da • Details % Com Cum. 9 % Com Cum. 9 % Com Cum. 9	rescale: 195 200m F 60% 63%	Q.+ • 23 • ₹ • 5 • 60% • 63%	☐ Timeline ☐ Details 51 8 Sep 13 5 61% 61% 1% 61% 64%	M 156 6256 156 6556	T 1% 64% 1% 66%	New Window Window Window 1% 65%	
Curtaninoni, rean	TINT	Gan	e T Task Vie 1 v 2 v 3 v		Resource Projec Resource Projec Resource Resource Planner - Oth Resource Sk Task Name ode Proj Proj Proj	d. View ource Usage * 2 ource Sheet * 2 er Views * 1 ina 2 Blok Bangu ek Mula iminari erformance Bon	Format Sort * Ø [No Highlig Qutline * V [No Filter] Tables * P [No Group] Data • Work • Duration ni 6,600 hrs 102 day: 0 hrs 0 days 0 hrs 102 day: d 0 hrs 5 days	hti • Tim • Da • Details % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com	rescale: 195 200m F 60% 63%	Q.+ + 23 ₹ 5 60% 63%	☐ Timeline ☐ Details 51 8 Sep '13 5 61% 61% 1% 64%	M 156 62% 1% 65%	T 1% 64% 1% 66%	New Window Window Window 1% 65%	
Cultimotit (Cult	UTUTK	Gan	e T Task Vie 1 v 2 v 3 v 4 v		Resource Projec Resource Projec Resource Resource Planner - Oth Resource sk Task Namo ode Proj Proj Proj	d. View ource Usage * 2 ource Sheet * 2 er Views * 1 ina 2 Blok Bangu ek Mula iminari erformance Bon	Format Sort * Ø [No Highlig Qutline * V [No Filter] Tables * P [No Group] Data • Work • Duration ni 6,600 hrs 102 day: 0 hrs 0 days 0 hrs 102 day: d 0 hrs 5 days	hti • Tim • Da • Details • Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9	rescale: 195 200m F 60% 63%	Q.+ + 23 ₹ 5 60% 63%	☐ Timeline ☐ Details 5 8 Sep '13 5 61% 61% 61% 64%	M 156 62% 1% 65%	T 1% 64% 1% 66%	New Window Window Window 1% 65%	
cultimotit (cult	UT STR.	Gan	e T Task Vie 1 v 3 v 4 v		Resource Projec Team Planner Oth Resource Sk Task Nam ode Memb Proj Proj Proj E Prel	d View ource Usage * 2 ource Sheet * 2 er Views * 1 ina 2 Blok Bangu ek Mula iminari erformance Bon st & remove S.O	Format Sort * Ø [No Highlig Qutline * V [No Filter] Tables * P [No Group] Data • Work • Duration ni 6,600 hrs 102 day: 0 hrs 0 days 0 hrs 102 day: d 0 hrs 5 days 0 hrs 97 days	hti • Tur • Da • Details % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com	rescale: rys Zoom F 60% 63%	Q.+ + 23 • ₹ 60% 63%	□ Timeline □ Details 5 8 Sep '13 5 1% 61% 61% 64%	M 1% 62%	T 1% 64% 1% 66%	New Window Window Window Window 1% 65%	
CURITINGIA ICUI	UT STR.	Gan	e T Task Vie 1 v 3 v 4 v		Resource Projec Team Planner Oth Resource Sk Task Nam ode Memb Proj Proj Proj E Prel	d View ource Usage * 2 ource Sheet * 2 er Views * 1 ina 2 Blok Bangu ek Mula iminari erformance Bon st & remove S.O	Format Sort * Ø [No Highlig Qutline * P [No Filter] Tables * P [No Group] Data • Work • Duration ni 6,600 hrs 102 day: 0 hrs 0 days 0 hrs 102 day: d 0 hrs 5 days • 0 hrs 97 days	phtj • Tur • Da • Details % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9	rescale: ys Zoom F 60% 63% 71%	Q.+ * 23 ¶ 5 60% 63% 71%	□ Timeline □ Details 5 8 Sep '13 5 1% 61% 64% 64% 71%	M 1% 62% 1% 65%	T 1% 64% 1% 66%	New Window Window W 1% 65% 1% 65% 71%	
	TUTK	Gan	c T Task Vie 1 × 2 × 3 × 4 × 5 ×		Resource Proje Team Planner Oth Resource Sk Task Nam ode Memb Proj Proj Proj E Prel	d View ource Usage * 2 ource Sheet * 2 er Views * 1 ina 2 Blok Bangu ek Mula iminari erformance Bon st & remove S.O Establish S.O	Format Sort + Sort + Outline - Tables + Work - No Group Data Work - Ouration ni 6,600 hrs 102 day: O hrs 0 days O hrs 102 days O hrs 5 days O hrs 5 days O hrs 5 days	hti • Tur • Da • Details % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com Cum. 9 % Com	rescale: ys Zoom F 60% 63% 71%	Q.+ * 23 ¶ 60% 63% 71%	□ Timeline □ Details 5 1% 61% 61% 64% 71%	M 1% 62% 1% 65%	T 1% 64% 1% 66%	New Window Window Window 1% 65% 65% 71% 71%	

File	Task	Resource	Project	View	Format										۵
		•	Resour	ce Usage 🔹	<mark>≹</mark> ↓ Sort +	💋 (No Highlig	ght] =	Timescale:	Q.	1 T	ineline			R. P.	
antt	Task	теат Раппе	Resour	te Sheet * News *	Tables *	V [No Filter]	•	Months	· 29	0	letails		*	New T	Macros
Task	Views		Resource Vie	85	-	Data		Zoom			Split	t Všew		Window	Macros
	0	Task 🖕 Mode	Task Name		🗸 Work	🖕 Duratio	Uetar	15	May		Jun	Jul	Aug	Sep	Oct
1	1	3	- Membina	2 Blok Ba	ngun: 6,60	0 hrs 102 day	% Co	mplete	- ()	0.96	12%	19%	21%	27%	20%
		-					Cum	. % Complete		0%	12%	31%	52%	80%	100%
2	~	00	Projek Mula	Mula		0 hrs 0 days	% Co	mplete	(0% 0%	0%				
							Cum	. % Complete	10	0%	100%				
3	1	-	Prelim	inari		0 hrs 102 day	% Co	mplete			19%	21%	18%	20%	20%
							Cum	.% Complete			19%	41%	59%	80%	100%
4	1	2	Dorf	ormance	land	Ohrs 5 days	96.00	molete			100%				

C

	Past *	e Vinboard	nat Painter	BI	U • Eont	<u>ð</u> r <u>A</u>			📕 📑 Merge &	Center *	∰ - % , Number	4.0 .00 .00 ⇒.0
Copy data from		J19	13	• (=	f _x	1	3	Aligi	ment	12	Number	
As Project to Ms Excel	1	А	В		С	D	E	F	G	Н	I	J
	2					lun	Iulai	Οπος	Sentember	Oktober		
	4			% comp	olete	12%	19%	21%	27%	20%	, , ,	
	5			Cumm.	% complete	12%	31%	52%	80%	100%		

Monthly Physical S-Curve And Cash Flow

Repeat steps as previous slides and plot the S-Curve



MICROSOFT PROJECT

Saving File



Saving File



Saving File

6

		Task	WBS_	ask Name	Duration	Start	Finish	Fredecessor	Car 2, 2015	(av 3, 2013)	Qtr 4, 2011	Gtr 1	2014					
		Mode						a foreign and	Apr May Am	ALT AUS	sep Oct Nov	Dec Jan	Feb [
		9	1	Membina 2 Blok Bangunan	102 days	Sat 01 06 13	Wed 90 10 13			06	~							
*		4	11	> Destinient	t03 days	Sat 01 00 15	540 01 00 13		(lea	UU								
-			1.1	Preuminari	102 days	Sun 02 00 13	Wed 30 10 13											
		14	ded et	Personance bond	2 date	200.22.00.23	300 43 00 13											
5.		1	1.2.2	Est & remove S.O.	97 days	Mon 10 06 13	Wed 30 10 13		-									
6			17.2.1	Establish S.O	5 days	Mon 10 06 13	Sun 16 06 13	4	10									
2		1	1.2.2.2	Removal 5.0	2 days	Tue 29 10 13	Wed 30 10 13	20			1							
8		-	1.2.3	Maintain S.O.	91 days	Mon 17 06 13	Tue 29 10 13	6	1									
9.	0	9	1.2.4	Progress Report	83 days	Sun 23 06 13	Wed 23 10 13			1 1	1							
10		4	1.2.4.1	Progress Report 1	1 dəy	Sun 23 06 13	Sun 23 06 13		1	80. 1/2011								
11		10	1.2.4.2	Progress Report 2	1 day	Tue 23 07 13	Tue 23 07 13			1				12000.000		20	numumum	
12		10	1.2.4.3	Progress Report 3	1 dəy	Sun 25 08 13	5un 25 08	1 1 1 · C	17			6	infl Chart Tools	BGN - Memi	iina 2 Blok Bangur	van - Initial - 01 -	2013-06-01 - Microso	oft Project
		10	1.2.4.4	Progress Report 4	1 day	Mon 23 09 13	Man 23 09	File Task	Resource	Project	View Ad	d-Ins	Format					
4	112	10	1.2.4.5	Progress Report S	1 day	Wed 23 10 13	Wed 23 10	-	_			_						
5		2	1.3	Land Acquisition (A&B)	0 days	Sat 01 06 13	Sat 01 06 1	Save 🚽		roossaat.		+ DCM	March	I - I			The second in	1 A 1 1 1 1 1 1 1
0		1 D	1.4	Service Relocation (8)	0.0005	Sat 01 06 13	Sat 01 06 1			OPDO 3TE		T 0.2 C 10.0		Ing 7 2101			and the second s	
-		80	1.1.1	and a second sec	e onys	581 02 00 25		Saug Ar	7	Unnau	on Adou	LDGIN	- memo	IIIa Z DIUI	Bangunai	n - In	0. ET	
17		8	1.5	- Blok A	93 days	Mon 10 06 13	Thu 24 10	🛃 Save As	7	Ionnau Isers\JKRDe	ON ADOU sktop\penjadu	alan\BGN -	 IVIEITIDI Membina 2 Blo 	il i di Zi DiOM ok Bangunan - Ir	t Bangunai itial - 01 - 2013-06	n - In H01.mpp		
17 18	!	0.08	15	= Blok A Kerja Tanah	93 days 42 days	Mon 10 06 13 Mon 10 06 13	Thu 24 10 Wed 07 01	🛃 Save As	7	Ionnau Isers\JKRDe	ON ADOU sktop\penjadu	alan\BGN -	- IVIEITID Membina 2 Blo	ok Bangunan - Ir	: Bangunai itial - 01 - 2013-06	n - In -01.mpp		
17 18 19	•	0 00 00 00 00	15 151 152	Blok A Kerja Tanah Kerja Struktur Karja Arkita	93 days 42 days 33 days 43 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 12	Thu 24 10 Wed 07 04 Wed 64 05	Save As	7	ISERS/JKR/,De	ON ADOU sktop\penjadu	alan\BGN -	- IVIEITID Membina 2 Bk	ii id 2 DiOF	: Bangunai .itial - 01 - 2013-06	n - In H01.mpp		
7 8 9	*	0 of c0 of c8	15 151 152 153	Blok A Kerja Tanah Kerja Struktur Kerja Arkitek	93 days 42 days 33 days 43 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13	Thu 24 10 Wed 07 01 Wed 64 03 Thu 24 10	🔜 Save As 🎯 Open 📬 Close		Isers'UKR\De	ON ADOU sktop\penjadu Project Se	alan\BGN -	- INTETTIDI Membina 2 Blo unts	ii i di Zi Di Of	: Bangunai _{itial} - 01 - 2013-06	n - In H01.mpp		
17 18 19 20 21 12	•	00 00 00 00 00 00	15 151 152 153 154 16	Slok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja M+E "Blok B	93 days 42 days 43 days 43 days 12 days 12 days 97 days	Mon 10 06 13 Mon 10 06 13 Thu 10 06 11 Thu 22 08 13 Thu 22 08 13 Thu 29 08 13 Mon 10 06 13	Thu 24 10 Wed 07 08 Wed 04 08 Thu 24 10 Mon 14 10 Wed 30 10	🔜 Save As 🎯 Open ゴ Close	7	Isers\JKR\De	ON ADOU sktop\penjadu Project Se Not connec	alan\BGN - rver Acco	- IVIEITIDI Membina 2 Blo unts sct Server	ok Bangunan - Ir	: Bangunai _{itial} - 01 - 2013-06	n - In ⊢01.mpp		
17 18 19 20 21 22 22	•	00 00 00 00 00 00 00	1.5 1.5.2 1.5.3 1.5.4 1.6 1.6	Slok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja M+E Slok B Kerja Tanah	93 days 92 days 42 days 53 days 43 days 12 days 97 days 51 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 29 08 13 Mon 10 06 13 Mon 10 06 13	Thu 24 10 Wed 07 08 Wed 04 05 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 00	🛃 Save As 🚰 Open 📬 Close		Isersi UKRi De	ON ADOU sktop\penjadu Project Se Not connec	IL DIGIN alan\BGN - rver Acco ted to Proj	- IVIEITIDI Membina 2 Blo unts ect Server	ok Bangunan - Ir	: Bangunai _{itial} - 01 - 2013-06	n - In ⊦01.mpp		
17 18 19 20 21 22 23 23 24	*	ch all all all all all all all all	1.5 1.5.1 1.5.2 1.5.3 1.5.4 1.6 1.6.1 1.6.2	Blok A Kerja Tanah Xerja Struktur Kerja Arkitek Kerja M+E Blok B Kerja Tanah Kerja Tanah Kerja Struktur	93 days 42 days 43 days 43 days 12 days 12 days 97 days 51 days 30 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 29 08 13 Mon 10 06 13 Mon 10 06 11 Mon 29 07 13	Thu 2410 Wed 0700 Wed 0405 Thu 2410 Mon 1410 Wed 3010 Mon 2500 Tue 1009	Save As Open Close Info Docont		Isersi UKRi De	ON ADOU sktop\penjadu Project Se Not conner	alan\BGN - rver Acco ted to Proj	- IVIEITIDI Membina 2 Blo unts ect Server	ii i a' 2' DiOF	: Bangunai #iai - 01 - 2013-06	n - In ⊢01.mpp		
17 18 19 20 21 22 23 24 25		oli oli oli oli oli oli oli oli oli	1.5 15.1 15.2 15.3 15.4 1.6 1.6.1 1.6.2 1.6.3	Blok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja M+E Blok B Kerja Tanah Kerja Tanah Kerja Struktur Kerja Arkitek	93 days 93 days 42 days 33 days 43 days 12 days 97 days 51 days 30 days 42 days	Mon 10 06 13 Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 20 07 13 Wed 28 08 11	Thu 24 10 Wed 07 01 Wed 06 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 26 08 Tue 10 09 Wed 30 10	Save As Open Oose Info Recent		Isers'UKR\De	ON ADOU sktop\penjadu Project Se Not connec	IL DIGIN - alan\BGN - rver Acco ted to Proj	- IVIEITIDI Membina 2 Bio unts act Server	i i G Z DIOF	: Bangunai _{itial} - 01 - 2013-06	n - In -01.mpp		
17 18 19 20 21 22 23 24 25 26		că	1.5 1.5.1 1.5.2 1.5.3 1.5.4 1.6 1.6.1 1.6.2 1.6.3 1.6.4	Slok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja M+E Blok B Kerja Tanah Karja Struktur Kerja Arkitek Kerja M+E	93 days 42 days 53 days 43 days 22 days 97 days 53 days 53 days 30 days 42 days 28 days	Mon 10 06 13 Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 27 08 13 Mon 10 06 13 Mon 10 06 13 Mon 20 07 13 Wed 28 08 13 Wed 24 09 13	Thu 24 10 Wed 07 01 Wed 04 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 26 00 Tue 10 09 Wed 30 11 Mon 14 10	Save As Copen Copen Cose Sato Recent Name		Isers'UKR\De Manage Accounts	ON ADOU sktop\penjadu Project Se Not conner	IL DOIN alan\BGN - rver Acco ted to Proj	- IVIEITIDI Membina 2 Bic unts ect Server	i i Ga Z DiOV	: Bangunai _{itial - 01} - 2013-06	n - In ⊣01.mpp	Project Informatio	
7 8 9 0 1 1 2 3 4 5 6 7		of of of of all of all of all of all all	15 15.1 15.2 15.3 15.4 16 16 16.1 16.2 16.3 15.4 1.7	 Blok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja Arkitek Kerja Tanah Kerja Tanah Kerja Tanah Kerja Arkitek Kerja Arkitek Kerja Arkitek Kerja Arkitek Kerja Completion of Cable Lay by TNB 	93 days 42 days 33 days 43 days 12 days 97 days 51 days 30 days 42 days 28 days 0 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 20 07 13 Wed 28 08 11 Wed 04 09 13 Mon 21 10 13	Thu 24 10 Wed 07 00 Wed 08 05 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 00 Twe 10 05 Wed 30 10 Mon 21 10	Save As Open Cose Info Recent New		isers'UKR\De Manage Accounts	ON ADOU sktop\penjadu Project Se Not connec Organize	alan\BGN - nver Acco ted to Proj Global Te	- IVIEITID Membina 2 Bio unts ect Server mplate	i i Ga Z DIOV	: Bangunai _{itial - 01} - 2013-06	n - In ⊦01.mpp	Project Information	1.6/2013
7 8 9 10 11 12 13 14 5 16 17 18	*	of of of of of all of all of all of all of	15 15.1 15.2 15.3 15.4 16 161 16.2 16.3 15.4 1.7 18	Slok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja M+E Blok B Kerja Tanah Kerja Struktur Kerja Arkitek Xerja Arkitek Completion of Cable Lay by TNB ThC	93 days 93 days 42 days 13 days 12 days 97 days 51 days 30 days 42 days 28 days 0 days 5 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 20 07 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13	Thu 24 10 Wed 07 01 Wed 04 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 00 Tue 10 09 Wed 30 11 Mon 14 10 Mon 21 10 Mon 28 10	Save As Open Cose Info Recent New Print		Sers UKR De Manage Accounts	ON ADOU sktop\penjadu Project Se Not connec Organize Move proje	alan\BGN - nver Acco ted to Proj Global Te ct elements	- IVIEITID Membina 2 Bio unts ect Server mplate such as views,	reports, and tab	: Bangunai itial - 01 - 2013-06 les between two k	n - In +01.mpp scal files,	Project Information	n- 1/6/2013
7 8 9 0 11 12 13 14 5 6 6 17 18 9 9	*	ցի ցի շի	15 151 152 153 154 16 161 162 163 164 17 18 19	Slok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja M+E Blok B Kerja Tanah Kerja Struktur Kerja Arkites Kerja Arkites Kerja Arkites Kerja Arkites Kerja Tanah Kerja Struktur Kerja Arkites Kerja Tanah Kerja Arkites Kerja Kerja Kerja Kerja Kerja Kerja Kerja Kerja Kerja Kerja Kerja	93 days 93 days 42 days 13 days 12 days 97 days 51 days 30 days 42 days 0 days 5 days 0 days 5 days 0 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 20 07 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13 Wed 30 10 13	Thu 24 10 Wed 07 00 Wed 06 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 00 Tue 10 09 Wed 30 11 Mon 14 10 Mon 21 10 Mon 28 10 Wed 30 11	Save As Open Cose Dose		Sers UKR De Manage Accounts	ON ADOU sktop\penjadu Project Se Not connec Organize Move proje or between	IL DOIN alan\BGN - rver Acco ted to Proj Global Te ct elements a local file	- INTERTID Membina 2 Bio unts ect Server mplate such as views, and the global t	reports, and tab	: Bangunai itial - 01 - 2013-06 les between two k	n - In -01.mpp scal files,	Project Information Start Date Finish Date Schedule from	1.6/2013 30/10/2013
27 14 29 20 20 21 22 22 24 25 26 27 28 29	*	նի մի են	15 151 152 153 154 16 161 162 163 184 17 18 15	 Blok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja Arkitek Blok B Kerja Tanah Kerja Tanah Kerja Arkitek Kerja Arkitek Kerja Arkitek Kerja Arkitek Kerja Arkitek Kerja Arkitek Kerja Tanah <li< td=""><td>93 days 93 days 42 days 133 days 12 days 97 days 51 days 30 days 42 days 0 days 5 days 0 days 5 days 0 days</td><td>Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 20 07 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13 Wed 30 10 13</td><td>Thu 24 10 Wed 07 01 Wed 04 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 01 Tue 10 05 Wed 30 11 Mon 14 10 Mon 21 10 Mon 28 10 Wed 30 10</td><td>Save As Open Cose Drio Recent New Print Save & Send</td><td></td><td>Accounts</td><td>ON ADOU sktop\penjadu Project Se Not connec Organize Move proje or between</td><td>IL DOIN alan\BGN - rver Acco ted to Proj Global Te ct elements a local file</td><td>- INTERTID Membina 2 Bio unts ect Server mplate such as views, and the global t</td><td>reports, and tab template file.</td><td>: Bangunai itial - 01 - 2013-06 les between two k</td><td>n - In -01.mpp scal files,</td><td>Project Information Start Date Finish Date Schedule from</td><td>1.6(2013 30/10/2013 Start</td></li<>	93 days 93 days 42 days 133 days 12 days 97 days 51 days 30 days 42 days 0 days 5 days 0 days 5 days 0 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 20 07 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13 Wed 30 10 13	Thu 24 10 Wed 07 01 Wed 04 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 01 Tue 10 05 Wed 30 11 Mon 14 10 Mon 21 10 Mon 28 10 Wed 30 10	Save As Open Cose Drio Recent New Print Save & Send		Accounts	ON ADOU sktop\penjadu Project Se Not connec Organize Move proje or between	IL DOIN alan\BGN - rver Acco ted to Proj Global Te ct elements a local file	- INTERTID Membina 2 Bio unts ect Server mplate such as views, and the global t	reports, and tab template file.	: Bangunai itial - 01 - 2013-06 les between two k	n - In -01.mpp scal files,	Project Information Start Date Finish Date Schedule from	1.6(2013 30/10/2013 Start
17 18 19 20 21 21 22 23 24 25 26 27 28 29	*	նը եցել՝ օն էն են	15 151 152 153 154 16 161 162 163 164 17 18 19	 Blok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja Arkitek Kerja Tanah Kerja Tanah Kerja Struktur Kerja Arkitek Kerja Arkitek Kerja Arkitek Kerja M+E Completion of Cable Lay by TNB ThC Projek Siap 	93 days 93 days 42 days 133 days 12 days 97 days 51 days 30 days 42 days 0 days 5 days 5 days 5 days 0 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 29 07 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13 Wed 30 10 13	Thu 24 10 Wed 01 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 00 Tue 10 09 Wed 30 11 Mon 21 10 Mon 28 10 Wed 30 11	Save As Open Close Drito Recent New Print Save & Send		isers/UKR/De Manage Accounts	ON ADOU sktop\penjadu Project Se Not connec Organize Move proje or between	IL D'GIN alan\BGN - rver Acco ted to Proj Global Te ct elements a local file	- INTERTID Membina 2 Bio unts ect Server mplate such as views, and the global t	reports, and tab template file.	: Bangunai itial - 01 - 2013-06 les between two lo	n - In -01.mpp xal files,	Project Information Start Date Schedule from Current Date	1.6/2013 30/10/2013 Start Today
17 18 19 20 21 22 23 24 25 26 27 28 28 29	*	են ոն ոն են ոն	15 151 152 153 154 16 161 162 163 164 17 18 19	 Blok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja Kerja Kerja Arkitek Kerja Kerja Kerja Kerja Kerja Kerja Kerja	93 days 93 days 93 days 82 days 83 days 82 days 97 days 97 days 93 days 93 days 93 days 94 days 93 days 94 days 95 days 95 days 96 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 29 07 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13 Wed 30 10 13	Thu 24 10 Wed 01 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 00 Tue 10 09 Wed 30 10 Mon 21 10 Mon 28 10 Wed 30 10	Save As Open Close Drfo Recent New Print Save & Send Help		isers/UKR/De Manage Accounts	ON ADOU sktop\penjadu Project Se Not connec Organize Move proje or between	IL DUIN alan\BGN - rver Acco ted to Proj Global Te ct elements a local file	- INTERTID Membina 2 Bio unts ect Server mplate such as views, and the global t	reports, and tab template file.	itial - 01 - 2013-06	n - In 401.mpp scal files,	Project Information Start Date Schedule from Current Date Status Date	1,6/2013 30/10/2013 Start Today Today
17 18 19 20 21 22 23 24 25 26 27 28 29	*	ୁଥି କଥି କଥି କଥି କଥି କଥି କଥି କଥି କଥି କଥି କ	15 151 152 153 154 16 161 162 163 164 17 18 15	 Blok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja Kerja Kerja Kerja<td>93 days 93 days 42 days 43 days 12 days 97 days 51 days 30 days 44 days 28 days 0 days 5 days 5 days 5 days</td><td>Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 29 07 13 Wed 28 08 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13 Wed 30 10 13</td><td>Thu 24 10 Wed 01 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 00 Tue 10 09 Wed 30 10 Mon 21 10 Mon 28 10 Wed 30 11</td><td>Save As Open Close Drito Recent New Print Save & Send Help</td><td></td><td>isers/UKR/De Manage Accounts</td><td>ON ADOU sktop\penjadu Project Se Not connec Organize Move proje or between</td><td>IL DUIN alan\BGN - rver Acco ted to Proj Global Te ct elements a local file</td><td>- INTERTID Membina 2 Bio unts ect Server mplate such as views, and the global t</td><td>reports, and tab template file.</td><td>itial - 01 - 2013-06</td><td>n - In 401.mpp scal files,</td><td>Project Information Start Date Schedule from Current Date Status Date Last Modified</td><td>1,6/2013 30/10/2013 Start Today Today</td>	93 days 93 days 42 days 43 days 12 days 97 days 51 days 30 days 44 days 28 days 0 days 5 days 5 days 5 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 29 07 13 Wed 28 08 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13 Wed 30 10 13	Thu 24 10 Wed 01 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 25 00 Tue 10 09 Wed 30 10 Mon 21 10 Mon 28 10 Wed 30 11	Save As Open Close Drito Recent New Print Save & Send Help		isers/UKR/De Manage Accounts	ON ADOU sktop\penjadu Project Se Not connec Organize Move proje or between	IL DUIN alan\BGN - rver Acco ted to Proj Global Te ct elements a local file	- INTERTID Membina 2 Bio unts ect Server mplate such as views, and the global t	reports, and tab template file.	itial - 01 - 2013-06	n - In 401.mpp scal files,	Project Information Start Date Schedule from Current Date Status Date Last Modified	1,6/2013 30/10/2013 Start Today Today
17 18 19 20 21 12 12 13 14 15 16 17 18 19	*	ୁଥି କଥି କଥି କଥି କଥି କଥି କଥି କଥି କଥି କଥି କ	15 151 152 153 154 16 163 163 164 17 18 15	 Blok A Kerja Tanah Kerja Struktur Kerja Arkitek Kerja Kerja Kerja 	93 days 93 days 42 days 43 days 12 days 97 days 51 days 90 days 44 days 28 days 0 days 5 days 5 days 0 days	Mon 10 06 13 Mon 10 06 13 Thu 18 07 13 Thu 22 08 13 Thu 22 08 13 Thu 22 08 13 Mon 10 06 13 Mon 10 06 13 Mon 29 07 13 Wed 28 08 13 Wed 28 08 13 Wed 28 08 13 Mon 21 10 13 Tue 22 10 13 Wed 30 10 13	Thu 24 10 Wed 01 03 Thu 24 10 Mon 14 10 Wed 30 10 Mon 26 00 Tue 10 09 Wed 30 10 Mon 21 10 Mon 28 10 Wed 30 10	Save As Open Cose Info Recent New Print Save & Send Help Options		isers/UKR/De Manage Accounts	ON ADOU sktop\penjadu Project Se Not connec Organize Move proje or between	IL DUIN alan\BGN - rver Acco ted to Proj Global Te ct elements a local file	- INTERTID Membina 2 Bio unts ect Server mplate such as views, and the global t	reports, and tab template file.	itial - 01 - 2013-06	n - In 401.mpp scal files,	Project Information Start Date Finish Date Schedule from Current Date Status Date Last Modified Project Calendar	1.6/2013 30,10/2013 Start Today Today Standard

MICROSOFT PROJECT



Application of S-Curve : Financial S-Curve.

- Financial S-Curve shall be generated from Accepted Work Programme.
- THIS Financial S-Curve is to be used in SKALA (Unjuran Kewangan Kontrak).
- Progress reporting in SKALA is financial progress.

Application of S-Curve : Physical S-Curve.

- Physical S-Curve is derived from % complete which is based on duration.
- Report of physical work progress shall be based on the physical s-curve.

MICROSOFT PROJECT



FINAL SUMMARY.

- Financial S-Curve obtained from the approved Work Programme.
- More realistic reporting based on the approved Work Programme.
- Contractor has to perform based on the financial cash flow that has been planned.

MICROSOFT PROJECT



Penyediaan S-Curve

Activity	Duration (weeks)	Cost (RM)	W1	W2	W3	W4	W5
Α	4	24 k					
В	5	30 k					
С	4	16 k					
D	2	50 k					
E	2	80 k					
F	3	18 k					55

Penyediaan S-Curve

CLASS EXERCISE

Q.1 Plot the Financial S-Curve

Q.2 Plot the Physical S-Curve

Q.3 Combine the Financial S-Curve & Physical S-Curve in the same chart

Q.4 Why Physical S-Curve show higher than Financial S-Curve??

Q.5 What is the progress of the works at week 3?

Q.6 At week 3, how much can be claimed as payment for work done?

CLASS EXERCISE

Q.7 At week 3, the contractor actually achieved the following works:

- A done 1000/2000
- B done 2 Of 5 column
- C installed A/C units 1 of 4
- D no progress (0%)
- E no progress (0%)
- F done 100/300

What's the progress & how much can be paid out?

Penyediaan S-Curve



RUMUSAN.

- Pastikan nilai bayaran yang disyorkan mengikut nilai kerja sebenar dan bukannya mengikut kemajuan fizikal
- Setiap program kerja akan menunjukkan perbezaan di antara % kemajuan fizikal dan % kemajuan kewangan – Rujuk S-Curve untuk lihat perbezaan