

FOLDER 5

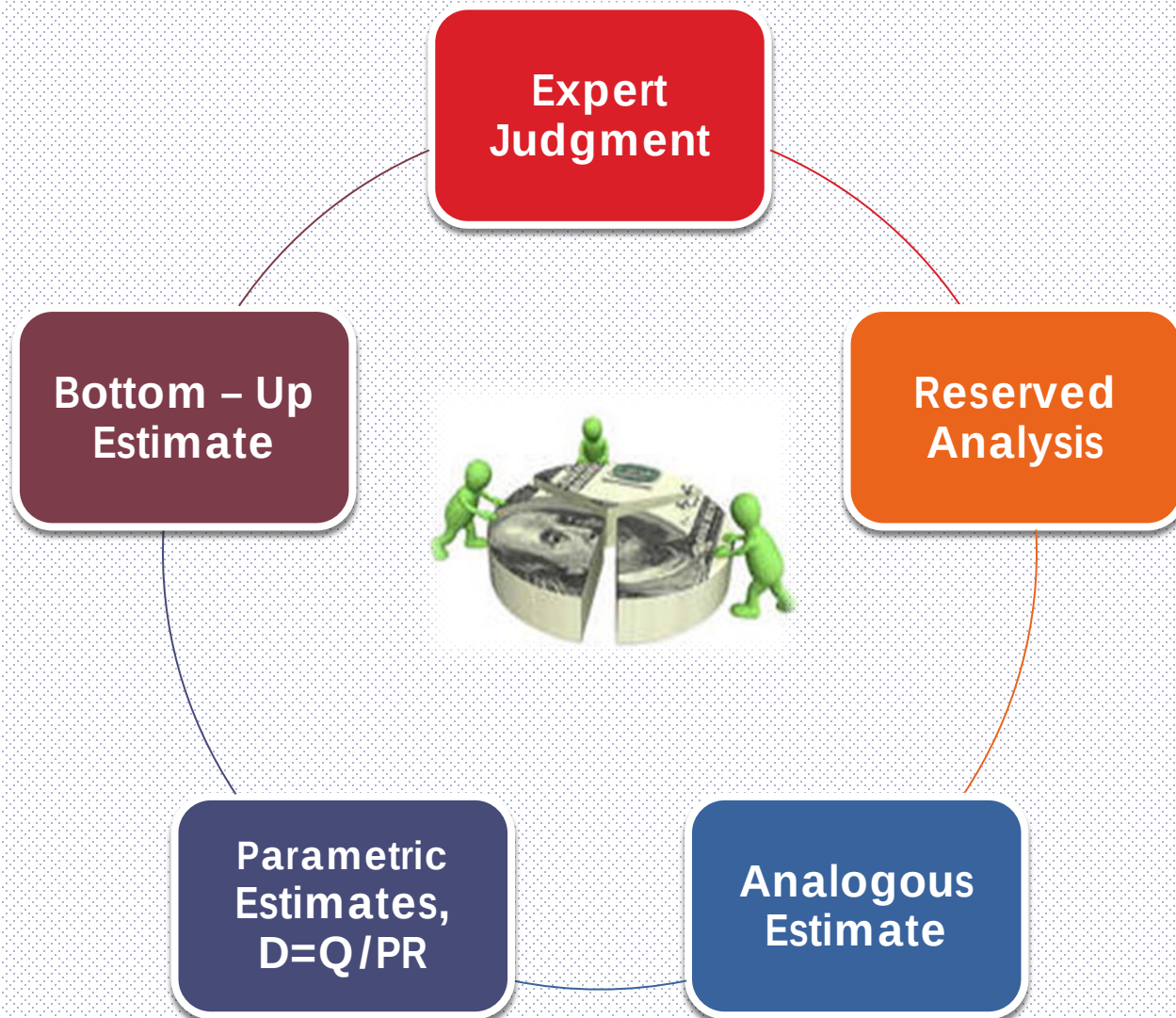
Activity Duration Estimate (ADE)

MICROSOFT PROJECT



PERANCANGAN JADUAL KERJA - *Activity Duration Estimate*

Teknik Anggaran



Teknik Anggaran

No.	Teknik Anggaran	Keterangan
1.	Analogous Estimate	Use the actual cost of a previous, similar project as the basis for the new estimate (e.g: project with std design)
2.	<u>Bottom – Up Estimate</u>	Estimate individual work items and sum them to get total estimate
3.	<u>Parametric Estimates</u> D=Q/PR	Use project characteristics in mathematic model to estimate
4.	Expert Judgment	Expertise that has been acquired in a specific knowledge area (personal experience)
5.	<u>Reserve Analysis</u>	Consider risk at that respective time

Latihan 2 : Parametrik Estimate



Resource Allocation

Resources	Total	Initials	Production Rates
Earthwork Team	2	EWT	Earthwork - 500m ³ /d Drainage - 15m/d Turfing – 100m ² /d Fence – 25m/d
Structure Team	4	ST	Frame – 50m ³ per 5-day cycle Wall – 50m ² /d Roof – 50m ² /d
Architectural Team	2	AT	Finishes – 200m ² /d
Mechanical Team	2	MT	Sanitary – 20m/d Air-Cond – 3 days per unit Fire Protection – 4 days per unit
Electrical Team	2	ECT	Wiring – 100m/d Lighting switches & fitting – use Analogous Estimate
Premix Team	1	PRT	100m ² /d

Senarai WBS

No.	Task Name	Resources	Qty	Risks
1	•Project Start			
2	•Performance Bonds & Insurance			
3	•Site Office			
4	•Setting Out			
5	•Certificate of Fitness for Building			
6	•Earthworks	EWT [2]	40,000m3	Raining (10%)
7	•Drain	EWT [2]	600m	Material Delivery (3 days)
8	•Road	PRT [1]	2000m2	QA/QC (5 days), Trial Lay (2 days)
9	•Turfing	EWT [1]	2000m2	Workmanship (4 days)
10	•Fence	EWT [1]	400m	Material Quality (3 days), Delivery (5 days)
11	•Frame – Bangunan Serbaguna	ST [3]	800m3	Testing (7 days)
12	•Wall – Bangunan Serbaguna	ST [2]	1600m2	Delivery (4 days)
13	•Roof – Bangunan Serbaguna	ST [2]	1800m2	Procurement (7 days)
14	•Finishes & furniture – Bangunan Serbaguna	AT [2]	4000m2	Quality & Workmanship (4 days)
15	•Door & Windows – Bangunan Serbaguna	AT [1]	20 nos	Quality & Workmanship (4 days)
16	•Sanitary & Plumbing – Bangunan Serbaguna	MT [1]	200m	Delivery & Quality (3 days)
17	•Wiring	ECT [2]	2000m	Workmanship (2 days)
18	•Lighting Switches & Powerpoints	ECT [2]	40 nos	Quality (3 days)
19	•Fittings	ECT [2]	40 nos	Workmanship (3 days)
20	•Air Conditional & Ventilation Works	MT [2]	14 nos	Quality & Workmanship (4 days)
21	•Fire Protection Works	MT [2]	10 nos	Quality & Workmanship (4 days)
22	•Frame – Pondok Pengawal	ST [1]	200m3	Testing (7 days)
23	•Wall - Pondok Pengawal	ST [1]	400m2	Delivery (4 days)
24	•Roof – Pondok Pengawal	ST [1]	400m2	Procurement (7 days)
25	•Door, Window & Finishes	AT [1]	1000m2	Quality & Workmanship (4 days)
26	•Minor Electrical & mechanical Works	MT [1], ECT [1]		
	•Testing & Commissioning			
	•Project Finish			

MICROSOFT PROJECT

Hands-On



Anggaran Parametrik

Ta M	WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names	0 O N
	1	Projek Membina bangunan serbaguna Dan Pondok Pengawal JKR	200 days	Tue 01 03 11	Mon 05 12 11			
	1.1	Project Start	0 days	Tue 01 03 11	Tue 01 03 11			
	1.2	Preliminaries	200 days	Tue 01 03 11	Mon 05 12 11			
	1.2.1	Performance Bonds & Insurance	7 days	Tue 01 03 11	Wed 09 03 11	2		
	1.2.2	Site Office	4 days	Thu 10 03 11	Tue 15 03 11	4		
	1.2.3	Setting Out	7 days	Thu 10 03 11	Fri 18 03 11	4		
	1.2.4	Progress Report	191 days	Tue 01 03 11	Tue 22 11 11			
	1.2.5	CCC	14 days	Wed 16 11 11	Mon 05 12 11	29;35;49;56;5		
	1.3	External Works	172 days	Mon 21 03 11	Tue 15 11 11			
	1.3.1	Earthworks	44 days	Mon 21 03 11	Thu 19 05 11	6	Earrthwork Team[200%]	
	1.3.2	Drain	23 days	Thu 04 08 11	Mon 05 09 11	37;52	Earrthwork Team[200%]	
	1.3.3	Road	27 days	Tue 06 09 11	Wed 12 10 11	31	Premix Team	
	1.3.4	Turfing	24 days	Thu 13 10 11	Tue 15 11 11	32	Earrthwork Team	
	1.3.5	Fence	24 days	Thu 13 10 11	Tue 15 11 11	32	Earrthwork Team;Electri	
	1.4	bangunan Serbaguna	96 days	Fri 20 05 11	Fri 30 09 11			
	1.4.1	Frame	34 days	Fri 20 05 11	Wed 06 07 11	30	Structure Team[300%]	
	1.4.2	Wall	20 days	Thu 07 07 11	Wed 03 08 11	36	Structure Team[200%]	
	1.4.3	Roof	25 days	Thu 07 07 11	Wed 10 08 11	36	Structure Team[200%]	
	1.4.4	Finnishes & Furniture	14 days	Mon 29 08 11	Thu 15 09 11	38;41;43;40	Architectural Team[200%	
	1.4.5	Door & Windows	5 days	Thu 04 08 11	Wed 10 08 11	37	Architectural Team	
	1.4.6	Sanitary & Plumbing	13 days	Thu 07 07 11	Mon 25 07 11	37SS	Mechanical Team	
	1.4.7	Electrical Works	33 days	Thu 11 08 11	Mon 26 09 11			
	1.4.7.1	Wiring	12 days	Thu 11 08 11	Fri 26 08 11	37;38	Electrical Team[200%]	
	1.4.7.2	Lighting Switches & Powerpoints	10 days	Mon 29 08 11	Fri 09 09 11	39SS	Electrical Team[200%]	
	1.4.7.3	Fittings	7 days	Fri 16 09 11	Mon 26 09 11	39;44	Electrical Team[200%]	

Anggaran Tempoh Kerja keseluruhan

Ta M	WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names	O	N
	1	Projek Membina bangunan serbaguna Dan Pondok Pengawal JKR	200 days	Tue 01 03 11	Mon 05 12 11				
	1.1	Project Start	0 days	Tue 01 03 11	Tue 01 03 11				
	1.2	Preliminaries	200 days	Tue 01 03 11	Mon 05 12 11				
	1.2.1	Performance Bonds & Insurance	7 days	Tue 01 03 11	Wed 09 03 11	2			
	1.2.2	Site Office	4 days	Thu 10 03 11	Tue 15 03 11	4			
	1.2.3	Setting Out	7 days	Thu 10 03 11	Fri 18 03 11	4			
	1.2.4	Progress Report	191 days	Tue 01 03 11	Tue 22 11 11				
	1.2.5	CCC	14 days	Wed 16 11 11	Mon 05 12 11	29;35;49;56;5			
	1.3	External Works	172 days	Mon 21 03 11	Tue 15 11 11				
	1.3.1	Earthworks	44 days	Mon 21 03 11	Thu 19 05 11	6	Earrthwork Team[200%]		
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	1.4.2	Wall	20 days	Thu 07 07 11	Wed 03 08 11	36	Structure Team[200%]		
	1.4.3	Roof	25 days	Thu 07 07 11	Wed 10 08 11	36	Structure Team[200%]		
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Untuk Lihat Keseluruhan Jadwal

