

BAB 7 KESIMPULAN DAN SARAN

7.1. Kesimpulan

Berdasarkan penelitian pada perancangan dan analisis *lead time Proactive Project*, dapat disimpulkan bahwa :

- a. Perancangan dan analisis *lead time* menggunakan metode PERT dan SDM sudah telah memenuhi kebutuhan *stakeholders* antara lain Department Head PT VWXY, dan PIC proyek. Pemenuhan kebutuhan *stakeholders* ditunjukkan dengan terpenuhinya standar proyek *vehicle* dari sisi *development* sampai *manufacturing*.
- b. Berdasarkan perhitungan secara matematis probabilitas tercapai *lead time* 26 minggu pada observasi 750 dengan tingkat probabilitas tertinggi pada tingkat 0,1333%.
- c. Waktu tercepat *Proactive project* dapat terselesaikan adalah 27,46 minggu atau dibulatkan menjadi 28 minggu dengan probabilitas 51,30%. Berdasarkan simulasi yang dilakukan dengan probabilitas diatas 90% maka *lead time* yang ideal untuk *Proactive project* adalah 28,30 minggu dengan tingkat keberhasilan 92,20%.

7.2. Saran

Berdasarkan penelitian yang telah dilakukan, terdapat beberapa saran yang dapat digunakan sebagai dasar pengembangan penelitian selanjutnya, antara lain:

- a. Mempertimbangkan metode lain yang mampu mengontrol variabel eksternal agar proses perancangan *Master schedule* dapat lebih terkontrol dan memiliki risiko keterlambatan yang lebih rendah.
- b. Pada proses kategorisasi proyek tidak hanya memperhatikan kategori proyek namun *part*/komponen yang akan dilakukan *development*.
- c. *Robotic Process Automation* (RPA) yang dibuat bisa dikembangkan agar menjadi *tools* yang dapat digunakan secara general untuk diakses tidak hanya divisi tertentu.

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LAMPIRAN

Lampiran 1. Wawancara dan Observasi Bi-Weekly

Observasi dilakukan bersamaan meeting proyek yang dilaksanakan sehingga tidak dapat di *screenshoot* untuk keamanan data pribadi divisi lain serta materi yang dipaparkan bersifat confidential



Lampiran 2. Daftar Pertanyaan

No	Pertanyaan
1	Apa tujuan utama dari proyek <i>vehicle</i> ini?
2	Target pasar kendaraan yang dihasilkan dari proyek ini?
3	Apa kategori kendaraan yang akan dibuat dalam proyek ini?
4	Bagaimana proyek ini akan memenuhi kebutuhan pasar kendaraan yang sudah ada?
5	Siapa yang akan terlibat dalam proyek ini?
6	Apa yang menjadi peran penulis dalam proyek ini?
7	Berapa lama waktu yang diperlukan untuk menyelesaikan proyek ini?
8	Apa risiko terbesar dalam proyek ini?
9	Bagaimana risiko tersebut akan diatasi?
10	Bagaimana cara mengevaluasi kesuksesan proyek ini?
11	Apa langkah yang diambil jika proyek tidak mencapai tujuannya?
12	Apa yang menjadi prioritas dalam proyek ini?
13	Apa tantangan terbesar yang dihadapi dalam proyek ini?



Lampiran 3. Hasil Simulasi 100x *Lead Time* Proyek Metode PERT

PERT/CPM

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Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	0	0.0000	0.0000
6	26.50	27.40	0	0.0000	0.0000
7	27.40	28.30	1	1.0000	1.0000
8	28.30	29.20	10	10.0000	11.0000
9	29.20	30.10	22	22.0000	33.0000
10	30.10	31	28	28.0000	61.0000
11	31	31.90	29	29.0000	90.0000
12	31.90	32.80	9	9.0000	99.0000
13	32.80	33.70	1	1.0000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			100	Random Seed =	27437
Average Completion Time =			26 weeks	= 0.0000%	
Chance to finish in					

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Lampiran 4. Hasil Simulasi 150x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	0	0.0000	0.0000
6	26.50	27.40	1	0.6667	0.6667
7	27.40	28.30	3	2.0000	2.6667
8	28.30	29.20	15	10.0000	12.6667
9	29.20	30.10	35	23.3333	36.0000
10	30.10	31	38	25.3333	61.3333
11	31	31.90	46	30.6667	92.0000
12	31.90	32.80	10	6.6667	98.6667
13	32.80	33.70	2	1.3333	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			150	Random Seed =	27437
Average Completion Time =			26 weeks	= 0.0000%	
Chance to finish in					

start Graphics Server PERT/CPM 9:02 AM



Lampiran 5. Hasil Simulasi 200x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	0	0.0000	0.0000
6	26.50	27.40	3	1.5000	1.5000
7	27.40	28.30	8	4.0000	5.5000
8	28.30	29.20	21	10.5000	16.0000
9	29.20	30.10	45	22.5000	38.5000
10	30.10	31	56	28.0000	66.5000
11	31	31.90	53	26.5000	93.0000
12	31.90	32.80	11	5.5000	98.5000
13	32.80	33.70	3	1.5000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			200	Random Seed =	27437
Average Completion Time =			26 weeks	= 0.0000%	
Chance to finish in					

start Graphics Server PERT/CPM 9:03 AM



Lampiran 6. Hasil Simulasi 250x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	0	0.0000	0.0000
6	26.50	27.40	3	1.2000	1.2000
7	27.40	28.30	10	4.0000	5.2000
8	28.30	29.20	28	11.2000	16.4000
9	29.20	30.10	57	22.8000	39.2000
10	30.10	31	70	28.0000	67.2000
11	31	31.90	65	26.0000	93.2000
12	31.90	32.80	14	5.6000	98.8000
13	32.80	33.70	3	1.2000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			250	Random Seed = 27437	
Average Completion Time =			26 weeks	= 0.0000%	
Chance to finish in					

start Graphics Server PERT/CPM 9:09 AM



Lampiran 7. Hasil Simulasi 300x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	0	0.0000	0.0000
6	26.50	27.40	3	1.0000	1.0000
7	27.40	28.30	14	4.6667	5.6667
8	28.30	29.20	33	11.0000	16.6667
9	29.20	30.10	62	20.6667	37.3333
10	30.10	31	85	28.3333	65.6667
11	31	31.90	81	27.0000	92.6667
12	31.90	32.80	19	6.3333	99.0000
13	32.80	33.70	3	1.0000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			300	Random Seed =	27437
Average Completion Time =			30.35 weeks		
Chance to finish in			26 weeks	= 0.0000%	

start Graphics Server PERT/CPM 9:11 AM



Lampiran 8. Hasil Simulasi 350x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	0	0.0000	0.0000
6	26.50	27.40	3	0.8571	0.8571
7	27.40	28.30	18	5.1429	6.0000
8	28.30	29.20	37	10.5714	16.5714
9	29.20	30.10	72	20.5714	37.1429
10	30.10	31	99	28.2857	65.4286
11	31	31.90	96	27.4286	92.8571
12	31.90	32.80	22	6.2857	99.1429
13	32.80	33.70	3	0.8571	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			350	Random Seed =	27437
Average Completion Time =			30.36 weeks		
Chance to finish in			26 weeks	= 0.0000%	

start Graphics Server PERT/CPM 1:29 PM



Lampiran 9. Hasil Simulasi 400x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	0	0.0000	0.0000
6	26.50	27.40	3	0.7500	0.7500
7	27.40	28.30	20	5.0000	5.7500
8	28.30	29.20	42	10.5000	16.2500
9	29.20	30.10	88	22.0000	38.2500
10	30.10	31	109	27.2500	65.5000
11	31	31.90	109	27.2500	92.7500
12	31.90	32.80	27	6.7500	99.5000
13	32.80	33.70	3	0.7500	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			400	Random Seed =	27437
Average Completion Time =			26 weeks	= 0.0000%	
Chance to finish in					

start Graphics Server PERT/CPM 1:30 PM



Lampiran 10. Hasil Simulasi 450x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	0	0.0000	0.0000
6	26.50	27.40	3	0.6667	0.6667
7	27.40	28.30	24	5.3333	6.0000
8	28.30	29.20	47	10.4444	16.4444
9	29.20	30.10	100	22.2222	38.6667
10	30.10	31	120	26.6667	65.3333
11	31	31.90	125	27.7778	93.1111
12	31.90	32.80	28	6.2222	99.3333
13	32.80	33.70	3	0.6667	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			450	Random Seed =	27437
Average Completion Time =			30.35 weeks		
Chance to finish in			26 weeks	= 0.0000%	

start Graphics Server PERT/CPM 1:32 PM



Lampiran 11. Hasil Simulasi 500x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	1	0.2000	0.2000
6	26.50	27.40	3	0.6000	0.8000
7	27.40	28.30	25	5.0000	5.8000
8	28.30	29.20	54	10.8000	16.6000
9	29.20	30.10	108	21.6000	38.2000
10	30.10	31	135	27.0000	65.2000
11	31	31.90	138	27.6000	92.8000
12	31.90	32.80	33	6.6000	99.4000
13	32.80	33.70	3	0.6000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			500	Random Seed =	27437
Average Completion Time =			30.36 weeks		
Chance to finish in			26 weeks	= 0.0000%	

start Graphics Server PERT/CPM 1:33 PM



Lampiran 12. Hasil Simulasi 550x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	1	0.1818	0.1818
6	26.50	27.40	4	0.7273	0.9091
7	27.40	28.30	26	4.7273	5.6364
8	28.30	29.20	62	11.2727	16.9091
9	29.20	30.10	116	21.0909	38.0000
10	30.10	31	154	28.0000	66.0000
11	31	31.90	150	27.2727	93.2727
12	31.90	32.80	34	6.1818	99.4545
13	32.80	33.70	3	0.5455	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			550	Random Seed =	27437
Average Completion Time =			30.35 weeks		
Chance to finish in			26 weeks	= 0.0000%	

start Graphics Server PERT/CPM 1:34 PM



Lampiran 13. Hasil Simulasi 600x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	2	0.3333	0.3333
6	26.50	27.40	4	0.6667	1.0000
7	27.40	28.30	26	4.3333	5.3333
8	28.30	29.20	68	11.3333	16.6667
9	29.20	30.10	129	21.5000	38.1667
10	30.10	31	173	28.8333	67.0000
11	31	31.90	159	26.5000	93.5000
12	31.90	32.80	37	6.1667	99.6667
13	32.80	33.70	3	0.5000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			600	Random Seed =	27437
Average Completion Time =			30.35 weeks		
Chance to finish in			26 weeks	= 0.0000%	

start Graphics Server PERT/CPM 1:38 PM



Lampiran 14. Hasil Simulasi 650x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	2	0.3077	0.3077
6	26.50	27.40	4	0.6154	0.9231
7	27.40	28.30	27	4.1538	5.0769
8	28.30	29.20	72	11.0769	16.1538
9	29.20	30.10	140	21.5385	37.6923
10	30.10	31	192	29.5385	67.2308
11	31	31.90	169	26.0000	93.2308
12	31.90	32.80	41	6.3077	99.5385
13	32.80	33.70	3	0.4615	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			650	Random Seed =	27437
Average Completion Time =			30.36 weeks		
Chance to finish in			26 weeks	= 0.0000%	

start Graphics Server PERT/CPM 1:39 PM



Lampiran 15. Hasil Simulasi 700x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	0	0.0000	0.0000
5	25.60	26.50	2	0.2857	0.2857
6	26.50	27.40	4	0.5714	0.8571
7	27.40	28.30	28	4.0000	4.8571
8	28.30	29.20	82	11.7143	16.5714
9	29.20	30.10	148	21.1429	37.7143
10	30.10	31	210	30.0000	67.7143
11	31	31.90	179	25.5714	93.2857
12	31.90	32.80	44	6.2857	99.5714
13	32.80	33.70	3	0.4286	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			700	Random Seed =	27437
Average Completion Time =			30.35 weeks		
Chance to finish in			26 weeks	= 0.0000%	

start Graphics Server PERT/CPM 1:40 PM



Lampiran 16. Hasil Simulasi 750x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	1	0.1333	0.1333
5	25.60	26.50	2	0.2667	0.4000
6	26.50	27.40	4	0.5333	0.9333
7	27.40	28.30	31	4.1333	5.0667
8	28.30	29.20	87	11.6000	16.6667
9	29.20	30.10	161	21.4667	38.1333
10	30.10	31	223	29.7333	67.8667
11	31	31.90	192	25.6000	93.4667
12	31.90	32.80	46	6.1333	99.6000
13	32.80	33.70	3	0.4000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			750	Random Seed =	27437
Average Completion Time =			30.34 weeks		
Chance to finish in			26 weeks	= 0.1333%	

start Graphics Server PERT/CPM 1:41 PM



Lampiran 17. Hasil Simulasi 800x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	1	0.1250	0.1250
5	25.60	26.50	2	0.2500	0.3750
6	26.50	27.40	4	0.5000	0.8750
7	27.40	28.30	31	3.8750	4.7500
8	28.30	29.20	91	11.3750	16.1250
9	29.20	30.10	169	21.1250	37.2500
10	30.10	31	242	30.2500	67.5000
11	31	31.90	207	25.8750	93.3750
12	31.90	32.80	49	6.1250	99.5000
13	32.80	33.70	4	0.5000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			800	Random Seed =	27437
Average Completion Time =			30.37 weeks		
Chance to finish in			26 weeks	= 0.1250%	

start Graphics Server PERT/CPM 1:42 PM



Lampiran 18. Hasil Simulasi 850x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	1	0.1250	0.1250
5	25.60	26.50	2	0.2500	0.3750
6	26.50	27.40	4	0.5000	0.8750
7	27.40	28.30	31	3.8750	4.7500
8	28.30	29.20	91	11.3750	16.1250
9	29.20	30.10	169	21.1250	37.2500
10	30.10	31	242	30.2500	67.5000
11	31	31.90	207	25.8750	93.3750
12	31.90	32.80	49	6.1250	99.5000
13	32.80	33.70	4	0.5000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			800	Random Seed =	27437
Average Completion Time =			30.37 weeks		
Chance to finish in			26 weeks	= 0.1250%	

start Graphics Server PERT/CPM 1:42 PM



Lampiran 19. Hasil Simulasi 900x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	1	0.1111	0.1111
5	25.60	26.50	2	0.2222	0.3333
6	26.50	27.40	4	0.4444	0.7778
7	27.40	28.30	36	4.0000	4.7778
8	28.30	29.20	101	11.2222	16.0000
9	29.20	30.10	186	20.6667	36.6667
10	30.10	31	279	31.0000	67.6667
11	31	31.90	231	25.6667	93.3333
12	31.90	32.80	56	6.2222	99.5556
13	32.80	33.70	4	0.4444	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			900	Random Seed =	27437
Average Completion Time =			30.38 weeks		
Chance to finish in			26 weeks	= 0.1111%	

start Graphics Server PERT/CPM 1:45 PM



Lampiran 20. Hasil Simulasi 950x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000
1	22	0	0.0000	0.0000
2	22.90	0	0.0000	0.0000
3	23.80	0	0.0000	0.0000
4	24.70	1	0.1053	0.1053
5	25.60	2	0.2105	0.3158
6	26.50	5	0.5263	0.8421
7	27.40	39	4.1053	4.9474
8	28.30	103	10.8421	15.7895
9	29.20	201	21.1579	36.9474
10	30.10	292	30.7368	67.6842
11	31	244	25.5842	93.3684
12	31.90	59	6.2105	99.5789
13	32.80	4	0.4211	100.0000
14	33.70	0	0.0000	100.0000
15	34.60	0	0.0000	100.0000
16	35.50	0	0.0000	100.0000
17	36.40	0	0.0000	100.0000
18	37.30	0	0.0000	100.0000
19	38.20	0	0.0000	100.0000
20	39.10	0	0.0000	100.0000
21	40	0	0.0000	100.0000
	and over	0	0.0000	100.0000
Total Observations =		950	Random Seed =	27437
Average Completion Time =		30.37 weeks		
Chance to finish in		26 weeks	=	0.1053%

start Graphics Server PERT/CPM 1:46 PM



Lampiran 21. Hasil Simulasi 1000x *Lead Time* Proyek Metode PERT

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

02-28-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	22	0	0.0000	0.0000
1	22	22.90	0	0.0000	0.0000
2	22.90	23.80	0	0.0000	0.0000
3	23.80	24.70	0	0.0000	0.0000
4	24.70	25.60	1	0.1000	0.1000
5	25.60	26.50	2	0.2000	0.3000
6	26.50	27.40	6	0.6000	0.9000
7	27.40	28.30	41	4.1000	5.0000
8	28.30	29.20	110	11.0000	16.0000
9	29.20	30.10	210	21.0000	37.0000
10	30.10	31	309	30.9000	67.9000
11	31	31.90	257	25.7000	93.6000
12	31.90	32.80	60	6.0000	99.6000
13	32.80	33.70	4	0.4000	100.0000
14	33.70	34.60	0	0.0000	100.0000
15	34.60	35.50	0	0.0000	100.0000
16	35.50	36.40	0	0.0000	100.0000
17	36.40	37.30	0	0.0000	100.0000
18	37.30	38.20	0	0.0000	100.0000
19	38.20	39.10	0	0.0000	100.0000
20	39.10	40	0	0.0000	100.0000
21	40	and over	0	0.0000	100.0000
Total Observations =			1000	Random Seed =	27437
Average Completion Time =			30.37 weeks		
Chance to finish in			26 weeks	= 0.1000%	

start Graphics Server PERT/CPM 1:47 PM



Lampiran 22. Hasil Simulasi 100x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	0	0.0000	0.0000
5	23.85	24.48	0	0.0000	0.0000
6	24.48	25.12	2	2.0000	2.0000
7	25.12	25.76	6	6.0000	8.0000
8	25.76	26.39	16	16.0000	24.0000
9	26.39	27.03	13	13.0000	37.0000
10	27.03	27.67	22	22.0000	59.0000
11	27.67	28.30	26	26.0000	85.0000
12	28.30	28.94	11	11.0000	96.0000
13	28.94	29.58	3	3.0000	99.0000
14	29.58	30.21	1	1.0000	100.0000
15	30.21	30.85	0	0.0000	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			100	Random Seed =	27437
Average Completion Chance			Time =	27.32 weeks	
			26 weeks	= 10.0000%	

start Graphics Server PERT/CPM 11:35 PM



Lampiran 23. Hasil Simulasi 150x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	0	0.0000	0.0000
5	23.85	24.48	2	1.3333	1.3333
6	24.48	25.12	3	2.0000	3.3333
7	25.12	25.76	9	6.0000	9.3333
8	25.76	26.39	21	14.0000	23.3333
9	26.39	27.03	16	10.6667	34.0000
10	27.03	27.67	33	22.0000	56.0000
11	27.67	28.30	40	26.6667	82.6667
12	28.30	28.94	17	11.3333	94.0000
13	28.94	29.58	7	4.6667	98.6667
14	29.58	30.21	1	0.6667	99.3333
15	30.21	30.85	1	0.6667	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			150	Random Seed =	27437
Average Completion			Time =	27.36 weeks	
Chance to finish in			26 weeks	= 12.6667%	

start Graphics Server PERT/CPM 11:37 PM



Lampiran 24. Hasil Simulasi 200x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	0	0.0000	0.0000
5	23.85	24.48	2	1.0000	1.0000
6	24.48	25.12	6	3.0000	4.0000
7	25.12	25.76	13	6.5000	10.5000
8	25.76	26.39	23	11.5000	22.0000
9	26.39	27.03	21	10.5000	32.5000
10	27.03	27.67	44	22.0000	54.5000
11	27.67	28.30	53	26.5000	81.0000
12	28.30	28.94	24	12.0000	93.0000
13	28.94	29.58	11	5.5000	98.5000
14	29.58	30.21	2	1.0000	99.5000
15	30.21	30.85	1	0.5000	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			200	Random Seed =	27437
Average Completion Chance			Time =	27.39 weeks	
			26 weeks	= 13.5000%	

start Graphics Server PERT/CPM 11:38 PM



Lampiran 25. Hasil Simulasi 250x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.4000	0.4000
5	23.85	24.48	2	0.8000	1.2000
6	24.48	25.12	6	2.4000	3.6000
7	25.12	25.76	13	5.2000	8.8000
8	25.76	26.39	28	11.2000	20.0000
9	26.39	27.03	30	12.0000	32.0000
10	27.03	27.67	51	20.4000	52.4000
11	27.67	28.30	69	27.6000	80.0000
12	28.30	28.94	31	12.4000	92.4000
13	28.94	29.58	12	4.8000	97.2000
14	29.58	30.21	6	2.4000	99.6000
15	30.21	30.85	1	0.4000	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			250	Random Seed =	27437
Average Completion			Time =	27.44 weeks	
Chance to finish in			26 weeks	= 12.0000%	

start Graphics Server PERT/CPM 11:39 PM



Lampiran 26. Hasil Simulasi 300x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.3333	0.3333
5	23.85	24.48	2	0.6667	1.0000
6	24.48	25.12	7	2.3333	3.3333
7	25.12	25.76	16	5.3333	8.6667
8	25.76	26.39	34	11.3333	20.0000
9	26.39	27.03	34	11.3333	31.3333
10	27.03	27.67	57	19.0000	50.3333
11	27.67	28.30	88	29.3333	79.6667
12	28.30	28.94	37	12.3333	92.0000
13	28.94	29.58	15	5.0000	97.0000
14	29.58	30.21	8	2.6667	99.6667
15	30.21	30.85	1	0.3333	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			300	Random Seed =	27437
Average Completion Time =			27.46 weeks		
Chance to finish in			26 weeks		= 12.0000%

start Graphics Server PERT/CPM 11:40 PM



Lampiran 27. Hasil Simulasi 350x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.2857	0.2857
5	23.85	24.48	2	0.5714	0.8571
6	24.48	25.12	10	2.8571	3.7143
7	25.12	25.76	19	5.4286	9.1429
8	25.76	26.39	36	10.2857	19.4286
9	26.39	27.03	40	11.4286	30.8571
10	27.03	27.67	64	18.2857	49.1429
11	27.67	28.30	106	30.2857	79.4286
12	28.30	28.94	46	13.1429	92.5714
13	28.94	29.58	17	4.8571	97.4286
14	29.58	30.21	8	2.2857	99.7143
15	30.21	30.85	1	0.2857	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			350	Random Seed =	27437
Average Completion			Time =	27.46 weeks	
Chance to finish in			26 weeks	= 12.0000%	

start Graphics Server PERT/CPM 11:41 PM



Lampiran 28. Hasil Simulasi 400x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.2500	0.2500
5	23.85	24.48	3	0.7500	1.0000
6	24.48	25.12	12	3.0000	4.0000
7	25.12	25.76	21	5.2500	9.2500
8	25.76	26.39	45	11.2500	20.5000
9	26.39	27.03	48	12.0000	32.5000
10	27.03	27.67	75	18.7500	51.2500
11	27.67	28.30	111	27.7500	79.0000
12	28.30	28.94	48	12.0000	91.0000
13	28.94	29.58	25	6.2500	97.2500
14	29.58	30.21	10	2.5000	99.7500
15	30.21	30.85	1	0.2500	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total	Observations =		400	Random Seed =	27437
Average	Completion	Time =	27.44 weeks		
Chance	to finish in	26 weeks	= 12.5000%		

start Graphics Server PERT/CPM 11:42 PM



Lampiran 29. Hasil Simulasi 450x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.2222	0.2222
5	23.85	24.48	3	0.6667	0.8889
6	24.48	25.12	12	2.6667	3.5556
7	25.12	25.76	23	5.1111	8.6667
8	25.76	26.39	53	11.7778	20.4444
9	26.39	27.03	58	12.8889	33.3333
10	27.03	27.67	85	18.8889	52.2222
11	27.67	28.30	118	26.2222	78.4444
12	28.30	28.94	56	12.4444	90.8889
13	28.94	29.58	30	6.6667	97.5556
14	29.58	30.21	10	2.2222	99.7778
15	30.21	30.85	1	0.2222	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			450	Random Seed =	27437
Average Completion			Time =	27.44 weeks	
Chance to finish in			26 weeks	= 11.5556%	

start Graphics Server PERT/CPM 11:42 PM



Lampiran 30. Hasil Simulasi 500x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.2000	0.2000
5	23.85	24.48	4	0.8000	1.0000
6	24.48	25.12	12	2.4000	3.4000
7	25.12	25.76	25	5.0000	8.4000
8	25.76	26.39	57	11.4000	19.8000
9	26.39	27.03	68	13.6000	33.4000
10	27.03	27.67	91	18.2000	51.6000
11	27.67	28.30	133	26.6000	78.2000
12	28.30	28.94	63	12.6000	90.8000
13	28.94	29.58	33	6.6000	97.4000
14	29.58	30.21	12	2.4000	99.8000
15	30.21	30.85	1	0.2000	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =		500		Random Seed =	
Average Completion Time =		27.45 weeks			
Chance to finish in		26 weeks		= 11.2000%	

start Graphics Server PERT/CPM 11:43 PM



Lampiran 31. Hasil Simulasi 550x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1818	0.1818
5	23.85	24.48	6	1.0909	1.2727
6	24.48	25.12	12	2.1818	3.4545
7	25.12	25.76	27	4.9091	8.3636
8	25.76	26.39	61	11.0909	19.4545
9	26.39	27.03	77	14.0000	33.4545
10	27.03	27.67	103	18.7273	52.1818
11	27.67	28.30	142	25.8182	78.0000
12	28.30	28.94	74	13.4545	91.4545
13	28.94	29.58	34	6.1818	97.6364
14	29.58	30.21	12	2.1818	99.8182
15	30.21	30.85	1	0.1818	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			550	Random Seed =	27437
Average Completion			Time =	27.44 weeks	
Chance to finish in			26 weeks	= 11.0909%	

start Graphics Server PERT/CPM 11:44 PM



Lampiran 32. Hasil Simulasi 600x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1667	0.1667
5	23.85	24.48	6	1.0000	1.1667
6	24.48	25.12	12	2.0000	3.1667
7	25.12	25.76	29	4.8333	8.0000
8	25.76	26.39	64	10.6667	18.6667
9	26.39	27.03	85	14.1667	32.8333
10	27.03	27.67	111	18.5000	51.3333
11	27.67	28.30	158	26.3333	77.6667
12	28.30	28.94	85	14.3333	92.0000
13	28.94	29.58	35	5.8333	97.8333
14	29.58	30.21	12	2.0000	99.8333
15	30.21	30.85	1	0.1667	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			600	Random Seed =	27437
Average Completion Time =			27.46 weeks		
Chance to finish in 26 weeks =			10.5000%		

start Graphics Server PERT/CPM 11:45 PM



Lampiran 33. Hasil Simulasi 650x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1538	0.1538
5	23.85	24.48	6	0.9231	1.0769
6	24.48	25.12	12	1.8462	2.9231
7	25.12	25.76	33	5.0769	8.0000
8	25.76	26.39	67	10.3077	18.3077
9	26.39	27.03	93	14.3077	32.6154
10	27.03	27.67	120	18.4615	51.0769
11	27.67	28.30	174	26.7692	77.8462
12	28.30	28.94	93	14.3077	92.1538
13	28.94	29.58	36	5.5385	97.6923
14	29.58	30.21	14	2.1538	99.8462
15	30.21	30.85	1	0.1538	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			650	Random Seed =	27437
Average Completion			Time =	27.47 weeks	
Chance to finish in			26 weeks	= 10.3077%	

start Graphics Server PERT/CPM 11:47 PM



Lampiran 34. Hasil Simulasi 700x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1429	0.1429
5	23.85	24.48	7	1.0000	1.1429
6	24.48	25.12	13	1.8571	3.0000
7	25.12	25.76	40	5.7143	8.7143
8	25.76	26.39	70	10.0000	18.7143
9	26.39	27.03	98	14.0000	32.7143
10	27.03	27.67	131	18.7143	51.4286
11	27.67	28.30	186	26.5714	78.0000
12	28.30	28.94	100	14.2857	92.2857
13	28.94	29.58	37	5.2857	97.5714
14	29.58	30.21	15	2.1429	99.7143
15	30.21	30.85	2	0.2857	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			700	Random Seed =	27437
Average Completion			Time =	27.46 weeks	
Chance to finish in			26 weeks	= 11.1429%	

start Graphics Server PERT/CPM 11:47 PM



Lampiran 35. Hasil Simulasi 750x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1333	0.1333
5	23.85	24.48	7	0.9333	1.0667
6	24.48	25.12	16	2.1333	3.2000
7	25.12	25.76	41	5.4667	8.6667
8	25.76	26.39	77	10.2667	18.9333
9	26.39	27.03	107	14.2667	33.2000
10	27.03	27.67	141	18.8000	52.0000
11	27.67	28.30	197	26.2667	78.2667
12	28.30	28.94	104	13.8667	92.1333
13	28.94	29.58	42	5.6000	97.7333
14	29.58	30.21	15	2.0000	99.7333
15	30.21	30.85	2	0.2667	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			750	Random Seed =	27437
Average Completion			Time =	27.45 weeks	
Chance to finish in			26 weeks	= 11.2000%	

start Graphics Server PERT/CPM 11:48 PM



Lampiran 36. Hasil Simulasi 800x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1250	0.1250
5	23.85	24.48	7	0.8750	1.0000
6	24.48	25.12	16	2.0000	3.0000
7	25.12	25.76	42	5.2500	8.2500
8	25.76	26.39	82	10.2500	18.5000
9	26.39	27.03	115	14.3750	32.8750
10	27.03	27.67	153	19.1250	52.0000
11	27.67	28.30	210	26.2500	78.2500
12	28.30	28.94	110	13.7500	92.0000
13	28.94	29.58	46	5.7500	97.7500
14	29.58	30.21	16	2.0000	99.7500
15	30.21	30.85	2	0.2500	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =		800		Random Seed =	
Average Completion Time =		27.46 weeks			
Chance to finish in		26 weeks		= 10.8750%	

start Graphics Server PERT/CPM 11:54 PM



Lampiran 37. Hasil Simulasi 850x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1176	0.1176
5	23.85	24.48	7	0.8235	0.9412
6	24.48	25.12	16	1.8824	2.8235
7	25.12	25.76	45	5.2941	8.1176
8	25.76	26.39	87	10.2353	18.3529
9	26.39	27.03	123	14.4706	32.8235
10	27.03	27.67	163	19.1765	52.0000
11	27.67	28.30	220	25.8824	77.8824
12	28.30	28.94	121	14.2353	92.1176
13	28.94	29.58	49	5.7647	97.8824
14	29.58	30.21	16	1.8824	99.7647
15	30.21	30.85	2	0.2353	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =		850		Random Seed =	
Average Completion Time =		27.46 weeks			
Chance to finish in		26 weeks		= 10.8235%	

start Graphics Server PERT/CPM 11:57 PM



Lampiran 38. Hasil Simulasi 900x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1111	0.1111
5	23.85	24.48	7	0.7778	0.8889
6	24.48	25.12	17	1.8889	2.7778
7	25.12	25.76	48	5.3333	8.1111
8	25.76	26.39	95	10.5556	18.6667
9	26.39	27.03	127	14.1111	32.7778
10	27.03	27.67	172	19.1111	51.8889
11	27.67	28.30	224	25.0000	77.8889
12	28.30	28.94	127	14.1111	92.0000
13	28.94	29.58	53	5.8889	97.8889
14	29.58	30.21	17	1.8889	99.7778
15	30.21	30.85	2	0.2222	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =		900		Random Seed =	
Average Completion Time =		27.46 weeks			
Chance to finish in		26 weeks		= 10.8893%	

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Lampiran 39. Hasil Simulasi 950x *Lead Time* Proyek Percepatan

PERT/CPM

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Simulation Result for Master Schedule Y

03-09-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1053	0.1053
5	23.85	24.48	8	0.8421	0.9474
6	24.48	25.12	17	1.7895	2.7368
7	25.12	25.76	50	5.2632	8.0000
8	25.76	26.39	101	10.6316	18.6316
9	26.39	27.03	131	13.7895	32.4211
10	27.03	27.67	180	18.9474	51.3684
11	27.67	28.30	244	25.6842	77.0526
12	28.30	28.94	143	15.0526	92.1053
13	28.94	29.58	55	5.7895	97.8947
14	29.58	30.21	18	1.8947	99.7895
15	30.21	30.85	2	0.2105	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =		950		Random Seed =	
Average Completion Time =		27.47 weeks			
Chance to finish in		26 weeks		= 10.8421%	

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Lampiran 40. Hasil Simulasi 1000x *Lead Time* Proyek Percepatan

PERT/CPM

File Format Results Utilities Window Help

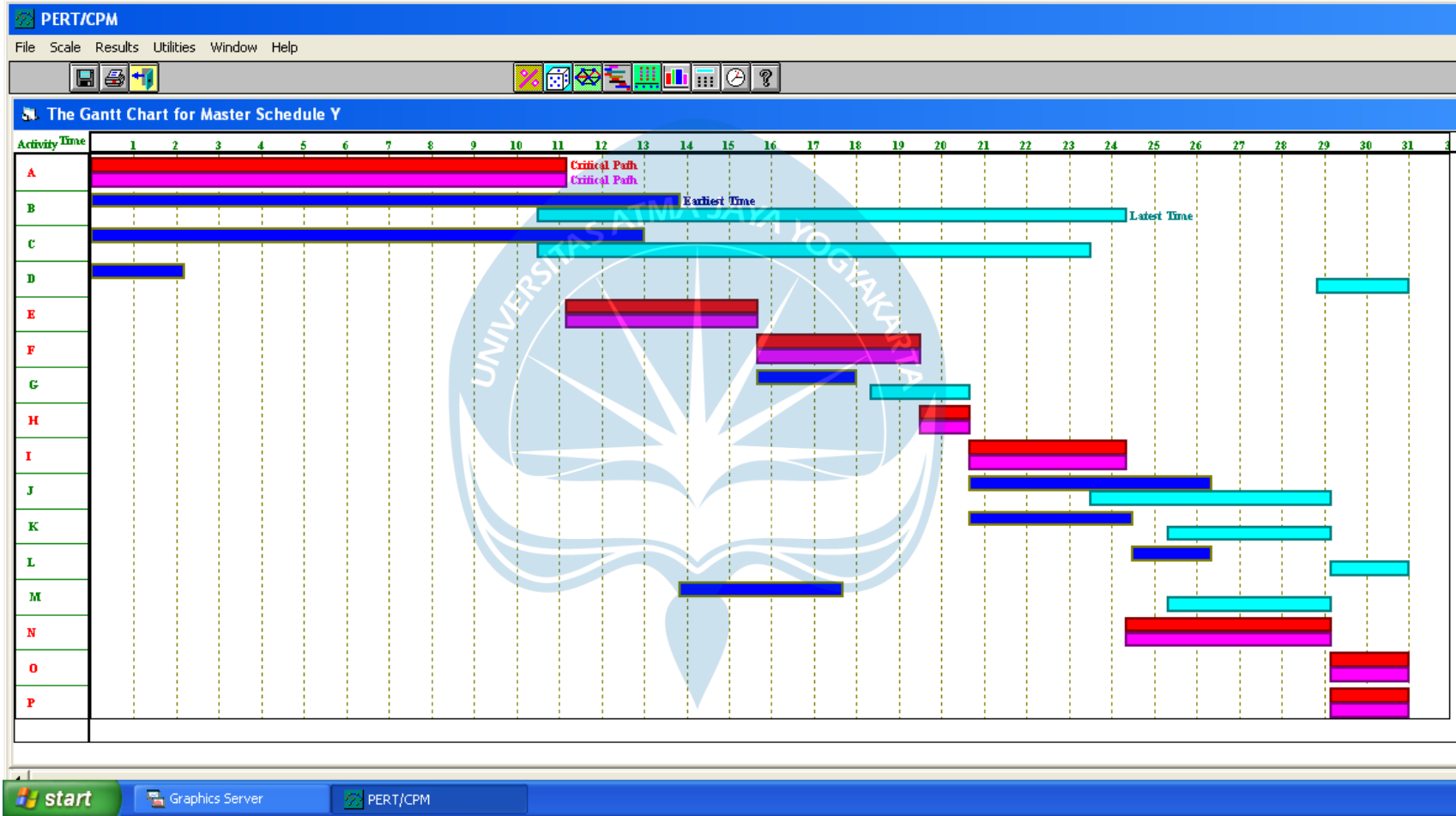
Simulation Result for Master Schedule Y

03-08-2023	Completion Time From	To (included)	Frequency	%	Cumulative %
0	0	21.30	0	0.0000	0.0000
1	21.30	21.94	0	0.0000	0.0000
2	21.94	22.58	0	0.0000	0.0000
3	22.58	23.21	0	0.0000	0.0000
4	23.21	23.85	1	0.1000	0.1000
5	23.85	24.48	8	0.8000	0.9000
6	24.48	25.12	19	1.9000	2.8000
7	25.12	25.76	52	5.2000	8.0000
8	25.76	26.39	106	10.6000	18.6000
9	26.39	27.03	139	13.9000	32.5000
10	27.03	27.67	188	18.8000	51.3000
11	27.67	28.30	251	25.1000	77.4000
12	28.30	28.94	148	14.8000	92.2000
13	28.94	29.58	58	5.8000	98.0000
14	29.58	30.21	18	1.8000	99.8000
15	30.21	30.85	2	0.2000	100.0000
16	30.85	31.49	0	0.0000	100.0000
17	31.49	32.12	0	0.0000	100.0000
18	32.12	32.76	0	0.0000	100.0000
19	32.76	33.39	0	0.0000	100.0000
20	33.39	34.03	0	0.0000	100.0000
21	34.03	and over	0	0.0000	100.0000
Total Observations =			1000	Random Seed =	27437
Average Completion			Time =	27.46 weeks	
Chance to finish in			26 weeks	= 10.9000%	

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Lampiran 42. Gantt Chart WINQSB Metode PERT



Lampiran 43. Gantt Chart WINQSB Percepatan

