LAMPIRAN

Lampiran 1: Data Penerbangan Internasional Bandara I Gusti Ngurah Rai

PERKEMBANGAN PENERBANGAN ANGKUTAN UDARA INTERNASIONAL BANDARA I GUSTI NGURAH RAI DARI JANUARI 2019 SAMPAI FEBRUARI 2020															
NO	**Tujuan**	**Jan-19**	**Feb 19**	**Maret 19**	**Apr-19**	**mei-19**	**Juni 19**	**Juli-19**	**Agust-19**	**Sep-19**	**okt-19**	**Nov-19**	**Des-19**	**Jan-20**	**Feb-20**
1	Australia	747	628	672	705	745	730	776	790	779	784	766	810	853	738
2	Malaysia	446	403	431	465	485	476	490	509	506	526	526	563	557	506
3	Singapura	534	482	526	497	508	490	509	514	484	506	506	522	531	478
4	Thailand	147	132	138	141	143	141	148	147	142	144	129	136	126	125
5	Philipina	94	83	91	92	97	91	93	97	86	80	92	91	89	88
6	Qatar	92	85	92	90	94	95	93	94	90	93	90	93	93	87
7	Tiongkok	434	481	444	451	466	451	462	459	418	415	379	388	60	73
8	Hongkong	123	113	112	123	126	120	123	123	116	109	91	103	112	70
9	Korea Selatan	80	71	63	69	71	69	70	71	70	71	67	71	72	66
10	Lainnya	376	301	319	314	322	351	397	432	405	440	436	451	869	384
Total		**3073**	**2779**	**2888**	**2947**	**3057**	**3014**	**3161**	**3236**	**3096**	**3168**	**3082**	**3228**	**3362**	**2615**

Lampiran 2: Perhitungan Tingkat Akurasi

1. *Konstanta Smoothing (α=0,1)*

$$MAD = \frac{\sum_{t=1}^{n} |At - Ft|}{n} = \frac{2003.275}{14} = 143.09$$

$$MSE = \frac{\sum_{t=1}^{n} (At - Ft)^2}{n} = \frac{540538.8}{14} = 38{,}609.91$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n} (At - Ft)^2}{n}} = \sqrt{38{,}609.91} = 196.49$$

$$MAPE = \frac{\sum_{t=1}^{n} \left| \frac{At - Ft}{At} \right|}{n} \times 100\% = \frac{67.92\%}{14} = 4.852\%$$

2. *Konstanta Smoothing (α=0,2)*

$$MAD = \frac{\sum_{t=1}^{n} |At - Ft|}{n} = \frac{1980.662}{14} = 141.48$$

$$MSE = \frac{\sum_{t=1}^{n} (At - Ft)^2}{n} = \frac{570065.6}{14} = 40{,}718.97$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n} (At - Ft)^2}{n}} = \sqrt{40{,}718.97} = 201.79$$

$$MAPE = \frac{\sum_{t=1}^{n} \left| \frac{At - Ft}{At} \right|}{n} \times 100\% = \frac{67.50\%}{14} = 4.821\%$$

3. *Konstanta Smoothing (α=0,3)*

$$MAD = \frac{\sum_{t=1}^{n} |At - Ft|}{n} = \frac{1936.674}{14} = 138.33$$

$$MSE = \frac{\sum_{t=1}^{n} (At - Ft)^2}{n} = \frac{594164.1}{14} = 42{,}440.29$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n}(At - Ft)^2}{n}} = \sqrt{42{,}440.29} = 206.01$$

$$MAPE = \frac{\sum_{t=1}^{n}\left|\frac{At - Ft}{At}\right|}{n} \times 100\% = \frac{66.34\%}{14} = 4.739\%$$

4. *Konstanta Smoothing (α=0,4)*

$$MAD = \frac{\sum_{t=1}^{n}|At - Ft|}{n} = \frac{1951.623}{14} = 139.40$$

$$MSE = \frac{\sum_{t=1}^{n}(At - Ft)^2}{n} = \frac{616466.2}{14} = 44{,}033.30$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n}(At - Ft)^2}{n}} = \sqrt{44{,}033.30} = 209.84$$

$$MAPE = \frac{\sum_{t=1}^{n}\left|\frac{At - Ft}{At}\right|}{n} \times 100\% = \frac{67.06\%}{14} = 4.790\%$$

5. *Konstanta Smoothing (α=0,5)*

$$MAD = \frac{\sum_{t=1}^{n}|At - Ft|}{n} = \frac{1960.656}{14} = 140.05$$

$$MSE = \frac{\sum_{t=1}^{n}(At - Ft)^2}{n} = \frac{639325}{14} = 45{,}666.07$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n}(At - Ft)^2}{n}} = \sqrt{45{,}666.07} = 213.70$$

$$MAPE = \frac{\sum_{t=1}^{n}\left|\frac{At - Ft}{At}\right|}{n} \times 100\% = \frac{67.53\%}{14} = 4.824\%$$

6. *Konstanta Smoothing (α=0,6)*

$$MAD = \frac{\sum_{t=1}^{n} |At - Ft|}{n} = \frac{1954.312}{14} = 139.59$$

$$MSE = \frac{\sum_{t=1}^{n} (At - Ft)^2}{n} = \frac{663786.9}{14} = 47{,}413.35$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n} (At - Ft)^2}{n}} = \sqrt{47{,}413.35} = 217.75$$

$$MAPE = \frac{\sum_{t=1}^{n} \left| \frac{At - Ft}{At} \right|}{n} \times 100\% = \frac{67.46\%}{14} = 4.819\%$$

7. *Konstanta Smoothing (α=0,7)*

$$MAD = \frac{\sum_{t=1}^{n} |At - Ft|}{n} = \frac{1987.764}{14} = 141.98$$

$$MSE = \frac{\sum_{t=1}^{n} (At - Ft)^2}{n} = \frac{689839.4}{14} = 49{,}274.24$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n} (At - Ft)^2}{n}} = \sqrt{49{,}274.24} = 221.98$$

$$MAPE = \frac{\sum_{t=1}^{n} \left| \frac{At - Ft}{At} \right|}{n} \times 100\% = \frac{68.75\%}{14} = 4.911\%$$

8. *Konstanta Smoothing (α=0,8)*

$$MAD = \frac{\sum_{t=1}^{n} |At - Ft|}{n} = \frac{2051.935}{14} = 146.57$$

$$MSE = \frac{\sum_{t=1}^{n} (At - Ft)^2}{n} = \frac{716975.2}{14} = 51{,}212.52$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n}(At - Ft)^2}{n}} = \sqrt{51{,}212.52} = 226.30$$

$$MAPE = \frac{\sum_{t=1}^{n}\left|\frac{At - Ft}{At}\right|}{n} \times 100\% = \frac{71.06\%}{14} = 5.076\%$$

9. *Konstanta Smoothing (α=0,9)*

$$MAD = \frac{\sum_{t=1}^{n}|At - Ft|}{n} = \frac{2109.914}{14} = 150.71$$

$$MSE = \frac{\sum_{t=1}^{n}(At - Ft)^2}{n} = \frac{744638.1}{14} = 53{,}188.43$$

$$RMSE = \sqrt{\frac{\sum_{t=1}^{n}(At - Ft)^2}{n}} = \sqrt{53{,}188.43} = 230.63$$

$$MAPE = \frac{\sum_{t=1}^{n}\left|\frac{At - Ft}{At}\right|}{n} \times 100\% = \frac{73.14\%}{14} = 5.224\%$$