

附錄

附表 1、產品 A：4 期預測結果

預測 期數	實驗 No	本研究模型一				本研究模型二				Jeong 等人之預測模型			
		MAD	MSE	預測與 實際值 比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE
4	1	65	7762.5	84.01%	23.13%	102.25	14505.75	90.93%	44.30%	93.5	15844.5	66.76%	33.24%
4	2	68.25	6430.25	95.72%	30.17%	22.25	661.25	89.25%	12.85%	97.25	16177.75	152.63%	62.45%
4	3	71.75	5607.25	137.71%	37.71%	47.5	3645.5	93.68%	19.27%	235.25	73386.75	270.03%	172.84%
4	4	33.5	1414.5	97.43%	17.53%	20.25	860.75	98.28%	8.42%	123.75	22670.75	153.13%	53.13%
4	5	60.5	9483	111.94%	20.19%	90.25	14885.25	77.02%	31.91%	296.5	118417	314.74%	215.44%
4	6	93.25	13990.25	83.64%	36.43%	54.75	5579.75	86.76%	19.51%	40.5	2816.5	84.02%	15.98%
4	7	59	4045.5	103.17%	29.44%	37.25	1746.25	103.67%	19.09%	195.5	49315.5	238.53%	145.20%
4	8	80.5	10303	86.90%	31.90%	88.5	14862.5	75.47%	30.36%	296.5	118417	314.74%	215.44%
4	9	51.5	3636.5	96.24%	22.86%	77.25	8034.75	142.02%	42.02%	96.25	16075.75	64.58%	35.42%
4	10	79.75	11426.25	80.71%	28.64%	36.25	2505.25	86.79%	13.21%	158.5	32041.5	210.97%	117.63%
4	10次 平均	66.3	7409.9	97.75%	27.80%	57.65	6728.7	94.39%	24.09%	163.35	46516.3	187.01%	106.68%

附表 2、產品 A-8 期預測結果

預測 期數	實驗 No	本研究模型一				本研究模型二				Jeong 等人之預測模型			
		MAD	MSE	預測與 實際值 比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE
8	1	271.38	392955.88	69.83%	33.74%	293.5	430404	77.26%	41.00%	302	425843.5	55.71%	44.29%
8	2	255.25	352357.75	80.04%	32.91%	261.88	378095.88	63.35%	37.71%	341.13	455378.63	130.94%	78.21%
8	3	246.13	321407.88	104.25%	35.26%	256.63	376320.13	75.99%	30.49%	439.75	500393.75	206.50%	151.04%
8	4	223.63	250500.38	71.51%	35.97%	239.25	355502	77.41%	25.94%	305	400786.75	102.21%	50.91%
8	5	275.63	388800.63	96.54%	37.10%	288.75	415624.5	66.42%	38.05%	489	537395	238.64%	183.17%
8	6	279.38	392547.88	72.80%	37.24%	266.25	386751.5	70.39%	32.74%	266.13	383324.13	64.42%	35.58%
8	7	267.38	401719.88	81.89%	34.41%	246.63	368717.88	82.91%	28.47%	405	480134	181.90%	128.20%
8	8	281	406098.75	72.03%	37.37%	291.63	419080.38	63.91%	39.01%	489	537395	238.64%	183.17%
8	9	242.63	354816.63	83.58%	26.13%	291.88	427049.63	95.74%	46.27%	304.75	427472.5	54.00%	46.00%
8	10	270.25	369970.5	69.39%	35.29%	255.63	368334.63	68.52%	31.48%	371.75	463310.5	160.11%	105.80%
8	10次 平均	261.266	363117.616	80.19%	34.54%	269.203	392588.053	74.19%	35.12%	371.351	461143.376	143.31%	100.64%

附表 3、產品 A-12 期預測結果

預測 期數	實驗 No	本研究模型一				本研究模型二				Jeong 等人之預測模型			
		MAD	MSE	預測與實 際值比平 均	MAPE	MAD	MSE	預測與實 際值比平 均	MAPE	MAD	MSE	預測與實 際值比平 均	MAPE
12	1	198	263197.67	69.94%	32.45%	208.08	287646.58	77.65%	34.53%	225.67	286027.17	55.70%	44.30%
12	2	181.67	235404.83	93.60%	30.31%	203.5	254933.67	57.76%	42.94%	251.92	306528.25	131.38%	68.55%
12	3	172.08	214497.42	103.95%	28.67%	187.25	252009.75	74.64%	29.68%	334.17	342027	192.90%	127.17%
12	4	158.17	167450	77.58%	29.01%	176.75	238241.08	74.87%	27.36%	220.67	268343.33	90.79%	44.63%
12	5	195	259781.5	90.02%	32.41%	209.25	278276.25	67.88%	35.09%	381.83	373721.83	223.16%	157.71%
12	6	195.5	262027.83	82.85%	30.78%	195.75	259180.58	69.53%	32.56%	202	257723.67	61.36%	38.64%
12	7	191.5	268595.17	80.22%	30.65%	178	246681.83	80.90%	26.68%	304.08	326005.08	172.38%	107.70%
12	8	201.25	271631.42	73.43%	32.83%	213.17	280793.17	64.88%	37.07%	381.83	373721.83	223.16%	157.71%
12	9	171.5	236998.17	86.65%	23.07%	214.08	286109.25	84.95%	43.06%	229.75	287462.92	53.08%	46.92%
12	10	189.92	247020.42	83.46%	30.31%	190.67	247147.83	66.98%	33.02%	272.33	311816.17	150.82%	86.94%
12	10 次平 均	185.459	242660.44 3	84.17%	30.05%	197.65	263101.99 9	72.00%	34.20%	280.42 5	313337.72 5	135.47%	88.03%

附表 4、產品 B-4 期預測結果

預測 期 數	實 驗 No	本研究模型一				本研究模型二				Jeong 等人之預測模型			
		MAD	MSE	預測與實際 值比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE
4	1	134.75	21660.25	117.68%	21.98%	142	29629.5	109.98%	22.22%	261.75	149291.75	111.43%	36.14%
4	2	177	47610.5	107.83%	26.80%	179.5	63567.5	128.69%	28.69%	286.5	184734.5	127.28%	41.41%
4	3	197.25	47662.75	68.64%	31.36%	282.5	145073.5	144.21%	44.21%	289.5	184744.5	133.28%	43.41%
4	4	226.5	88179.5	106.31%	33.21%	317	267658.5	143.88%	45.73%	373.5	190702.5	162.95%	62.95%
4	5	293	146436.5	148.89%	48.89%	325.5	197209	150.72%	50.72%	695	953086.5	205.08%	105.08%
4	6	485.5	288500.5	181.77%	81.77%	345.5	183669.5	155.27%	55.27%	621.5	436293	206.08%	106.08%
4	7	566.75	350199.25	198.46%	98.46%	378.75	268741.75	158.67%	58.67%	633	440961.5	208.10%	108.10%
4	8	578.75	361044.75	198.64%	98.64%	371.75	199841.25	160.02%	60.02%	901.5	951785	250.69%	150.69%
4	9	740.25	609890.75	226.91%	126.91%	432	313771.5	167.98%	67.98%	965.25	1437412.75	254.59%	154.59%
4	10	839.25	813617.75	242.22%	142.22%	443.75	240672.25	173.42%	73.42%	1122.25	1564353.75	286.20%	186.20%
4	10 次 平 均	423.9	277480.25	159.74%	71.02%	321.825	190983.425	149.28%	50.69%	614.675	649335.575	193.97%	99.27%

附表 5、產品 B-8 期預測結果

預測 期 數	實驗 No	本研究模型一				本研究模型二				Jeong 等人之預測模型			
		MAD	MSE	預測與 實際值 比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE
8	1	172.38	40627.88	119.95%	22.96%	187.25	49868.5	100.73%	23.23%	259.88	126739.13	106.13%	31.73%
8	2	218.63	74397.13	99.70%	27.99%	187.75	63071.5	115.74%	24.31%	313.13	139655.13	120.58%	44.16%
8	3	400	285233.75	58.52%	41.48%	261.25	138506	126.66%	35.33%	475.38	403532.38	124.68%	51.16%
8	4	408.75	291476	112.64%	43.85%	286.13	140046.38	129.54%	36.17%	475.38	403532.38	124.68%	51.16%
8	5	347.13	171018.13	104.40%	44.49%	280.75	132139.25	132.67%	38.97%	408.88	247709.13	153.40%	62.97%
8	6	340.75	176528.5	142.10%	50.81%	285.25	170117	130.73%	39.12%	422.88	263286.63	165.33%	66.54%
8	7	381.13	204282.88	151.31%	59.54%	377.38	276847.88	129.32%	42.95%	551.88	612795.63	161.43%	70.75%
8	8	475.5	270010.5	170.96%	70.96%	361.88	228177.88	139.47%	47.70%	722.63	717645.13	195.12%	99.65%
8	9	467.25	331430.75	166.95%	73.84%	392.25	235248.75	144.74%	49.30%	946.5	1339384.75	195.32%	118.84%
8	10	532.75	452335	176.06%	82.69%	389.25	201591.75	155.24%	55.24%	909.13	1167786.88	210.54%	123.04%
8	10次 平均	374.427	229734.052	130.26%	51.86%	300.914	163561.489	130.48%	39.23%	548.567	542206.717	155.72%	72.00%

附表 6、產品 B-12 期預測結果

預測 期數	實驗 No	本研究模型一				本研究模型二				Jeong 等人之預測模型			
		MAD	MSE	預測與實 際值比平 均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE	MAD	MSE	預測與 實際值 比平均	MAPE
12	1	203.42	62250.75	111.26%	21.51%	221.92	100105.42	113.74%	27.58%	332.75	142722.58	105.15%	38.01%
12	2	401.75	267581.92	83.20%	35.26%	321.92	176980.75	98.22%	28.48%	587.17	738198.33	124.66%	45.90%
12	3	386.33	188937.5	91.92%	40.68%	389.67	272572.5	83.69%	32.28%	368.17	204347.17	130.38%	47.46%
12	4	376.67	199370.67	118.85%	43.09%	286.67	192008	115.95%	32.36%	529.67	414743.33	102.30%	48.26%
12	5	586.08	529241.08	88.44%	49.22%	334.58	163921.92	110.48%	33.33%	529.67	414743.33	102.30%	48.26%
12	6	462.75	311743.08	122.45%	51.56%	308.25	136635.75	113.90%	33.86%	456.67	289826	134.76%	54.73%
12	7	656.42	712368.75	47.79%	52.21%	313	163431.83	112.50%	34.07%	609.5	617528.33	151.83%	62.00%
12	8	424.25	215971.92	155.62%	55.62%	375.58	214347.08	131.34%	40.44%	586.75	539221.25	169.79%	72.81%
12	9	501.17	358346.67	133.50%	60.36%	404.25	232050.92	121.27%	41.42%	701.33	912985	159.66%	84.92%
12	10	467.5	354059.17	144.05%	61.79%	364.25	168257.92	144.15%	44.15%	693.58	813076.25	176.24%	87.67%
12	10 次平 均	446.634	319987.151	109.71%	47.13%	332.009	182031.209	114.52%	34.80%	539.526	508739.157	135.71%	59.00%