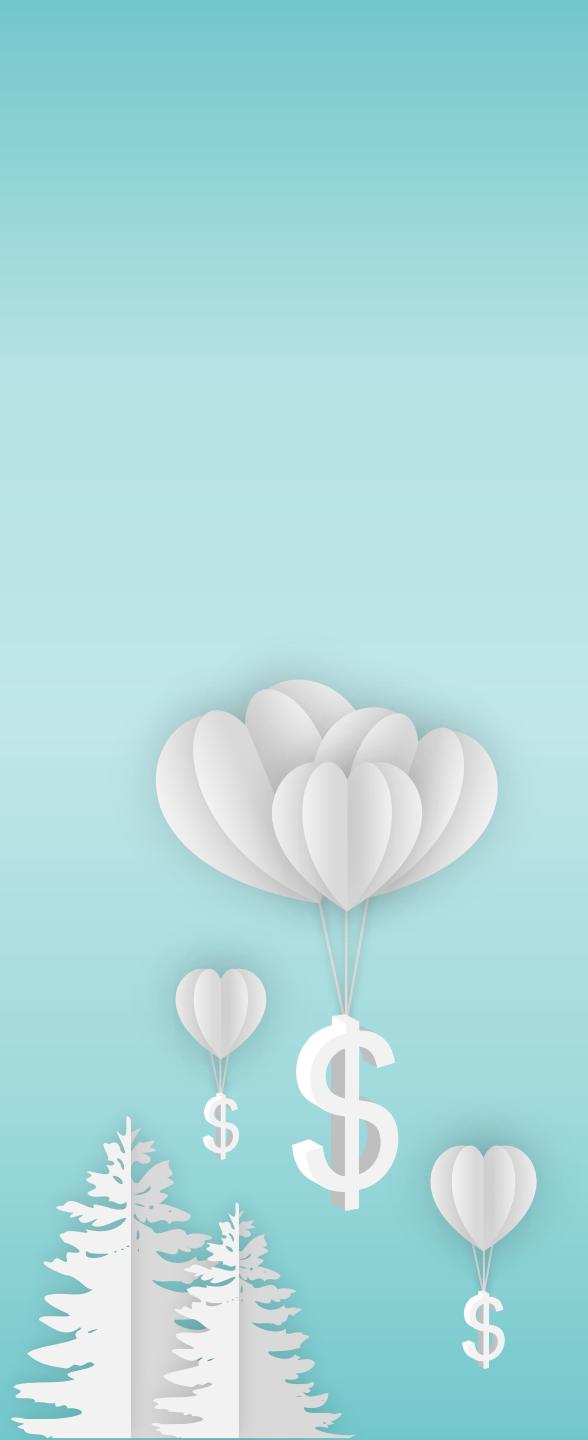


機器學習 第二組

組員：黃碩彥、魏嗣宸、劉昊東、李冠瑩





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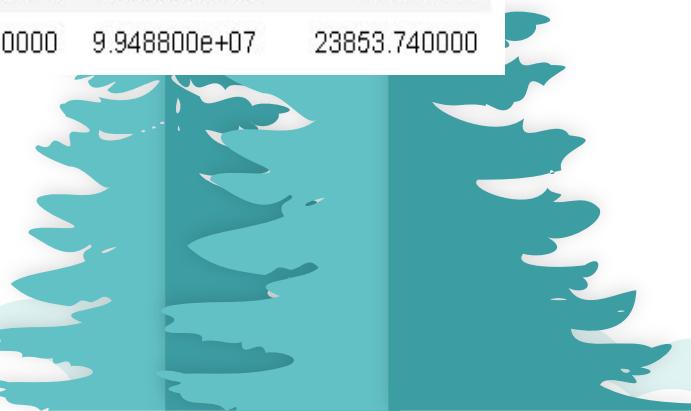


資料EDA與視覺化解讀



敘述統計

	ROA	ROE	Berry ratio	Current ratio	Debt ratio	Net worth/assets	Total asset turnover	Inventory turnover rate (times)	cash_flow	After-tax net profit growth rate
count	74.000000	74.000000	74.000000	74.000000	74.000000	74.000000	74.000000	74.000000	7.400000e+01	74.000000
mean	10.106486	14.409054	187.729324	347.374595	34.381622	65.618378	0.785676	6.617568	3.107830e+06	473.081757
std	12.602113	17.392531	141.199920	300.483755	17.258426	17.258426	0.408512	6.729052	1.325494e+07	2830.728339
min	-12.840000	-43.040000	-32.160000	66.330000	0.490000	15.960000	0.010000	0.000000	-4.356725e+06	-589.320000
25%	3.960000	6.155000	117.650000	184.757500	22.240000	53.365000	0.530000	3.385000	-8.913500e+03	2.862500
50%	7.645000	14.080000	171.490000	243.170000	32.845000	67.155000	0.700000	4.970000	2.848605e+05	39.900000
75%	13.940000	19.187500	212.907500	368.250000	46.635000	77.760000	0.990000	6.772500	9.300835e+05	110.205000
max	76.710000	77.230000	924.380000	1966.690000	84.040000	99.510000	2.420000	49.620000	9.948800e+07	23853.740000



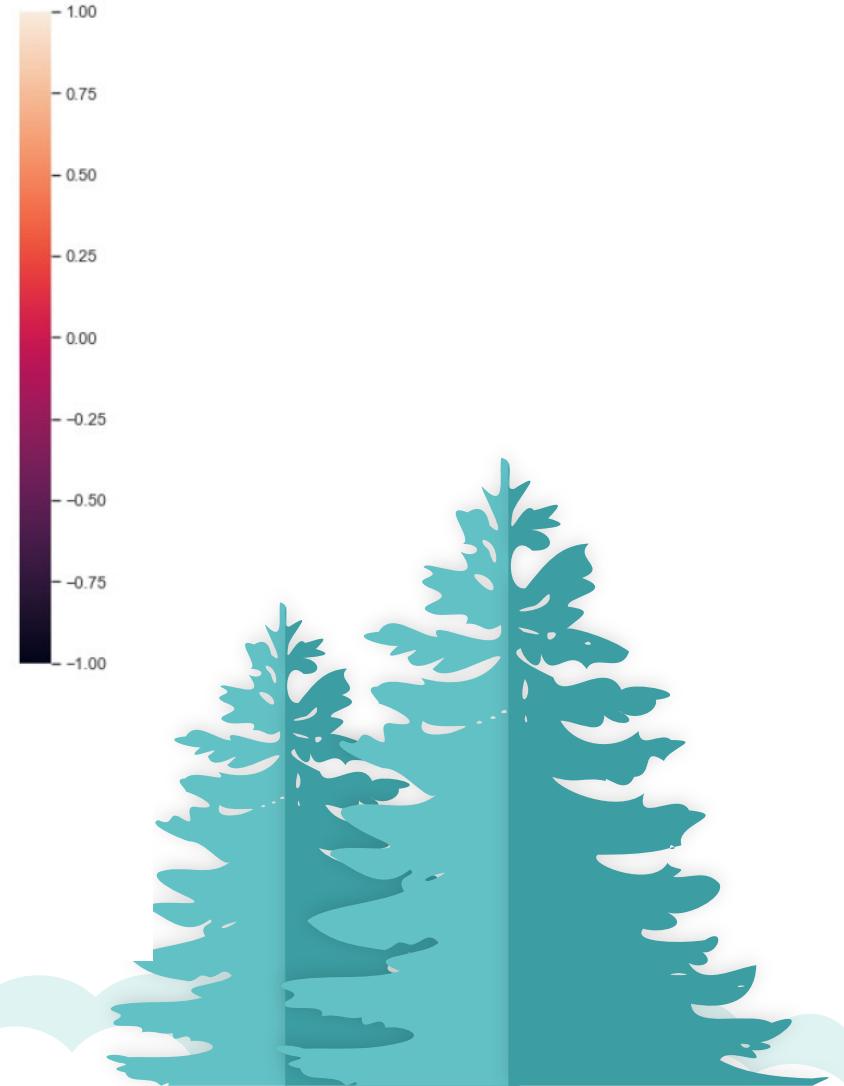
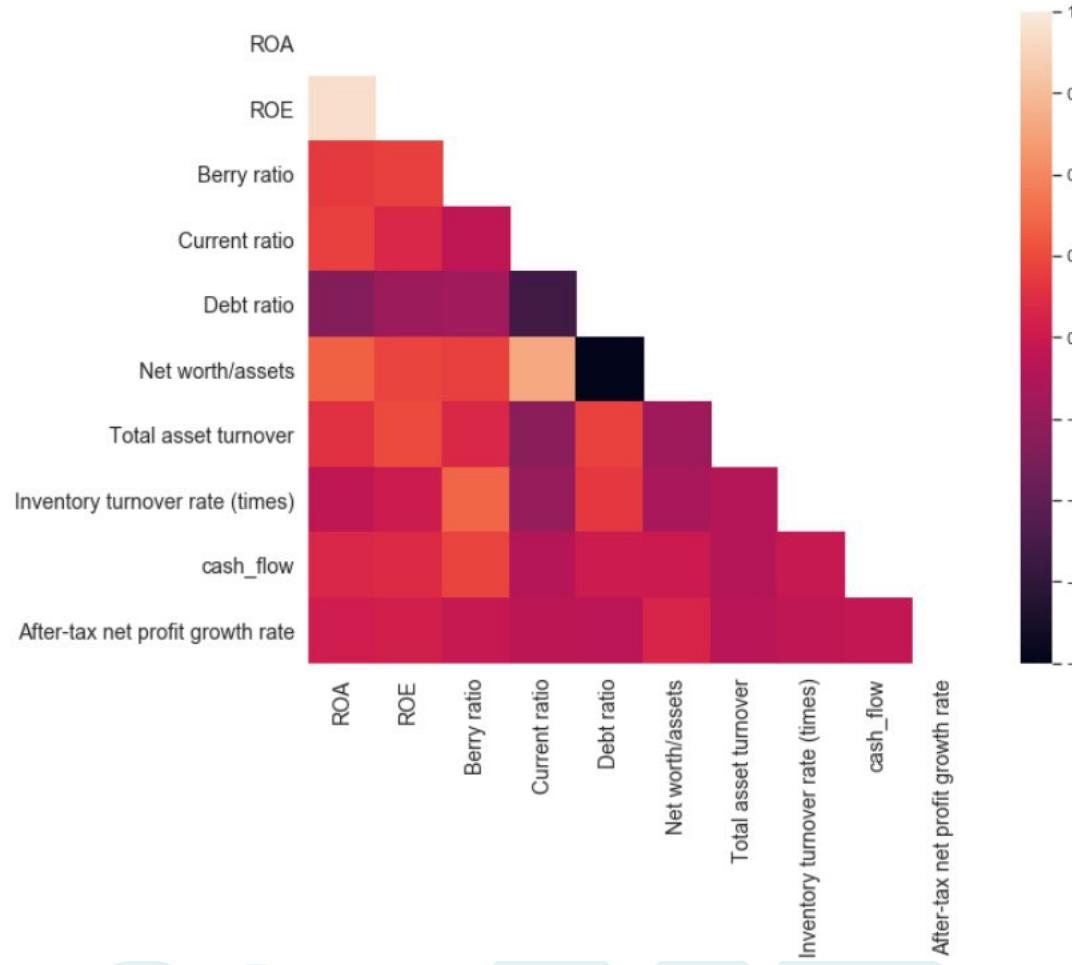
資料EDA與視覺化解讀



相關係數

	ROA	ROE	Berry ratio	Current ratio	Debt ratio	Net worth/assets	Total asset turnover	Inventory turnover rate (times)	cash_flow	After-tax net profit growth rate
ROA	1.000000	0.929972	0.175467	0.199281	-0.330601	0.330601	0.134305	-0.054992	0.079668	0.016653
ROE	0.929972	1.000000	0.206651	0.087859	-0.226025	0.226025	0.243006	0.004588	0.097214	0.036328
Berry ratio	0.175467	0.206651	1.000000	-0.056441	-0.197228	0.197228	0.092331	0.351818	0.224796	-0.015867
Current ratio	0.199281	0.087859	-0.056441	1.000000	-0.652724	0.652724	-0.308998	-0.249287	-0.105584	-0.068381
Debt ratio	-0.330601	-0.226025	-0.197228	-0.652724	1.000000	-1.000000	0.212572	0.171108	0.001894	-0.076741
Net worth/assets	0.330601	0.226025	0.197228	0.652724	-1.000000	1.000000	-0.212572	-0.171108	-0.001894	0.076741
Total asset turnover	0.134305	0.243006	0.092331	-0.308998	0.212572	-0.212572	1.000000	-0.104829	-0.103141	-0.091174
Inventory turnover rate (times)	-0.054992	0.004588	0.351818	-0.249287	0.171108	-0.171108	-0.104829	1.000000	-0.022999	-0.061120
cash_flow	0.079668	0.097214	0.224796	-0.105584	0.001894	-0.001894	-0.103141	-0.022999	1.000000	-0.039382
After-tax net profit growth rate	0.016653	0.036328	-0.015867	-0.068381	-0.076741	0.076741	-0.091174	-0.061120	-0.039382	1.000000

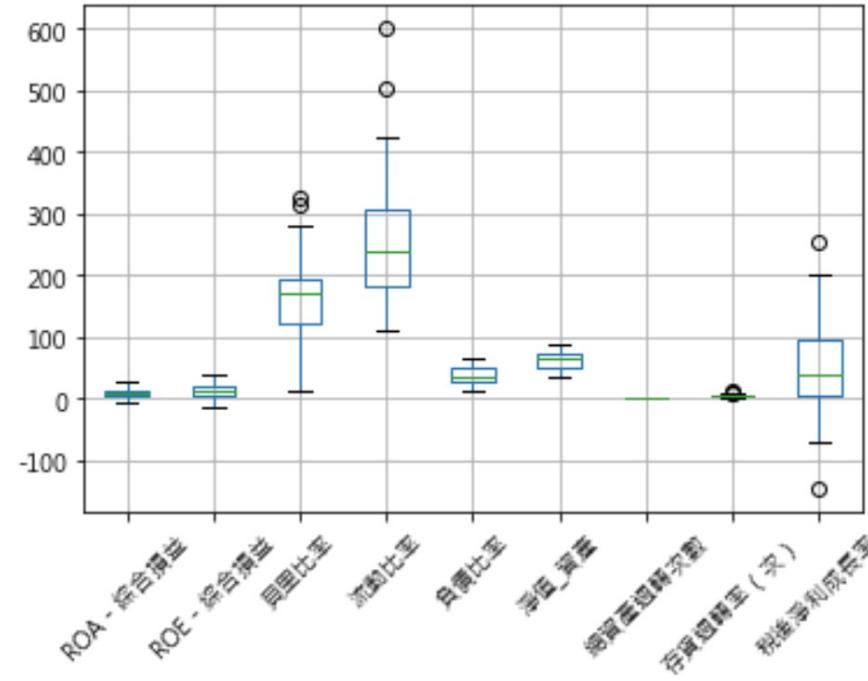
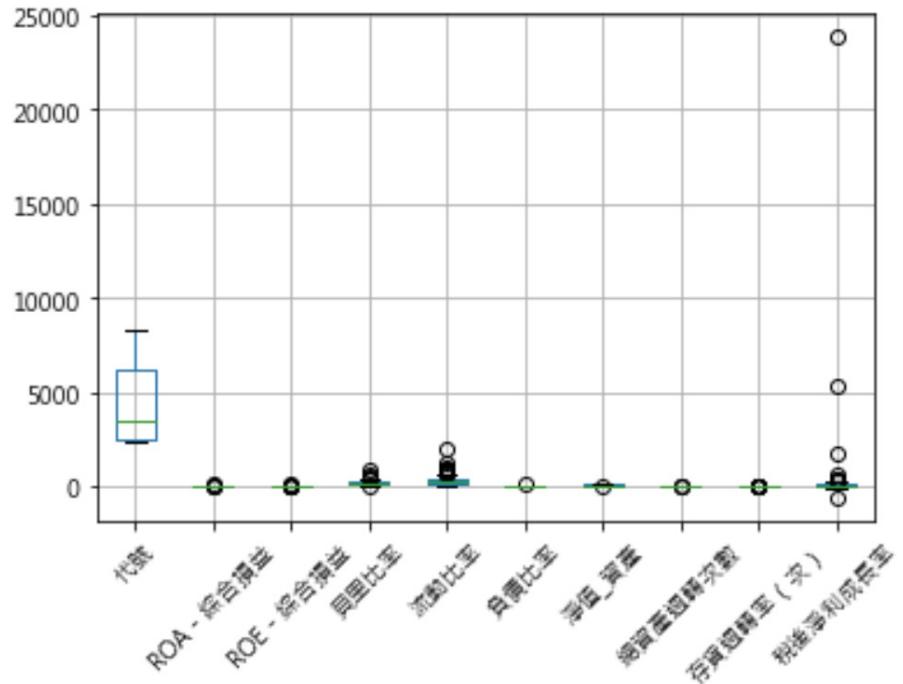
資料EDA與視覺化解讀



資料EDA與視覺化解讀



盒須圖



division of work



Group leader

TEJ資料預處理

TEJ資料視覺化

巨資 黃碩彥



Group member

TEJ資料預處理

TEJ資料視覺化

巨資 魏嗣宸



Group member

問題構想

TEJ資料收集

機器學習簡報整理

經濟 李冠瑩



Group member

問題構想

TEJ資料收集

機器學習報告人

經濟 劉昊東

Meeting minutes



01

5/12

會議記錄

問題定義與說明：探討影響公司成長率的指標-以台灣股市資料為例
資料來源：TEJ資料(現金流量表、損益表、股票年報)

前處理步驟：去空值、去除離異值、敘述統計、看是否要正則化（可以再討論）

資料EDA與視覺化解讀：
相關係數圖、盒須圖、分佈圖
(可以再討論)



02

5/16

會議記錄

如何分工：
報告人：劉昊東
簡報：李冠瑩
資料蒐集：李冠瑩、劉昊東
預處理：黃碩彥、魏嗣宸
資料視覺化：黃碩彥、魏嗣宸)

如何解決問題：
透過五個指標(operating income,Cash flow,Debt ratio,ROE,Total asset turnover)預測公司是否成長(0,1)



03

5/18

會議記錄

如何解決問題：
透過10個指標('ROA - 綜合損益', 'ROE - 綜合損益', '貝里比率', '流動比率', '負債比率', '淨值_資產', '總資產週轉次數', '存貨週轉率(次)', '自由現金流量(D)', '稅後淨利成長率')預測公司是否成長(0,1)

Show GitHub



<https://github.com/MachineLearningGroup2/Project>





THANKS YOU