

Data 11.05.2023

**Temat: "Procedura analitycznej
hierarchizacji"**

Wariant: 2

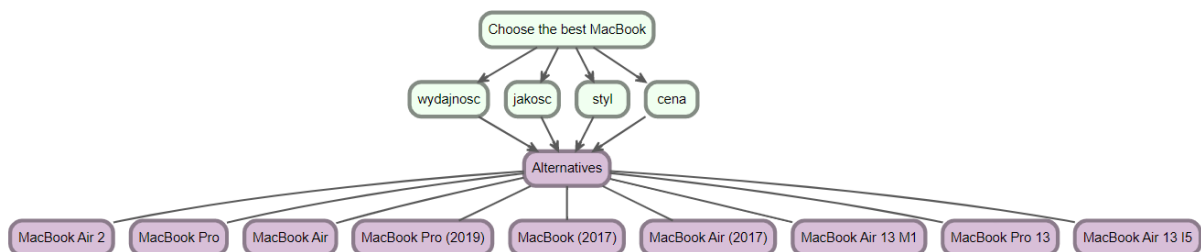
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Polecenie: Podjąć decyzję o kupieniu Macbooka Apple dla klienta, uwzględniając cztery kryteria: wydajność, jakość, styl i cena. Na podstawie względnej wagi każdego z tych kryteriów, należy wybrać najlepszy Macbook dla klienta, biorąc pod uwagę dane techniczne, takie jak: ekran, pamięć RAM, dysk oraz cenę, a także inne istotne parametry, jeśli takie istnieją.

```
> library(ahp)
> library(data.tree)
> treeAhp <- Load("MacBooki.ahp")
> print(treeAhp, filterFun = isNotLeaf)
      levelName
1 Choose the best MacBook
2  |--wydajnosc
3  |--jakosc
4  |--styl
5  °--cena
> Calculate(treeAhp)
```

```
> print(treeAhp, priority = function(x) x$parent$priority["Total", x$name])
```

	levelName	priority
1	Choose the best MacBook	NA
2	--wydajnosć	0.481821993
3	--MacBook Air 2	0.375913118
4	--MacBook Pro	0.236810425
5	--MacBook Air	0.149181220
6	--MacBook Pro (2019)	0.093978279
7	--MacBook (2017)	0.059202606
8	--MacBook Air (2017)	0.037295305
9	--MacBook Air 13 M1	0.023494570
10	--MacBook Pro 13	0.014800652
11	--MacBook Air 13 I5	0.009323826
12	--jakość	0.364516542
13	--MacBook Air 2	0.111111111
14	--MacBook Pro	0.111111111
15	--MacBook Air	0.111111111
16	--MacBook Pro (2019)	0.111111111
17	--MacBook (2017)	0.111111111
18	--MacBook Air (2017)	0.111111111
19	--MacBook Air 13 M1	0.111111111
20	--MacBook Pro 13	0.111111111
21	--MacBook Air 13 I5	0.111111111
22	--styl	0.106143974
23	--MacBook Air 2	0.435942736
24	--MacBook Pro	0.247537945
25	--MacBook Air	0.140557530
26	--MacBook Pro (2019)	0.079538840
27	--MacBook (2017)	0.044634152
28	--MacBook Air (2017)	0.025166530
29	--MacBook Air 13 M1	0.014146723
30	--MacBook Pro 13	0.007957244
31	--MacBook Air 13 I5	0.004518300
32	--cena	0.047517490
33	--MacBook Air 2	0.111111111
34	--MacBook Pro	0.111111111
35	--MacBook Air	0.111111111
36	--MacBook Pro (2019)	0.111111111
37	--MacBook (2017)	0.111111111
38	--MacBook Air (2017)	0.111111111
39	--MacBook Air 13 M1	0.111111111
40	--MacBook Pro 13	0.111111111
41	--MacBook Air 13 I5	0.111111111



> Analyze(treeAhp)

	Weight	MacBook Air 2	MacBook Pro	MacBook Air
1 Choose the best MacBook	100.0%	27.3%	18.6%	13.3%
2 --wydajnosć	48.2%	18.1%	11.4%	7.2%
3 --jakość	36.5%	4.1%	4.1%	4.1%
4 --styl	10.6%	4.6%	2.6%	1.5%
5 --cena	4.8%	0.5%	0.5%	0.5%
MacBook Pro (2019)	MacBook (2017)	MacBook Air (2017)	MacBook Air 13 M1	
1	10.0%	7.9%	6.6%	5.9%
2	4.5%	2.9%	1.8%	1.1%
3	4.1%	4.1%	4.1%	4.1%
4	0.8%	0.5%	0.3%	0.2%
5	0.5%	0.5%	0.5%	0.5%
MacBook Pro 13	MacBook Air 13 i5	Inconsistency		
1	5.4%	5.1%	16.2%	
2	0.7%	0.4%	45.5%	
3	4.1%	4.1%	926.7%	
4	0.1%	0.0%	76.7%	
5	0.5%	0.5%	7850.9%	

> AnalyzeTable(treeAhp)

	Weight	MacBook Air 2	MacBook Pro	MacBook Air	MacBook Pro (2019)	MacBook (2017)	MacBook Air (2017)	MacBook Air 13 M1	MacBook Pro 13	MacBook Air 13 i5	Inconsistency
Choose the best MacBook	100.0%	27.3%	18.6%	13.3%	10.0%	7.9%	6.6%	5.9%	5.4%	5.1%	16.2%
wydajnosć	48.2%	18.1%	11.4%	7.2%	4.5%	2.9%	1.8%	1.1%	0.7%	0.4%	45.5%
jakość	36.5%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	926.7%
styl	10.6%	4.6%	2.6%	1.5%	0.8%	0.5%	0.3%	0.2%	0.1%	0.0%	76.7%
cena	4.8%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	7850.9%

Najlepszy okazał się MacBook Air2