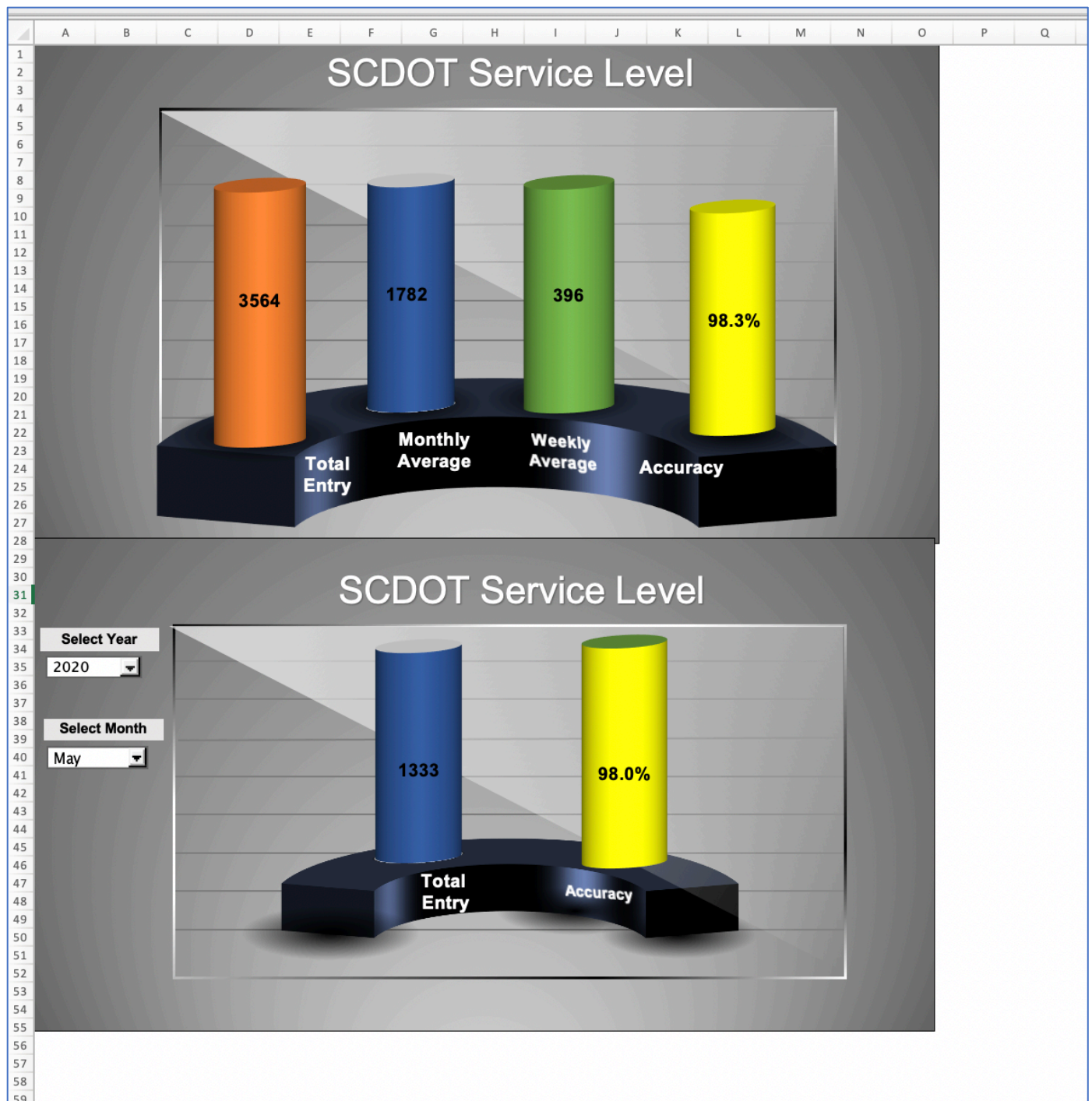


### Problem : Dependent Combo boxes

There are two combo boxes one for the year and the other for the month. Depending on the year selected in the first combo box, we want to make only the relevant months for that year to be available in the second combo box.

Let's say in 2020, the business was operational only from Aug to December whereas it was operational every month in 2021 and remains operational as on date – Feb 2022. When User selects 2020, we want only Aug to Dec to be visible. When User selects 2021, all months should be visible. And on selection of 2022, months till Feb should be displayed.



	A	B	C	D	E	F	G	H	I
1	Year	Month	Total	Errors	Percent	Error Rate	Accuracy	Year	
2	2021	January	1912	36	100.0%	2%	98.1%	2020	
3		February	1652	26	100.0%	2%	98.4%	2021	
4		March	0	0	0.0%	0%	0%	2022	
5		April	0	0	0.0%	0%	0%	2023	
6		May	0	0	0.0%	0%	0%	2024	
7		June	0	0	0.0%	0%	0%		
8		July	0	0	0.0%	0%	0%		
9		August	0	0	0.0%	0%	0%		
10		September	0	0	0.0%	0%	0%		
11		October	0	0	0.0%	0%	0%		
12		November	0	0	0.0%	0%	0%		
13		December	0	0	0.0%	0%	0%		
14									
15	2020	Month	Total	Errors	Percent	Error Rate	Accuracy		
16		May	1333	26	100.0%	2%	98.0%		
17		June	659	23	100.0%	3%	96.5%		
18		July	1601	45	100.0%	3%	97.2%		
19		August	4052	73	100.0%	2%	98.2%		
20		September	1559	25	100.0%	2%	98.4%		
21		October	1697	35	100.0%	2%	97.9%		
22		November	1787	23	100.0%	1%	98.7%		
23		December	1542	39	100.0%	3%	97.5%		
24									
25	2022	Month	Total	Errors	Percent	Error Rate	Accuracy		
26		January	0	0	0.0%	0%	0.0%		
27		February	0	0	0.0%	0%	0.0%		
28		March	0	0	0.0%	0%	0%		
29		April	0	0	0.0%	0%	0%		
30		May	0	0	0.0%	0%	0%		
31		June	0	0	0.0%	0%	0%		
32		July	0	0	0.0%	0%	0%		
33		August	0	0	0.0%	0%	0%		
34		September	0	0	0.0%	0%	0%		
35		October	0	0	0.0%	0%	0%		
36		November	0	0	0.0%	0%	0%		
37		December	0	0	0.0%	0%	0%		
38									
39	2023	Month	Total	Errors	Percent	Error Rate	Accuracy		
40		January	0	0	0.0%	0%	0.0%		
41		February	0	0	0.0%	0%	0.0%		
42		March	0	0	0.0%	0%	0%		
43		April	0	0	0.0%	0%	0%		
44		May	0	0	0.0%	0%	0%		
45		June	0	0	0.0%	0%	0%		
46		July	0	0	0.0%	0%	0%		
47		August	0	0	0.0%	0%	0%		
48		September	0	0	0.0%	0%	0%		
49		October	0	0	0.0%	0%	0%		
50		November	0	0	0.0%	0%	0%		
51		December	0	0	0.0%	0%	0%		
52									
53	2024	Month	Total	Errors	Percent	Error Rate	Accuracy		
54		January	0	0	0.0%	0%	0.0%		
55		February	0	0	0.0%	0%	0.0%		
56		March	0	0	0.0%	0%	0%		
57		April	0	0	0.0%	0%	0%		
58		May	0	0	0.0%	0%	0%		
59		June	0	0	0.0%	0%	0%		
60		July	0	0	0.0%	0%	0%		
61		August	0	0	0.0%	0%	0%		
62		September	0	0	0.0%	0%	0%		
63		October	0	0	0.0%	0%	0%		
64		November	0	0	0.0%	0%	0%		
65		December	0	0	0.0%	0%	0%		

	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG
1											
2											
3		Data Prep Table					Dynamic Ranges	Chosen yr	Method1	Method2	
4		2020	2021	2022	2023	2024		2020	May	May	
5		May	January	January	January	January			June	June	
6		June	February	February	February	February			July	July	
7		July	March	March	March	March			August	August	
8		August	April	April	April	April			September	September	
9		September	May	May	May	May			October	October	
10		October	June	June	June	June			November	November	
11		November	July	July	July	July			December	December	
12		December	August	August	August	August					
13			September	September	September	September					
14			October	October	October	October					
15			November	November	November	November					
16			December	December	December	December					
17											
18											
19											
20											

=OFFSET(Support!\$X\$4,1,MATCH(Support!\$AD\$4,Support!\$X\$4:\$AB\$4,0)-1,  
COUNTA(OFFSET(Support!\$X\$4,1,MATCH(Support!\$AD\$4,Support!\$X\$4:\$AB\$  
4,0)-1, 13)))

=CHOOSE(\$N\$6,\$X\$5:\$X\$12,\$Y\$5:\$Y\$16,\$Z\$5:\$Z\$16,\$AA\$5:\$AA\$16,\$AB\$5:\$AB\$16)

	K	L	M	N	O	P	Q	R	S	T	U	V	W
1			ComboBox2 - Month (Output)	1	May	2021	Total	0	Accuracy	0.0%		1333	
2				ID	May	2020	Total	1333	Accuracy	98.0%		98.0%	
3					May	2022	Total	0	Accuracy	0.0%			
4					May	2023	Total	0	Accuracy	0.0%			
5					May	2024	Total	0	Accuracy	0.0%			
6			ComboBox1 - Year (Output)	1	2020								
7													
8													
9													
10													
11													
12													
13													

=INDEX(CHOOSE(\$N\$6,\$X\$5:\$X\$12,\$Y\$5:\$Y\$16,\$Z\$5:\$Z\$16,\$AA\$5:\$  
AA\$16,\$AB\$5:\$AB\$16),\$N\$1)

Dynamic Named Ranges when size of the range can change	A common problem in creating charts for modelling is that the size of the source data can change, and cause errors. The problem with specifying a range is that if someone adds data to the right or below the table, it will not be included in the range, and therefore will not show in the chart. L	=OFFSET(Data!A\$1,0,0,COUNTA(Data!\$A\$1:\$A\$5000),COUNTA(Data!\$A\$1:\$Z\$1))	<a href="#">USING EXCEL FOR BUSINESS AND FINANCIAL MODELLING   Page No. 376</a>
Dynamic Named Ranges using Names Manager	Usecase <u>SCDOT data</u> where the combobox validation entries is dynamic and dependent on selected value from another dropdown	=Support!\$AE\$4:INDEX(Support!\$AE\$4:\$AE\$15,MATCH("ZZZZZZZZZZZZZZ",Support!\$AE\$4:\$AE\$15,1))  * Support is the name of a sheet within the SCDOT workbook	<ul style="list-style-type: none"> <li>• This is superb. Using "named range" from names manager came to rescue. Further, named ranges takes in the formula that made it dynamic.</li> <li>• Also, we can see the use of match function with lookup value "zzzzzzzzzz" with "approximate match". This is quite creative.</li> <li>• This is much simpler than the VBA approach with the only caveat being that "Months" range should not be changed unintentionally.</li> <li>• it is an interesting usecase of choose, index, offset, counta, match, combobox and named ranges (dynamic) to make dependent combo box.</li> </ul>