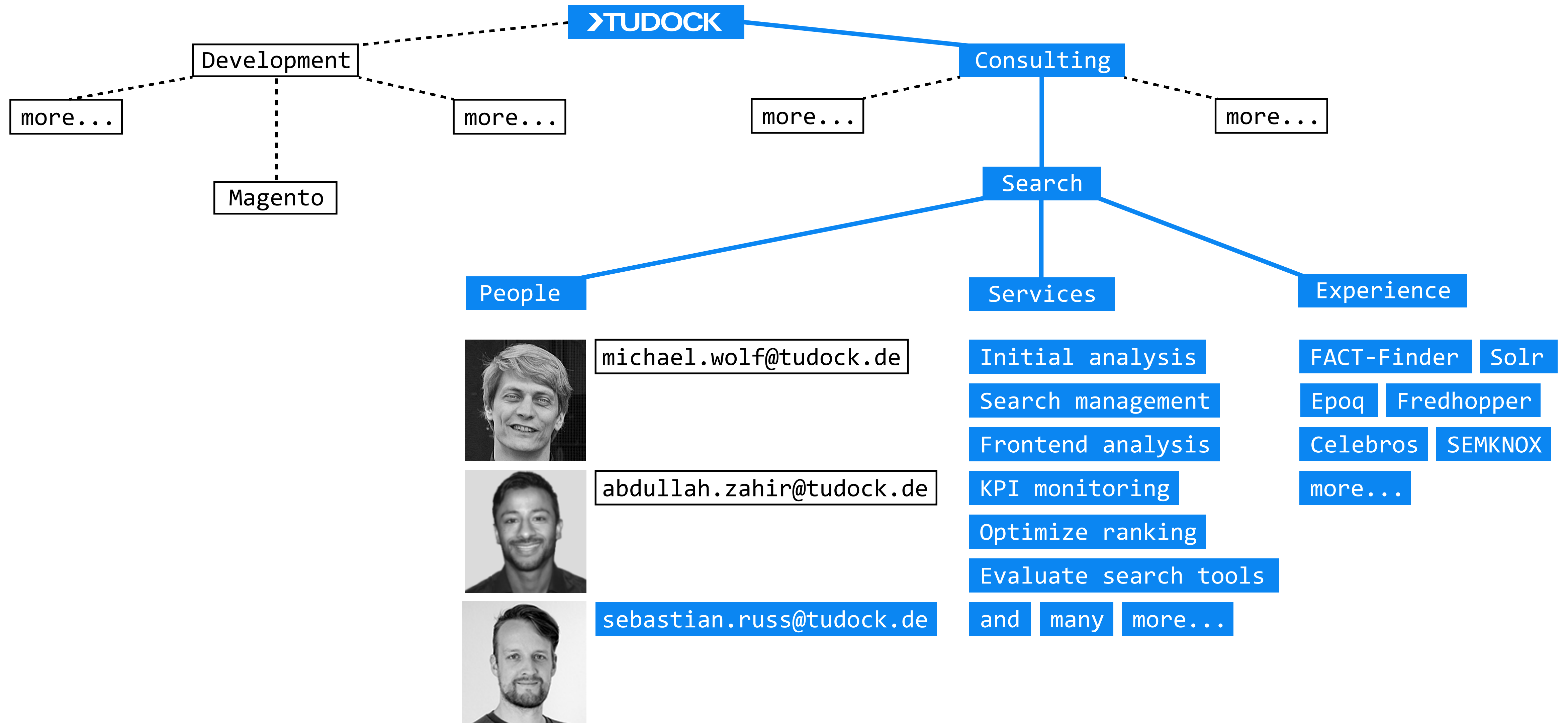
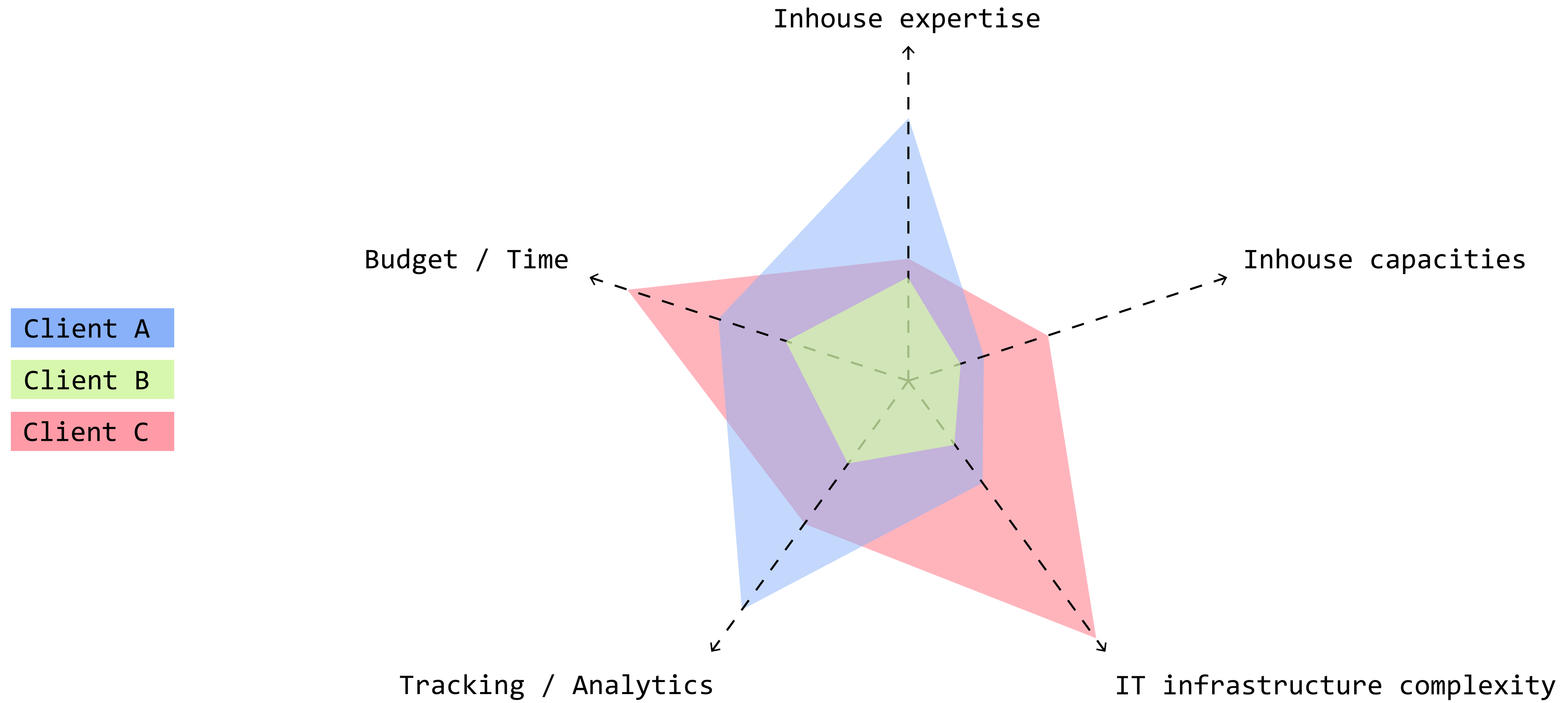


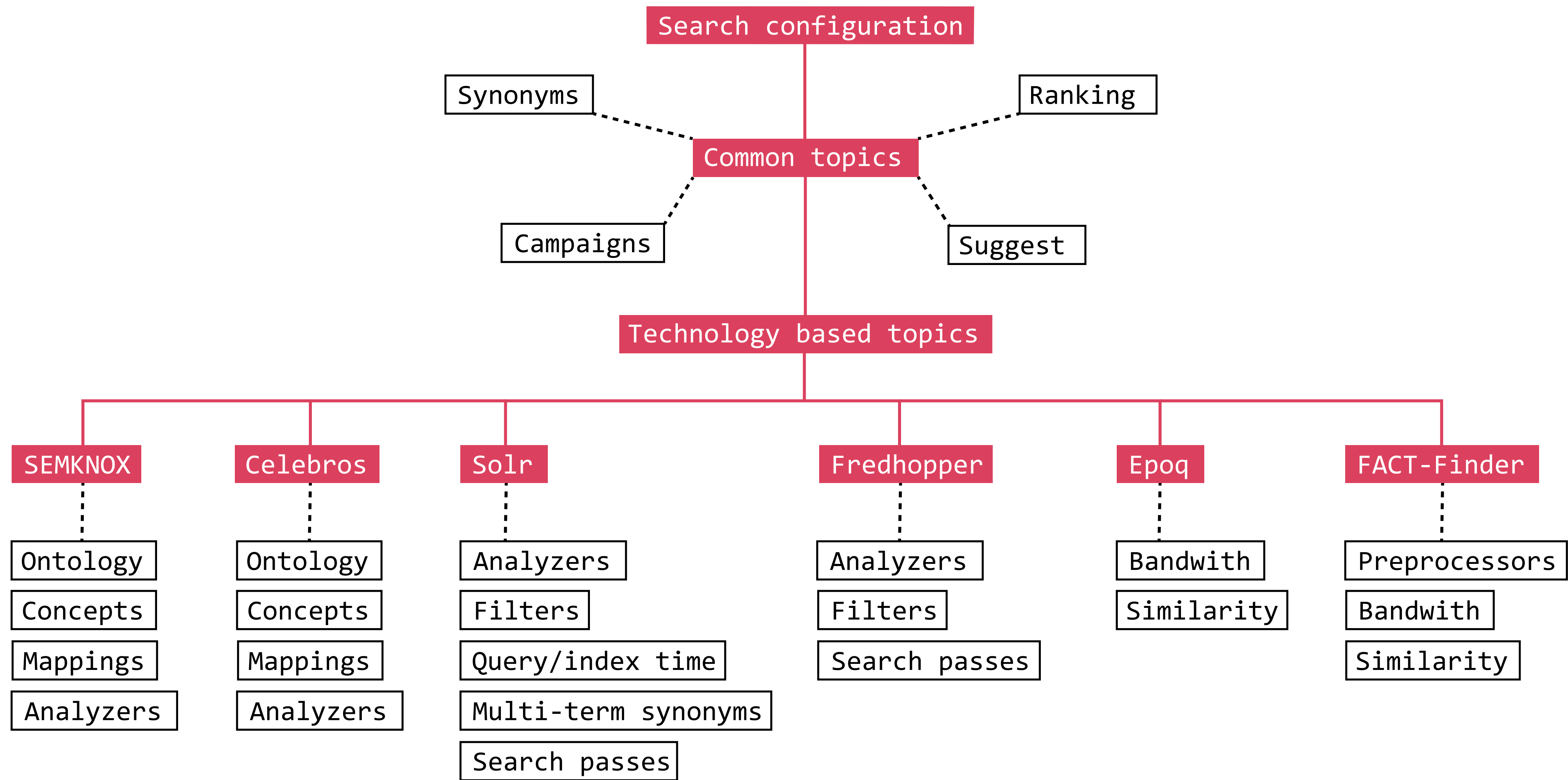
Visualizing search results

About us



Challenges we're facing



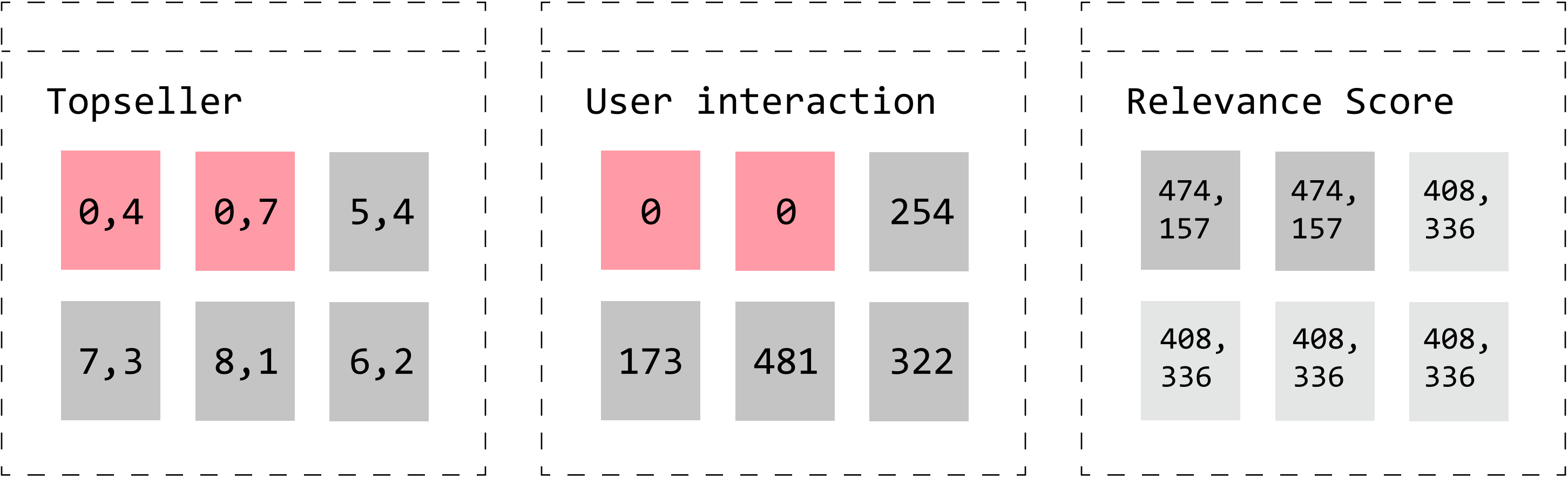


Visible part



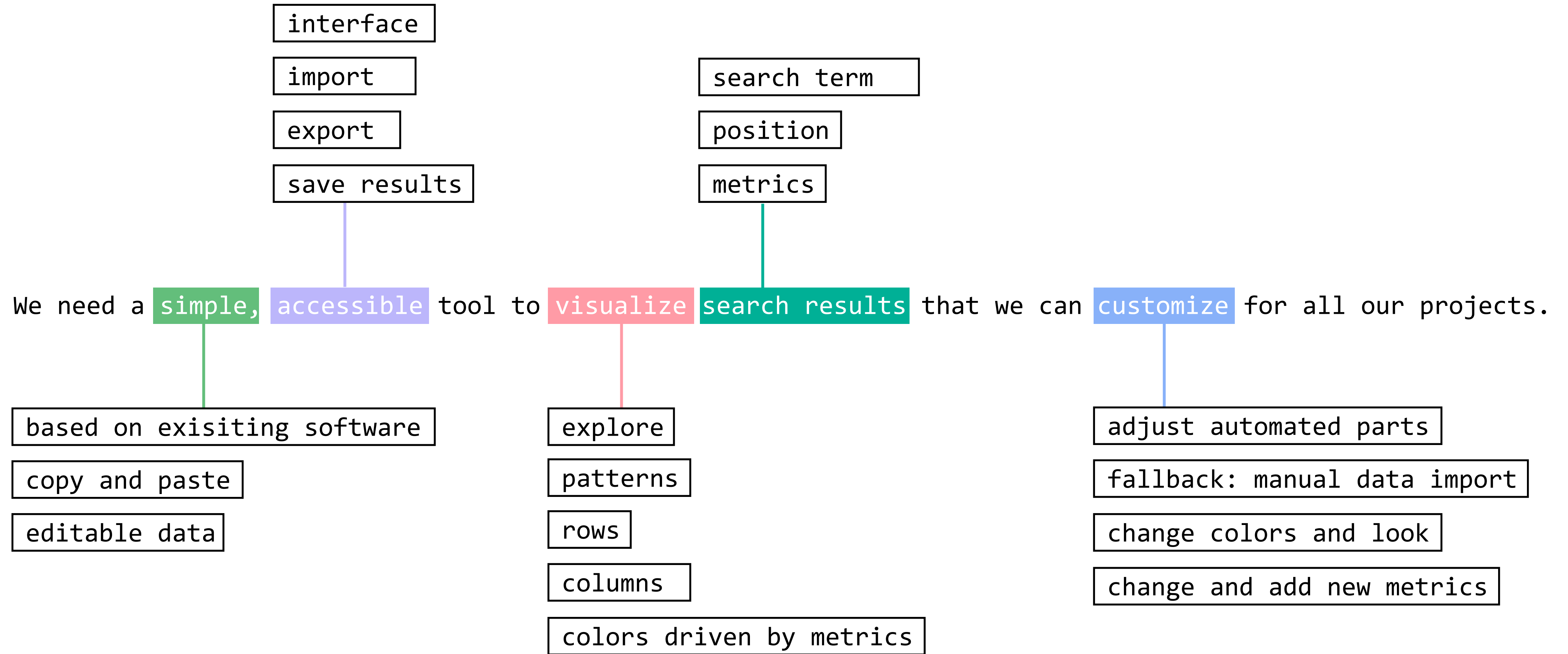
The search result „washing machine“ looks good! We’re done!

Mostly invisible part

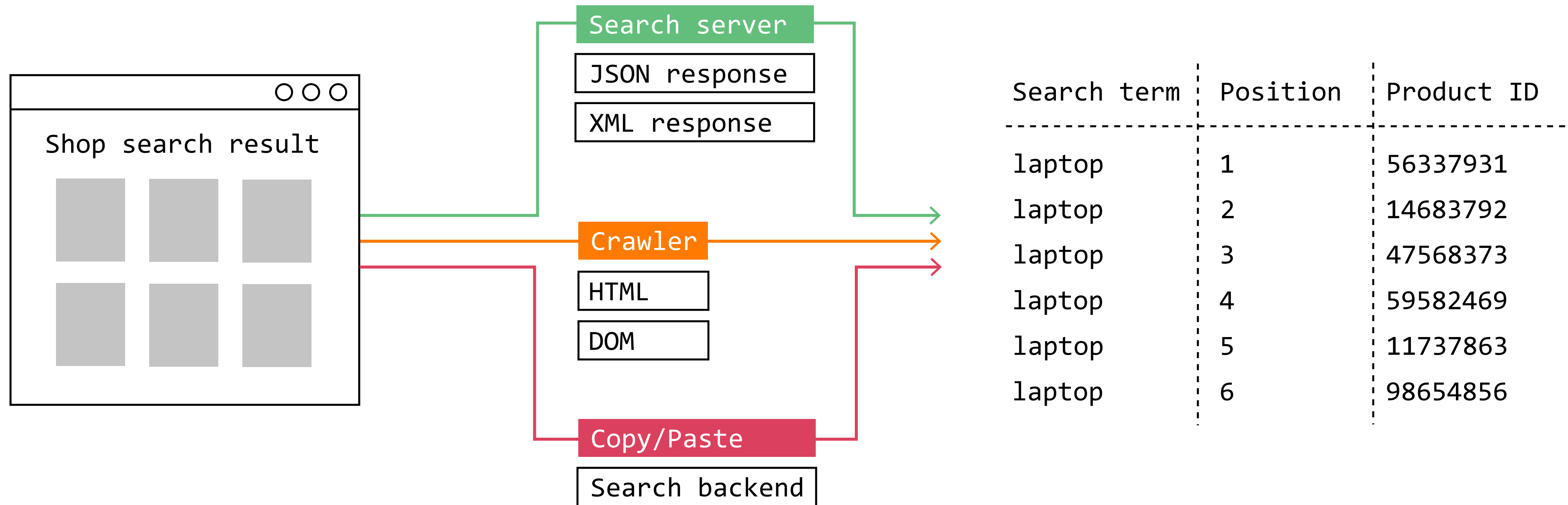


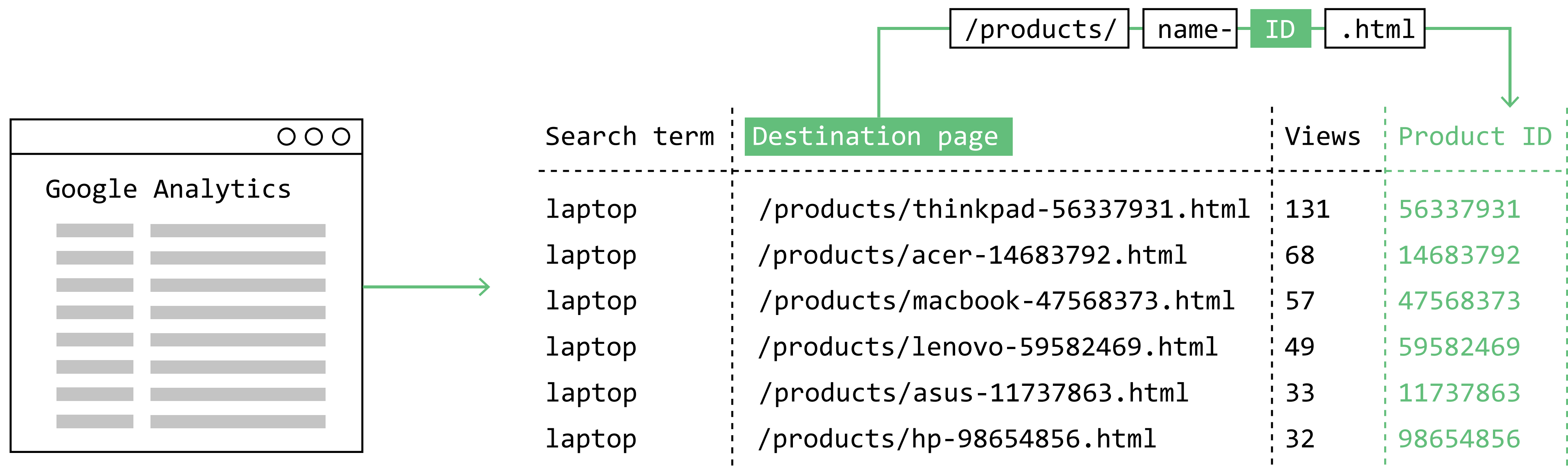
Hmmm... there’s room for improvement in ranking these search results.

What we need



The tool





		Position																					
Search term	Metric	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	...	
laptop	Clicks	71	4	6	1	2	2	0	0	1	0	3	56	67	39	0	0	5	23	1	7	0	



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Shop search result

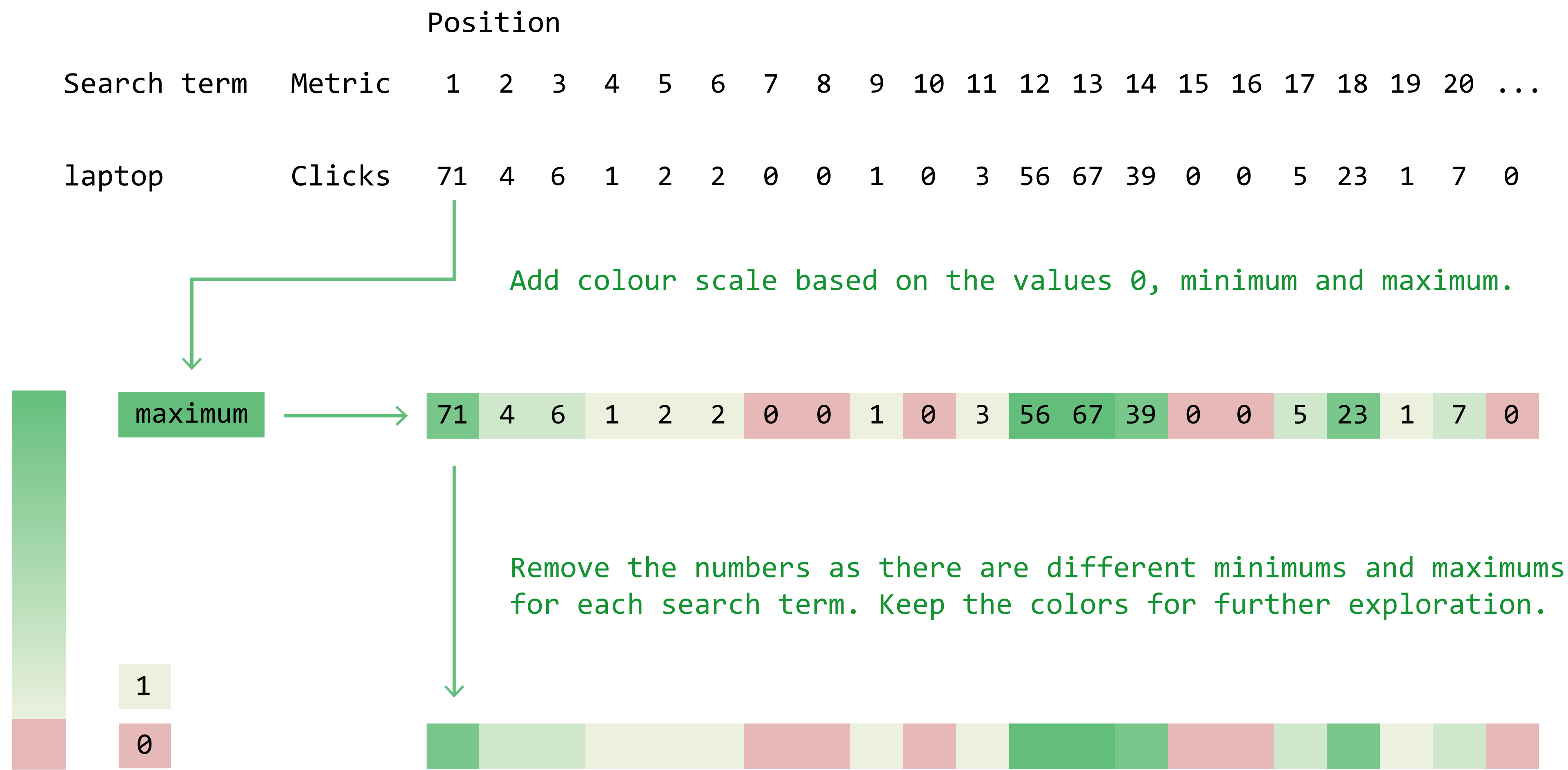
Search term	Pos	ID
laptop	1	56337931
laptop	2	14683792
laptop	3	47568373
laptop	4	59582469
laptop	5	11737863
laptop	6	98654856

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Google Analytics

Search term	ID	Views
laptop	56337931	131
laptop	14683792	68
laptop	47568373	57
laptop	59582469	49
laptop	11737863	33
laptop	98654856	32

	Position																																																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
washing machine	1	7	4	3	0	0	0	0	18	24	97	16	39	48	2	44	6	7	37	20	37	34	2	6	3	2	3	18	4	11	23	0	0	14	0	1	2	2	16	3	7	0	5	0	3	0	9	5	5	1
jeans	30	0	4	2	1	1	0	2	0	0	0	0	1	1	0	1	1	0	0	2	0	1	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	
jackets	4	25	13	5	5	14	2	3	7	1	1	1	0	3	5	2	1	3	0	0	2	0	0	3	1	0	0																					2	1	
bed	37	40	6	30	3	30	13	1	15	31	44	19	17	5	7	11	20	2	5	8	1	3	3	4	0	4	4																					0	4	
garden	60	27	21	21	9	38	14	7	2	15	8	4	15	5	15	16	6	5	5	5	14	7	4	5	0	0	3																					1	4	
led-tv	0	2	1	0	5	5	2	2	0	1	1	0	2	2	0	1	0	3	3	0	2	0	1	0	5	2	0																					12	3	
kettle	0	15	31	18	14	1	11	2	16	3	8	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0																					0	0	
shoe	13	3	1	0	0	8	0	1	1	0	8	16	2	4	0	2	0	0	0	0	2	0	0	0	0	0	0																					0	0	
samsung	33	20	1	6	1	2	6	4	5	3	2	0	0	0	1	0	7	1	51	9	5	8	5	4	2	2	1																					0	1	
gardening tools	0	2	0	5	0	3	4	2	1	10	2	2	0	3	0	1	1	0	0	0	0	0	0	0	1	0	7																					1	1	
tables	0	14	2	2	7	13	3	5	12	11	11	2	9	1	6	17	3	0	4	12	9	3	2	4	12	2	1																					16	14	
fans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																					0	0	
couch	3	4	0	0	6	1	3	6	1	1	2	4	6	3	8	1	0	2	0	0	0	0	0	0	0	0	0																					0	0	
menswear	5	1	8	5	2	1	1	2	1	0	1	23	2	0	1	13	0	0	0	5	9	5	4	0	1	0	2																					0	0	
refrigerator	1	7	0	57	22	3	10	13	7	10	15	0	24	4	3	2	1	0	3	1	2	2	2	6	8	0	0																					1	0	
wine	7	9	4	0	3	1	1	1	0	0	10	73	37	32	6	17	23	1	9	3	12	9	14	2	3	6	9																					3	2	
groceries	11	8	4	54	6	4	18	8	3	7	7	2	4	67	1	2	0	4	3	5	1	6	16	3	27	9	6																					1	-	
bedding	0	0	0	0	0	0	0	0	0	0	1	7	5	0	0	0	0	0	0	0	0	11	1	0	8	7	3																					0	0	
furniture	0	2	0	0	0	0	9	0	1	0	2	2	2	1	0	1	3	0	0	0	0	0	0	0	0	0	0																					0	0	
rugs	66	3	9	27	20	10	2	5	10	10	0	23	17	1	0	0	0	0	8	13	4	24	7	17	2	6	33																					-	-	
vacuums	2	3	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	8	3	0	3	4	4	1	0																					0	1	
shirts	3	0	7	4	0	4	0	6	4	3	2	4	1	4	2	0	2	5	2	0	13	3	3	20	5	9	3																					12	9	
football jerseys	0	14	10	1	5	0	2	1	1	0	3	2	1	1	0	2	1	1	2	1	0	2	1	3	0	0	2																					1	0	
nike	7	18	7	12	14	18	13	1	16	2	1	0	4	0	3	5	7	2	1	3	1	3	0	1	2	3	1																					1	1	
dyson	19	5	8	22	15	4	23	26	10	5	10	4	8	9	0	4	4	4	9	10	4	8	-	-	-	-	-																					-	-	
adidas	32	20	36	1	23	9	1	4	11	27	4	5	3	10	2	5	28	8	2	8	1	2	0	8	2	2	4																					0	0	
couches	0	0	3	0	2	1	2	5	0	6	0	1	1	1	3	2	0	2	0	0	3	0	0	1	1	2	0																					2	8	
cookbooks	1	1	0	1	0	0	6	0	0	0	1	1	2	2	1	0	0	0	0	0	1	1	0	0	0	1	0																					28	3	
dinnerware sets	9	17	5	13	17	23	5	1	15	5	2	2	26	1	0	1	4	1	1	2	0	0	0	0	0	7	3																					1	1	
kitchen appliances	0	0	7	5	2	6	8	3	4	9	4	1	1	1	0	1	1	8	61	18	19	4	0	1	0	2																					0	0		
canning	21	22	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0																					0	0	
t-shirts	16	8	2	3	1	0	11	2	5	14	4	1	4	1	8	4	0	1	4	1	5	3	2	3	5	0	0																					9	2	
accessoires	7	0	2	1	50	2	6	18	1	1	1	12	11	1	7	15	5	19	10	10	4	0	42	2	4	2	1																					-	-	
lego	1	2	1	0	0	3	0	0	105	15	13	3	3	11	4	0	11	6	1	0	2	3	1	0	3	1	0																					1	2	
fragrances	0	0	12	1	5	2	4	1	2	0	4	2	3	2	0	0	13	5	0	0	2	2	0	1	0	0	1																					0	0	
beauty	1	0	0	1	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	1	10	2	3	6	4	3	2	1	9	1	2	1	7	4	0	2	1	1	1	0	4	3	4	8	1	2	3	4	0	0
ps4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
iphone	53	8	11	23	12	16	4	4	18	5	0	2	1	3	8	0	11	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



		Position																				
Search term	Metric	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	...



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Shop search result

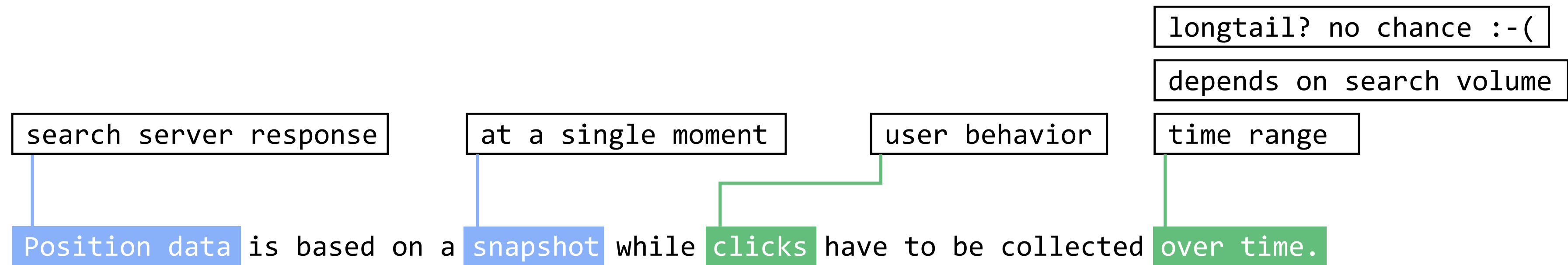
Search term	Pos	ID
laptop	1	56337931
laptop	2	14683792
laptop	3	47568373
laptop	4	59582469
laptop	5	11737863
laptop	6	98654856

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Google Analytics

Search term	ID	Views
laptop	56337931	131
laptop	14683792	68
laptop	47568373	57
laptop	59582469	49
laptop	11737863	33
laptop	98654856	32

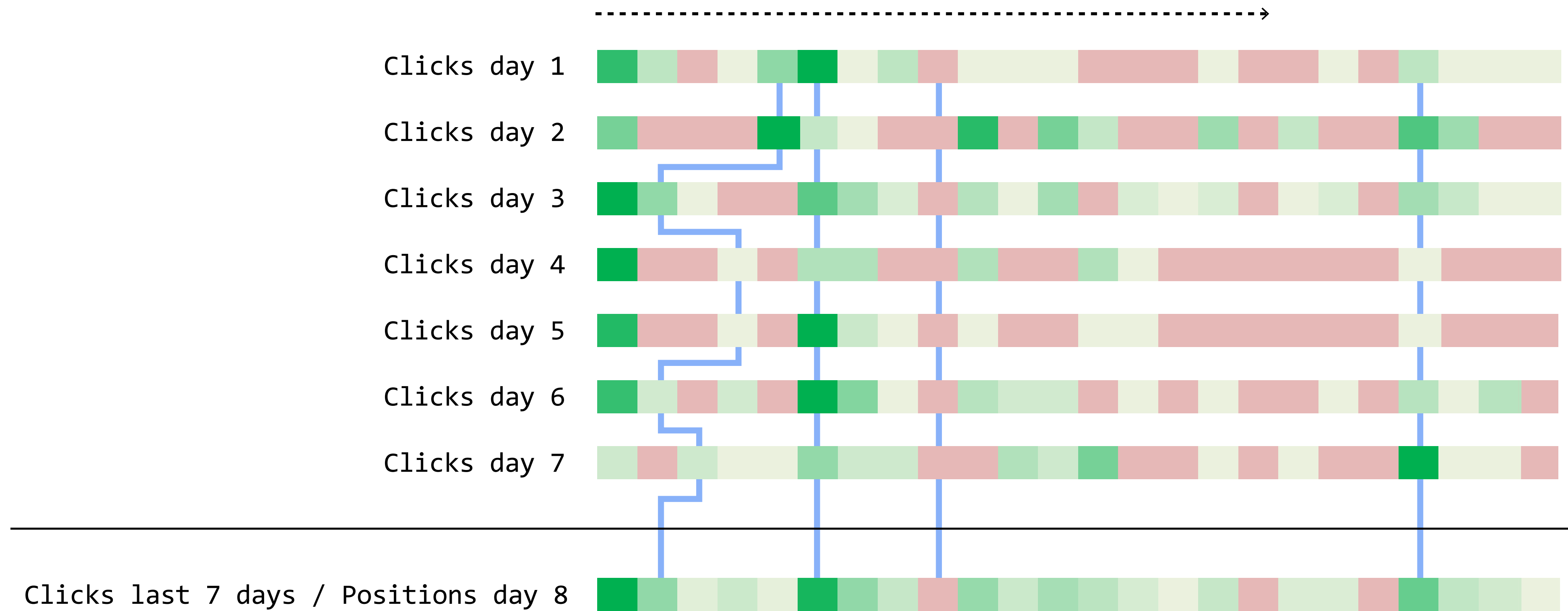
Position bias



In other words: We don't know the position of the product when it was clicked, only where it was when we took the snapshot. But the position effects the amount of clicks a product gets.

Search term „washing machine“

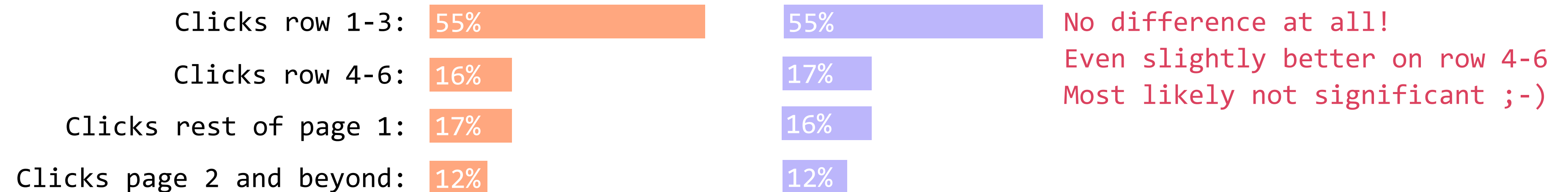
Position



Click data on **live search** vs. the same click data on **new experimental search** positions (offline)



Control group click data on **live search** vs. test group click data on **new search** (A/B test)



% of clicks on top positions

Average click position

etc...

Not useful to calculate metrics but powerful to explore patterns. And does a fantastic job whenever you want to compare different configurations or to discuss complex topics.

Live/stage

Preparing A/B tests

Category page vs. search result

ranking factors

relevancy issues

Combine with additional data

Search term

Position

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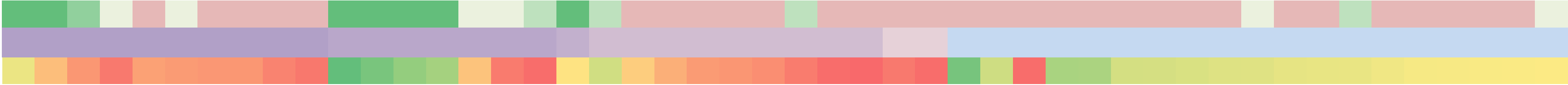
washing machine



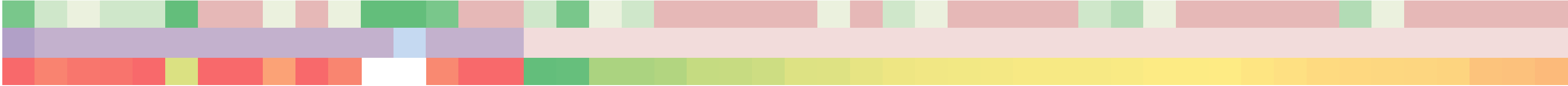
table



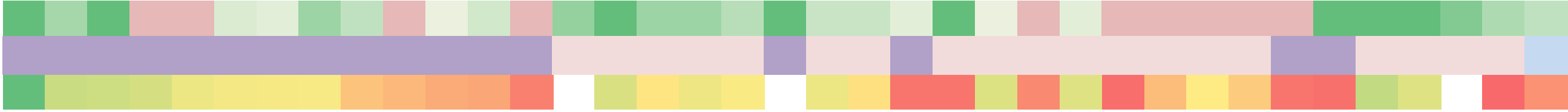
dish washer

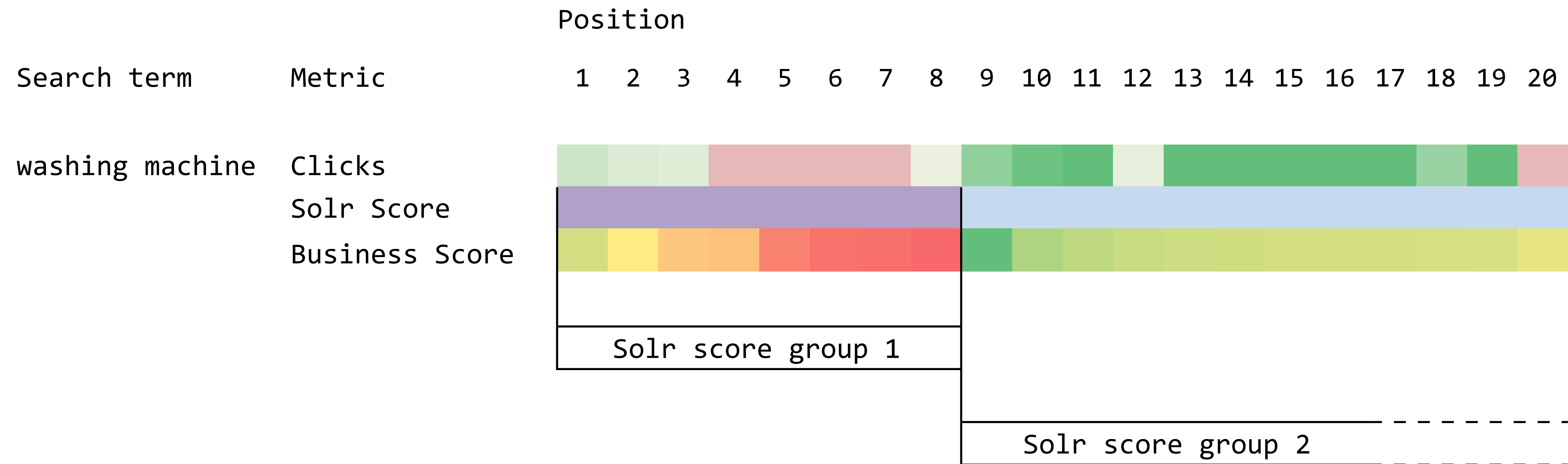


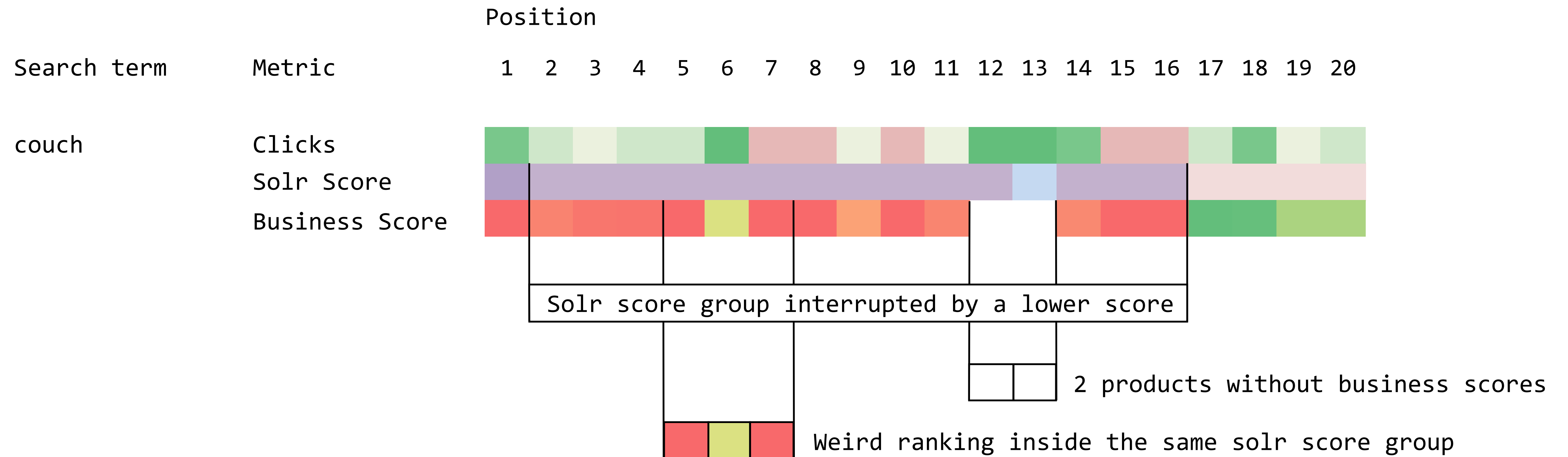
couch



smartphone







Search term „laptop“

Position

----->

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Bestseller score

Margin

Availability

New

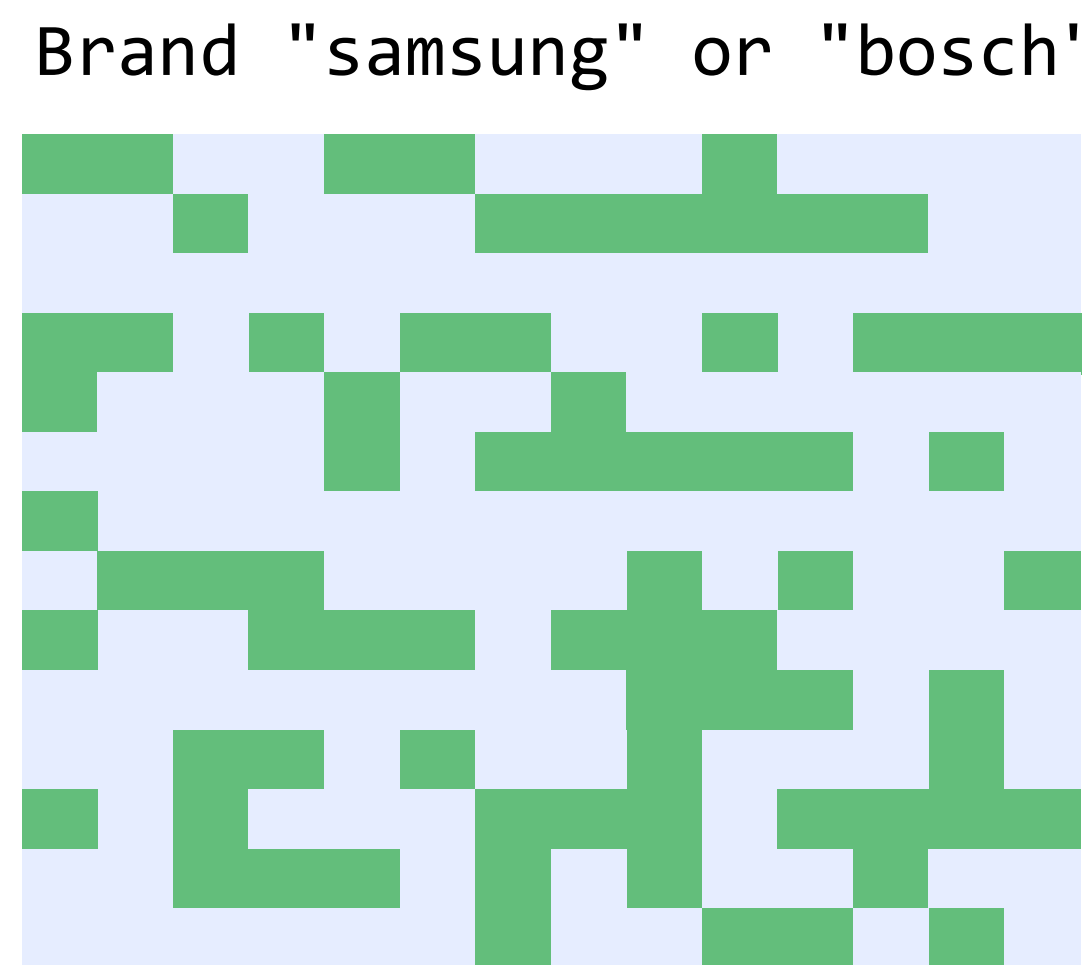
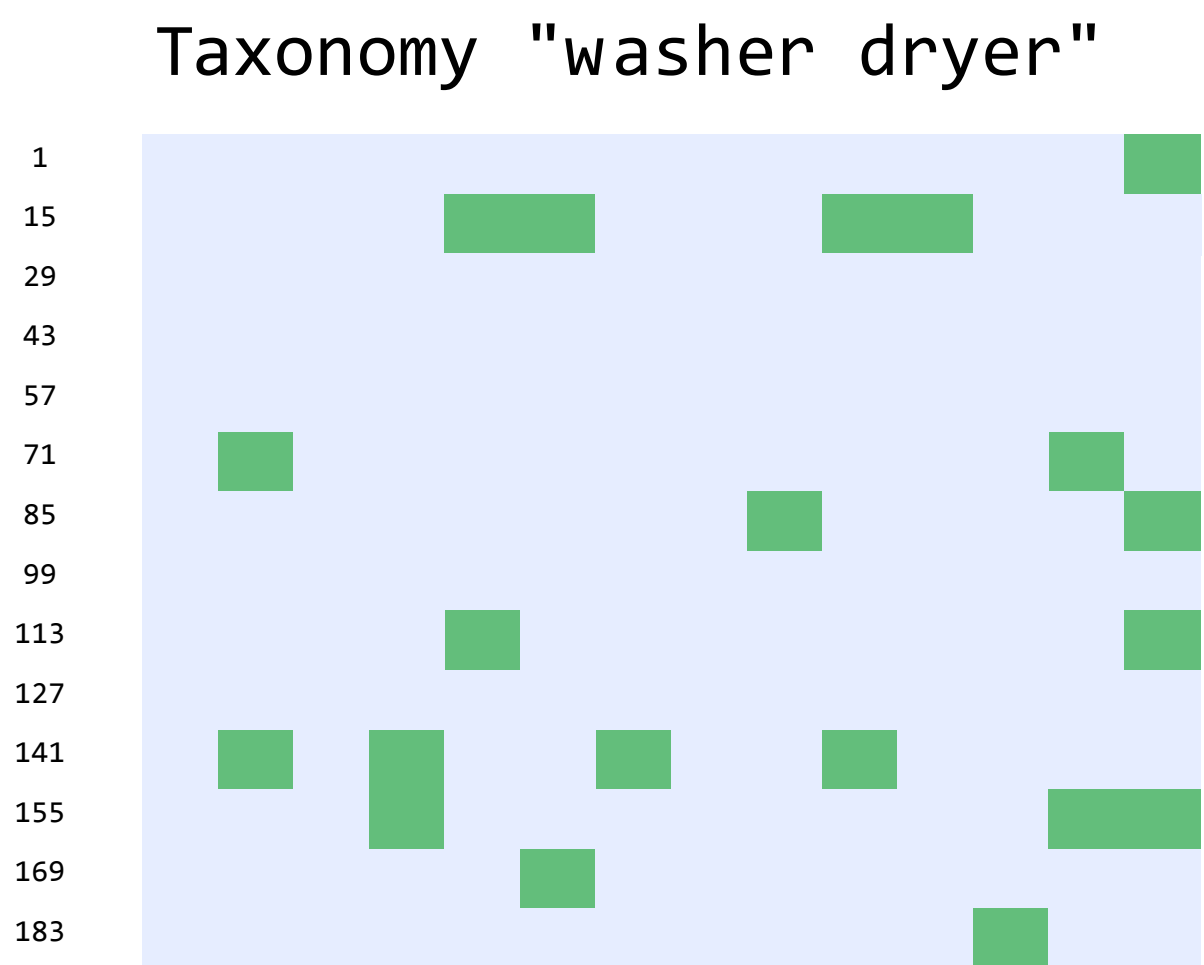
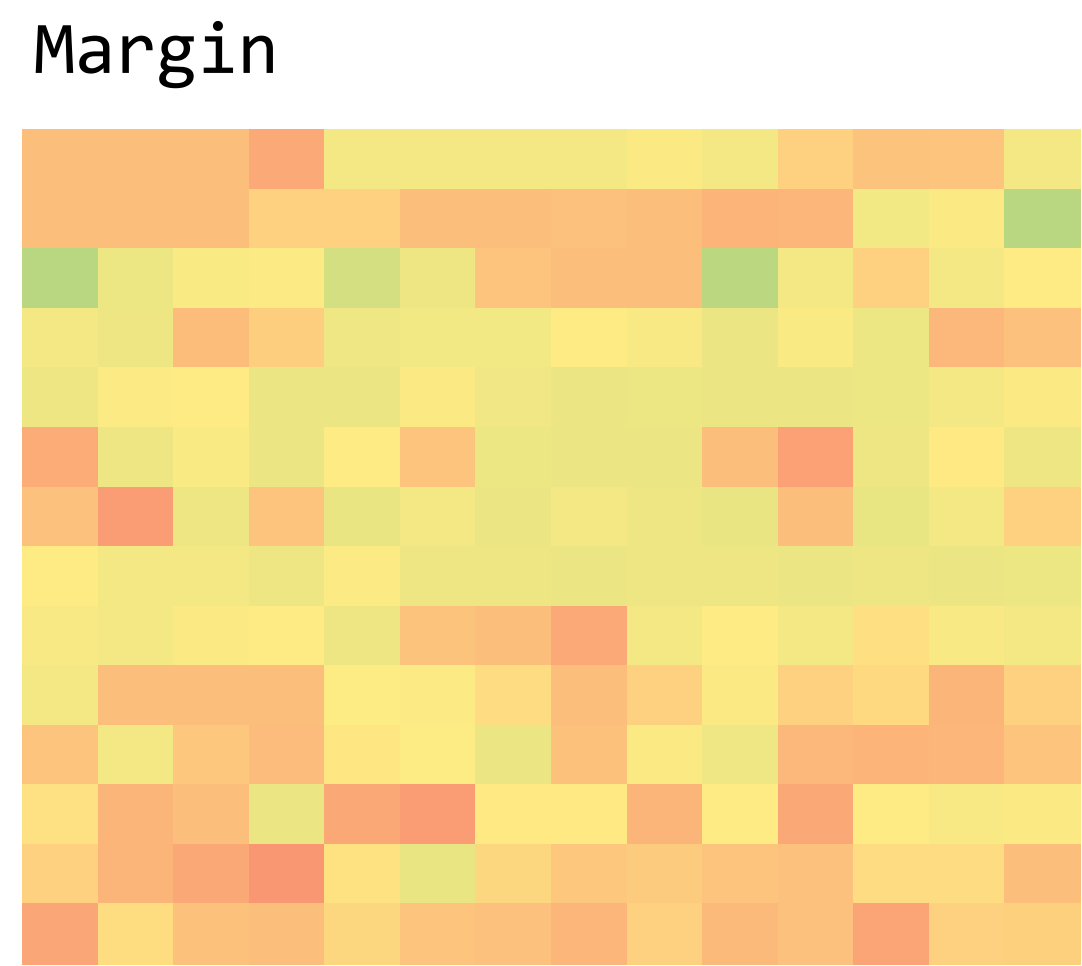
Category „Laptops“

Category „Laptop bags“

Category „Spare parts“



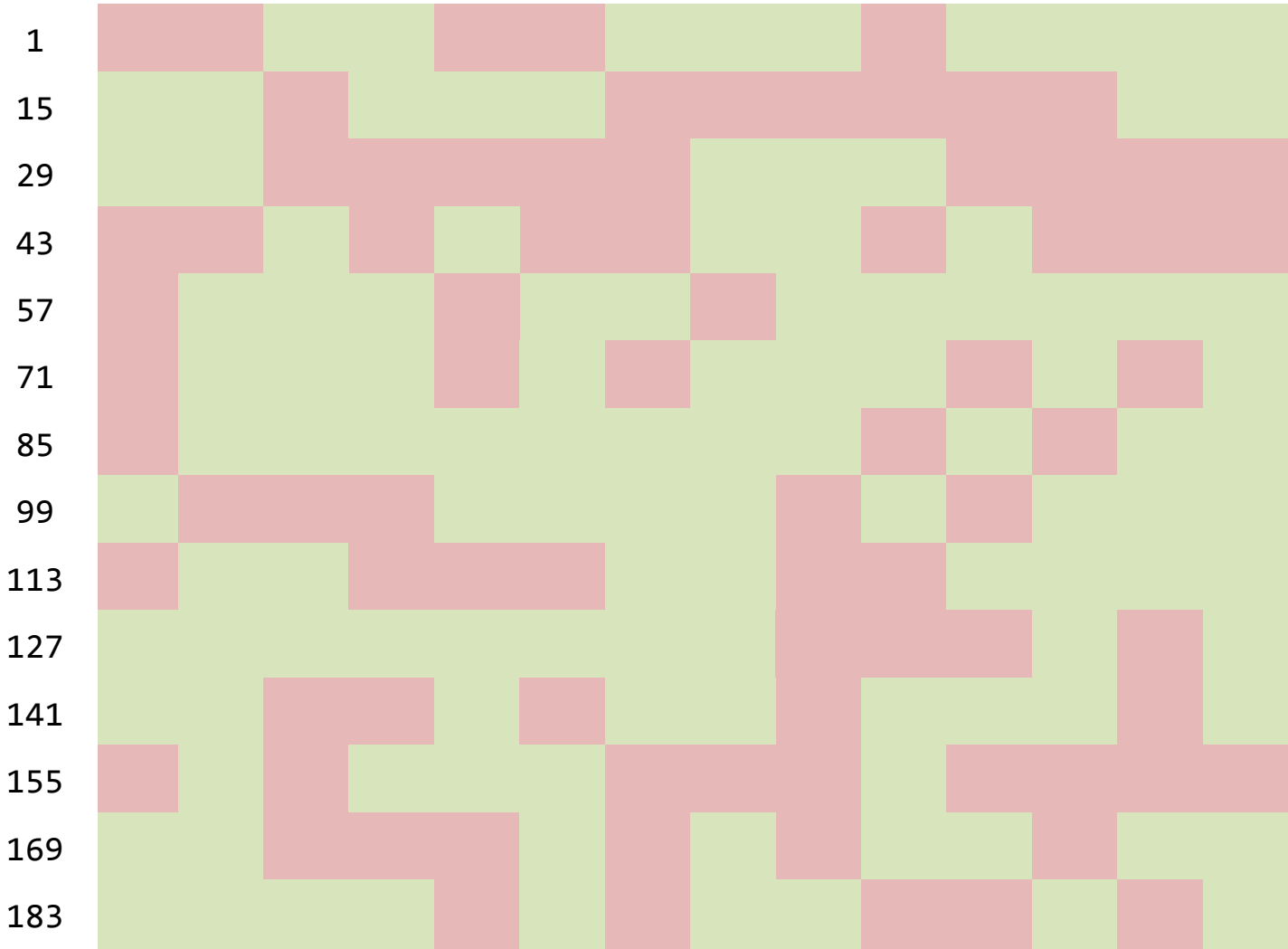
Search term „washing machine“



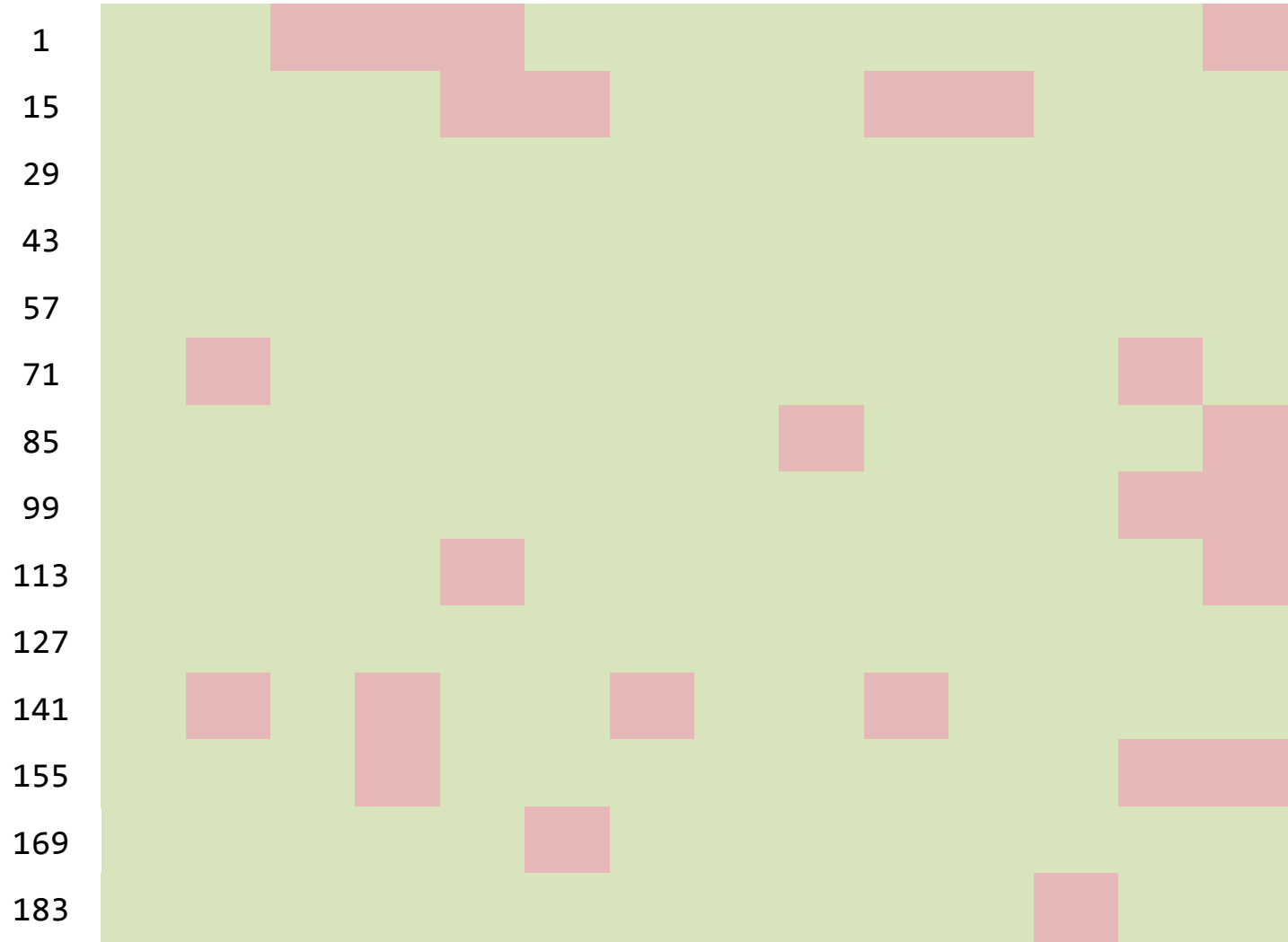
Search term „washing machine“

- Taxonomy is „washing machine“
- Taxonomy is not „washing machine“

Live

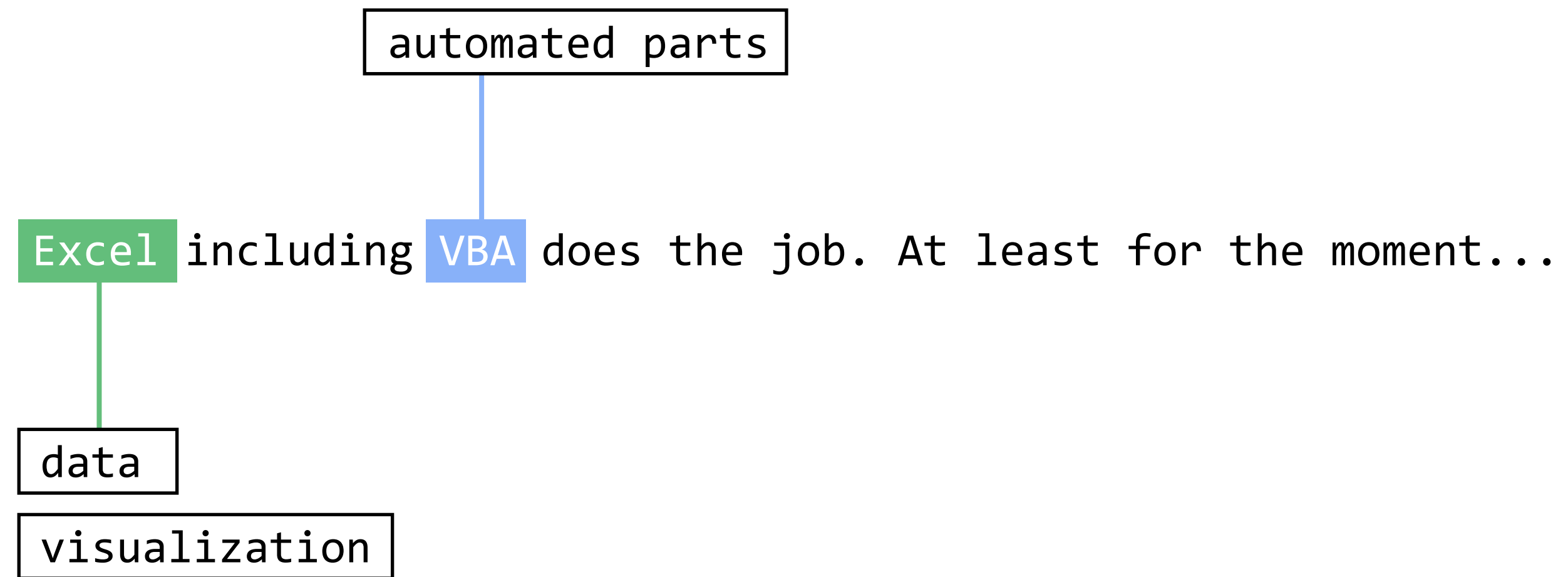


Test 1

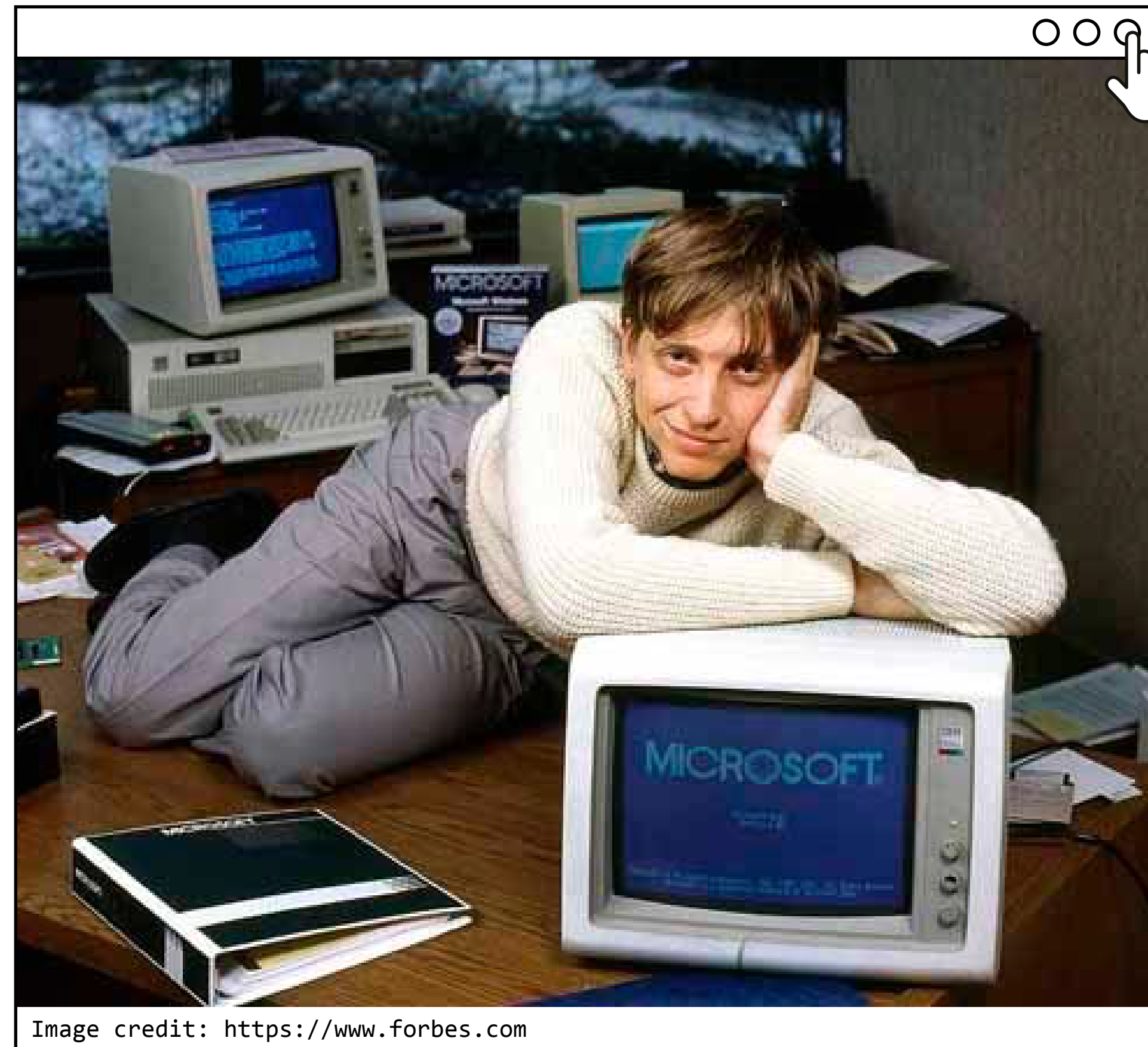


Test 2





...and yes, I do feel a bit weird because of that :-)



Discussion