

Instance normalisation

“winner”	“game”	“team”	“sales”	“run”	Page content
16	22	81	75	10	business
12	14	44	16	12	business
4	7	20	0	2	sport
2	3	7	6	1	???

For record r and attribute a with value (r, a) , where N is the number of attributes:

$$v_{new}(r, a) = \frac{v(r, a)}{\sum_{j=1}^{N-1} v(r, j)}$$

Nb: Sum of the attributes in the row =

$$\sum_{j=1}^{N-1} v(r, j)$$

i.e. Divide by the total number of words in each row

- Row 1 divide by 204
- Row 2 divide by 98
- Row 3 divide by 33
- Row 4 divide by 19

Instance- normalised table:

“winner”	“game”	“team”	“sales”	“run”	Page content
0.0784	0.1078	0.397	0.368	0.049	business
0.12	0.14	0.45	0.16	0.12	business
0.12	0.21	0.61	0	0.061	sport
0.105	0.158	0.368	0.316	0.053	???

1-NN will now show that record 4 is closer to 1 and 2, *business*