

Try a Different Query?

q = “**presidential campaign** **update**”

$$p(q|d4 = \text{... news of } \textbf{presidential campaign} \text{ ... } \textbf{presidential} \text{ candidate ...}) = \frac{2}{|d4|} * \frac{1}{|d4|} * \frac{0}{|d4|} = 0!$$

$$p(q|d3 = \text{... news of } \textbf{presidential campaign} \text{ ...}) = \frac{1}{|d3|} * \frac{1}{|d3|} * \frac{0}{|d3|} = 0!$$

$$p(q|d2 = \text{... news about organic food } \textbf{campaign} \text{ ...}) = \frac{0}{|d2|} * \frac{1}{|d2|} * \frac{0}{|d2|} = 0$$

What assumption has caused this problem? How do we fix it?