Why is a LM Useful?

- Quantify the uncertainties in natural language

- Allows us to answer questions like:

  - Given that we see "*John*" and "*feels*", how likely will we see "*happy*" as opposed to "*habit*" as the next word?   (speech recognition)

  - Given that we observe "baseball" three times and "game" once in a news article, how likely is it about "sports"?   (text categorization, information retrieval)

  - Given that a user is interested in sports news, how likely would the user use "baseball" in a query? (information retrieval)