TEAM BERT & PADDY

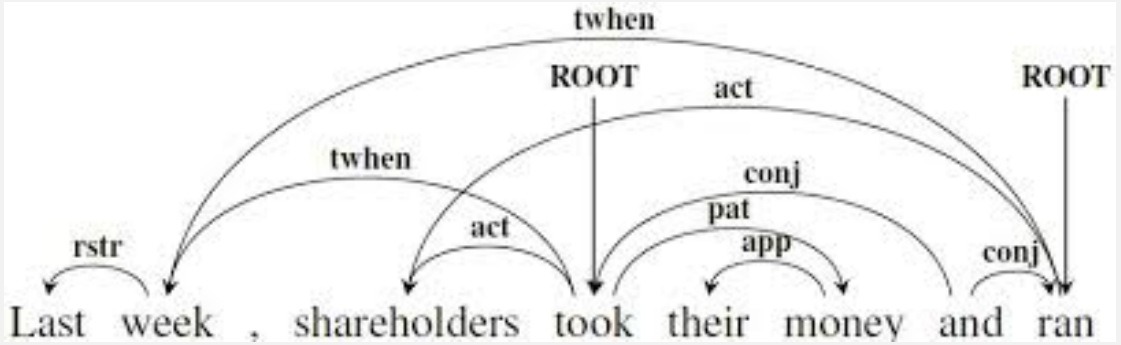
OUR HACKATHON PROJECT

- What is BERT?
- Training on the SQuAD dataset
- Demo time !!!
- What does our project mean for Lloyds?
  How can it be applied/used within LBG?

WHAT IS BERT?

- **B**idirectional **E**ncoder **R**epresentations from **T**ransformers
- Uses: Sentiment analysis, Q & A

ATTENTION


twhen
ROOT
act
ROOT
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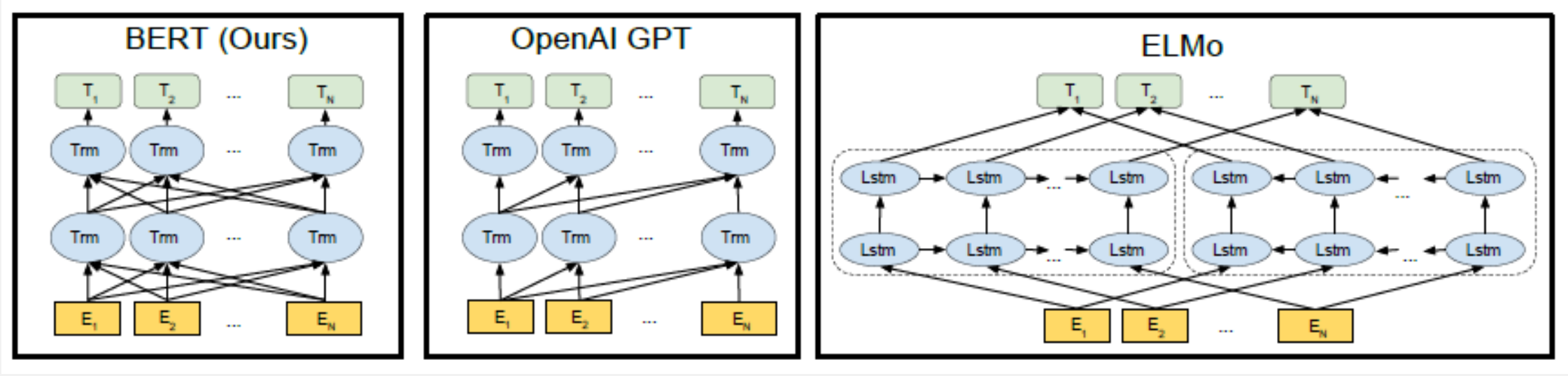
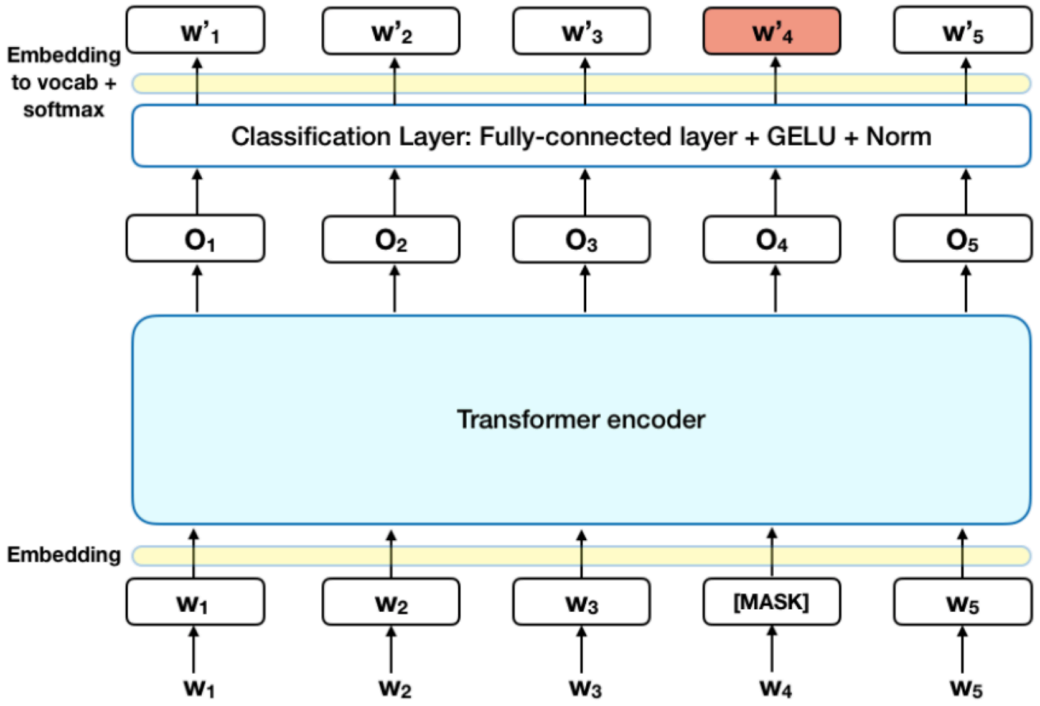
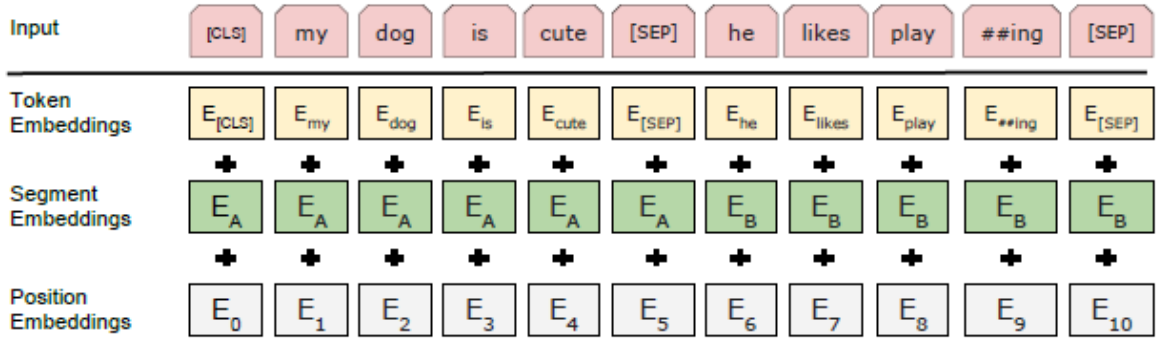
Last week , shareholders took their money and ran


BERT (Ours)
OpenAI GPT
ELMo
Trm
Lstm

PRE-TRAINING BERT

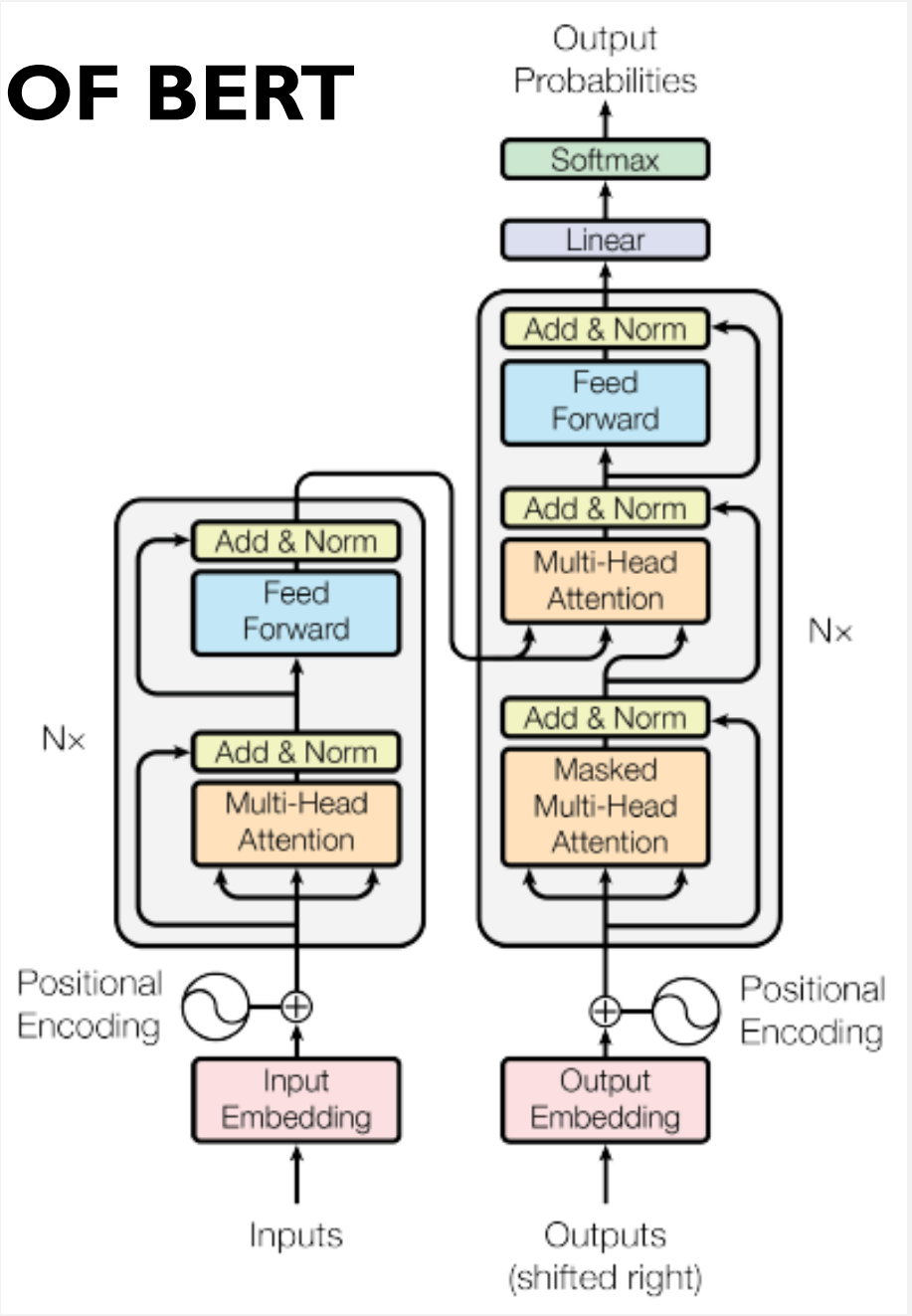


Masked Learning Model



Next Sentence Prediction

THE 12 LAYERS OF BERT

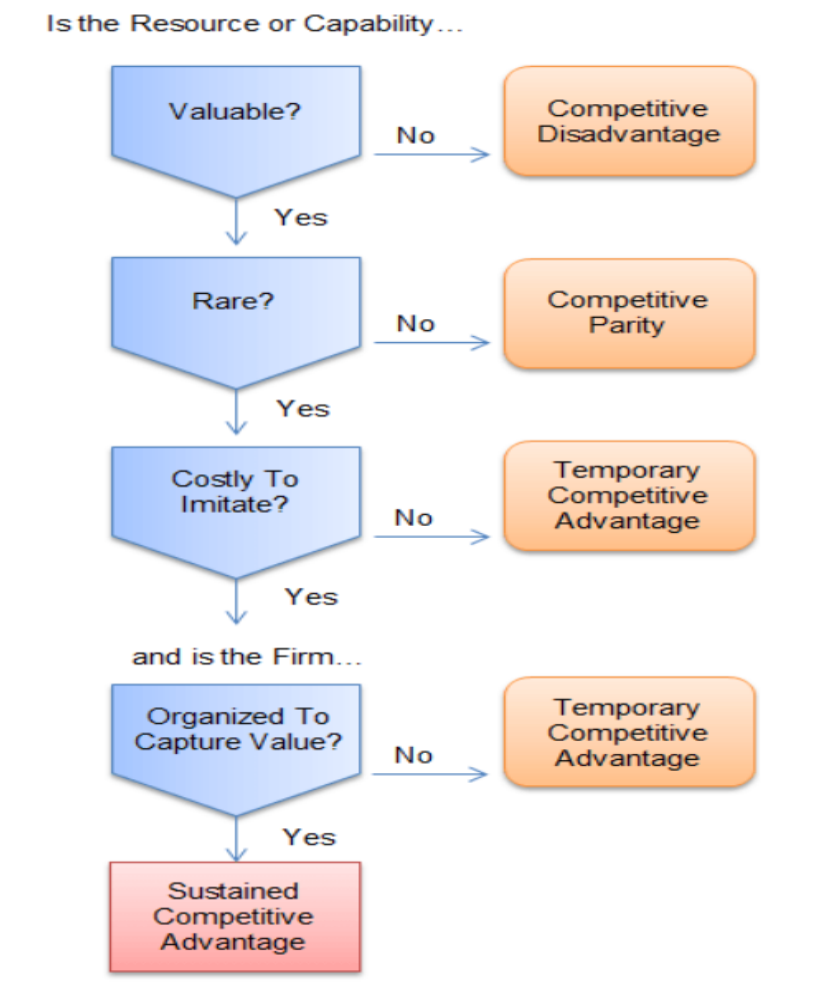


STANFORD QUESTION ANSWERING DATASET

- 442 subjects ranging from Beyoncé to the Sino-Tibetan relations during the Ming dynasty
- Subjects are Wikipedia pages broken into context paragraphs
- Each context paragraph has multiple question and their respective answers on which we trained Bert

DEMO TIME

BERT COULD HELP LBG UNLOCK THE VALUE OF ITS TEXTUAL DATA



- **LBG has lots of textual data**
  - Internal documents
  - Customer interaction data

- **This textual data is a resource that is**
  - Valuable
  - Rare
  - Costly to Imitate

- **BERT could help us capture this value:**
  - Legal could use BERT to find answers in the context of legal contracts
  - Customers could use BERT to find answers in the context of Terms and Conditions
  - The customer DNA team could use BERT to find answers in the context of customer interaction data