Bullet-points for presentation to Sundar.

- BERT is a new type of model architecture that can productively scale up deep learning models to close the gap or even match human performance in many language understanding benchmarks.

- Applying BERT to WebAnswers demonstrates a huge Redacted coverage increase at constant precision in English. This captures Redacted on Assistant for WebAnswers, a noticeable distinguishing factor over Alexa. Early experiments show that gains internationally are even larger. Answers are critical to the Assistant international strategy.

- Early experiments with BERT applied to several other areas in Search, including Web Ranking, suggest very significant improvements in understanding queries, documents and intents.

- Any competitor can use BERT or similar technologies. Fortunately, our training data gives us a nice head-start. We have the opportunity to maintain and extend our lead by fully using the training data with BERT and serving it to our users. This needs multiple orders of magnitude more hardware resources (mainly TPUs).

- While BERT is revolutionary, it is merely the beginning of a leap in Natural Language Understanding technologies. We would likely need sustained investment in these areas as these technologies continue to advance rapidly.