Summary:

"BERT" is the name of a new component of Google's algorithm that Google rolled out the week of October 21.

What is BERT?

- Announced on Friday, Oct 25. Started rolling out earlier that week.
- Nerdsplanation: BERT is Google's neural network-based technique for natural language processing (NLP) pre-training. BERT stands for Bidirectional Encoder Representations from Transformers.

Why does BERT matter?

Google said this is their biggest update in 5 years. Because it is a significant update in the world of search, we want our Adept team & clients to be informed about what it is and what it means.

Google says BERT is:

- "the biggest leap forward in the past five years, and one of the biggest leaps forward in the history of search."
- not used on all queries. "BERT will help Search better understand one in 10 searches in the U.S. in English, and we'll bring this to more languages and locales over time."
- "Particularly for longer, more conversational queries, or searches where prepositions like "for" and "to" matter a lot to the meaning, Google Search will be able to understand the *context* of the words in your query"
- "BERT doesn't assign values to pages. It's just a way for us to better understand language."
 - This means BERT does not change how pages are evaluated (the almighty "ranking factors" such as weighting of meta titles, backlink anchor text, header tags, etc.). It just changes how Google interprets users' search queries).

This algorithm update is a big deal because BERT represents a significant enhancement in the technology for understanding language in a more human-like manner. Basically, BERT involves using machine learning to better interpret human language context.

To the Adept SEO team, BERT is less of a game-changer than a natural milestone in Google's evolution of getting better at understanding humans. Thus, the paradigm has not shifted, and the most important SEO strategy at Adept remains the same: figure out exactly what the target audience is searching for, and give them what they want to see.



Notes on immediate impacts in the world of SEO:

- Featured snippets (the "answer" snippet that sometimes comes first for questions or implied questions), seem to be especially heavily impacted
- BERT seems to impact "long-tail" (uncommon) queries the most (as opposed to "head" queries, which are searched for by multiple people every day).
- The ranking tracking databases that are usually our barometer for major algorithm updates did not detect much volatility during BERT week. <u>One theory</u> is that this is because BERT focuses on long-tail search queries and the rank-trackers track more common keywords.
- In SEO news, not many casualties reported.
- Per usual, we've seen several articles making claims without sufficient evidence and even some with straight-up misinformation.

Impact to Adept Clients:

That said, we have not seen a major impact on any SEO clients at Adept. Indeed the immediate impact on the SEO industry at large seems to have been quite small for such a publicized update.

Notes on long term implications for SEO:

- BERT may lay the foundation for subsequent updates.
 - We will want to keep an eye out for this.
- For Adept and our clients, BERT requires no change in SEO strategy.
 - We are not about just spamming keywords all over the content that is the kind of outdated old-school SEO that BERT doesn't like.
 - Adept SEO is already centered on truly understanding user intent and giving people what they are actually searching for.
 - But we need to continue to get better at what we do (just like we always do).



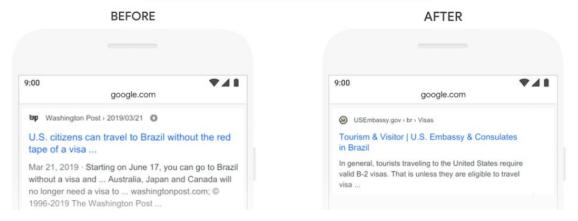
Examples

Below are two examples provided by Google in their announcement of BERT of queries before and after BERT.

> Here are some other examples where BERT has helped us grasp the subtle nuances of language that computers don't quite understand the way humans do. Can you get medicine for someone pharmacy **BEFORE AFTER** 9:00 741 9:00 741 google.com google.com MedlinePlus (.gov) > ency > article ⟨⟨ HHS.gov > hipaa > for-professionals Getzing a prescription filled: MedlinePlus Medical Can a patient have a friend or family member> pick up a prescription. Aug 26, 2017 · Your health care provider may give you a Dec 19, 2002 · A pharmacist may use professional prescription in ... Writing a paper prescription that you judgment and experience with common practice to ... the take to a local pharmacy ... Some people and insurance patient's best interest in allowing a person, other that the companies choose to use .. patient, to pick up a prescription.

> > Here's a search for "2019 brazil traveler to usa need a visa." The word "to" and its relationship to the other words in the query are particularly important to understanding the meaning. It's about a Brazilian traveling to the U.S., and not the other way around. Previously, our algorithms wouldn't understand the importance of this connection, and we returned results about U.S. citizens traveling to Brazil. With BERT, Search is able to grasp this nuance and know that the very common word "to" actually matters a lot here, and we can provide a much more relevant result for this query.







Additional Reading:

- The announcement:
 .blog.google/products/search/search-language-understanding-bert/
- FAQs: <u>/searchengineland.com/faq-all-about-the-bert-algorithm-in-google-search-324193</u>
- BERT is actually an open source project where anyone can train their own language processing system for Q&A or other tasks:
 - o https://ai.googleblog.com/2018/11/open-sourcing-bert-state-of-art-pre.html
 - https://github.com/google-research/bert

