online spotlight

Googling Before You Google

I was recently chatting with *Online Searcher* editor Marydee Ojala about ways to shake up the upcoming Searcher Academy workshop at the 2018 Internet Librarian conference and tie it in with the Search Skills Academy workshop at Internet Librarian International conference happening concurrently in October. She suggested we test how people catch their initial assumptions and hidden biases. So, I challenged the workshop presenters to show the first three steps they would take to find information on security issues related to USB thumb drives. The trick, though, was that I only sent them an image of a thumb drive; I didn't specify the words to describe it.

This column was written before the workshop, so I don't know what my fellow presenters will come up with, but I can show what my thought process was and how I tried to catch my immediate assumptions. To make this challenge more interesting for me, I decided to limit myself to only using Google resources for my first three steps.

While I call these portable memory devices "thumb drives," I knew that there were other names for them: USB flash drive, keychain drive, flash memory, pen drive, and memory unit are just a few. My first step, since I had an image of the item in question, was to run a reverse-image search in Google. Note that, in my recent experience, Google's reverse-image search is not as effective in locating identical or similar images as TinEye (tin eye.com) or Bing's reverse-image search. Instead of a search results page full of similar images, Google often returns links to webpages that contain related material. While that would be considered a bug for most image searches, I considered it a feature; it was easy to skim through the results to see what words were used to describe the device being searched.

Skimming through the results, I collected the various names for a thumb drive and headed over to Google Trend Search (trends.google.com) to see how frequently each of those terms had been searched in Google to help me narrow down my query to the most common names. As I was adding each of the phrases, I noticed that Google Trends flagged several as Topic searches—the closest thing to a controlled vocabulary that Google has. After a little experimenting, I found that the most common phrases were "USB flash drive," "thumb drive," and "jump drive." Of these three, USB flash drive was by far the most common phrase being searched. Interestingly, "memory stick" was categorized as Camera Storage Type, which suggested to me that searching on that term would be more likely to turn up discussions about photo storage, which would have unnecessarily narrowed my search.

For the second aspect of the question, I needed to find the most common words for security-related concerns regarding thumb drives ... er, USB flash drives, as I am now calling them. I had noticed that Google has improved its snippets feature—the People Also Ask box that often appears after the first few hits in the search results page. While Google initially offers you four snippets of similar search results, if you open any of the snippets, Google then adds two additional snippets at the end of the snippets list. By searching for usb flash drive security and clicking on four or five snippets in the People Also Ask box, I was quickly able to get a list of a dozen related queries. From skimming those snippets, I could see that variations on the word "encryption" were used far more often than the word "security."

Before I could congratulate myself for my cleverness, though, I realized that encryption covers only one aspect of USB flash drive security. Yes, if you leave your flash drive behind when you step out of your Lyft ride or forget to pull it out of a podium laptop, you'll be glad you encrypted those confidential files you were carrying around. But the other risk is people's tendency to put a found flash drive into the nearest USB port to see what's in the drive, thereby inadvertently installing malicious software onto that machine. To find the right words for the danger of curiosity, I headed over to Google Scholar (scholar.google. com) and repeated my search for usb flash drive security. A review of the search results suggested that I should include words like "vulnerability," "malware," and even "social engineering."

One unexpected discovery I made from this process was how much valuable information I could get from starting my search with some of Google's lesser-known search features rather than just launching a Google web search and clicking through the results. By spending my first 5 or 10 minutes learning about the information topography, I was able to focus my search with the phrases most likely to turn up useful results.

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