

DATA PRIVACY

RISK

LAW

PROTECTION

COMPLIANCE

REGULATIONS

EXPOSED

RECORD

breach

data

digital

classification

search

Metadata

anonymous

Privacy

Patient privacy

Sensitive Information

Authentication

Privacy On the Internet

Agenda of our Privacy On the Internet Series:

- ✓ **Part One: VPN's (Virtual Private Networks)**
- ✓ **Part Two: Browsers and basic browser privacy settings**
-  • **Part Three: Search engines**
- **Part Four: Some of the ways you can be tracked**
- **Part Five: Anti-tracking and add blocker software**
- **Part Six: The privacy policies of the internet giants and what they do with your information**
- **Part Seven: Can you remove all your personal info from the internet?**

Then we'll see where we go from there

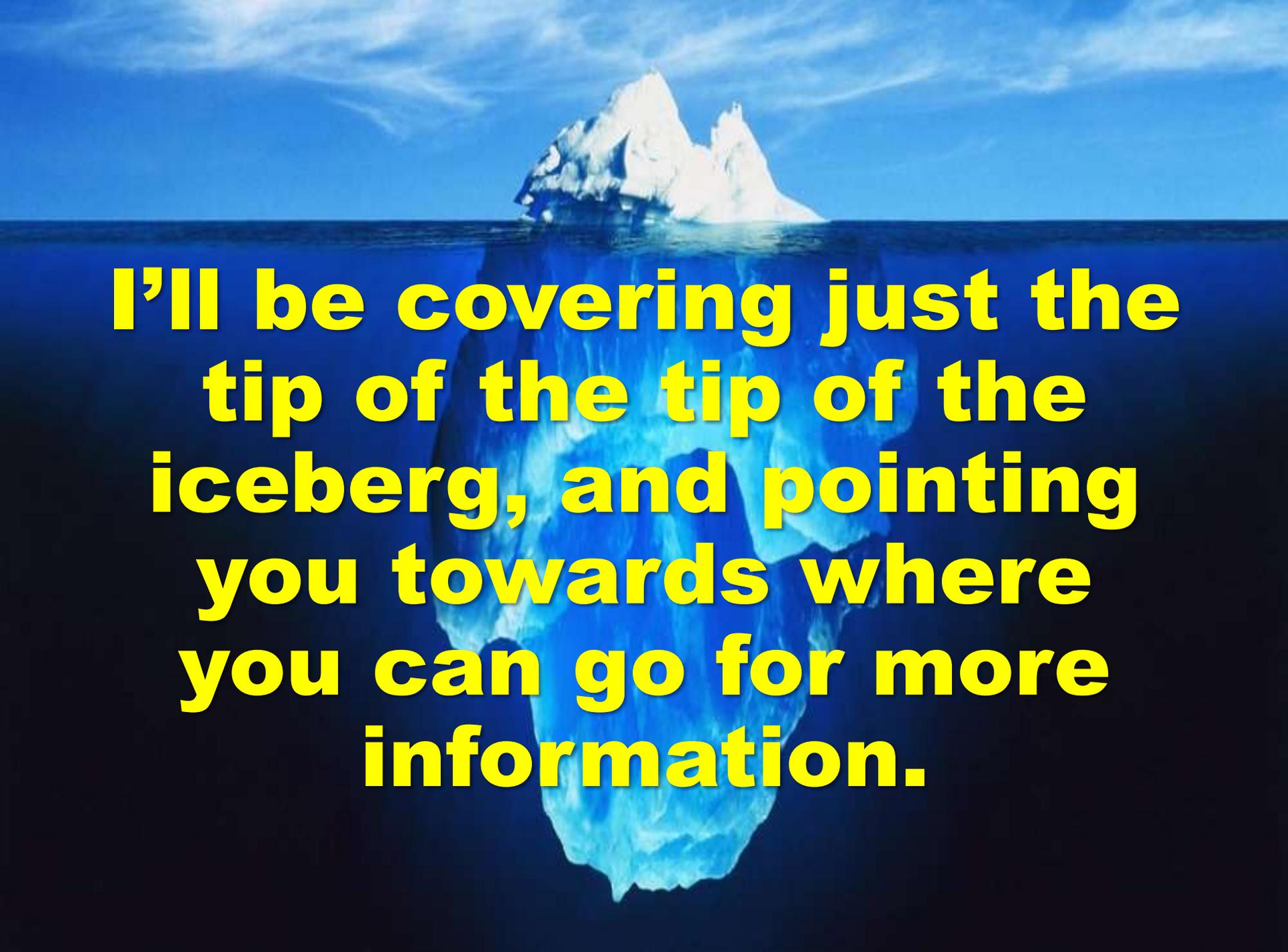
Privacy On the Internet

Keep in mind that your desire or need for privacy on the internet is up to you and your tolerance for having others know more about you than you might like.

Privacy On the Internet

**Last session we looked at
BROWSERS**

**This week we'll look at
SEARCH ENGINES
and how they can affect your
privacy.**

A photograph of a large iceberg floating in the ocean. The iceberg is white and jagged, with a prominent peak. The water is a deep blue, and the sky is a lighter blue with some wispy clouds. The iceberg's reflection is visible in the water below the surface.

I'll be covering just the tip of the tip of the iceberg, and pointing you towards where you can go for more information.

Privacy On the Internet

The items you enter into a search engine can disclose highly personal information about you. Things like as medical conditions, employment status, financial information, political beliefs, and other private details.

This data can be collected, stored, and linked to detailed digital profiles which contain your real identity.

The only way to ensure that your data is safe is to keep it out of the hands of the data collectors. One of the ways to do that is to use a Private Search Engine.

Privacy On the Internet

- **If you're concerned about Google, Bing, and other search engines tracking your searches, you do have alternatives.**
- **Some private search engines are real search engines in that they actually crawl websites to glean the information they need to deliver search results. These offer more privacy because they don't interact with Google or Bing, but may not offer the best results.**
- **Others are 'metasearch engines', essentially act as a middleman between the user and Google or other sites, enabling them to offer a better overall experience.**
- **Some blend both and utilize their own crawlers as well as pulling results from the likes of Google and Bing.**



DuckDuckGo (DDG)

The company's name is a reference to the children's game [duck, duck, goose](#).

DuckDuckGo (US based) is the most popular privacy search engine, and is the default search engine in the TOR browser.

They have their own crawler (called DuckDuckBot), but also pull information from over 400 other sources. These include Bing, Oath (previously Yahoo), and Wikipedia.



DuckDuckGo (DDG)

This search engine does save searches but they are not tied to an individual user:

“We also save searches, but again, not in a personally identifiable way, as we do not store IP addresses or unique User agent strings. We use aggregate, non-personal search data to improve things like misspellings.”



DuckDuckGo (DDG)

DuckDuckGo displays ads for affiliate sites in the right sidebar, which is a little less aggressive than Google, which presents ads at the top of search results.

It earns additional profits from commissions from sites like Amazon and eBay, so you may want to be wary if those pop up a lot in search results:

“Similarly, we may add an affiliate code to some eCommerce sites (e.g. Amazon & eBay) that results in small commissions being paid back to DuckDuckGo when you make purchases at those sites.”



DuckDuckGo (DDG)

DuckDuckGo DOES use your IP address to serve local results. Even though it doesn't store your IP address, it's visible when you send your search request. Basically, it's used to identify your approximate location and then is immediately deleted.

If you'd rather not have your IP address used at all, then:

- You may be better off with one of the other search engines that doesn't use your IP address.
- You can use a VPN or a privacy oriented browser that disguises your IP address.



DuckDuckGo (DDG)

DuckDuckGo has a feature that allows you to use Google's search engine through DuckDuckGo: prepend "*!Google*" to searches.

By using this feature DuckDuckGo partially launders your search, but in reality DuckDuckGo may not isolate your identity as much as you'd like when searching using Google.



DuckDuckGo (DDG)

According to comparitech.com:

“Overall, this is the best private search engine in terms of user experience, especially if you're interested in local search results.”

DuckDuckGo's interface is very similar to that of Google and other popular search engines. You can search the entire web, or refine your search to images, videos, news, maps, meanings, or shopping. Filters include adult content and timeframe of results.

DuckDuckGo is accessible via your browser, but it also offers apps for iOS and Android, and an Edge browser extension.

MetaGer

- MetaGer (based in Germany) is operated by non-profit organization, SuMa-eV.
- It provides results in a few different languages including English, German, and Spanish.
- MetaGer has its own web crawlers and indexers, but it's primarily a metasearch engine, querying up to 50 search engines, including Yahoo and Bing. Most of the top results come from Bing.
- MetaGer has an .onion* site that can be accessed through the TOR network.

* - .onion is a special-use top level domain name designating an anonymous onion service, which was formerly known as a 'hidden service'.

MetaGer

- When deciding which results to display, MetaGer aims to serve users variety. As such, it doesn't use the number of click-throughs a webpage receives as a ranking factor.
- Their business-model involves donations, membership fees, and non-targeted advertising on results pages. Therefore your IP address is stored along with a timestamp for up to 96 hours (four days). This is because MetaGer limits the number of searches per IP address in a given amount of time and needs some way to track this.
- For the non-targeted advertising component of its model, MetaGer does collect some data. It provides advertisers with truncated IP addresses (which can provide approximate location data) and user agent details, including which browser and operating system the search query is coming from. None of this information can supposedly identify a user.

MetaGer

- **MetaGer adds an extra layer of privacy by giving you the option to open a web page anonymously. This way the search engine acts as a proxy and hides your IP address from your destination website.**
- **The MetaGer interface isn't as refined as others on this list, but it's easy to use nonetheless. You don't have as many search options as with some other platforms, but you can search the entire web or only pictures or shopping. Other options include filtering by date or language or using safe search to filter out adult content.**
- **There is a MetaGer Firefox add-on and you can set MetaGer as your default search engine for Chrome and Edge. Android users can download a native app.**



Qwant

Qwant is based in France and delivers results in a choice of more than a dozen languages.

This search engine doesn't track you or your device and promises not to log your search history.

“We don't use any tracking device (pixel, fingerprinting...). We don't collect and we don't store any history or your searches.”

This is a metasearch engine that primarily takes Bing search results and delivers them to the user. It does have its own indexing capabilities as well.



Qwant

The profit model for this company includes affiliate deals with sites such as eBay and Trip Advisor, so, for some searches, you may end up with these sites having an unfair advantage in terms of making it to the top of results pages.

Most test searches delivered expected results, but local search results were generally inappropriate.

There are Qwant extensions for Chrome and Firefox, and apps are available for iOS and Android. If you need a faster, lighter search engine (for example, if you're using an older web browser), Qwant Lite is designed specifically for that purpose.

mojeek

Mojeek (based in the UK), unlike the other tools covered in this presentation, exclusively uses crawlers and doesn't rely at all on mainstream search engines. This makes it more suitable for users who are trying to avoid companies like like Google and Bing altogether.

The downside is that your results won't be as refined as those from other private search engines, since Mojeek's algorithms can't quite contend with those of search engines that have been in the business for decades.



Swisscows is a Switzerland-based private search engine that does very well with privacy and security. They promise no tracking or data collection.

In terms of privacy, Swisscows is one of the top choices.

In testing it provided good results, which are primarily sourced from Bing.

Because Swisscows does not pass on user data from search requests, they are unable to effectively monetize their service through ad partners, which means they largely rely on donations and sponsorships to maintain operations. Sponsors can get a banner ad at the top of results.



One unique aspect of Swisscows is that they are passionate about family-friendly content. As they explain on their ‘about’ page:

- 1. We promote moral values.***
- 2. We hate violence and pornography.***
- 3. We promote digital media education.***

While some people may not like the fact that Swisscows filters some adult content, others may see this as a great feature, especially those with children.

Privacy On the Internet

For more information on private search engines, including those mentioned earlier or other search engines:

Best private search engines that won't track you in 2022:

<https://www.comparitech.com/blog/vpn-privacy/best-private-search-engine/>

9 Best Private Search Engines for 2022:

<https://restoreprivacy.com/private-search-engine/>

Privacy On the Internet

Next session:

***Part Four: Some of the ways YOU
can be tracked***