DARK WEB

A

Seminar Report

Submitted

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ABSTRACT

Searching on the Internet today can be compared to dragging a net across the surface of the ocean. While a great deal may be caught in the net, there is still a wealth of information that is deep, and therefore, missed. The reason is simple: Most of the Web's information on dynamically generated sites, and standard search engines never find it.

Traditional search engines create their indices by spidering or crawling surface Web pages. To be discovered, the page must be static and linked to other pages. Traditional search engines can not "see" or retrieve content in the deep Web - those pages do not exist until they are created dynamically as the result of a specific search. Because traditional search engine crawlers can not probe beneath the surface, the deep Web has heretofore been hidden.

Deep web is the name given to the technology of surfacing the hidden value that cannot be easily detected by other search engines. The deep web is the content that cannot be indexed and searched by search engines. For this reason, the deep web is also called invisible web.

INTRODUCTION

The Deep Web is the content that resides in searchable databases, the results from which can only be discovered by a direct query. Without the directed query, the database does not publish the result. When queried, Deep Web sites post their results as dynamic Web pages in real-time. Though these dynamic pages have a unique URL address that allows them to be retrieved again later, they are not persistent.

The invisible web consists of files, images and web sites that, for a variety of reasons, cannot be indexed by popular search engines. The deep web is qualitatively different from the surface web. Deep web sources store their content in searchable databases that only produce results dynamically in response to a direct request. But a direct query is a "one at a time" laborious way to search. Deep web's search technology automates the process of making dozens of direct queries simultaneously using multiple-thread technology.

The Deep Web is made up of hundreds of thousands of publicly accessible databases and is approximately 500 times bigger than the surface Web.

HISTORY OF DARK WEB

You don't have to be an Internet junkie to have heard dark, fantastical stories about deep web websites or deep web search engines where criminals and hackers collude to steal identities, change stock prices, or shut down a site of their choosing. The Deep Web, however, is not only much larger than these stories imply, it's also much more benign in nature than many have been led to believe.

In fact, one of the reasons behind these misconceptions is the fact that there is a "Dark" corner of Deep Webspace based on anonymity. However, both are only accessible with a specifically designed web browser, meaning that you won't stumble upon a secret drug ring by just typing an inquiry into your search engine.

DEFINITION

The **dark web** is the World Wide Web content that exists on darknets, overlay networks that use the Internet but require specific software, configurations or authorization to access.

The dark web forms a small part of the deep web, the part of the Web not indexed by web search engines, although sometimes the term deep web is mistakenly used to refer specifically to the dark web.

TYPES OF WEB

- **Surface Web:**

As the name suggests, 'surface web' deals with all the operations and processes that take place on the surface of the web. We all are familiar with these operations as they are indexable and can be crawled by search engines. The leading search engines like Bing, Yahoo, and Google crawl and index these webpages to make it available for the search users. Depending on the information present on these pages, these search engines rank websites.

- **Deep Web:**
Although all of these terms tend to be used interchangeably, they don't refer to exactly the same thing. An element of nuance is required. The 'Deep Web' refers to all web pages that search engines cannot find.

- **Dark Web:**
The Dark Web is a term that refers specifically to a collection of websites that exist on an encrypted network and cannot be found by using traditional search engines or visited by using traditional browsers.

Almost all sites on the so-called Dark Web hide their identity using the Tor encryption tool. You may know Tor for its ability to hide your identity and activity. You can use Tor to spoof your location so it appears you're in a different country to where you're really located, making it much like using a VPN service.

When a website is run through Tor it has much the same effect.

Indeed, it multiplies the effect. To visit a site on the Dark Web that is using Tor encryption, the web user needs to be using Tor. Just as the end user's IP address is bounced through several layers of encryption to appear to be at another IP address on the Tor network, so is that of the website.

There are several layers of magnitude more secrecy than the already secret act of using Tor to visit a website on the open internet - for both parties.

Thus, sites on the Dark Web can be visited by anyone, but it is very difficult to work out who is behind the sites. And it can be dangerous if you slip up and your identity is discovered.
You can also read our in-depth guide to using Tor if you want to know more about using the web anonymously and sending messages securely.

WHO IS ON THE DARK WEB

Despite attempts to index the Dark Web, much is still unknown about its contents. What we do know is that lurking within its depths, various characters use the Dark Web to perform nefarious activities and sell illegal products.

1) **Black Market:** Selling all manner of illegal and products, e.g. drugs and weapons.

2) **Botnets:** Services creating a large amount of traffic to temporarily or indefinitely interrupt or suspend a server.

3) **Terrorist:** The US Government has successfully intercepted messages from Al Qaeda.

4) **Hoaxers:** It's incredibly hard to tell what's true and what a hoax on the Dark Web is.

5) **Hackers:** The anonymity of the Dark Web provides the perfect base for hackers to work from.

6) **Fraudsters:** There are many sites and forums dedicated to scamming and counterfeiting.

7) **Phishing:** Cloned sites and scam sites are abundant on the Dark Web.

8) **Hitmen:** Services include hitmen for hire and arms dealers, with a pricing structure.

9) **Pornography:** Dominated by illegal and ethically disputed pornography.

ADVANTAGES OF DARK WEB

1) **Anonymity**

Anyone can be anonymous while on the internet—an ever-increasing array of encrypted browsing tools and private networks has seen to that. But being anonymous does not necessarily mean that you're private as well. Anonymity grants the average web user the freedom to be anyone but themselves.

Although this does secure personal interests and details, there have been several cases where online anonymity has not been enough to protect an individual's true identity.

Like privacy, anonymity exists in levels. An activist or whistleblower will take more measures to ensure that they remain anonymous than a teenager on Twitter would. For them, their identity is their most precious asset and protecting it with anonymity means keeping their online activities separate from their day-to-day lives.

2) **Political Activism**

The deep web has result in a speaker for noble causes. Oppressive governments are a crude reality in the 21st century. Information is a very powerful weapon to this kind of regimes, and its citizen's movements on the World Wide Web are strictly monitored to avoid the spread of revolutionary ideas. Blocking websites, especially the ones related to social media, is a common measure in oppressive environments. It is in this context that browsers such as Tor appear as a solution to enable a safe communication line not only in a national level, it also allows international denounce certain situations. The deep web has had a major role in recent historical events such as the Arab spring.

3) Freedom of Speech

That would be a direct consequence of anonymity. The right to freely express your opinion on any topic without fearing persecution that most western countries take for granted (although with these matters, you never really know what might happen) is almost a utopia in certain parts of the world.

Overcoming censorship is another really positive feature that deep net has allowed, which directly links us to our third benefit.

4) Knowledge

The deep-web stores the largest virtual libraries you could possibly imagine. It is a great space for researchers, students and teachers, since what they can find in the deep net will more probably not be available from standard search engines. Scientific findings that have not made public and could influence health and social beliefs of large populations can be found in the deepest of the web waters. Literature from all ways of thinking that you will not find in the book storefronts (pro-suicide, anti-moralis) are also stored in the deep web.

DIS - ADVANTAGES OF DARK WEB

Since there's more content to analyze, Deep Web search engines tend to be slower than standard search engines. Searching the Deep Web also requires a more precise search string. Deep Web searches should be reserved for serious, painstaking research, not for simple questions and basic Web surfing. Deep Web searches may also return sensitive personal information from normally restricted databases, creating ethical dilemmas and leaving individuals susceptible to fraud and identity theft.

1) **Child Pornography**

As absurd as it sounds child pornography is all over is dark net and it's not one of those things we are proud of, but it happens and there are a lot of child porn being traded on the dark web, this is a part you are advised to avoid as it is not a comfortable sight.

2) **Drug**

The Silk Road, one of the most popular marketplace for drugs, guns and other illegal stuff, the deep web is a haven for all of this which a very valid reason why you should tread careful and avoid being influenced by all of this.

3) **Weapon Trading and Hitmen for hire**

As much as drugs, in the dark web you can also buy weapons and hire hitmen which are also some of the cons and illegal vices going on in the deep web anonymously.

CONCLUSION

While this project has focused on deviance on the Dark Web, it is important to remember that this is only a portion of all the content on the Dark Web. It's akin to using fanfiction to represent the whole Internet — there is just so much varied information out there that it makes sense to focus on specific aspects.

The Dark Web, while a tool for pedophiles and extremists, is also a tool for scientists, government officials, professors, and anyone just looking for privacy. One example of this is a New England lawyer who keeps an anonymous blog on the Dark Web since publishing his views on certain subjects might hurt his business.

The point of highlighting these deviant subcultures on the Dark Web is precisely that they don't only exist digitally. Dissidents have been around for years, and pedophilia has been in the history books for thousands of years. What is new though is that because of the regulation of the Surface Web, these subcultures are forced to retreat to the Dark Web where they are mostly free to pursue their interests.

Relegating subcultures to a specific area out of public view doesn't stop them, in fact, it is empowering as communities are created.

Regardless of if the Dark Web exists or not, the aforementioned activities still occur. The Dark Web just provides an easy way to connect with people of similar interests, and to facilitate further interaction.

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