

Dark WEB in a NutShell

All of us are familiar with the various search engines used in Internet for browsing various activities. Most of us think that internet is all we see or know through these search engines but in reality these search engines form only 0.03 percent of Internet. The web pages in surface web comprises of indexed pages that have been successfully identified by the search crawlers and have the quality or relatable content against users' search phrases.

Internet consists for three major sections :

- Surface web
- Deep Web and
- Dark Web

It is best to imagine the Web as an entire ocean: the surface web is the top of the ocean which appears to spread for miles around, and is the easiest part of the ocean to see or "access"; the deep web is the deeper part of the ocean beneath the surface; the dark web is the bottom of the ocean, a place accessible only by using special technologies.

SURFACE WEB

Indexable and searchable content



4%

DEEP WEB

Non-indexed and non-searchable content

96%

DARK WEB

Content accessible via specific software or hardware

Source: Cyware
Designed by wstudio / Freepik



| Advantages of Dark Web | Disadvantages of Dark Web |
|---|---|
| <ul style="list-style-type: none"> • Helps people to maintain Privacy • People within closed groups or societies facing extreme censorship can utilize the DarkWeb to communicate with outsiders. • Even people from open societies use DarkNet for creative anonymity and secrecy. • Useful for journalists and whistle blowers to maintain secrecy in communication while transferring and leaking information. | <ul style="list-style-type: none"> • Encourages criminal activities. • Private data like photos and videos can be stolen. |

Social activities on the Darknet

The Darknet is used for a wide range of social activities. These range from being clearly morally acceptable, across to being considered as illicit by some people, or to being clearly criminal based on national and/or international legislative frameworks. These activities could be grouped into three main categories:

First - activism, journalism, and whistle-blowing:

Online anonymity provided by the Darknet is used for social and political purposes. Individuals can openly share their social, political beliefs and their disagreements with, or expectations of, their governments without fear of retribution. Journalists, activists, and whistle-blowers in these countries could use the Darknet to communicate with the outside world, encourage social change, and political reform, without disclosing their identities.

Second - criminal activities in virtual markets:

A large number of virtual markets on the Darknet specialise in the trading of illegal drugs. Stolen identities, credit card information, weapons, and contract killing are also popular 'goods and services' on this network. One of the most famous Darknet markets—the Silk Road—was said to promote decentralisation of governments and socio-political movements against law enforcement agencies. Since 2011 when the Silk Road dominated the Darknet's marketplace, its anonymous ecosystem has evolved significantly. The business model is similar with the online market place eBay.

Third - cyber security threats:

The Darknet is a hot bed for cyber security threats and risks. Hacking tools that could directly or indirectly be used to attack companies or other individuals are traded on some Darknet markets. Malware authors have been using the Darknet to communicate and exchange ideas. Malware uses the Tor infrastructure to obtain its victims' IP addresses and record their keyboard strokes; while there are certain malware which is known to maintain secure communications between the infected devices, and command and control server through the I2P hidden network. Ransomware installs viruses on infected computers, scramble and encrypt all data these can access, and then demand payments in the form of Bitcoin to release the data. The Tor network has become indispensable to the prevalence of ransomware applications. Certainly, the Darknet, along with the invention of Bitcoins has provided profitable businesses for criminals.