

Dark Net Black Markets

It is estimated that annual revenues earned on the deep web due to illegal activities are on the upward of \$100 million. This amount is mostly held in Bitcoin. With the recent fluctuations in the prices of Bitcoin, this revenue is likely to be more than that. Several crackdowns on the deep web have also indicated that the illegal activities on the deep web generate a lot more than could be imagined. A bust on a notorious deep web marketplace for drugs by the FBI led to the seizure of \$34.5 million in 2015. In May of the same year, \$80,000 in Bitcoin were nabbed during the crackdown of firearms and drugs marketplaces. These statistics are likely to be higher today, only if there will be more successful crackdowns to give out this data. The following are details about the dark net black markets that were or are still being used by vendors to list different types of illegal goods and services.

Silk Road

Focusing on Silk Road, a reliable network of selling and distributing drugs had been created, and law enforcement agencies could do very little to stop it for a long period of time. Transactions used to take place in the highly secure and anonymous dark net with the payments being done in Bitcoin to avoid traces to the transacting parties. Authorities apprehended Ross Ulbricht who was sentenced to life imprisonment. It was thought that this would be a deterrent to similar markets or to anyone that would assume the name Dread Pirate Roberts. It was a norm for a new head to take over the role of heading Silk Road with the name Dread Pirate Roberts. The tough sentence handed down was thought to bring an end to the online sale of drugs. However, it seems that the opposite happened. The use of the dark net just gained more publicity, a publicity that would lead to more dire consequences. Ross Ulbricht's case brought a lot of attention which served as free advertising to this online evil of buying drugs. There were arguments that he was innocent, there were other arguments that the FBI used illegal ways to get the evidence that was used in his case, and there were other arguments that he was not even the head of the Silk Road. All this had unintended consequences of getting to people that there was a way to buy drugs online anonymously. Media coverage on this issue was careless enough to explain how the Silk Road operated, the browsers that would be used to access it, and the form of payment that would be done. This led to the growth of this evil as authorities would discover in 2017.

AlphaBay

Following the free advertising that online drug sale had received in between 2013 and 2015 due to the case of Silk Road, a new online black market emerged to fill the gap that had been left. This new market would take up the former customers of the Silk Road as well as the new customers that had just heard about dark net drug markets. In mid-2017, the FBI was able to take down the largest drugs black market on the dark net that was called AlphaBay. This market, just like Silk Road, connected drug sellers with the online customers. However, AlphaBay was said to be ten times bigger than Silk Road. There was a record of 250,000 drugs listed on the site at the time that the FBI cracked down the site.

Alongside these were weap-ons and hacking tools. With the threat of terrorism and public shootings, the sale of guns was a huge concern. The vast distribution networks of the black market were an assurance that users would get the items they would order. Therefore, anyone with sufficient purchasing power could get hands on a deadly arsenal of weapons. The fact that there were so many items on the site meant that there was a big and ready market. The FBI said that the users on the site were well above 200,000. Even more shocking, the black market was able to reach sales of up to \$800,000 each day.

This online drug syndicate used to operate like eBay. It made money by taking a cut of the sales made. For each item displayed on the site, a given percentage would go to it as commission. At the time of the 2017 crackdown, the FBI said that the black market had made tens of millions of dollars. In the years prior to the crackdown, authorities were able to purchase and receive drugs and fake IDs from the site. The arrest of the founder of this dark net eBay-styled drug store, Alex Cazes, was less controversial as that of Ross Ulbricht. Authorities were able to find him through an email that he had configured to send recovery emails to users. He had used an email that was tied to a PayPal account and one that he had also used to post on a troubleshooting website. These small slipups turned out to be the only chance that authorities had to arrest the brains behind the market.

What was visible in the arrest of Cazes was that law enforcement agencies still have a long way to go when it comes to apprehending criminals on the dark net. It took over 2 years for the authorities to pick up on an open hint, that the founder used his email address to send recovery emails to users. This was a huge flaw that should have been picked up very early in an investigation on a black market that had made \$1 billion worth of transactions. The methods being used to nab dark net criminals are therefore wanting. Authorities are still playing catch up, and they are out-phased by the criminals on the dark side of the internet.

As has been the trend, the fall of one big drug market results in the rise of another. Silk Road fell and AlphaBay, which was ten times larger than Silk Road, raised. The demand for these drugs is only going up. The media has only been giving free advertisement to these dark net drug stores by explaining how they are accessed and the tools one needs to use to access them. There is a high probability that another black market on the dark net is being established and it will be even bigger than AlphaBay. In response to this type of speculations, the FBI director said that this was the nature of crime, it never really goes away and thus has to be constantly fought. <http://pulselive.co/ke/bi/tech/tech-the-fbi-just-took-down-alphabay-an-online-black-market-for-drugs-that-was-10-times-bigger-than-silk-road-id7023493.html>

Hansa

This was the much-expected successor of AlphaBay after law enforcement agencies put an end to it in June 2017. However, this was not to be as the legal agencies had already proliferated Hansa and within a month, they also brought it down. Impersonating as site administrators, Dutch officers were able to collect sensitive information such as usernames and passwords that allowed them to close down the black market just before it rose to its glory. Hansa was no different from AlphaBay in terms of the items that it sold. There were drugs, weapons, and fake identity cards on sale. With the efficient distribution networks that the black market used, these items could be smuggled to their customers within and also outside of the Netherlands. It also had an encouraging user base which was being served by close to 8,000 vendors by the time of closure.

Dream Market

This is a dark net site that is still active and running at a time when most other dark net black markets have been taken down by law enforcement agencies. Its merchandise is no different from the likes of Silk Road and AlphaBay. It has drugs, stolen data, consumer goods, and counterfeit currency, among other things. All the transactions are carried out using Bitcoin. The black market has an added advantage to buyers in that it offers escrow services. Therefore, payments are released to sellers after buyers acknowledge receipt of goods. There is also an active support team that handles disputes between sellers and buyers. There is even a chat forum where sellers, buyers, and moderators can interact with each other.

There is speculation that Dream Market will grow to be bigger than AlphaBay if the FBI or any other law agency does not take it down. Currently, customers that used to shop for drugs and other things on AlphaBay are streaming into this black market. Vendors that used to post items for sale in Silk Road and AlphaBay are also joining this market. It also has a commendable structure that is normally visible in some e-commerce stores such as eBay. The fact that there is a support team to deal with any misunderstandings between customers and sellers means that the market is well thought out. The founder(s) seemingly had a long-term vision of this type of business. With strengthened ties between customers and the vendors, the market might just grow faster. It will also be adopted by many others. News media have been giving dark net websites' free coverage each time FBI takes down a black market. The biggest free advertising that media did was in 2015 during the shutdown of Silk Road 2.0 that was headed by Ross Ulbricht. The shutdown of AlphaBay also received a lot of coverage. Among the things that news media were covering was how to access these dark net stores and how to buy products listed therein. With all the public awareness that is out there, the knowledge that the large black markets have been shut down leaves Dream Market at an advantage. New buyers will keep streaming into the market.

There are however some fears about the survival of this black market. A common tactic that law enforcement agencies have shown in previous shutdowns is that they first infiltrate the black markets. They pretend to be customers, vendors, and even site administrators as they interact with other users of the site. All this time, the law enforcement agents will be collecting incriminating evidence that can be used to put people on the black market in jail. It is said that before AlphaBay was shut down, law enforcement agencies had infiltrated the site and had been collecting information about the transacting parties. In the last month of its operations, the site was claimed to be run by law enforcement agencies who had already apprehended or put out of power the real site admins. There are fears that Dream Market is in this state. It is not explainable how this market has been able to survive after the vigorous takedown of other large black markets. It is probable that indeed law enforcement agencies are already in control of the site. In the case of AlphaBay, the law enforcement agencies that had taken over the site changed some files that users used to get after transactions so as to track them. There was a time that they made Excel invoices that when downloaded and opened by users, the files would send back the IP addresses of the machines that they had been opened in.

This black market already has 57,000 of drugs which is more than what Silk Road had. The administrator of the site, who doubled as a vendor, was arrested in 2017, and this has been fueling the rumors that the site is currently under the control of the police. Bitcoin worth \$500,000 at the time of

arrest was also recovered from the administrator's wallet. It is being said that many of the vendors in the dark net shop are now being controlled by Dutch law enforcement agents as they try to recover more information before finally shutting down the site. Furthering the doom news, some users complained that they were losing funds while transacting in the shop. A purported staff member claimed that it was because of a hard drive problem and that the lost funds would be refunded. To date, the funds have not been refunded, and it is unclear whether they will ever be. Nevertheless, Dream Market is an interesting black market on the dark net that people should look out for. Probably the law enforcement agencies will take it down, but there is also a belief that the site is stronger than AlphaBay and thus could continue supporting transactions for a long period of time. If it were weak, then probably the arrest of the administrator would have led to its end as has been the case in both Silk Road and AlphaBay.

Apple Market

In the list of the dark net sites that law enforcement agencies have already taken down is Apple Market. Apple Market was an e-commerce store that featured escrow services and was seen to be quite secure and reliable by users. Even though it had fewer listings than the bigger black markets such as AlphaBay, it has an aesthetic and easy-to-use interface that was appealing to buyers. Apple Market still dealt with the normal illegal products such as drugs, accounts, cards, hacking tools, software, keygens, serial keys, and eBooks. The listings depended on the vendors that put their items on the platform. The market also had a search functionality, a feature that was not available in many of the other dark net shops. It enabled users to quickly find the items that they were searching for on the site. The user interface of the site was modern with functionalities that are normally available in clear web e-commerce sites such as Amazon. The site had a feature to hold one's money through its own cryptocurrency wallet. Users would either debit or credit the wallet with Bitcoin. It was advisable, for the sake of promoting anonymity, for the user to use a Bitcoin mixer instead of sending them directly from an exchanger. The short hop from the exchanger to the Bitcoin to the Bitcoin address that the currency was being debited would be viewed as a security risk. This is because a majority of the things on this market were illegal.

Your Drug

As of November 2017, the status of this market was that it was up and running on the dark net. It is another dark net store that claims to have years of experience in the drug selling business but has expanded its businesses to the dark net markets. The store claims to be a provider of the best quality drugs at the best market prices and that it sells exactly what customers want and expect. The shop is seemingly observant of security as it says that that is its number one priority. The clientele that the shop advertises to are resellers and final customers, and it assures them that it will respect their shipping times, packaging, and privacy.

Stoned 100

This is one of the trusted vendors on the dark net that has recently been featured in the Dream Market and previously on the AlphaBay market. This seller holds his external dark net presence, and it has helped him survive the recent crackdowns on AlphaBay and the current uncertainty on Dream Market. The vendor is known to sell speed, ecstasy, hash, sildenafil, and weed, among other things.

QualityKing

This is another vendor from AlphaBay, Dream Market, and other markets that decided to establish his or her own dark net presence to be able to carry out business without overly relying on the big black markets. This has seemingly been working well because the big markets have been focused on by law enforcement agencies and taken down one after the other. This seller has a narrow scope of goods and only advertises opioids to buyers. As of November 2017, the seller's dark net presence was still there.

MushBud

One of the longest surviving individual vendors of drugs on dark net black markets is MushBud. MushBud has been present on the dark net for a long term and has passed through other black markets such as Silk Road 2, Sheep, Agora, and Abraxas. This is one of the known retailers for weed and psychedelics. The vendor has received hundreds of positive comments on dark net chat forums. This vendor was found to be up and running as of November 2017.

Fight Club

With a catchy name that has also been featured as a title of a successful Hollywood movie, Fight Club is another dark net vendor that has moved from one dark net black market to the other. This vendor only specializes in the sale of illegal documents. The vendor is a seller of driving licenses of different countries and also identity cards. This vendor has been a member of sites such as Dream, Abraxas, AlphaBay, and Nucleus. As of November 2017, this vendor was confirmed to be still active on the dark net.

L33TER

This is an old vendor that is still present on the dark net. The vendor claims to be an important part of the dark net markets ever since evolution. They deal with the sale of digital and physical products with a well set up dispatch and delivery system. The vendor is said to use a customer ticketing system to ensure that customers get their products at the end of the transaction. The vendor's digital products are said to have an auto dispatch whereby they get sent to the customer at the completion of a payment. This vendor was confirmed to be active as of 2017 November.

Agora Market and Forum

Agora Market was one of the dark net sites taken down alongside Silk Road 2 by law enforcement agencies. It was also a renowned market just like Silk Road 2 though had nagging regular downtimes. The site allowed the use of weapons along-side the usual products such as drugs and counterfeit money. The owners made revenues by charging a 4% commission on the items that were posted for sale on the market. It required a referral link in order for one to visit it. However, even with all these measures, it was still taken down by legal agencies. It also had a forum for sellers and buyers to interact called the Agora Forum. This forum suffered the same fate as the market when officers came knocking.

Atlantis

This is a former marketplace that was notorious for drugs at a time when the dark net was still getting popularity. It operated till late 2013, the time at which law enforcement agencies made more frantic efforts to shut down dark net marketplaces. This marketplace is said not to have been taken down by the legal enforcement units, rather, it was the owner that shut it down citing security concerns.

Blue Sky Marketplace

It was a marketplace that was taken down in 2014. It was moderately sized based on the sellers and buyers that were registered on it at the time. The marketplace charged vendor commissions ranging from 5% to 10% of the price of the products that they would post on the platform. However, to attract less heat on its tail, the marketplace had banned the sale of weapons.

Caravan Marketplace

This was the first refuge site for customers that were fleeing the collapsing Silk Road 2 after the takedown by the FBI. It featured listings for hard drugs, identity cards, stolen credit cards, and hacked PayPal accounts. The marketplace had an elaborate messaging system for collaboration purposes between the site's users. There were also active admins that used to resolve issues that users faced. It went down once and then another site was created to replace it in 2014. However, even the new site did not stay up that long as the law enforcement agencies took it down in early 2015.

Darknet Heroes League

This was built up to be a reliable marketplace that would feature the old-time vendors on the dark net. This would boost its reliability in the face of other new marketplaces on the dark net as users would be more certain of old-time vendors. The site invited the vendors that it saw fitting its description. However, it was taken down at the time of the fall of AlphaBay and Hansa in 2017. A few months after these were taken down, it also suffered the same fate under the hands of law enforcement agencies.

Outlaw Market

This is now a defunct marketplace as of November 2017 following the takedown by law enforcement agencies. It was a small market that had not yet grown but had the prospects of doing so. The marketplace offered an attractive 0% commission to vendors that wanted to list their items. However, they were still required to pay a small fee. Alongside drugs and counterfeits, the site had allowed the sale of weapons. At the time of takedown, it was first taken over by law enforcement agencies who collected some data and then proceeded to shut down the marketplace. Users had been cautioned to stop using the market when allegations came flying that the site was under the control of the legal agencies.

The RealDeal Market

It was a marketplace for the tech-savvy users that were looking for exploits to use in hacking expeditions. The marketplace offered exploits, source codes, hardware, hacking services, and the likes. Alongside the tech-related items, the marketplace also listed drugs and other normal products such as counterfeits that were being sold by other marketplaces. Its downfall came in 2017 with the site going offline on 31st of October. Legal agencies got to it and shut it down as they were taking down many other dark net sites.

Sheep Marketplace

This was a drug marketplace that died off in a dramatic way. Since there is no honor among thieves, the owner of this marketplace waited till the site accumulated quite a number of customers' Bitcoin and then ran off with them. The site followed the format of many others where funds would be deposited with

the site to allow a customer to make a purchase. The owner had other crafty ideas of making quick cash, and the first chance they got at disappearing with a sizeable amount of the customers' Bitcoin, he or she took it. It was a classic example of an exit scam. The site went down in December 2013.

Russian Anonymous Marketplace

It was one of the noticeable dark net market takedowns of 2017. Russian police took out the Russian Anonymous Marketplace (RAMP) which was said to be the largest remaining site after Hansa and AlphaBay went down. The marketplace had been launched in 2012 and had been quite stable except for the occasional distributed denial-of-service (DDoS) attacks that it faced. It was the largest dark net site that was written in the Russian language to serve the needs of Russians on the dark net. RAMP users and admins were in disbelief when Russia took down the site as they thought that they would not suffer the same consequences that other marketplaces were going through in the hands of the FBI and Dutch police. While being interviewed by Russian media, one of the site admins said that the Russian law enforcement was not concerned with hidden services on the internet and they did not consider them as a threat. Russia was being said to have the tendency to turn a blind eye to online crime. However, when the law enforcement agencies stroke, the site was taken down faster than it took the FBI to take down AlphaBay. However, tactics varied as the Russians were mostly interested in shutting down the site while on the other hand, the FBI had spent time collecting data on the AlphaBay marketplace before it was shut down.

UK Guns and Ammo

As the name suggests, this is a dark net shop that specializes in the sale of guns and ammo. The shop claims to sell products only from the United Kingdom. Their preferred transaction method is through Bitcoin.

HQEB

In full, the name is High Quality Euro Bills. This shop sells counterfeit currency which it claims to be of high quality. It only sells Euro Bills.

USA/EU Fake Documents Store

This store claims to sell passports to several countries on the internet and provide free delivery to customers. The store says that it has passports for the United Kingdom, the United States, Japan, and Australia.

Illegal Goods and Services Offered on the Dark Net

The mentioned markets have a lot to say about the current crime threats that are emerging on the dark net. There are probably very many criminal threats, but the following are most popular.

Drugs

From the markets listed earlier, the main commodity for sale was drugs. There seems to be a never-ending demand for narcotics. Since it is at times very risky to buy drugs from street vendors, drug abusers will take the safe alternative of buying online when such an opportunity appears. Drug abusers have severally taken to internet chat forums to complain about the shutdown on some of these black markets since they used to rely on them for supplies.

Weapons

One of the most dangerous crimes being carried out on the dark net is the sale of weapons. These range from pistols to rifles and in some black markets, there are explosives. This is a big security threat since the sale of these weapons is uncontrolled and they can get to anyone. Black markets are known for effective peer reviews, and therefore, users are able to weed out the illegitimate sellers from the platforms. The vendors left are the trusted ones that are known to deliver. Therefore, there is an assurance that the weapons for sale on these platforms will eventually get to the buyers. The buyers could be terrorists, mentally troubled people, or people with vengeance goals.

Communication Channels for Terrorists

Due to the international hunting down of terrorist organizations, many communication platforms are monitored. Some are forcefully monitored as was said by Edward Snowden in 2015. He, an National Security Agency (NSA) whistleblower, quit his job at the agency and put on the public domain a lot of information about the monitoring of calls and messages on several carriers. He also said that the NSA was reading messages on other communication platforms. Terrorists are aware of this and that is why they use the dark net for their communication needs. The dark net offers them a secure space in which they can plan and coordinate terrorist activities without the fear of being tracked down. The dark net is a perfect environment for terror-related communication since it offers ready chat rooms and does not put the terrorists at the risk of easily being exposed or found out by legal agencies.

Hacking

There are specialist black hat hackers on the dark net that offer their services for hire. While browsing on the dark net, the following is a description provided by one of the hackers. The hacker first says that the least charge for a small job is €250. On the hacking skills, the hacker says that he or she is specialized in zero-day exploits, personalized Trojans, bots, and DDoS attacks. To top this up, the hacker claims to be knowledgeable of social engineering. They also say that they can cause technical troubles on websites, disrupt networks, cause economic sabotage, gather private sensitive information, and ruin persons or businesses. Among the techniques for this is framing them as child porn users.

There are other corners of the dark net where one can find malware for sale, other than just renting a hacker. The malware is normally sold based on its capabilities and detection by antivirus programs. Zero-day exploits are also sold on the dark net. Zero-day exploits target vulnerabilities that have not yet been fixed and therefore have a high chance of success.

Assassinations

Among the charges that Ross Ulbricht of Silk Road faced was hiring an assassin to take out some people that he had gotten into loggerheads with. He is said to have hired them on the dark net. Though hidden, there are some markets where one can hire assassins to take down specific people. The assassins claim to have high rates of success, and they charge differently based on the complexity of the task. Though there may be a number of bluffs on the dark net, some of the assassins for hire might be legit and will kill people for money. Due to the anonymity of the dark net, they feel protected that they cannot be tracked down. The details of how assassination deals go down on the dark net are horrifying. Since the

places where these services are offered want to keep away attention from the police, they normally reject requests for proof of past work or feedback from previous customers that might be indicative of their success. Customers are asked to give proof that they have the required amounts for the assassination job and the amount is placed in an escrow service. After the assassination, the assassin provides proof that the job was completed and then the funds are released.

One of the dark net sites that offer these services is called C'thulhu which claims to be a group of former soldiers and mercenaries with lots of experience. They say that they offer solutions to common problems and that they can perform hits anywhere in the world. On their dark net site, they explain why they are the best people to work with. They say that other hitmen hired physically are risky since they can collaborate with the police once caught and threatened with a prison sentence. They may take a plea and help the police find the person that paid for their services in exchange for lighter sentences. The dark net assassins say that it is out of mutual interest that they carry offer their services on the dark net. Due to the anonymity, they cannot take the person paying for these services to prison and neither can the person take them. Their services are quite expensive as advertised on their site. The cheapest one is the beat-ing up of a target which is charged at \$3,000. The most expensive service is killing a target through an accident whereby the target is a high-ranking politician. Other services that they offer are the crippling of a target, rape, and bombing.

There are, however, reports that most of these adverts for assassinations and hit men services are a hoax. For example, Ross Ulbricht of Silk Road was initially accused by the FBI of hiring a hit man to assassinate six people. However, the FBI, later on, dropped these charges. It is said that they found out that the hit men services they were referring to were a hoax and there was no way they would stick on Ulbricht. Also, several analysts of the deep web have collected intelligence that these hit men services advertised on the dark net are hoaxes. There is also something fishy about the guaran-tee that the hit men give on being able to take down any target anywhere in the world.

Fraud

There are all sorts of making quick money advertised on the dark net. Most of them are through fraud. There are some shops that sell counterfeit currency. They assure that the counterfeit currency will pass the normal UV light scans. For about \$600, one can get around \$6,000 in some shops. There are other vendors that sell ATM cards. They place the prices on these cards based on the account balances of the ATM cards. They claim that they will ship the physical cards and provide a working PIN code for the purchaser to draw out the amounts.

Another common fraud on the dark net is the sale of hacked PayPal accounts. These accounts are also priced based on the amounts that they hold in their bal-ances. The vendors claim that they will give the buyer the hacked logins to these accounts from where the buyer will transfer the funds to their accounts. There are two categories of accounts that are sold. The first category is composed of accounts that the hackers have verified the balances that the buyer will find. The second cat-egory is composed of a bulk of unverified accounts whereby the balances have not been checked but there is some guarantee that some money will be found in some of them. Verified accounts attract more charge than the unverified ones. While browsing the dark net, there was an advert in one of the shops selling 100 PayPal accounts for \$100. This is an example of the bulk unverified accounts where the buyer is uncertain of the balance that will be contained in these accounts thus the cheap price of \$1 per account.

It is important to note that for all these fraudulent accounts and ATM cards advertised on the dark net shops, no one is assured that the promised quick money will be made or they will get burned. The payment is done via Bitcoin, and there are no refunds even if one is burned. However, the dark net at times has a very effective peer-review network which will direct buyers in the direction of the trustable vendors in the dirty business.

Fake IDs/Driving Licenses

It is no lie that some of the immigrants in First World countries get in there through backdoors. Once inside, they run into a new problem of getting identity cards and driving licenses that they can use in the foreign countries. These are very powerful documents, and they can enable them to get jobs or stay away from trouble should they run into police officers. People within some countries may have been engaged in some criminal activities, and thus may seek to acquire new clean identities. There are others who simply want a fake identity that they can use to open bank accounts for fraudulent transactions, apply for loans, purchase property fraudulently, and do so many other things without jeopardizing their real identities. There are some shops in the dark net that specialize in the making of fake identity cards and driving licenses. They require the purchaser to provide a photograph and maybe desired name to be used on these fake documents. These identity cards and driving licenses differ in price based on the country that one wants to get documents for. In some dark net listings, a fake US passport, identity card, and driving were being sold for €900. For Switzerland documents, the price was slightly lower at €850. The cheapest listing was for a Germany ID, passport, and driving license which were coming to a total of €650.