



Editors' choice

Responsible vendors, intelligent consumers: Silk Road, the online revolution in drug trading

Marie Claire Van Hout^{a,*}, Tim Bingham^b^a School of Health Sciences, Waterford Institute of Technology, Waterford, Ireland^b Irish Needle Exchange Forum, Ireland

ARTICLE INFO

Article history:

Received 28 August 2013

Received in revised form 25 October 2013

Accepted 27 October 2013

Keywords:

Silk Road
Internet
Vending
Drug markets

ABSTRACT

Background: Silk Road is located on the Deep Web and provides an anonymous transacting infrastructure for the retail of drugs and pharmaceuticals. Members are attracted to the site due to protection of identity by screen pseudonyms, variety and quality of product listings, selection of vendors based on reviews, reduced personal risks, stealth of product delivery, development of personal connections with vendors in stealth modes and forum activity. The study aimed to explore vendor accounts of Silk Road as retail infrastructure.

Methods: A single and holistic case study with embedded units approach (Yin, 2003) was chosen to explore the accounts of vendor subunits situated within the Silk Road marketplace. Vendors ($n = 10$) completed an online interview via the direct message facility and via Tor mail.

Results: Vendors described themselves as 'intelligent and responsible' consumers of drugs. Decisions to commence vending operations on the site centred on simplicity in setting up vendor accounts, and opportunity to operate within a low risk, high traffic, high mark-up, secure and anonymous Deep Web infrastructure. The embedded online culture of harm reduction ethos appealed to them in terms of the responsible vending and use of personally tested high quality products. The professional approach to running their Silk Road businesses and dedication to providing a quality service was characterised by professional advertising of quality products, professional communication and visibility on forum pages, speedy dispatch of slightly overweight products, competitive pricing, good stealth techniques and efforts to avoid customer disputes. Vendors appeared content with a fairly constant buyer demand and described a relatively competitive market between small and big time market players. Concerns were evident with regard to Bitcoin instability.

Conclusion: The greatest threat to Silk Road and other sites operating on the Deep Web is not law enforcement or market dynamics, it is technology itself.

© 2013 Elsevier B.V. All rights reserved.

Introduction

Cyber drug markets and online drug user communities are increasingly innovative in providing avenues for drug retail (Davey, Schifano, Corazza, & Deluca, 2012; Forsyth, 2012). The development of usable interfaces, electronic currencies and anonymous networks has facilitated ease of access of drug markets located on the Deep Web (Christin, 2013; Tor Project, 2011). The Deep Web is accessed via secure and confidential communication lines by encryption of computer IP addresses using Tor anonymising software or web proxy to the Tor network (<http://tor2web.org>) (Tor Project, 2011). For users transacting on Deep Web sites, Electrum is an anonymous Tor server used to access a virtual wallet containing

the digital currency called Bitcoin (BTC). This ensures payment anonymity via online verifiable transactions occurring without a central third party (Bitcoin, 2011; Davis, 2011). At the time of writing, BTC can be bought at many online exchanges such as the Tokyo Mt. Gox and Bitstamp and is indexed to the USD (27/08/2013 valued at USD100). See Fig. 1 for an example of BTC.

Silk Road is the most famous novel drug trading site and is in operation since February 2011. It is located on the Deep Web. Whilst Silk Road is not a shop (Christin, 2013), it provides an online and anonymous transacting infrastructure similar to eBay by its visibility of vendor, buyer and product ratings to assist in member transaction decision-making, its professional dispute resolution mechanism, and Escrow system that releases payment to vendors on customer receipt of orders (Barratt, 2012). It has wisely maximised on its trust mechanisms by demonstrating it is not a typical counterfeit drug website scam. 220 distinct categories of drug and related products are listed for sale which include cannabis, ecstasy,

* Corresponding author. Tel.: +353 51 302166.

E-mail address: mcvanhout@wit.ie (M.C. Van Hout).



Fig. 1. Bitcoin.

psychedelics, opioids, stimulants, benzodiazepines and dissociatives (Barratt, 2012; Christin, 2013). See Fig. 2 for an example of the Silk Road front page listings.

Consumer purchasing motives and decisions to access Silk Road appear grounded in so called 'responsible' drug consumerism, with users presenting themselves as drug connoisseurs (Van Hout & Bingham, 2013a,b). Other motivating factors include the protection of identity by screen pseudonyms, selection of vendors based on review feedbacks, trust building within anonymous transacting, variety and quality of product listings, distance from street sourcing, stealth of product delivery and forum activity within the active Silk Road community (Van Hout & Bingham, 2013a,b).

Of interest for this study is that previous qualitative work with Silk Road members in 2012 and 2013 (Van Hout & Bingham, 2013a,b) indicated members' intentions to commence vending on the site. Vendor authenticity and member opportunity to commence vending on the site are controlled through the payment of a refundable bond (at the present time USD500), and by the auctioning of new vendor accounts to the highest bidders. Vendors and buyers are mandated to use the Escrow system which facilitates transacting via tumbler services of dummy and single

use intermediaries, and resolution of (any) dispute between vendors and buyers (Christin, 2013). Commission fees range between 3 and 8.5% of the sales price. Transactions can also take place out of Escrow via private messaging hosted by Tor. The dynamic site turnover of vendors is visible, with Christin (2013) reporting that a majority of vendors disappear within three months of market entry, with most items available for less than three weeks. Stealth and custom listings exist whereby vendors may exit the visible online listings, and custom is directed at certain buyers by providing the URL or via private messaging. Vendors active for over one month and with more than 35 successful transactions are allowed to request buyers to finalize early (release of payment before receipt of the product). This presents some concern for buyers, with potential for being ripped off (dubbed 'whitewashing') where vendors build an excellent reputation and relationship with its customer base and then exit, leaving a large number of paid but un-dispatched orders (Feldman, Papadimitriou, Chuang, & Stoica, 2006) and offering little recourse for dissatisfied customers (Christin, 2013). See Fig. 3 for an example of the Silk Road vendor roundtable page.

Comprehensive measurement analysis and site monitoring for a period of eight months during late 2011 and 2012 estimated total vendor revenue from public listings, as slightly over USD1.2 million per month, with approximately USD92,000 per month in commissions for the Silk Road operators (Christin, 2013). At the time of writing, Christin has since commented that Silk Road's traffic and reputation increased drastically over the past 12 months, with expectations that it had doubled its transactions to somewhere between USD30 and 45 million. According to Van Buskirk, Roxburgh, Bruno, and Burns (2013), increased traffic on Silk Road is largely due to international vendor activity. A June 2013 crawl of the site by StExo (a Silk Road member) revealed 1239 active vendors selling at any given moment. This represents double the number Christin reported on in August 2012. At the time of writing this paper in August 2013, we were able to view 13,426 listings originating from EU countries, the US, Australia, New Zealand, Canada, Russia, Thailand, Indonesia, Hong Kong, Singapore, Ghana, Japan, Vietnam, South Africa and the Philippines, along with 17,066 undeclared listings. Christin (2013) noted a clear bias toward vending activity from English speaking countries. It is important to note that countries may have several active vendors who may list or advertise more than once, and who dispatch to a variety of destinations.

Fig. 2. The 'Silk Road' front page.

Download English Version:

<https://daneshyari.com/en/article/7514048>

Download Persian Version:

<https://daneshyari.com/article/7514048>

[Daneshyari.com](https://daneshyari.com)