Online Drug Markets

Damon McCoy
About me

• Research on online drug markets
  • Worked with pharmaceutical companies to disrupt Visa payment channels
  • Worked with Microsoft to disrupt Visa payment channels for counterfeit software

• Research on cybercriminal networks and forums
  • Tools to dealias handles using stylometry (writing style)
  • Understanding structure and dependencies of intermediaries

• Research on tracking Bitcoin payments
Darkweb Marketplace Technology

• Hidden Website (Tor Hidden Service, I2P)
  • Customers
    • No cost of creation
    • No information needed
  • Vendors
    • Vendor bonds required
    • Often invite only
    • Public feedback history

• Payments (Bitcoin)
  • Marketplaces often act as escrow agent
  • Escrow sometimes acts as a mixing service

• Encrypted Messages (PGP)
Reddit list of market places
Darkweb Drug Markets
Market Transactions

“I’ll take the red pill”
Market Transactions

“1 BTC please”
Market Transactions

Deposit 1 BTC
Market Transactions

Funds ok
Market Transactions
Market Transactions

Received
“Excellent seller, would do business with again. A++++”
Market Transactions

Deposit 0.9 BTC
Ecosystem is resilient to market place takedown
Majority of sales are for Cannabis, MDMA and Stimulants

Kyle Soska, Nicolas Christin - CMU
Measuring the Longitudinal Evolution of the Online Anonymous Marketplace Ecosystem
Vendor Volumes CDF

Top 2-3% of sellers account for 90% of revenue

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Darkweb Drug Markets

• Resilient to market place take downs

• Large-scale sellers operate on most market places
Openweb Drug Shops

• Search for common drug terms
• Lots of fake sites
  • Some might be real
Online Ad Networks – 7search
Accept Visa and MasterCard
Accept Visa and MasterCard
Test Purchases

• Test purchases
  • Identify acquiring bank and merchant account
  • Report to Visa and MasterCard
  • Credit card networks will levy fines against banks
  • Deterring them from onboarding merchants selling drugs

• Low cost and effective method of disrupting payment channels

• Map out shippers and suppliers