

CRIM6002

Online Criminal Markets

Cyber crime grows up: carding, escrow, and the dark markets

Workshop 6

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Today

- (Online) criminal markets
- Guest speaker: Gert Jan van Hardeveld
- A few case studies

Criminal markets

- Criminal/illegal/black markets
- “Grey markets”
 - ☐ Actors? (often OC rhetoric)
 - ☐ Their social organisation?
 - ☐ Trust? “Enforcement”?
 - ☐ Governance / Racket?
 - ☐ Goods/ services?
 - ☐ Relationships with customers?
 - ☐ ...



“Can I interest you in fake Rolexes, pirated DVDs or validated parking receipts?”

Online criminal markets

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Governance / Racket?
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*Transformed by cyberspace?
To what extent? How?*



Case study #1

Qualitative analysis of 10 publicly accessible Russian web forums that facilitate the distribution of malware and attack tools (Holt, 2012)

- Payment (use of guarantors)
 - Privacy and anonymity
 - Reputation / trust
 - Price
 - Customer service
-
- Implications for law enforcement, computer security professionals, ...



[Escrow Services]

How Escrow.com Works ...

1 Buyer & Seller Agree to Terms



2 Buyer Pays Escrow.com



3 Seller Transfers Domain



4 Buyer Approves Transfer



5 Escrow.com Pays the Seller



Bogus escrow scam!

Case study #2 [carding]

Analysis of 300 threads passively collected from six web forums run by and for data thieves (Holt & Lampke, 2010)

- Products: *dumps*, stolen credit cards, bank accounts and the associated customer data, *cashout services*, *plastic*
 - Access to hacking services
 - Pricing
 - Preference for electronic payment
 - Trust (review process for first-time sellers)
 - Speed of communication
 - Customer service
-
- Implications for law enforcement, computer security professionals, ...



Case study #3 [online drug markets]

- Cryptomarkets (Van Hout and Bingham 2013; Martin 2014) but also surface web (Lavorgna 2014)
- “ideal type” cryptomarket (e.g. Silk Road):
 - Reliance on TOR network; use of cryptonyms to conceal user identity; use of traditional postal system to deliver goods; third-party hosting and administration; decentralised exchange of networks; use of encrypted electronic currencies (Martin 2014)
- Changes in the social organisation of:
 - Criminal activity
 - (Criminal) actors
- Challenges to law enforcement



Exercise

Discuss how the policing of Internet-facilitated drug trade should evolve to better address this issue

