

# Offline and Local: The Hidden Face of Cybercrime

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# Background

- Cybercrime is a largely anonymous activity that exists in cyberspace (see Grabosky, 2004; Wall, 2007; Lusthaus, 2013).
- Cybercriminals 'meet' anonymously in virtual marketplaces (Holt and Lampke 2010; Decary-Hetu and Dupont, 2013; Hutchings and Holt, 2015).
- Shadowy attackers could strike from anywhere at any moment.
- A new type of threat...

# Offline/Local Dimension

- Highlighting a neglected aspect of the cybercrime phenomenon: the offline and local dimension.
- All cyber-attacks stem from a person who physically exists in a certain location.
- Expect a degree of variation as to how cybercrime presents in each case based on socio-economic factors.
- Both the individuals behind cybercrime and the offline worlds they inhabit deserve study.
- Alongside the online and technical, there is an offline, human and contextual element that matters.

# Approach and Methods

- Case study of Romania (a leading cybercrime hub), as an exploratory pilot study.
- 2 fieldwork visits Sep 2014 & March 2015 to Bucharest, Ramnicu Valcea and Alexandria.
- Field observations and semi-structured interviews.
- 17 participants: LE, private sector, a journalist, a hacker, a former cybercriminal and more...

# The Local Brand

- ‘Online auction fraud’ is a Romanian speciality, with a traditional focus on fictitious cars.
- Began with eBay, but has now migrated to other platforms as well.
- Multimillion dollar business (Hall, 2014; Odobescu, 2014).
- Scams often target the West, but developing countries now also targetted (LV2).

# Why Romania?

- Legacy of communism:
  - Ceausescu invests in education and reverse engineering computers is important (Heeks and Grundey, 2004; LV10; LV11).
  - Romanians are successful internationally, foreign companies operate in Romania, along with startups (LV1; see Coleman, 2014).
  - Micro-networks and Internet pioneers, good connectivity.

# Why Romania 2

- The infrastructure exists for fast and successful online (criminal) operations.
- May explain why online fraud rather than hacking/malware is the Romanian cybercrime par excellence (technical players are employed).

# Why Romania 3

- Economic situation is relatively poor despite the IT situation (2014 average salary is 398 euros a month - the EU average is 1,489).
- Corruption remains high in Romania (TI 2016 Corruption Perceptions Index, Romania scores 48 out of a possible 100).
- Scams are around...
- A fertile environment for online fraud?



Number of decisions of the Court of Appeals for cases involving 'fraudă informatică', 2008-2010, Romania (Source: Juridex)

Region	Number of cases	% of total
CA PITEȘTI	75	26.98
CA BUCUREȘTI	38	13.67
CA BACĂU	25	8.99
CA CLUJ	22	7.91
CA BRAȘOV	21	7.55
CA CRAIOVA	19	6.83
CA ALBA IULIA	18	6.47
CA GALAȚI	16	5.76
CA TIMIȘOARA	11	3.96
CA IAȘI	10	3.60
CA CONSTANȚA	9	3.24
CA PLOIEȘTI	9	3.24
CA SUCEAVA	4	1.44
CA ORADEA	1	0.36
CA TG MUREȘ	0	0
CA MILITARĂ	0	0
TR VRANCEA	0	0
<b>TOTAL</b>	<b>278</b>	<b>100</b>

# The Regional Story

- Ramnicu Valcea (aka 'Hackerville') is a major hub of cybercrime, though its nickname should be 'Fraudville'.
- Local specialty is auction fraud, the major industry.
- Cafes, shops, malls, shiny black luxury cars...
- Few other sources of wealth: OltChim plant struggles/becomes insolvent in 2013.
- Many believe this is a cybercrime hub (Wylie, 2007; Bhattacharjee, 2011; Bran, 2011; Hall, 2014; see also Wittkop, 2016, pp. 163–164).

# Organisation

- Two components:
  - 1) Organisation of fraud (coordinated team advertising fake products/engaging customers)
  - 2) “Arrows” (money mules moving money back from UK/US etc – money transfer agencies and more)
- In both cases, many offenders know each other personally...

## Organisation 2

"I don't know if the people of Ramnicu Valcea are too smart or too stupid... They talk a lot to each other. One guy learns the job from another. They ask their school friends: Hey, do you want to make some money? I want to use you as an arrow. Then the arrow learns to do the scams himself." (Bhattacharjee 2011)

# The Very Local Dimension

- According to local prosecutors, mostly based in the Ostroveni neighbourhood (Bran, 2011).
- Allegedly, High School no. 10 is a focal point.
- But many scammers have now grown up.
- Parallels to 'network effects' of expertise and knowledge in legitimate industry (Reagans and McEvily, 2003).

# Corruption/Protection

- Corruption appears to aid cybercrime:
  - Deputy Head of Ramnicu Valcea police arrested in December 2014 for revealing confidential information to criminals.
  - March 2015, another police officer arrested for passing information to a cyber fraud group (Ripan, 2015).
  - Socialist senator implicated in another case with a violent criminal (Miercuri, 2015).
  - RV's mayor convicted of bribe taking 2014 (Jurnalul National, 2014).

# Conclusion

- Cybercrime has important offline and local dimensions, alongside the online component.
- Large-scale cybercrime can thrive thanks to offline social networks.
- These points do not relate only to the case of Romania (see, for instance, Lusthaus, 2016, pp. 24–31; Leukfeldt, 2014; Leukfeldt et al., 2016).

# Conclusion 2

- Offline/local contention mirrors broader debates on the nature of organized crime (Varese 2010, 2014; Fijnaut, 2015, Campana 2011, 2013).
- Organized criminal enterprises are 'local in scope' (Reuter, 1985, p. 21; Gambetta 1993).
- Cybercrime needs to be tackled in the places where it originates.
- Romanian model as a way forward?