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Profits at the dawn of cybercrime-as-a-service (Conference Paper)

[Ganancias del Cibercrimen como Servicio]

Vidal, J.M.^a ✉️, Monge, M.A.S.^b ✉️, Monterrubio, S.M.M.^c ✉️, Lopez, L.I.B.^d ✉️, Caraguay, A.L.V.^d ✉️

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Abstract

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The growing of Information and Communication Technologies (ICT) that has been experienced in recent years, has led to new and more sophisticated ways of doing business. Consequently, worldwide organized criminal groups have been able to adapt their activities to new trends in the area of information security. In this paper the problem of cyber-crime as a profitable business and the model Cybercrime-as-a-service (CaaS) are exposed. For this purpose, the ransomware, which is one of the threats that have generated more profit in the last two years, is analyzed. This kind of malware is able to block assets in the victim systems and blackmail their owners with their deletion, if they fail to pay a ransom. In this sense, a game theory model of the behavior of actors involved in a ransomware attack is proposed. The proposed model describes the extortion process between the attacker and victim and estimates the probability of payment of ransom. © 2019 IEEE.

Author keywords

CaaS Cibercrimen Malware Ransomware

Indexed keywords

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-
- 1 An, J., Kim, H.-W.
A Data Analytics Approach to the Cybercrime Underground Economy (Open Access)
(2018) *IEEE Access*, 6, pp. 26636-26652. Cited 6 times.
<http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=6287639>
doi: 10.1109/ACCESS.2018.2831667

View at Publisher
-
- 2 Enbody, R., Sood, A.K., Bajpai, P.
A key-management-based taxonomy for ransomware
(2018) *eCrime Researchers Summit, eCrime*, 2018-May, pp. 1-12. Cited 6 times.
<http://ieeexplore.ieee.org/xpl/conferences.jsp>
ISBN: 978-153864922-0
doi: 10.1109/ECRIME.2018.8376213

View at Publisher
-
- 3 Cleary, G., Cox, O., Lau, H., Nahorney, B., Gorman, B., O'Brien, D., Wallace, S., (...), Wueest, C.
(2018) *Internet Security Threat Report Symantec*, p. 8089.
-
- 4 Conti, M., Gangwal, A., Ruj, S.
On the economic significance of ransomware campaigns: A Bitcoin transactions perspective
(2018) *Computers and Security*, 79, pp. 162-189. Cited 13 times.
doi: 10.1016/j.cose.2018.08.008

View at Publisher
-
- 5 (2014) *Police Ransomware Threat Assessment 2014*. Cited 2 times.
[Europol](#)
-
- 6 Goode, L.
Anonymous and the Political Ethos of Hacktivism
(2015) *Popular Communication*, 13 (1), pp. 74-86. Cited 15 times.
<http://www.tandfonline.com/toc/hppc20/current>
doi: 10.1080/15405702.2014.978000

View at Publisher
-
- 7 Hernandez-Castro, J., Cartwright, E., Stepanova, A.
(2017) *Economic Analysis of Ransomware*. Cited 10 times.
<http://dx.doi.org/10.2139/ssrn.2937641>
-
- 8 Silva, J.A.H., López, L.I.B., Caraguay, Á.L.V., Hernández-álvarez, M.
A survey on situational awareness of ransomware attacks-detection and prevention parameters (Open Access)
(2019) *Remote Sensing*, 11 (10), art. no. 1168. Cited 3 times.
https://res.mdpi.com/remotesensing/remotesensing-11-01168/article_deploy/remotesensing-11-01168.pdf?filename=&attachment=1
doi: 10.3390/rs11101168

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-



- 9 Huang, K., Siegel, M., Madnick, S.
Systematically understanding the cyber attack business: A survey ([Open Access](#))

(2018) *ACM Computing Surveys*, 51 (4), art. no. 3199674. Cited 6 times.
<http://dl.acm.org/citation.cfm?id=J204>
doi: 10.1145/3199674

[View at Publisher](#)

- 10 Kim, D.W., Yan, P., Zhang, J.
Detecting fake anti-virus software distribution webpages

(2015) *Computers and Security*, 49, pp. 95-106. Cited 12 times.
doi: 10.1016/j.cose.2014.11.008

[View at Publisher](#)

- 11 Kolodenker, E., Koch, W., Stringhini, G., Egele, M.
PayBreak : Defense against cryptographic ransomware

(2017) *ASIA CCS 2017 - Proceedings of the 2017 ACM Asia Conference on Computer and Communications Security*, pp. 599-611. Cited 52 times.
ISBN: 978-145034944-4
doi: 10.1145/3052973.3053035

[View at Publisher](#)

- 12 Kshetri, N.
Cybercrimes in the Former Soviet Union and Central and Eastern Europe: Current status and key drivers

(2013) *Crime, Law and Social Change*, 60 (1), pp. 39-65. Cited 13 times.
doi: 10.1007/s10611-013-9431-4

[View at Publisher](#)

- 13 Manky, D.
Cybercrime as a service: A very modern business

(2013) *Computer Fraud and Security*, 2013 (6), pp. 9-13. Cited 15 times.
doi: 10.1016/S1361-3723(13)70053-8

[View at Publisher](#)

- 14 (2017) *The Economic Impact of Cybercrime No Slowing Down, McAfee White Paper*
[McAfee](#)

- 15 Me, G., Pesticcio, L.
Tor black markets: Economics, characterization and investigation technique

(2018) *Advanced Sciences and Technologies for Security Applications*, pp. 119-140.
<https://link.springer.com/bookseries/5540>
doi: 10.1007/978-3-319-97181-0_6

[View at Publisher](#)

- 16 Naqvi, S.
Challenges of cryptocurrencies forensics: A case study of investigating, evidencing and prosecuting organised cybercriminals
(2018) *Proceedings of the 13th International Conference on Availability, Reliability and Security*
ACM, New York, NY, USA, 1-5 August

- 17 Ben Naseir, M.A., Dogan, H., Apeh, E., Richardson, C., Ali, R.
Contextualising the National Cyber Security Capacity in an Unstable Environment: A Spring Land Case Study

(2019) *Advances in Intelligent Systems and Computing*, 930, pp. 373-382.
<http://www.springer.com/series/11156>
ISBN: 978-303016180-4
doi: 10.1007/978-3-030-16181-1_35

[View at Publisher](#)

- 18 Phelps, A., Watt, A.
I shop online - Recreationally! Internet anonymity and Silk Road enabling drug use in Australia

(2014) *Digital Investigation*, 11 (4), pp. 261-272. Cited 18 times.
http://www.elsevier.com/locate/journaldescription.cws_home/702130/description#description
doi: 10.1016/j.diin.2014.08.001

[View at Publisher](#)

- 19 Ring, T.
Why bug hunters are coming in from the wild

(2014) *Computer Fraud and Security*, 2014 (2), pp. 16-20. Cited 3 times.
doi: 10.1016/S1361-3723(14)70463-4

[View at Publisher](#)

- 20 Schirmacher, N.B., Ondrus, J., Tan, F.T.C.
Towards a response to ransomware: Examining digital capabilities of the wannacry attack
(2018) *Proceedings of Pacific Asia Conference on Information Systems*, pp. 1-9. Cited 3 times.
Yokohama, Japan, June

- 21 Schrittwieser, S., Katzenbeisser, S., Kieseberg, P., Huber, M., Leithner, M., Mulazzani, M., Weippl, E.
Covert Computation - Hiding code in code through compile-time obfuscation

(2014) *Computers and Security*, 42, pp. 13-26. Cited 7 times.
doi: 10.1016/j.cose.2013.12.006

[View at Publisher](#)

- 22 Snader, R., Borisov, N.
Improving security and performance in the tor network through tunable path selection

(2011) *IEEE Transactions on Dependable and Secure Computing*, 8 (5), art. no. 5560675, pp. 728-741. Cited 20 times.
doi: 10.1109/TDSC.2010.40

[View at Publisher](#)

- 23 Sood, A.K., Enbody, R.J.
Crimeware-as-a-service-A survey of commoditized crimeware in the underground market

(2013) *International Journal of Critical Infrastructure Protection*, 6 (1), pp. 28-38. Cited 40 times.
doi: 10.1016/j.ijcip.2013.01.002

[View at Publisher](#)

□ 24 Wainwright, P., Kettani, H.

An analysis of botnet models

(2019) *ACM International Conference Proceeding Series*, pp. 116-121.

<http://portal.acm.org/>

ISBN: 978-145036634-2

doi: 10.1145/3314545.3314562

[View at Publisher](#)

□ 25 Young, Adam, Yung, Moti

Cryptovirology: extortion-based security threats and countermeasures

(1996) *Proceedings of the IEEE Computer Society Symposium on Research in Security and Privacy*, pp. 129-140. Cited 77 times.

[View at Publisher](#)

□ 26 Monika, Zavorsky, P., Lindskog, D.

Experimental Analysis of Ransomware on Windows and Android Platforms: Evolution and Characterization [\(Open Access\)](#)

(2016) *Procedia Computer Science*, 94, pp. 465-472. Cited 25 times.

<http://www.sciencedirect.com/science/journal/18770509>

doi: 10.1016/j.procs.2016.08.072

[View at Publisher](#)

□ 27 (2013) *Security Watch: The Crimeware-As-A-Service Reality*
Sunday Business Post, N/a

□ 28 Dupont, B.

Bots, cops, and corporations: on the limits of enforcement and the promise of polycentric regulation as a way to control large-scale cybercrime

(2017) *Crime, Law and Social Change*, 67 (1), pp. 97-116. Cited 16 times.

<http://www.kluweronline.com/issn/0925-4994>

doi: 10.1007/s10611-016-9649-z

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