

How Attackers Determine the Ransom in Ransomware Attacks



BACKGROUND

Ransomware attacks have become more prevalent over the past years [2]. Even though most ransomware attackers are financially motivated [1], the actual financial gains made by attackers are still unclear. This study aims to empirically study the ransom requested by attackers.

METHODS

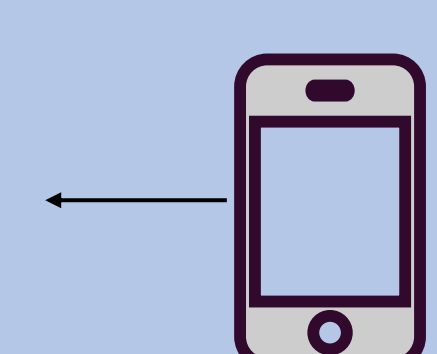
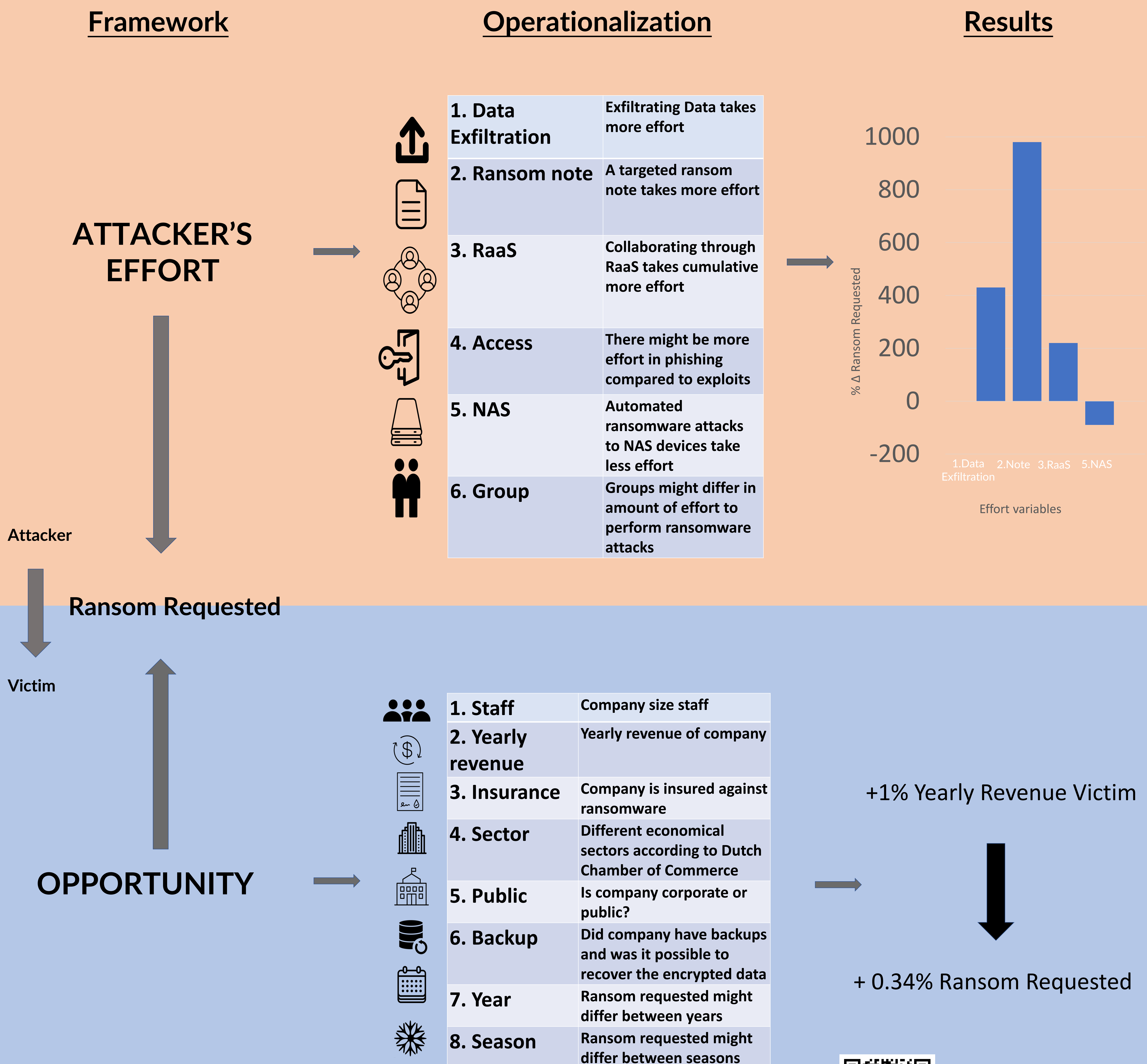
- 371 ransomware attacks between 2019 and 2021 reported to the Dutch Police were collected. 172 attacks (46 %) reported ransom requested by attackers.
- For each observation, attacker, victim characteristics and context (time) was measured.

RESULTS

- If attackers put in more effort, such as extra activities additional to the encryption, they will ask a larger ransom, as expected.
- There is no increasing trend of requested ransom over the years, in contrast with expectations
- High revenue of victims should lead to larger requested ransom, as expected
- In contrast with previous findings does the requested ransom not vary over the different seasons

LITERATURE

- Oosthoek, K., Cable, J., & Smaragdakis, G. (2022). A Tale of Two Markets: Investigating the Ransomware Payments Economy. *arXiv preprint arXiv:2205.05028*.
- Oz, H., Aris, A., Levi, A., & Uluagac, A. S. (2021). A survey on ransomware: Evolution, taxonomy, and defense solutions. *arXiv preprint arXiv:2102.06249*.



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