Technological Advancements of Criminal Enterprises: The Impact of Cloud Computing

Rachel Sitarz, Samuel Liles
Purdue University

Background: Technology has constantly evolved throughout history. This constant innovation requires social learning and adoption of new processes. Technological evolution has many benefits, such as the transmission of information, and instantaneous communication, however, there are innate problems, such as the facilitation of crime and introduction of vulnerabilities to the user and businesses utilizing the cloud. The prevalence of technological crimes have been growing drastically in the recent years, due to widespread availability of technology, changing the scope of crime and criminal investigations.

Purpose: Currently, there is very little research done on cloud computing and the impact on criminal activities. Most research to date explains what cloud computing is, and the issues that are faced. However, this leads to many knowledge gaps. Based on this, the purpose of the current project is to examine criminal enterprises and the cloud computing role. More specifically, the current project will make comparisons between historical criminal organizations, and the observed criminal organizations of the present.

Criminal Enterprises Online: Throughout history, criminal organizations have gone to dynamic environments in order to facilitate their criminal activity. New technologies allow for new ways to aid old crimes, and the development of new criminal activities. Numerous criminal organizations utilize cloud computing for a wide variety of technological and cyber crimes. At the core of online crime, they are the same as offline crime. While there are some new crimes to develop with the advent of the Internet and modern technology, much of the crime is the same as "old" crime. These crimes simply use a new medium to facilitate their crime.

What is Cloud Computing: Cloud computing is considered a technological milestone, in which individuals can shift from document-based storage on a physical drive, in which documents can be accessed only on the particular drive, to electronic-based storage in a logical space, in which people can access the materials from any device, so long as there is Internet access. The cloud allows for access and sharing of documents, files, and media (movies, pictures, etc.), transmission of communication, etc., with whomever, whenever and wherever they desire. Multiple people can access, alter, create, or delete documents and data.

http://ratti-report.com/region-global/cloud-computing-companies-the-next-new-business-frontier/attachment/new-business-cloud-computing-diagram-small/
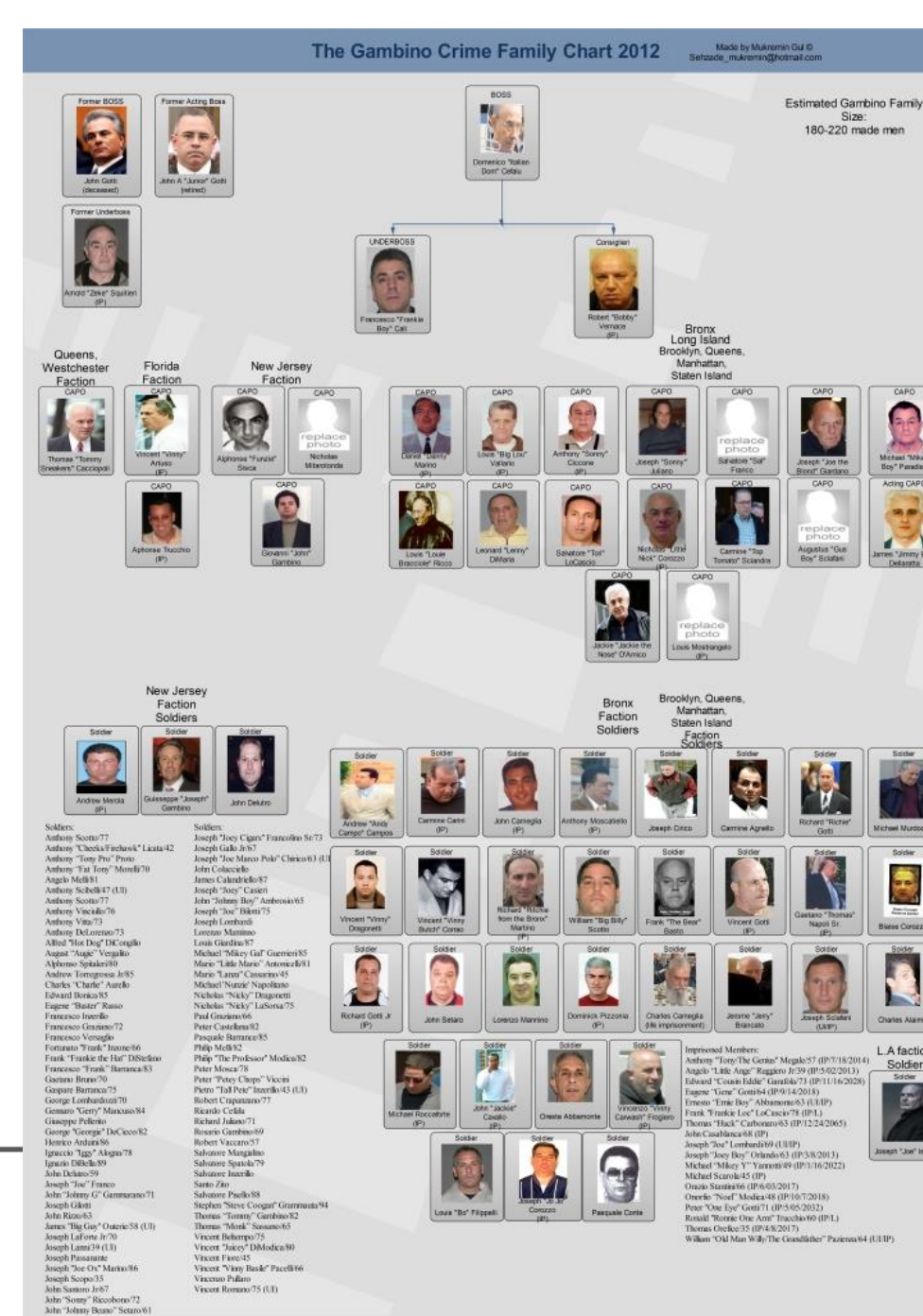
Findings: Criminals constantly look to new technology as a method to facilitate any old crimes. Criminals utilize the cloud to create, store, process and distribute illicit materials, and supporting evidentiary documents. Just as traditional criminals have throughout history, they will mask their identity, protect other insiders, and educate on the best method to facilitate the criminal activity. Criminal organizations continually adapt to changes seen in society. Whether the changes are the development of modern technology, or the enforcement of the law, criminals will adapt and change their practices. The uniqueness of the cloud is that those working in a network function can work on documents, and communicate in real time, without being geographically close. They could be spread throughout the world, yet have access to the same documents and materials instantaneously. This poses potential problems for Law Enforcement in that if they close in on a target, and execute a search, a person in a remote location can access the documents and delete or alter before the authorities have time to forensically copy the data. When a criminal works in part of a network, each party has a role, and the aim is to transmit information, protect one another, especially by masking the identities of other insiders, and work towards an end goal for the organization, albeit power, monetary reward, or gratification . Each party knows their placement, and the organizational setting allows for advancement and role repositioning within the online networking setting . Criminal organizations on the cloud can be analogous with the Mafia. While the Mafia in the past did not have the technology utilized today, they used the available technology to maximize criminal activity.

Conclusion: Cloud computing is changing the scope of Internet crimes and online interactions.. New criminal organizations do not differ from ,those of the past, they are just utilizing new technology to facilitate their crime. Whether the organization is storing the evidence on the cloud, or utilizing the cloud to communicate, they are fundamentally the same as historical criminals. It is urged that Law Enforcement remains educated with the trends, and technology, in order to apprehend these individuals.

http://www.fivefamiliesnyc.com/p/current-leadership-of-five-families.html

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