CRJ422 CapStone Paper

Name

CRJ 422: Criminal Justice Capstone

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Social and economic vices continue to be on the rise due to multiple factors that facilitate their prevalence. While law enforcement has found effective strategies for dealing with most social vices, economic crimes remain primarily unresolved, mainly due to their complexities. Fraud, a significant economic vice, has cost significant losses to organizations and financial institutions as well as other fields in the private sector. Research by Comer (2017) suggests that this form of financial vice is defined as the illegal and intentional deception of an individual or organization to deprive them of money, property, or legal rights accorded the same.

Over time, various types of fraud, such as check fraud, wire fraud, and identity, have been detected, and hence, the conclusion by scholars that these are the most common types of fraud. According to studies, fraud leads to losses amounting to more than three trillion dollars annually from small scale and large scale businesses, investors, and the society at large (Sadaf, Oláh, Popp & Máté, 2018). Moreover, corporates have experienced increased insecurities concerning various types of fraudulent activities such as check fraud, wire fraud, and identity theft. Advancements in technology have, however, allowed for the effectiveness of artificial intelligence systems, which can be used by law enforcement agencies in the fight against fraud.

Fraud can be described as an intentionally deceptive action designed to provide a perpetrator with an unlawful gain and to deny the victim a right. Fraud can take place in different sectors, such as finance, investment, insurance, and real estate. Fraud can be found in the sale of property like land, personal property such as art or collectibles, and intangible property like bonds and stocks. The individual that commits fraud takes advantage of the information available to deceive the victim. In 2019, many companies suffer from fraud; the use of current AI technology can help law enforcement to detect and prevent fraud. Over the last few months,

many companies have had to grapple with security issues such as check fraud, wire fraud, and identity theft among others. Technological advancements in the field of artificial intelligence (AI) will help the law enforcers detect and combat fraud.

Summary of the Issue

What Makes It an Issue?

Fraud involves a false representation of facts that can be done by intentionally withholding important information or the provision of false statements for the purpose of gaining something through the use of deception. Fraud can be described as a criminal justice issue because it deprives the victim of their rights and violates civil law, criminal law, and it causes loss of money and property. During fraud, the perpetrator of the fraud is usually aware of the information which the victim may not be aware of, allowing the perpetrator to deceive the victim. The business and financial sectors are most affected by fraud based on increasing cases of the problem within organizations and financial institutions such as banks. The manipulation of financial records by CEOs of companies ranging from WorldCom to Cendant has raised international concerns based on the lack of integrity in these institutions and the prevalence of fraud. A significant incident depicting the extent of this as a criminal justice issue is the sentencing of WorldCom's CEO to 25 years imprisonment, as he was found to have engaged in multiple cases of fraud and conspiracy as well as the inflation of assets (Bekiaris & Papachristou, 2017). This, in turn, led to significant losses for the giant telecommunications company, which suffered bankruptcy while affecting investors who suffered $180 billion in damages.

Data Showing Impact on Society

Fraud has a significant negative impact on society; for example, the CEO discussed above, as mentioned, led to the bankruptcy of WorldCom, which in turn facilitated unemployment for 30,000 employees (Bekiaris & Papachristou, 2017). Similarly, credit card fraud has been found to cost billions of dollars every year. Companies and individuals report millions of losses on an annual basis as a result of fraud (Kultur & Caglayan, 2017). The impact of fraud is also apparent as there are new ways of extracting funds from the government, businesses, corporations, and people. There has been a recent surge of online fraud as people start to increasingly undertake transactions online. Mobile transactions and online purchases are increasingly being used today.

Fraudsters have found the internet a good platform to undertake criminal activities, and this has resulted in millions of people losing their money on a daily basis. Companies that experience fraud experience loss of reputation and loss of client trust. Individuals that go through fraud experience loss of income and devastating losses. Over the last year, the issues of fraud and identity theft remained some of the most significant crimes reported. In 2018, the number of theft and fraud reports was at a whopping 3 million. Almost 50% or half of these cases involved the loss of money. Further statistics showed that 15% of all the complaints in 2018 were related to identity theft (Choi & Lee, 2018).

Social Justice Principles That Should Be Addressed

The social justice violation that should be addressed by the crime of fraud is the legal right to property. Fraud involves deception of a victim that deprives them of their legal rights. In a fair and just society, everyone would be able to work and earn what they have worked for.

Fraudsters take the monetary gain or benefits of an individual through illegal means. The issue of fraud is also critical because criminal justice has often been blamed for falling far behind fraudsters. This is especially in the case where frauds fall on non-specialist security or in the general public (Kingston, 2017). To protect the rights of individuals, the social justice system should be improved to capture fraudsters easily.

Cultural Diversity Issues

Fraud is a global issue that exists in different cultures. The triggers of fraud can be described to be a societal culture that is based on individualism (Kültür & Çağlayan, 2017). Individualism is apparent in the global business, where it appears that everyone wants to realize gain for themselves. The increasing culture of individualism has made more people be willing to engage in fraudulent behaviors. Fraud is also high in a culture that does not place emphasis on integrity, honesty, and ethics.

How Preventing Fraud Creates a More Just Society

Fraud prevention can create a more just society because it reduces suffering through the loss of funds and will protect the rights of people. Many people that have been victims of fraud have experienced significant financial losses, and some have even gone into debt. Fraud prevention will prevent any such suffering caused by financial losses. Fraud prevention also improves security and will protect the rights of people. Finding fraudsters and imprisoning them for their wrongdoings will mean that those that engage in criminal activities are incarcerated and face the consequences of their wrongdoings (Kültür & Çağlayan, 2017).

Evolution of Fraud

Since its inception, deception has caused significant damage to individuals on a wide range of scopes as deceptive acts such as fraud have led to both material and monetary loss as well as psychological distress to its victims. Research suggests that the earliest reported case of fraud occurred in 300BC, an era with limited access to information and hence the lack of effective countermeasures (Sprague, 2018). Hegestratos, a merchant who transported valuable goods, shifted the dynamics of finance when he was caught attempting to contact insurers. As a shipping merchant, Hegestratos was offered first-party insurance, which facilitated the acquisition of a loan to purchase the goods.

He, however, attempted to sink the boat after selling the goods and intending to claim the loss despite these facts. According to research, cases of recorded fraud increased as the world remained mainly indifferent to these acrions (Sprague, 2018). Moreover, as society evolved; therefore, fraud prevailed and has since been catalyzed by both the industrial and information revolution as technological advancements and commerce have become the tools and targets for fraud, respectively. There exists a variety of new cases of internet-enabled fraud, such as the "Famous Names" case, which involved celebrities' third party stolen credit cards.

Similarly, 1994 saw the emergence of system applications, which facilitated the generation of accurately useful credit card numbers, which were then used to make purchases (Fu et al., 2016). While these were more advanced than the famous names scams, they failed to be as popular as the latter. Consequently, the presence of the internet allowed for the introduction and expansion of e-commerce and hence, the creation of false merchant sites aimed at taking advantage of this progressive age. Such sites were meant to collect credit card numbers before chargebacks and, therefore, significant cases of fraud. Studies have thus been conducted to

understand the psychology of fraud stars as well as their profiles, which in turn led to the realization that they begin with low-value transactions before upgrading.

The law enforcement has since then used various resources to attempt to eradicate the issue; however, its complexity outweighs their capacities. Scholars have categorized white-collar crime into six major types, the first being the predominance of high-level delinquents in the society while the second is the motivation for financial gain (Gottschalk, 2015). Additionally, such crimes are carried out systematically with limited violence as trust is breached, and hence, the diffusion of its victims. Such characteristics have proven to be a challenge for law enforcement to categorize these acts as this kind of malfeasance fails to fall under the rubric of crime.

Specific social norms dictated that white-collar crimes be considered less damaging to the community as they fail to cause damage such as those caused by robbery with violence. In some countries, therefore, fraudsters and other white-collar criminals continue to act unethically as they are guaranteed lower sentences than other offenders. However, the late 1930s facilitated the emergence of influential criminologists who developed theories to counter the social perception of crime as an attribute of poverty and the belief that high ranking officials failed to commit a crime. Similarly, Gottschalk (2015) argued that contrary to social misconceptions, crimes such as fraud were not due to technical violations but instead were conducted intentionally.

This, in turn, contributed to the development of sectors within criminology to tackle such issues. However, leniency continues to be a significant hindrance to the effective diminishing of economic crimes as the perpetrators are considered fewer criminals as compared to others. Similarly, based on advancements in various aspects of life, it has proven difficult to prosecute them based on the sophisticated strategies used to conceal these crimes.

Empirical Research

The use and effectiveness of artificial intelligence and machine learning in the detection of fraud remain widely speculated as there exist numerous myths regarding the issue. Scholars define machine learning as the process of acquisition of information from datasets facilitated by analytic techniques without individual instructions (Choi & Lee, 2018). Artificial intelligence further refers to the use of the models built from machine learning in daily life tasks. Evidence by Wong (2009) reveals that machine learning has led to accurate and improved infographics as data scientists are equipped with the resources and knowledge necessary to distinguish fraudulent activities from legitimate acts and thus reducing false positives.

Additionally, based on the increasing complexity and anonymity of fraud tactics over time, machine learning and AI promise to identify new trends as they conduct an automated discovery of unseen patterns across large data sets. However, research suggests that a large percentage of efforts against fraud have failed based on singular defense strategies that do not comprise of multiple algorithms and resources (Hasan et al., 2011). Law enforcement agencies are thus advised to incorporate both supervised and unsupervised machine learning models, which allows the detection of previously unnoticed aspects of suspicious behavior.

Empirical research further suggests that there exist four significant challenges to fraud detection, such as the dynamic shifts in patterns over time (Kingston, 2017). Fraudsters use advanced and innovate strategies to gain access to systems as they remain intellectually active, a factor that poses a challenge to law enforcement. There exist problems adapting to these new patterns accompanied by the fact that they remain in constant shifts of change (Kültür & Çağlayan, 2017). Another issue involves class imbalance, whereby data scientists experience challenges in identifying and distinguishing between fraud detection models.

The empirical research analyzed different types of fraud, such as wire fraud, identity fraud, and check fraud, and how the use of artificial intelligence (AI) systems can be used to prevent fraud. Kultur and Caglayan (2017) established a fraud detection system that could detect fraud transactions up to 93.92% of the time. Wong (2009) proposed the use of AI technology involving neural nets, statistical analysis, and genetic algorithms. Choi and Lee (2018) proposed processing large amounts of financial data through feature selection, sampling and applying algorithms to detect fraud. The use of artificial intelligence was found as a critical tool to help investigators to successfully investigate crime (Hasan et al., 2011). The general analysis of the empirical data showed that fraud cases are increasingly growing and that the use of fraud detection through AI can increase the chances of preventing fraud.

Possible Resolution

Actual Resolution

Based on the vulnerabilities of financial institutions to cases of fraud, AI systems have been incorporated to conduct a wide range of operations, including providing security against fraud. Other operations facilitated by AI and machine learning include credit underwriting and conversational banking. This paper thus suggests that the integration of AI and machine learning in law enforcement attempts at detecting fraud with proving efficient and effective based on its garnered success over recent years (Jarovsky, Milo, Novgorodov & Tan, 2018). Similarly, these techniques may prove useful in detecting other forms of cybercrime, which evolve over time and hence become more sophisticated.

As discussed in the text, using both supervised and unsupervised machine learning will be beneficial, alongside behavioral analytics, which evaluates the behavior of each account

holder to determine their legitimacy. Machine learning then facilitates the detection of any anomalies in behavior, which leads to early detection of fraud (Jarovsky et al., 2018). The law enforcement should scan these accounts for instances that involve sudden and extreme spending, which may reveal fraudulent activities. Other strategies through which AI can be beneficial in detecting fraud for law enforcement include the incorporation of specialized fraud analytics.

Fraudsters have been attributed to innovative strategies that become more sophisticated over time. In cases where fraudulent activity is camouflaged, for example, specialized fraud analytics can detect this using advanced profiling. Nevertheless, this paper finds that fraud detection and prevention may fail to be commonplace based on a variety of hindrances to the same. Many financial systems worldwide remain unconnected and hence, difficulty in detecting the crime across a broad ecosystem. Veeramachaneni et al., (2016) however, affirm that if executed appropriately, AI will prove to be useful and beneficial as it will save costs for organizations and institutions while consequently guaranteeing security.

Branches of the Criminal Justice Impacted

The criminal justice system involves cohesive work between the federal, state, and local agencies aimed at fighting crime. Economic vices such as fraud, therefore, impact this system significantly, based on significant implications of specific branches of the criminal justice system (Cheng, 2016). Furthermore, the ways through which the justice system has handled fraud in the past suggests the need for further research to determine their use, effectiveness, and overall impact on society. For example, while law enforcement agencies and the criminal courts are majorly concerned with the vice, some fraudsters have been sanctioned by regulatory bodies without the council of these agencies. Additionally, other instances include the positioning of fraudsters in specific registries, which continue to allow them to enjoy privileges ranging from

insurance to credit cards and mortgages. Standards of justice vary significantly, and hence, the need for categorized branches that deal with economic crimes.

The main branches of the criminal justice system that are impacted by issues of fraud, as mentioned, are law enforcement and courts. Law enforcement can help to prevent fraud by taking an active approach towards identifying fraudsters. However, law enforcement may be lacking in technology and knowledge used by fraudsters. The lack of knowledge could be a hindrance to successfully reducing fraud (Kültür & Çağlayan, 2017). The court system can support fraud prevention by making sure that there are huge penalties in terms of the number of years served for individuals that have been found to undertake fraud.

<u>Criminal Justice Theories and Supreme Court Decisions</u>

The dynamics of fraud exist in such ways that it has encouraged the development of criminology theories aimed at explaining, evaluating, and improving the effectiveness of the criminal justice system against the same. Two specific theories with distinct origins discussed in this paper include a subdivision of the Contract theory and the Marxist ideology, Conflict theory (Siegel & Worrall, 2018). Evaluating the ideologies behind these models is crucial as it offers insight regarding the position of the criminal justice system on the issue of fraud from a theoretical perspective. The ideology surrounding the consensus theory of the Contract theory posits that society, in general, establishes the laws of the justice system.

The conflict theory, however, challenges this aspect as it claims that a selected population of high-value individuals control the establishment of laws. Similarly, the approaches differ with regards to their ideology of values within the society, as the first find that specific values of the society remain consistent regardless of the diverse elements that exist within a community.

Theorists thus argue that a criminal justice system reflects of a wholesome society (Siegel & Worrall, 2018). Nevertheless, conflict theorists differ in perception as they argue that societal values vary and hence vary across the different elements in the community. Therefore, unlike the consensus theorists who find that the justice system depicts the values of a society, conflict theorists propose that it fails to achieve the same.

The purpose of the criminal justice, according to the consensus theory, is to serve the society in its entirety while according to the conflict theory, the dominant class maintains political, social, and economic control. The consensus model observes that the criminal justice system ought to work cooperatively in order to produce justice while the conflict theory observes that organizations of criminal justice should work competitively in order to produce justice. One of the supreme court decisions that can be used to show the take of fraud is the court case SKILLING v. the UNITED STATES (No. 08-1394) 2010. Jeffrey Skilling was the CEO of Enron before it crashed as a result of committing wire fraud. Skilling was sentenced for 10 years (Kültür & Çağlayan, 2017). The case showed that there would be no tolerance to individuals that took part in fraudulent activities.

Also, following the Enron scandal, the Sarbanes-Oxley law was passed in order to promote standards of handling financial statements. Another case involves the CEO of a blood-testing company, Theranos Inc., was charged with wire fraud based on investigative reports that proved that the duration of the vice lasted an estimated eight years and cost a total of 8 million dollars (Dolan, 2018). Similarly, the same individual was charged with civil securities fraud and hence the proceeding court indictments.

How Law Enforcement Address Equality Issues

Social and criminal justice systems work to promote social equality and fairness. The criminal justice system is made of agencies, processes, and governments that control crime and impose penalties on individuals that violate the law. In the society today, anyone that has been fraud irrespective of the financial position will be given a fair judgment. The law enforcement system also ensures that people that undertake unfair practices of criminal fraud are caught and face jail time and financial penalties. Instances of social inequalities and exclusion continue to increase as multiple factors influence them. However, law enforcement and society have had a complicated relationship since past decades based on various cases of social inequalities, racial discrimination, human rights violations, and fairness.

Studies reveal that social inequalities have contributed to significant loss of lives within the community and police force based on ethnic and racial discrimination (Roberts, 2018). However, law enforcement has developed avenues through which they remain accountable through such avenues as community policing (Cheng, 2016). Similarly, standards have been developed, such as the social equality performance measurement, which aims at ensuring the effectiveness of social equity promotion programs.

Solidarity within the police force has further been promoted by the strengthening of relationships with other branches of the justice system and hence, productive efforts towards fighting crime and corruption. Information sharing between areas such as law enforcement, judiciary, and correctional centers has led to increased protection of human rights and fairness.

Sociocultural Variables

The sociocultural variables can impact the criminal justice system by focusing on the number of incarcerated individuals. A large percentage of incarcerated individuals come from poor backgrounds and are mostly African American men. This shows that the current society prohibits both the rich and poor from stealing, but when the poor are found, they are the only ones that go to prison. Religion can support the criminal justice system by enabling people to escape the lifestyle of crime and poverty. Religion impacts the psychological well-being of individuals and this can reduce crime incidences like that of fraud. From the lens of the conflict theory, various studies have proposed that the criminal justice system infringes on individuals from a poor background and exploits this population to generate revenue, which only benefits the elite in the society. This philosophical point of view suggests that justice systems fail to protect the rights of all citizens and hence, unfair. Consequently, other factors such as racism have been identified as contributing factors to how criminal justice agencies respond to issues revolving around the black community and minority groups in general.

In conclusion, fraud is a criminal justice issue that can be solved through the use of AI technology. Fraud was found to be a criminal justice issue because it deprives people of their legal rights and right to property. The advancement of the internet, mobile transfer money, and online purchases have made many people become vulnerable to online financial fraud and identity theft. The law enforcement should solve the issue by making use of advanced AI technologies to solve fraud. Furthermore, this paper has critically evaluated, described, and discussed fraud on a general scope and in specific categories. Similarly, it has provided an overview of the issue as well as its background and information regarding how it has evolved since its inception. While there exist numerous strategies aimed at combating this economic vice,

they remain expensive and ineffective and hence the proposed integration of AI systems into law enforcement efforts against the same. Fraud has been identified as becoming increasingly sophisticated, and therefore the use of flexible approaches that use complex algorithms to detect the issue remains highly applicable.

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