Human Nature Journal of Social Sciences
Vol.3, No.3 (September, 2022), Pp.412-421
ISSN(online): 2788-5240, ISSN(print):2788-5232

Human Nature Research Publisher

Original Article http://hnpublisher.com

A Legal Assessment of the Current Situation with Artificial Intelligence and Economic Crime Policing

Naheeda Ali[1]

[1]Assistant professor, Department of Law, University of the Punjab, Gujranwala Campus, Pakistan.
Correspondence: naheeda.ali@pugc.edu.pk[1]

ABSTRACT

The purpose of this article is to give a complete review of the uses of artificial intelligence (A.I.) in law enforcement, with a particular focus on crimes committed in economic markets, such as market manipulation and insider trading. When the market is manipulated, it may cause significant economic losses for investors and a decline in the degree of trust those investors have in the market. This impairs the efficiency of the markets, which corporations use to raise money and by producing profits through superannuation, pension, and self-governing wealth funds. Security measures have also taken, employing new technology to identify and react to illegal activity to safeguard stakeholders, the broader public, and the worldwide economic system. Criminals are more proficient in manipulating economic markets. This study analysis critically the potential of adopting A.I and possibilities include the merits and downsides of an A.I. strategy, limitations and possible benefits of increasing the use of A.I. to combat economic crime.

Article History

Received:
August 16, 2022

Revised:
September 26, 2022

Accepted:
September 27, 2022

Published:
September 30, 2022

Keywords: Artificial Intelligence, Economic Crime, Policing, Law & Regulation, Financial Markets, Manipulation and Insider Trading.

Introduction

Artificial intelligence known as "A.I.," previously presented. In computer science, "artificial intelligence" (A.I.) refers to the emulation of human intellect by a computer, robot, or another system. Artificial intelligence (A.I.) is a computer system or mechanical's capacity to impersonate the brain's cognitive processes of human beings. The scholarly field of artificial intelligence dates back to the 1950s. In 1956, when he organized the inaugural gathering of A.I. researchers at the Massachusetts Institute of Technology (MIT), John McCarthy coined the term "artificial intelligence". He established artificial intelligence (A.I.) as a distinct field with essential objectives such as modelling human cognitive processes and building machines that mimic this behaviour. Artificial intelligence (A.I.) studies and simulates human cognitive processes to produce robots with similar behavior (Hamet & Tremblay 2017). Since 1956, artificial intelligence (A.I.) has expanded tremendously, and it now includes both theoretical and practical subdisciplines. Artificial intelligence (A.I.) is a term that may be used to describe a wide variety of modern tools and technologies; nevertheless, there is ongoing dispute and disagreement around the meaning of intelligence and the criteria that must be met for a tool or technology to be considered intelligent. It might be useful at this time to split A.I. into two categories: "artificial general intelligence" (AGN) and "narrow artificial intelligence" (NAI) (ANI). AGN necessitates the development of computers that can learn and generalize, enabling them to apply their expertise to unexplored regions by human researchers (Dworzecki & Nowicka, 2021).

In contrast, constructing a computer capable of winning a challenging game (such as AlphaGo) but incapable of understanding and applying fundamental theoretical physics principles or how to make toast is not a good idea. Even though AGN research continues, artificial general intelligence has made significant progress (ANI). This refers to creating algorithms and robots capable of executing activities and solving difficulties similar to, but not identical to, those faced by people, and usually to a greater extent. Some of these algorithms were created with the primary purpose of advancing artificial intelligence research. For example, the 'Animal A.I. Olympics' is a current effort in which programmers aim to develop algorithms capable of learning how to solve fundamental issues like children and animals (including shrimp) do. "These difficulties are still difficult for A.I., according to the website, "and will need to be solved to develop more general forms of artificial intelligence. Government and business sectors, including the economic markets, have created and implemented several artificial neural networks (ANN) algorithms. As stated in the preceding section, applying artificial intelligence to economic markets involves several challenges (Harris, 2022).

Objectives of the Study

The purpose of this study is to accomplish two things: to provide an overview of the current state of the art implementation of A.I, for the regulation of financial markets; and to take an interdisciplinary look at the possibilities for improving the application of A.I. to the regulation of crime in general. In this study we discussed the laws adopted to prohibit unlawful conduct in economic markets, namely the offences of insider trading and market manipulation. These laws were enacted to prevent illegal activity in economic markets. This is followed by a discussion of the use of A.I. to detect and prevent economic crime, the use of A.I. in other policy domains, and an analysis of the existing state of the discipline.

Artificial Intelligence and Economic Market Regulation

Regulators and trading venues have used technology for decades to police economic markets and promote self-regulation among market players. During the 1990s, one of the earliest market monitoring devices was created in Australia. SMARTS (Securities Exchanges Automated Research Trading and Investigation) remain the better market investigation system. Thirty markets, including the Hong Kong Stock Exchange, use it. In the past, economic market investigation software would analyse the large amount of data the trading venue gave before giving alerts about potentially fraudulent activity. These alerts will be sent to agents of amenability or implementation for supplementary inquiry. A requirement for technologically reinforced regulation has amplified swiftly and drastically in the framework of the economic market. Markets contestants progressively use artificial intelligence (A.I.) in transactional connections and policies. Market advancements also demanded modifications in the operation of investigation equipment and strategies used by experts in the investigation industry (Hayward & Maas, 2021). Within current years, there has been an upsurge in trade activity across items and places. This increase has been spurred by the development of electronic and algorithmic trading. Dangerous market manipulation occurs when market contestants practice the business commotion of one market or benchmark to impact the prices of another linked market. Professionals in the investigation are increasingly required to monitor vital trade data for all linked instruments, not just those in a single sector (Levi, 2007).

Literature Review

The rapid use of artificial intelligence in (ML) machine learning is increasing the compliance and reactivity of investigation systems in many situations. A method known as machine learning may be used to develop artificial intelligence without explicitly directing a computer on how to do a certain job. According to the Government Accountability Office, machine learning technologies provide several benefits over more conventional algorithmic investigation techniques (FMSB). They enable systems to adapt to changing environments and to learn from real and simulated data. Using advanced natural language processing, machine learning algorithms may, for instance, proactively merge commerce and communications data more systematically. (Ligeti, 2019) A approach that detects insider trading or market manipulation based on the transmission of incorrect information through online forums or other electronic communication

channels might be very successful. Before delving into the applications of A.I. to economic market policing, it is necessary to offer background on market manipulation and insider trading. What conducts are investigation systems looking for, and why is artificial intelligence a feasible alternative? Previously examined the legal concepts of insider trading and market manipulation. In contrast, an explanation of A.I.'s application will always benefit from the context provided by a practical example. Frequently, market manipulation entails setting an erroneous price for an item for sale. A trader may, for instance, engage in the practice of "pump and dump," as outlined by the U.S. Securities and Exchange Commission (SEC).

(McDaniel & Pease, 2021) In a pump and dump operation, hoaxers often disseminate wrong or deceptive information to provoke purchasing turmoil and 'pump' the stock price. Fraudsters "dump" their shares by selling them at the inflated price after the stock price has been "inflated." When fraudulent parties sell their shares and stop disseminating false information regarding a company's stock, the stock's price drops, resulting in investor losses. Incorrect and deceptive information regarding a company's stock value might be disseminated by direct mail, email, newspapers, magazines, Internet chat rooms, and radio. It is worth noting that, rather than relying on outside sources, market manipulation may also be performed by circulating incorrect information inside the market. Fox et al. coined the term "Naked Open Market Manipulation" to describe this behaviour.

(Nadimpalli, 2017) A naked open market manipulation occurs when many shares are acquired, causing an upward price push. Then those shares are resold in circumstances that cause a less severe downward price push, consequential averagely selling price being greater than the traditional procurement value. Churning, wash trading, and the 'poop and scoop' tactic are other market manipulation techniques (the opposite of the pump and dump strategy). By actively trading or getting misleading information from an external source, the deviant actor creates the phony advent value movement or trading behaviour in every instance. Due to the quirky actor's appearance, other market contestants are persuaded to behave advantageously toward him or her. Information also plays a role in insider trading, but the question is whether a person intentionally exploits inside information to increase or decrease trading earnings. Illegal insider trading is buying or selling securities directly or indirectly utilizing information about publicly traded firms that are not generally known. Martha Stewart, ImClone, and Qwest Communications CEO Joseph Nacchio are two of the most well-known real-world instances. 64 Senior executives in each of these situations were aware of information that was not generally known and may have affected their firm's share price. They made money or reduced expenses by exploiting the information directly or indirectly via an intermediary. There were two ways this information was used: directly or indirectly via an intermediary. Sam Waksal, the CEO of ImClone, learned that FDA is most likely to cast off the clearance of novel cancer therapy. Stewart later received this information from Waksal, who used it to sell her firm shares and save a loss of $45,673. 65 In the instance of Qwest, Nacchio sold his shares for a $50 million profit despite giving investors optimistic economic predictions. Nacchio did so despite being well aware of the company's economic problems. Information from transaction place, particulars of dealings, who conducted them, and when they occurred) must typically be combined with information from other sources, such as emails and electronic communications, as well as news media alerts, to uncover any economic wrongdoing.

It is challenging to get all the essential data from a single source. More research and interpretation will be necessary after a suspicious transaction has been identified to demonstrate that the behaviour had the necessary intent to be considered unlawful or criminal. If so, until the transaction is recognized, legal certainty will not be attained. There are still significant barriers to entry when it comes to the degree of automation found in Market Investigation Systems (MSSs), according to research released in 2015. The current generation of MSSs' weak textual analysis capabilities, many investigation professionals, are obliged to manually gather relevant news articles using all-purpose search engines like Google. More efficient algorithms are required to analyse news-transaction links and evaluate transaction risk in real-time utilizing news items. The amount of work that professionals need to accomplish will decrease (Neil, 2008).

A pioneer in the creation of such systems, IBM has always been: 'IBM Economic Crimes Insight offers a thorough and insightful method for conducting insider trading and conducting risk monitoring. This method

more effectively and precisely tracks practically all employee-related behaviour. Tracking employees in genuine, comprising trading and market data, emails, chat transcripts, and voice recordings, goes beyond conventional rule-based alert detection. The practical use of A.I. is still hindered by data access, ownership, and privacy issues. Data that might be used to help detect and investigate economic crime is accessible to monetary authorities, trading venues, and market contestants; however, not all relevant information is often accessible to all parties. Economic crimes are more challenging to locate and study due to this. Consequently, investigation systems that rely on connected data sources may be restricted in their utility. IBM acknowledges that the fight against economic crime is entering a new phase, and only economic institutions, regulators, and technology partners can prevail in it together. Artificial intelligence and human intelligence are called "augmented intelligence." The effective deployment of A.I. in the fight against economic crime will need teamwork. Synthetic data and virtual settings are used in another way to police economic markets using A.I. This may aid in improving the algorithms now in use. It also can strengthen rules and regulations by discovering new kinds of unethical and destructive behaviour before bad players in the market use them. Although this is a relatively young topic of study, it has a lot of potential and a broad range of applications outside of policing economic crime (Holzinger et al.,2019). As previously stated, the enormous rate of false positives creates a significant issue for economic market regulation. Expert expertise is typically required when deciding where to place criteria for an alert, and the specifications for all types of misbehaviour may not always be represented. Market conditions and participant behaviour change too quickly for static monitoring systems to keep up. 70 For example, market manipulation may take several forms depending on trade volume and market volatility. Fluctuation in that product's price during a certain period). An effort to manipulate the value of a product with high trading activity and volatility would be quite different from one involving a stock that trades sparingly throughout the day and has a relatively constant price over many days (Nicholls et al., 2021).

Research Methodology

This study is based on qualitative research. Researcher analyzing statutes, local and international laws, protocols, conventions, treaties and reports for the accomplishment of this work.

Results

How Can Artificial Intelligence Resolve Issue?

Machine Learning programs are one of A.I.'s biggest benefits "conventional algorithms are less rule-based. "ML programs may learn from experience and use past data to find relevant market situations or structures. ML might assist investigation systems to be dynamic and learn from practice to spot variant forms of manipulation in different economic products or market scenarios. Machine learning might help the investigation identify tampering. To successfully employ ML to build more robust investigation tools, massive amounts of data indicating market manipulation or insider trading are needed. Machine learning requires this. This is not always possible since monitoring systems may identify hundreds of dubious transactions daily, but only a small fraction are examined or result in a guilty judgment. Few algorithms provide appealing learning situations. Economic Markets Supervisory Board worries about digital sandpits and falsified data. The usage of digital sandboxes in machine learning system testing may aid in the development of safe environments for the detection of potential threats. Using real data sets as the basis for digital sandpits and synthetically created scenarios allows testing in various market settings that were not accessible when historical data sets were acquired. The approach might also be used to thoroughly analyse the rule-based models already used for detecting market abnormalities (Nouman et al., 2021).

It is worth noting that the U.K. regulator has used digital sandpits before, and there is a good chance they will find new uses. This analysis of the present status of A.I. in economic crime enforcement revealed important inventions and advancements. However, just as A.I. in economic markets trading opens up new avenues for unethical behaviour, A.I.'s use to regulate economic markets has its own set of potential dangers. There is a good chance that law enforcement officials will not comprehend how the A.I. software handed for investigation works. This poses a significant risk. Furthermore, data quality concerns should be

taken seriously. Assume that investigation software and A.I. algorithms are not proficient and assessed on first-rate data illustrative of the general population. The produced warnings might be ineffective, or they may ignore major instances of misbehaviour. These issues apply to the usage of artificial intelligence in law implementation. Last but not least, even though individuals who commit economic crimes are expected to grow their use of A.I., artificial intelligence may not always be the solution to the challenge of police economic crime. If more people are aware of the advantages and downsides of artificial intelligence, progress may be made without it. A.I. tactics are being used. This might lead toward a sound legislative framework receptive to technological developments, evading the never-ending exclusive invention and retort that happens when enforcement operations chase down well-resourced criminal actors (Petit, 2018).

To summarise, artificial intelligence has already been used to monitor economic markets, and the technology's capabilities and applications are continually growing. Artificial intelligence has much-untapped promise as a tool for identifying and investigating economic crimes like market manipulation and insider trading, but it is not quite there yet. It is not very likely that it will ever be. It will never be able to replace the specialized human experience necessary for regulatory coordination and information sharing across trading venue(Dworzecki & Nowicka, 2021)s, market players, and regulators. Artificial intelligence (A.I.) in economic crime investigation and prosecution is not without risks. Assuming that an A.I. response is the solution to AI-enabled misbehaviour risks misallocating resources and overinvesting in technologies that may not yet be capable of dealing with the problem. It will be necessary to strike a balance between investments in cutting-edge technology and more conventional regulation and regulatory tactics other than enforcement, such as rule adaptation and modification. Additionally, funds will need to be allocated for staff training on A.I.'s limitations and nature (Qoyum, 2018).

Current Legal Framework for Regulating Economic Market Behaviour

Economic markets are the foundation of the global economy. Stock exchanges provide a platform for trading and investment channels. These stock markets allow trading and investing. ASIC thinks effective economic market regulation is crucial for Australian market integrity, trust, and innovation so companies may prosper and investors may participate with confidence." Fairness, efficiency, and honesty underpin economic regulation. According to Tony D'Aloisio, ASIC chairman at the time, the Corporations Act is based on the idea that markets should be organized so that all investors are treated equitably. This trust will be damaged if insiders trade using inside knowledge against public investors. Despite regulations, "market integrity has always been violated for economic gain," the paper says. Insider trading and market manipulation are examples. Illegal economic actions hurt businesses, people, and economies. They encourage human trafficking, terrorism, and drug trafficking. Because of illegal economic activity, governments worldwide have strengthened the legal framework that oversees economic markets and modernized the technology that supports them. Brown and Goldschmidt say: Market confidence increases liquidity and lowers capital costs. Investigation to discover odd trading behaviour is an effective strategy. It might affect the whole economy (Ligeti, 2019).

How can Regulation Prevent Market Manipulation and Insider Trading?

Due to globalized economic markets and coordination among exchanges and regulators, legal frameworks are often uniform across states, especially in wealthy western economies. Sections 1041A-H and 1043A of Australia's Corporations Act 2001 criminalize market manipulation and associated behaviour. (7.10.3) (Part 7.10, Division 2) A person with inside information who trades an economic instrument likely to be affected by their information is breaching the law under section 1043A. Section 1041A of the Internal Revenue Code prohibits conduct that causes or perpetuates improper economic instrument pricing (Hayward & Maas, 2021).

The essential consideration in unlawful insider trading is whether the knowledge qualifies as insider information and whether a rational individual will anticipate meaningful influence on the value of the economic instrument in question. First, inquire whether the price was "artificial" while investigating market manipulation. Under the law, a person may be convicted of manipulation even if they did not profit from

it. Similar to the U.K. and U.S., Australia bans insider trading and market manipulation. The FCA controls U.K. economic markets and enforces Market Abuse Regulations. The U.K. must comply (MAR). The E.U. developed these rules. After Brexit, they were "onshored" to continue operating in the U.K. Economic Conduct Authority (FCA) recognizes the necessity of combating economic crime to maintain investor trust and market stability. The FCA monitors market usage (FCA). This is "essential for consumer protection, market integrity, and competitiveness" U.K. Criminal Justice Act 1993, part 5 defines criminal insider selling and MAR's civil punishments. Economic Services Act 2012, U/S 89–91 outlines criminal market manipulation. Both are crimes in the U.K. SEC, and FINRA regulates and oversees U.S. economic markets. Both groups offer recommendations on combating market manipulation and insider trading. Despite being defined in section 9 of the Securities Exchange Act of 1934, market manipulation is widely interpreted, say experts. 11 FINRA Rule 2020 is perplexing. No member may use manipulative, deceptive, or fraudulent techniques or artifices to buy or sell securities. Insider trading is the illicit purchase or selling of a company's securities based on non-public information. This is SEC Rule 10b5-1.

Market manipulation involves artificially affecting an economic instrument's price. Insider trading is the inappropriate use of knowledge to affect an economic instrument's price. It is not public, however. In any event, breaking the law may lead to jail time and penalties. Regulators use market monitoring tools to prevent market manipulation and insider trading (MSSs). Brown and Goldschmidt presented computer-based conclusion backing mechanisms to evaluate market occurrences" in 1996. Their article accomplished this. The ASX and NYSE started using these technologies in the 1990s and have developed them subsequently. Li et al. (2015) note that regulators, trading exchanges, and firms employ these systems. This means several parties are deploying these systems (Harris, 2022).

Post-2008 during economic devastation, numerous trading misbehaviour cases accure, economic organizations were keen to integrate MSSs to observe inner processes for hazard reduction. MSSs can predict danger. When considering the possibility of policing economic markets, it is important to know how privatized this sector is. Maximum state governments and financial industry rules depend on market players to self-regulate. Despite strong consequences for illegal economic behaviour, market policing is left to market players. It is important to investigate how economic markets, market actors, regulators, and enforcement organizations self-regulate and detect economic crime. Consider regulators' and enforcers' tools. Consider the influence of new and growing technology (such as A.I. and machine learning) on controlling economic crime.: A.I. and other economic technology may increase size, speed, and connectivity issues. As technology gets increasingly complex, economic missteps may become deadly. According to ASIC and other regulatory organizations, new technologies and market developments may make economic crimes simpler to commit and harder to detect. Next, we will address the issues of regulating economic markets in the era of A.I. and other technologies. Regulators, market operators, and market contestants will be monitored closely (McDaniel & Pease, 2021).

Fairness, Efficiency, and Honesty are the Most Important Things

It is a common problem for law enforcement officers to constantly strive to catch up with the criminal organization or deviant actors. This is unmistakably the situation regarding economic market regulation: Complex criminal organizations continue to use emerging technology and ever-evolving environmental factors to commit increasingly intricate and widespread crimes. As a result, economic institutions are exposed to a heightened danger of criminal behaviour inside and beyond their walls. Increasing market participation, faster transaction speeds, and increased complexity of trading patterns provide critical difficulties for regulators, such as recognizing inappropriate behaviour in light of the large amounts of data generated due to these variables. Regarding data volume, the Australian Securities Exchange handles about 1.2 million transactions daily. 21 According to the Australian Securities and Investments Commission (ASIC), market supervision necessitates using "a portfolio of specialized technologies to identify, analyse, and react to activity in our dynamic economic markets." This is because market oversight necessitates the collection of large amounts of data (Nadimpalli, 2017).

The International Organization of Securities Commissions (IOSCO) has also said that some kinds of trading, such as High-Frequency Trading (HFT), threaten current monitoring systems. These difficulties present the following questions: Are investigation warnings sufficient and correctly regulated for such a transaction? Can investigation databases manage the bulk of data created by high-frequency trading? Another obstacle the police must overcome is proving that the objectionable behaviour was unlawful. When the behaviour results from an automated system or piece of software with artificial intelligence, setting a goal is often necessary but may be more difficult. This issue directly impacts regulators, law enforcement, market players (trading businesses), and economic markets (trading venues). Even if they are not required by law to do so, these actors may wish to look into the potential that the suspicious behaviour is criminal before reporting it to the authorities. It has become increasingly challenging for compliance teams to connect the dots between the behaviour and its objective, from insider trading to market abuse to determining whether or not a client is fit," says the report. Due to this, many incidents are only discovered after inappropriate behaviour and harm have been done via time-consuming manual evaluations (Rouhollahi, 2021).

Research Finding

It presented an overview of artificial intelligence's usage by police in general and demonstrated the challenges and possible advantages of employing A.I. in economic crime investigation and prosecution. The following are key findings from this study that might be applied to economic crime and the use of A.I. by police. The following lessons will emphasize the essential considerations that should be taken when regulating A.I. technologies, particularly its application in economic markets trading. The following principles are seen to be a good initial opinion for additional exertions to acclimatize the usage of artificial intelligence (A.I.) to police and enhance policing practices to respond to A.I.:

1. Artificial intelligence may have benefits for police in general. Still, possibilities and dangers must be carefully considered, and attention must be given to the aim of policing and if A.I. is efficiently accomplishing the purposes of the legislation being enforced.

2. Artificial intelligence, whether in economic markets or elsewhere, may not always be the appropriate instrument for policing the usage of artificial intelligence. When it comes to regulating artificial intelligence, more traditional regulatory approaches may be necessary at times. One of these strategies is establishing processes and procedures that must be followed while building A.I. technology.

3 It may be able to employ A.I. in the context of police economic crime to design legal remedies and test and adjust legal frameworks to avoid wrongdoing;

4. No matter how much A.I. is used in police, having a better grasp of how it is created and used would increase the efficiency of policing and law enforcement in those situations; this includes the environment (Dworzecki & Nowicka, 2021).

Discussion

The uppermost apprehension for market players is maintaining high levels of compliance and monitoring to protect their company's image. The same poll found that most businesses prioritize automated procedures and specialized technology for trade monitoring above other compliance domains like fighting corruption and money laundering. The NASDAQ study also noted reduced false positives in monitoring and reporting as a serious issue. A false positive occurs when a system flags a transaction as potentially illegal when it is almost certainly legal. IOSCO's 2012 market investigation research provides a clear picture of the problems that must be solved in order to monitor economic markets effectively. Trading platforms have become more automated, trading algorithms have advanced, and trading volume has greatly grown. Additionally, trading activity has spread across multiple platforms, making management and monitoring difficult. Thanks to technological advancements, investors may now trade across several markets, asset classes, and borders in milliseconds. Markets have become far more vulnerable to fraudulent conduct due to these improvements. This is because traders now have more opportunity to engage in complicated manipulative behaviour that

is difficult to detect, which has raised the probability of such activity occurring dramatically (Nadimpalli, 2017).

The IOSCO research also evaluates automated techniques for monitoring through controllers, transaction places, and market contestants. Because of enormous data volumes and high false-positive rates, these mechanisms need human input and interpretation. IBM Research, released in 2019, tackles the problem of false positives in trading venues' detection algorithms and investigation software solutions. It is not unusual for economic institutions to have false-positive rates of well over 90%, which means they get warnings of potentially suspicious behaviour but do not file a suspicious activity or suspicious transaction report.' A high false-positive rate is what this is referred to as. In reality, AML alerts are notorious for producing many false positives. This is due to a combination of utilizing archaic technology and having data that is both incorrect and incomplete. Additional issues have been identified by self-regulatory players like trading companies and market contestants (Dworzecki & Nowicka, 2021).

According to a 2019 survey of compliance and investigation departments in financial service companies, the most frequent challenge is that investigations take too long (45%). Other challenges include outdated systems and tools (42%), a high rate of false-positive alerts (40%), and too much data to analyse in the time allotted (40%), as well as outdated systems and tools (29 percent). Market manipulation and insider trading are examples of economic crime laws that are difficult to apply due to the volume of data, the pace of transactions, and complexity. Similar problems are faced by regulators and self-regulatory entities like exchanges and trading firms. However, the objective of enforcement versus compliance varies by participant. Technical advancement and A.I. might add to each division's issues and dangers. Given the limitations above, utilizing A.I. to enforce economic market regulation seems appealing. When police economic crime involves employing existing technology, innovative technologies are an intriguing answer. Economic markets, market contestants, and supervisory agencies employ A.I. to identify illegal behaviour, assure compliance, and enhance enforcement activities. The following sections describe A.I. for police and law enforcement. It examines A.I. threats in law enforcement and economic market regulation. Then, A.I. in economic market regulation is examined. The findings of this study and interpretation of the current condition of the field are then utilized to provide future lessons. These lessons include the possibility for more A.I. usage in law enforcement in general and cautionary remarks about the employment of A.I. in specific issue areas (Petit, 2018).

Conclusion

In conclusion, artificial intelligence is a reality, and the technology associated with it will continue to evolve. Due to these innovations, authorities will be able to address deviance and unlawful behavior in novel ways. To respond, law enforcement must use A.I., but they must be mindful of the inherent risks and limitations. Keep in mind that the requirement for accountability and explicability, as well as the issues arising from firms and people selling A.I. software, are equally borne by those who build it. Lin's findings reveal that society cannot accept the outputs of A.I. systems without appropriate research and understanding of their repercussions. Moreover, it is essential to realize that artificial intelligence is not a panacea for police problems; on the contrary, it may exacerbate and prolong problematic police practices. Law enforcement in general and economic criminal policing need a greater understanding of artificial intelligence's nature, how A.I. technologies may be deployed and created, and what measures will be most appropriate given clear and transparent regulatory aims. Collaboration will be required between market participants, trading venues, and regulators. To guarantee that their A.I. technology is informed and accepted, police agencies should engage with the wider community, including A.I. professionals, legal scholars, ethicists, and members of the public. This suggestion applies to all law enforcement officers.

Acknowledgments

None

Conflict of Interest

Author has no conflict of interest.

Funding Source

The author received no funding to conduct this study.

ORCID iDs

Naheeda Ali[1] https://orcid.org/0000-0003-2587-9608

References

Berente, N., Gu, B., Recker, J., & Santhanam, R. (2021). Managing artificial intelligence. *MIS quarterly*, *45*(3), 1433-1450.

Dworzecki, J., & Nowicka, I. (2021). Artificial Intelligence (AI) and ICT-Enhanced Solutions in the Activities of Police Formations in Poland. In *Artificial Intelligence and Its Contexts*, *31*, 161–181.

Harris, H. (2022). Artificial Intelligence and Policing of Financial Crime: A Legal Analysis of the State of the Field. *Financial Technology and the Law*, *21*, 281–299.

Hayward, K. J., & Maas, M. M. (2021). Artificial intelligence and crime: A primer for criminologists. *Crime, Media, Culture*, *17*(2), 209–233.

Hamet, P., & Tremblay, J. (2017). Artificial intelligence in medicine. *Metabolism*, *69*, S36-S40.

Holzinger, A., Langs, G., Denk, H., Zatloukal, K., & Müller, H. (2019). Causability and explainability of artificial intelligence in medicine. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, *9*(4), e1312.

Holmes, J., Sacchi, L., & Bellazzi, R. (2004). Artificial intelligence in medicine. *Ann R Coll Surg Engl*, *86*, 334-8.

Levi, M. (2007). Policing financial crimes. In *International handbook of white-collar and corporate crime*, *21*, 588–606.

Ligeti, K. (2019). Artificial Intelligence and Criminal Justice. *AIDP-IAPL International Congress*.

McDaniel, J. L., & Pease, K. (2021). *Predictive Policing and Artificial Intelligence*. Routledge, Taylor & Francis Group.

Nadimpalli, M. (2017). Artificial intelligence–consumers and industry impact. *International Journal of Economics & Management Sciences*, *6*(03), 4–6.

Neil, J. F. G. J. M. (2008). The role of private sector organizations in the control and policing of serious financial crime and abuse James F. Gilsinan James Millar Neil Seitz James Fisher Ellen Harshman Muhammad Islam Fred Yeager. *Journal of Financial Crime*, *15*(2), 111–123.

Nicholls, J., Kuppa, A., & Le-Khac, N.-A. (2021). Financial Cybercrime: A Comprehensive Survey of Deep Learning Approaches to Tackle the Evolving Financial Crime Landscape. *IEEE Access*, *15*, 588–606.

Petit, N. (2018). Artificial intelligence and automated law enforcement: A review paper. *International Journal of Economics & Management Sciences, 7*(02), 44–56.

Qoyum, A. (2018). Maqasid Ash-Shari‘ah framework and the development of Islamic finance products: The case of Indonesia. *Tazkia Islamic Finance and Business Review*, *12*(2).144-154

Rouhollahi, Z. (2021). Towards artificial intelligence enabled financial crime detection. *ArXiv Preprint ArXiv:32(2105.10866)*.