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Understanding How Digital Tool Innovate the Development of Law Enforcement in Indonesia (An Analysis Study to International Law and Technology Publication)

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Abstract---Our findings include preventing, responding, and checking for errors; police organizations currently use various digital applications such as surveillance cameras, shot identification frames, programmable tag scanners, facial recognition programs, body cameras, drones, and various information bases. As legal authorization has advanced in mechanics such as robotics, GPS labeling systems, and other advanced technologies, these are just a few examples of how advances in technological innovation in law enforcement provide mutual protection and justice. We found all the findings above after reviewing dozens of articles published in journals; and databases such as Sagepub, Academia, Taylor&France, Google Books, and websites. We design this study qualitatively relies on secondary data to understand how the latest technology has supported law enforcement efforts, especially by the police and other legal servants.

Keywords---digital technology, law enforcement, legal apparatus, publication review

Introduction

Lately, technological innovations have affected the needs of human life and work, including applying the law for the sake of justice for all citizens (Erfani & Tavakkoli, 2018). Overall, technological innovations have resulted in many benefits for authorizing legal instruments and tools. Cutting-edge innovation hardware can reduce job shortages, further develop worker safety, and assist officials in handling their responsibilities without much trouble (Bason, 2018). However, technology with its innovation can also be a stressor for officials when it is not handled optimally and wisely. How is PC innovation used in legal authorization? This requires study and experimentation. In recent years the use of PCs for legal purposes has proliferated, marked by the increasingly innovative handling of the law towards justice. This PC is responsible for getting rid of complex programs that allow law enforcement police, prosecutors, courts, and judges to quickly and accurately direct investigations than conventional methods. In addition, technology also stores data sets, becomes a rich source of knowledge and as a way of communication for subsequent development (Chen et al., 2012).

Pell & Soghoian (2012), say that legal authorization and the computerized world are now the most innovative partners in law enforcement. Due to computerized legal authorizations, massive information checks, geographic profiling, advanced legal science, policy-driven insights, Internet checks, and others. PCs have empowered new strategies that are currently critical for tool deposit legal requirements (Mascarenhas et al., 2012). This is not the default everywhere yet, but it will be in the years to come. Likewise, with advances in legal authorizations, police officers today can use surveillance cameras, shot identification frames, programmed tag readers, facial recognition programs, body cameras, drones, and various information bases to prevent, react to, and investigate violations. All of these digital tools have innovated the workings of the legal apparatus for the sake of upholding justice in a modern and high-efficiency way (Fish et al., 2013).

Digital data access and information system support are very helpful for law enforcement officials in authorizing legal certainty because legal apparatus can access profitable data quickly and precisely related to integrated data and

easy access to information. This also minimizes the risk of errors and errors in checking and processing data against the law (Lum et al., 2017). The basic need of law enforcement is an effective and valid way of working. Therefore, law enforcement officers need innovative ways of working according to their work in the digital era among law enforcement agencies because now there is no guarantee that legal officers can work with the system following progress demands advanced age (Kioumourtzis et al., 2021). This is evidenced by field requests that focus on doubling how effective data frameworks are up to date in truly task-oriented implementations, including enforcement of legal certainty (Mat Kamal et al., 2019). This digital way of working has been studied more thoroughly than the legal apparatus' recognition of increasingly demanding work arrangements (Evgenii & Cocou, 2020).

Regarding digital technology innovation in regulating the smooth running of legal administration, Cahyadi (2020), explained that technology system administration helps law-implementing organizations run more effectively, reduces manual work, and helps with data collection. Computing helps non-stop with unrivaled speed for submitting reports, reducing administrative work, and eliminating redundancies. As for cameras, both fixed and mobile cameras are very important because they can provide evidence that is expected to strengthen the evidence against a state of original evidence, help protect people, and help prove events (Adjomi, 2020). Regarding the Ground Position system (GPS), in particular, the GPS bolt allows the police to fire bolts at the target vehicle to attach to the approaching vehicle on the chased vehicle and then track the vehicle with GPS technology on the arrow. Using this GPS bolt can help with the search for goods and the need for a super-fast search that can help eliminate the dangers of legal investigations and innocent people. It is critical to identify innovative uses for intelligent devices, from phones to tablets, taking into account their productivity and flexibility (Sampouw, 2020). These instruments can help police report incident reports quickly and remotely, take photos, access police records, obtain data on state violation information bases, and that is only the tip of the iceberg. In essence, this innovation enables law enforcement officials to recover the information they need quickly and proficiently anywhere.

Then, at the same time, the use of digital equipment for legitimate individual defense purposes, such as weapons, immobilizers, Kevlar vests, or various types of security to ensure that the police are equipped with defense equipment in carrying out their obligations (Sevindik, 2003). These technological tools provide genuine authority, reassurance, protection, and serenity in jobs that are very intense and sometimes unusual in terms of the type and timing of danger. Considering the possibility of unexpected attacks by lawbreakers, facilitating legal apparatus with completely safe digital technology is a protected innovation right. Each task has the meaning of innovation that is protected by law (Redelmeier et al., 2003; Polinsky & Shavell, 2001). Legal governance issues strongly influence the meaning of licensed innovation rights in various countries and the principles of legal certainty applied in each country (Clò et al., 2020). The progress of world exchange has been going very fast and has pushed the progress of technology exchange to be more rapid and adaptive, in which all countries must open their access to technology—individual safety business sector. The globalization of the world exchange of technology, which unavoidable borders between countries cannot separate, has expanded the exchange of information through digital technologies such as the exchange of data and information. So, with the start of the technology application sector to facilitate the duties of domestic and foreign legal apparatus as one of the results of globalization/expansion of the latest technology exchange, this has encouraged examples of legal rights to protected innovation rights and protects all citizens (Setiawan & Prabawati, 2018).

Thus, based on evidence and experience from various contexts, we believe this digital communication technology has contributed to the smooth implementation of law enforcement tasks in many countries. So, we want to get input on original evidence from studies and publications before getting an in-depth understanding. Finally, we decided to review much literature from various publications about the ability of digital technology to innovate the work and duties of the legal apparatus in carrying out their respective duties (Power, 2013; Kellermann, 2010; Hunton, 2011).

Method

In the following, we describe how we carried out the study at a glance, especially the data search and analysis method until we found data to answer this legal and technology study question (Hermesen et al., 2016; Xavier, 2015; Nahak, 2017). First, we collect data from various law enforcement science literature and technological advantages commonly used by law enforcement officers such as police and other officers. After we found the data, then we understood well what the understanding of the study question was and the purpose of the new study; we tried to analyze the data by involving a data coding system, critical evaluation, and retrieving core data that was valid and believed to have answered the core question. We rely on secondary data considering that our study wants to understand the study's results and the existing literature. To make it easier, we have designed this study as a qualitative study by obtaining a writing model from the study of other research papers (Sgier, 2012).

Result and Discussion

Advances in technological innovation in the modern upheaval 4.0 have brought significant changes to regular daily life, including the country's life and the development of legal services (Kurniawan, 2020). However, the advancement of technological innovation also does not fully bring its convenience and enjoy the benefits. For example, artificial brainpower, one of the advances currently generally used and created in various disciplines of logic, is the law. Dila et al. (2020), said that technological innovation has consistently made it easier for legal officials to serve the community in the legal field. However, what has happened has resulted in an advanced government, where innovation continues to develop rapidly, so legitimate scientific developments follow a mechanical turn of events. "With the basis of instruction, especially law and innovation. So far, there is much evidence that has not discussed the law that is hampered by innovation. As many people think, the law does not pass the point of no return with an innovative turn of events, so that the law must advance its services in the Industrial Revolution era 4.0; thus, the convenience that technology has must be able to bring significant benefits to legal services for the same justice (Simatupang, 2021).

Evidence from previous studies clarifies that with the changing times and advances in technological innovation, the world of legal services is increasingly open and accessible, where all data is available more effectively and quickly (Umamah, 2017). Likewise, today's individual information can be effectively spread and accessed by anyone without adequate security guarantees. This is when legitimate legal service jobs are expected to control and supervise lest individuals do not misuse technological innovations, and many other legal jobs need legal protection. It is admitted that relatively few legal guidelines regulate the laws and guidelines governing the use of technology in the course of the changing times and this technological shift (Whitelaw et al., 2020; Pagani & Pardo, 2017). Legal officials have not thoroughly discussed Laws on the security of individual information. It is conceivable that different guidelines identified with data innovation should be controlled, call it the Cyber Security Bill. If there is no such guideline, take advantage of the Electronic Information Technology Law, which regulates that all citizens can be guaranteed individual and collective rights (Syahri, 2010). The guarantee of freedom of speech in the media in controlling information rules and online transactions.

The innovative progress of legal services has entered stages and assessments due to technology adoption (Sheppard, 2015). Nonetheless, today's web-based legal services are entering the forefront of innovation, yet many individuals still fail to see how to use them. "This is a different problem. In addition, state executives also need to take advantage of innovation to make it easier for each citizen to request services for their rights. Badri (2020), said that data innovation is developing. In this regard, individual rights must be fully protected. Digital records, all violations will be easily protected by using data innovation media and protecting individual rights. If someone violates the law on the rights of protected people, then the law is a solution with the ultimate goal of justice. This must be a collective commitment of law enforcement, but once the state has information about law violations, legal technology innovation solutions will immediately act, especially legal assets, and individual innovation rights must be guaranteed. Sururi (2016), said technological innovation plays a vital role in seeing how the law functions in a working legal system. For example, Cyberlaw online has developed a lot by utilizing today's innovations in running the organization's wheels. In addition, the law is a stage that is very worrying about the progress of the legal world, ranging from news, facilities, server farms to laws and guidelines (Ketaren, 2016).

Currently, digital trends are not only foreign devices where almost all public service sectors use the latest technological innovations. Therefore, it is straightforward for users and the general public to understand the law of public services. Prasetyo (2021), says police technology is promising: experience, challenges, and policy requirements in terms of technology. The results of this study involving all police departments and other law enforcement agencies from 10 countries have been released. For prevalence and suitability, results such as eavesdropping attempts, fingerprinting, DNA research, database linkage, video surveillance, and network analysis were assessed.

The proof of this study asks the extent to which police technology has been evaluated and has produced success stories, as well as legal, technological, and organizational barriers to its use in the police, all of which have been investigated with pretty good results where the advantages of digital technology greatly assist the duties of the legal apparatus (Golose, 2018). Furthermore, advances in information technology during the Industrial Revolution 4.01 have had a broad impact on various aspects of citizens' lives and legal services. It must be admitted that not all nations are on a smooth path in this current era, with the potential to grow big and strong or perhaps be the beginning of the end of a disaster. In today's world, speed and accuracy are the essential factors in achieving success and success in various sectors, including implementing legal processes in serving public rights in a government agency (Lindgren & Jansson, 2013; Nugraha et al., 2021).

Brey (2017), argues for the theory of technological progress and its function in handling crime and law enforcement for justice with particular reference to digital applications for approaches and speculation in terms of science and innovation and ways of thinking about innovation. The main finding of this study is about the work of innovation in the eyes of the public. This section distinguishes the main classes of wrongdoing and their legal authorization to characterize the technological innovations used by these law enforcers and their work in understanding law enforcers' goals for justice in the eyes of state law (Naslund et al., 2017; Fairburn & Patel, 2017).

If looking at the principle of the benefits of modern technology for law enforcement, this illustrates technology and the police. Law enforcement officials and others in the justice system are increasingly making use of technology. This is to fight crime because more complex crimes are committed with it. It is critical for the criminal justice system to use up-to-date software, tracking systems, and other tools to maintain public safety and preserve the lives of every citizen in need of justice and protection (Mitchell & Boyd, 2014). So, understanding the role of technology in the context of the state, especially law, becomes essential for every citizen. In particular, the role of computer technology in law enforcement can be understood as very important. Because the use of computers in law enforcement has been prevalent in recent years, these computers are tasked with storing complex software that allows police to conduct investigations quickly. They also function as data stores, sources of information, and means of communication. Abebe et al. (2020), added that the role of computerization in changing social life and legislation is enormous today. So, every citizen, especially law enforcement, must be compatible and applicable with technology.

The trend of technological progress undoubtedly has several consequences that must be foreseen and monitored. In the law on information and electronic transactions, this work finally resulted in a legal product. However, even with the ITE Law's enactment, not all ITE issues can be resolved (Notanubun, 2014). These problems arise, among others, because: First, with the legalization of ITE, the public and legal practitioners can learn about this law through information technology. Second, various forms of technological advances that result in new implementations and services must be identified first to overcome various technical problems that are considered new so that they can be used as sources for making various implementing laws. Third, expanding the sectoral field of law will help revive the dynamics of the law, which will become part of the national legal system.

The following study results, we can present some of the top-of-the-line technologies often applied by police officers in their field duties, which include cameras equipped with robotic motion systems, handheld laser devices, tracking devices, and identification of digital police license plates aircraft tracking devices without pilots, GPS trackers of illegal vehicles, thermal satellites, gunfire detectors, and forest fire smoke detectors (Custers, 2012). The job of computerized innovation in diminishing wrongdoing has been demonstrated to empower lawbreakers to carry out unlawful demonstrations online against others due to the accommodation of innovation, like the Internet and web-based media stages, making it conceivable. Simultaneously, the criminal equity framework can utilize innovation to help stop, identify, or keep these wrongdoings from occurring in any case. Then, at that point how innovation adds to the increment in wrongdoing. Advances in Information Communication Technology (ICT) influence Indonesian culture, yet in addition, affect wrongdoing. This grows criminal prospects and draws people to carry out violations, bringing about an unrivaled expansion in crime percentages (Olayemi, 2014).

Seeing the role of computers in law enforcement today, law enforcers need to understand the reliability of the Internet, which is full of helpful material to assist law enforcement. For successful crime-fighting, constant contact between police headquarters and patrol cars is necessary. Computers also facilitate the exchange of critical information across various government departments (Gottschalk, 2006). Now in what ways can the state-of-the-art police technology be used in the duties and responsibilities of criminal investigations it involves high-performance computer systems and Internet technology. All of these technologies help improve monitoring and investigation while simplifying the analytical process. Certain police officers use even advanced cell phone technology. Computer-Aided Dispatch (CAD) software is one of them. As for the type of technology used by detectives in crime scene investigators, forensic scientists, and police officers can quickly and efficiently compare fingerprints at crime scenes with a vast virtual database using magnetic fingerprinting and automatic fingerprint identification (Custers & Vergouw, 2015).

All the more profoundly, in law authorization, there is a component of data innovation that can help the lawful device in upholding the law. In doing law implementation obligations, it is feasible to utilize data innovation in different manners to help police work, like using different apparatuses for dissecting information, like geographic data frameworks, and recording wrongdoings in data sets (Jelokhani-Niaraki et al., 2020). Similarly, with the endeavors of computerized instruments, for example, artificial consciousness utilized in law requirements. What artificial brainpower helps in law is, for instance, to portray PC frameworks intended to impersonate human

intellectual cycles. This incorporates AI, which requires calculations that recognize designs in information and utilize these new examples to mechanize specific assignments (Rademacher, 2020).

Law authorization regularly utilizes these accounts to examine wrongdoings whenever they have happened and get guilty parties. For instance, facial acknowledgment is not the only thing AI can accomplish with these pictures; it can also distinguish complex articles and occasions like fender benders. Artificial reasoning is alluded to as AI (Berk, 2021). Hence, computerized reasoning is regularly acquiring footing in different fields, including law implementation. A few police divisions are now utilizing artificial consciousness (AI) to help anticipate and recognize dubious people and places. While the effect of artificial consciousness on law offices stays, for instance, AI has changed the lawful calling in various manners, yet by and sizeable artificial reasoning supplements what people do and permits them to focus on more elevated level errands like exhorting customers, drafting arrangements, and show up in court (Chandra et al., 2020).

The following inquiry is whether the FBI utilizes computerized reasoning in doing lawful obligations. Our discoveries recommend that the FBI is creating artificial consciousness and AI advances to identify deliberately changed fingerprints. The FBI has made it simpler for the population to view and scrutinize their criminal records (Moore, 2019). Similarly, with the job of artificial consciousness (AI) in wrongdoing counteraction. for this situation, organizations can utilize AI to recognize possible spaces of extortion, tax evasion, and militant psychological financing — just as more actual wrongdoings like worker burglary, digital misrepresentation, and fake solicitations to help government specialists indict this infringement all the more rapidly and adequately (Walters, 2018).

Conclusion

We have answered the purpose of this study by presenting the findings after discussing the data from the study, which aims to gain an in-depth understanding of the role of technology in supporting the work of legal apparatus such as the police in carrying out their duties to protect citizens while trying to provide legal protection for mutual justice. In short, we can say that digital technology has become the most up-to-date tool today, which is used in education and law enforcement. Digital technology was chosen because of the usefulness principle possessed by technology that has proven successful in renovating the duties of legal authorities so that their duties become more effective and productive compared to the way they worked in the days before the invention of advanced technology. So hopefully, the results of this study will be helpful to many parties, especially the legal apparatus and similar research studies, in the future.

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