

## PROTECTION OF VICTIMS OF BURGLARY AUTOMATIC TELLER MACHINE WITH CARD SKIMMING TECHNIQUE (STUDY AT LAWEYAN POLICE STATION)

<sup>1</sup>Diniar Hapsari

<sup>1</sup>Universitas Duta Bangsa Surakarta

[202020497@mhs.udb.ac.id](mailto:202020497@mhs.udb.ac.id)

---

***ABSTRACT:** Skimming cases are one of the many cases found in this digital age. Regarding the skimming case, the perpetrator can be charged with Article 363 paragraph (1) Number 4 of the Criminal Code, but it can also be charged with Article 46 of Law No. 11 of 2008 on information and Electronic Transactions. However, even though there are clear legal rules, skimming cases are still found in the field. The problem in this study is how the modus operandi of criminal acts skimming, how the Prevention of criminal acts skimming and how the legal protection of victims of criminal acts ATM burglary (Automatic Teller Machine) with card skimming techniques. The type of research used in this study is empirical juridical where data obtained from interviews in addition to data also obtained from literature studies. Data collection techniques were conducted by interviews at the research site where using accidental sampling techniques. After obtaining the data then the data is analyzed qualitatively. After conducting the study, the researchers concluded that the form of legal protection provided to victims of skimming crimes in the Laweyan Police Area is through preventive legal protection and repressive legal protection.*

***Keywords:** legal protection, victims, skimming*

### INTRODUCTION

Advances in science and technological developments have pushed people to a more advanced life, because the use of technology always affects people's minds and lifestyles. Technology is basically created to improve the quality of life and facilitate human activities in carrying out daily life.

The rapid development of innovations such as Personal computers (PCs), communication media, and data, supported by organizations as vast as the web and further having an ever-growing pace, makes it easier for people to complete life, where people from different lands and even regions of the world can communicate using only telecommunication devices such as

Personal computers (PCs) and mobile phones without meeting up close and personal, and different types of data can be effectively given complexity and practice. This signifies that the digital period in the business world has begun.<sup>1</sup>

The development of the Times and technology, the banking sector makes a new service that uses electronic transactions (e-banking), or mobile phones, and also the internet network. With these developments, one of the products of technology in the field of banking that can facilitate transaction activities without the need to go to the teller is an ATM machine (Automatic Teller Machine). ATM (Automatic Teller Machine) is a computerized device used by banking institutions as an effort to provide a system of financial transaction services in public places without using bank employees.<sup>2</sup>

The development of increasingly modern times and innovations, actions only have a positive impact but can also have a negative impact, one of which is the development of digital violations that develop into various new violations with new business as usual. For example, the types of digital errors continue to multiply. Cybercrime or cyberspace, is a crime committed by utilizing a network of Personal Computer (PC) frameworks, which are electronic frameworks that must be seen to practically engage web organizations and subject other web clients to victimization or targeting. This mistake is an injustice that is difficult to eradicate, considering that the culprit is an expert in his field.<sup>3</sup> Examples of cyber crimes range from widely known, for example, hacking, break-ins, skimming and carding, to more specific, for example, probes (attempts to gain access to frameworks); scans; split account discrepancies (illegal utilization of archives); and administrative or dos denial (rendering organizations non-functional).<sup>4</sup>

The case of skimming is one of the many cases found. This is due to the ease of electronic exchange by utilizing media used for exchange such as cards (both Automatic Teller Machine (ATM)/Charge cards and Debit cards). From the crime data in the banking sector, it is known

---

<sup>1</sup> Niniek Suparni, 2009, *Cyberspace Problematika dan Aplikasi Pengaturannya*, Jakarta: Sinar Grafika, hlm. 1.

<sup>2</sup> Jovin Ganda Ramadhan, dan Sumiyati, 2019, *Perlindungan Hukum terhadap Nasabah Korban Skimming Ditinjau Dari Undang-Undang Nomor 8 Tahun 1999*, Mimbar Keadilan, Vol. 12, No. 1.

<sup>3</sup> Budi Suhariyanto, 2013, *Tindak Pidana Teknologi Informasi (Cybercrime): Urgensi Pengaturan dan Celah Hukumnya*, Jakarta: Rajawali Pers, hlm. 17.

<sup>4</sup> Mahesa Jati Kusuma, 2012, *Hukum Perlindungan Nasabah Bank: Upaya Hukum Melindungi Nasabah Bank Terhadap Tindak Kejahatan ITE di Bidang Perbankan*, Bandung: Nusa Media, hlm. 2.

that the percentage of skimming cases is 30%.<sup>5</sup> In the development of skimming strategy has really been done by criminals in the Financial Field from long ago. The method of breaking into a customer's Automatic Teller Machine (ATM) card through a skimming process first occurred in 2009 at a Citibank ATM in Forest slope, California.<sup>6</sup>

Regarding the skimming case, the perpetrator can be charged with the Criminal Code (KUHP) in Article 363 paragraph (1) Number 4, where the perpetrator can be sentenced to imprisonment for a maximum of 7 years. In addition, the offender may be charged under Article 46 jo. Article 30 or Article 47 jo. Article 31 of Law Number 11 of 2008 on information and Electronic Transactions where the perpetrator can be threatened with imprisonment between 6 years to 12 years plus a fine.<sup>7</sup> However, even though there are clear legal rules, skimming cases are still found in the field.

As recently happened a Bank Central Asia (BCA) customer domiciled in Bandung admitted that his account was breached and lost hundreds of millions of rupiah, and pelau allegedly applied skimming mode. In addition, at the end of last year there was also a skimming criminal case at Bank Jateng Klaten Branch, Central Java where there were 53 victims and losses reached Rp. 1.6 billion.<sup>8</sup>

Based on the description above, the researcher is interested in doing “**Protection Of Victims Of Burglary Automatic Teller Machine With Card Skimming Technique (Study At Laweyan Police Station)**”.

## Problem

Based on the back end of the research that has been described above, can be used to solve the problem of the study in this study which is a statement in the form of Agriculture, namely :

1. How does the modus operandi of criminal skimming act?
2. How to prevent criminal acts of skimming?

<sup>5</sup> Dian Chisva Islami, Khodijah Bunga, dan Candiwan, 2016, *Kesadaran Informasi Pada Pegawai Bank X di Bandung Indonesia*, INKOM, Vol. 10, No. 1.

<sup>6</sup> Nevita Sari, 2019, *Perlindungan Hukum Bagi Konsumen Nasabah Dalam Card Skimming (Studi Kasus Bank BNI Syariah Pusat Di Jakarta)*, Jurnal Reformasi Hukum, Vol. 23, No. 2.

<sup>7</sup> Akhmad Zaenuddin, S.H, M.H, “Kejahatan Skimming ATM, Begini Hukumnya”, dalam Berita Kompas Tanggal 27 Juli 2021 yang Diakses Pada : [https://www.kompas.com/konsultasihukum/read/2021/07/27/060000780/kejahatan-skimming-atm-begini-hukumnya?page=all&jxconn=1\\*x0otaj\\*other\\_jxampid\\*SkIVc2ZThwSW9RdWMwM010X0d^MWtJMEo30Utx0DRCck9QRnP oU19LQIZFYw..#page2](https://www.kompas.com/konsultasihukum/read/2021/07/27/060000780/kejahatan-skimming-atm-begini-hukumnya?page=all&jxconn=1*x0otaj*other_jxampid*SkIVc2ZThwSW9RdWMwM010X0d^MWtJMEo30Utx0DRCck9QRnP oU19LQIZFYw..#page2) (Tanggal 14 Agustus 2022 Pukul 12.34 WIB).

<sup>8</sup> Desy Setyowati, “Selain BCA, Bank BUMN Pernah Hadapi Kasus Skimming”, dalam Berita Katadata Tanggal 29 Maret 2022 yang Diakses Pada : <https://katadata.co.id/desysetyowati/digital/6242c72e3d223/selain-bca-bank-bumn-pernah-hadapi-kasus-skimming> (Tanggal 07 Agustus 2022 Pukul 13.00 WIB).

3. How to protect the law of victims of criminal acts of breaking into automatic Teller machines with card skimming techniques?

### **Research Methods**

Research Approach by Legal research is a scientific activity in relation to certain techniques, Systematics and considerations that plans to concentrate on one or another specific legal phenomenon by means of solving it.<sup>9</sup> This study uses the method of empirical juridical approach, which focuses on the implementation of the regulation of a real regulation on certain legal events that occur in society.<sup>10</sup> Research Object of this study is how the modus operandi of criminal acts skimming, then how the Prevention of criminal acts skimming and how the legal protection for victims who are harmed by criminal acts skimming.

The types of data used include primary data and secondary data. The types of data in this study are as follows :

- a. Primary Data

Primary Data is data taken directly by the researcher to the source without any mediation. Primary Data can also be interpreted as data in the form of verbal or verbally spoken words, gestures or behaviors performed by subjects who can be trusted. The Data that the authors take is information from the field obtained through interviews at the research location.

Primary Data is information that is brought directly by the researcher to the source without intermediaries. Primary Data can also be deciphered as information in verbal or expressed words, signals, or ways of behaving that the trusted subject resolves. The information obtained by the creators is data from the field, obtained through interviews at the place of research.

- b. Secondary Data

Secondary Data are sources that do not directly provide information to information collectors. Secondary Data can also be described as information taken not from the first source or not from the main source, while the researcher implies a reference or supporting literature study of the title of the scientific work to be researched and support

---

<sup>9</sup> Soerjono Soekanto, 1986, *Pengantar Penelitian Hukum, cet. Ke-3*, Jakarta: UI-Press, hlm. 43.

<sup>10</sup> Abdul Kadir Muhammad, 2004, *Hukum dan Penelitian Hukum*, Bandung: PT.Citra Aditya Bakti, hlm. 53.

in writing the proposal, and taken from the second, third, and other sources. In addition, secondary data in this study consists of laws such as the Criminal Code, Law No. 11 of 2008 on information and Electronic Transactions, Law No. 8 of 1999 on Consumer Protection, Financial Services Authority Regulation Number 1 / POJK.07/2013 on Consumer Protection of the Financial Services sector and Bank Indonesia Regulation No. 9/15/PBI / 2007 on the application of Risk Management in the use of Information Technology by commercial banks.

In this study using data sourced from interviews with one of the police in the District sector Laweyan Surakarta. According to Syamsudin and Visman S. Damainti, an interview is a meeting of two people to exchange information and ideas through questions and answers, so that meaning can be constructed in a given topic.

## **Discussion**

### **1. The Modus Operandi Of Criminal Skimming**

As a result of the rapid development of Science and technology, many countries are not ready to anticipate these changes by producing legal products. In essence, the skimming crime that arose in the era of modern technology is a manifestation of social ills caused by a lack of legal awareness and low well-being of society. Skimming crime can certainly be interpreted as part of a social phenomenon or pattern if it is linked from the perspective of legal criminology.<sup>11</sup>

Criminals in the banking industry use skimming techniques to steal customer information contained in ATM (Automatic Teller Machine) cards. The mode is to install the skimmer into the ATM card slot (Automatic Teller Machine). Skimmers are not the only tools used by skimmers. Usually, the perpetrator also uses a surveillance camera (spy camera) to observe the movement of the customer's finger when entering the PIN (Personal Identification Number) ATM card (Automatic Teller Machine). However, due to the increasingly sophisticated skimmer tools used by the perpetrators, surveillance cameras are rarely used. In

---

<sup>11</sup> Komang Aldi Saskara, Ni Luh Gede Yogi Arthani, 2021, *Tinjauan Kriminologi Terhadap Kejahatan Skimming Melalui Atm Di Polda Bali*, Jurnal Mahasiswa Hukum Saraswati (Jumaha), Vol. 01, No. 01.

case of PIN theft (Personal Identification Number), sophisticated Skimmers use a fake PIN PAD.<sup>12</sup>

By using this fake PIN PAD, each key pressed will be recorded complete with the press time. Therefore, it will be useless to cover the hand when pressing the PIN to prevent pin theft. Each customer enters the ATM machine (Automatic Teller Machine), the card is copied automatically to the skimmer machine thanks to sophisticated skimmer technology. PIN (Personal Identification Number) is automatically recorded on the pin-pad unit. Both of these tools will send the data via bluetooth to the main-unit placed a maximum of 25 meters from the ATM machine (Automatic Teller Machine). Furthermore, this main unit will provide notifications to the thief via SMS (Short Message Service). In fact it is not impossible, the thief has got what he wants without taking back the skimmer unit in the ATM (Automatic Teller Machine), because all the data he wants has been sent via GPRS (General Packet Radio Service) to the thief's notebook.<sup>13</sup>

Here's a systematic way of working according to IPDA actors skimming Lilik Haryanto:<sup>14</sup>

- a. The perpetrator is looking for the target of skimmer installation on an ATM machine (Automatic Teller Machine) that has no security, quiet and no CCTV camera surveillance (Closed Circuit Television).
- b. The perpetrator started the theft of customer data by installing a skimmer at the mouth of the ATM machine (Automatic Teller Machine). The perpetrator used a skimmer to duplicate the data on the magnetic stripe ATM card (Automatic Teller Machine) and then cloned it to an empty ATM card (Automatic Teller Machine). This procedure can be done manually, with the perpetrator returning to the ATM (Automatic Teller Machine) to retrieve the previously prepared data chip. However, the collected data can be accessed from anywhere if criminals use more sophisticated skimmers. Usually, data transmission is via SMS (Short Message Service).

The formation of ATM (Automatic Teller Machine) break - ins cannot be separated due to the negligence of the ATM card owner (Automatic Teller Machine) itself. In the crime of breaking into an ATM (Automatic Teller Machine) by skimming method, the victim is

---

<sup>12</sup> Mugianto Sumbodo, 2019, Skimming, Cara Kerja dan Pencegahan Pada ATM, IKRA-ITH Teknologi, Vol. 3, No. 2.

<sup>13</sup> *Ibid.*

<sup>14</sup> Hasil wawancara dengan IPDA Lilik Haryato pada Hari Jum'at, Tanggal 23 September 2022 di Polsek Laweyan.

generally unknowingly recorded video at the time of entering the ATM pin (Automatic Teller Machine) and magnetic tape has been recorded through a special tool. To avoid becoming a victim of ATM (Automatic Teller Machine) theft, every ATM (Automatic Teller Machine) user must always keep his personal PIN (Personal Identification Number) Number secret.

## 2. Crime Prevention Efforts Skimming

The position of the police is very meaningful to overcome and carry out investigations and investigations of theft crime problems by using a skimmer. Policing is an integral part of social policy. Social policy can be interpreted as a rational effort to achieve the welfare of citizens (social welfare policy) and also includes the protection of citizens (social defense policy). So in short it can be said that the ultimate goal or main goal of criminal policy is the protection of citizens to achieve welfare.

Police efforts in tackling crime skimming as one of the criminal acts or crimes that threaten the security of society, of course, these countermeasures are essentially a form of integral Protection of the community. Therefore, criminal law enforcement is part of a crime prevention strategy, with the ultimate goal of protecting the community in order to achieve prosperity. Thus the enforcement of criminal law in the form of improvement of legislation with the application and implementation of criminal law and increase the role of the community to participate in tackling every crime.<sup>15</sup>

Against the rampant crime of skimming, IPDA Lilik Haryanto said there are several prevention efforts that can be done, namely :<sup>16</sup>

- a. Pre-emptive efforts, an initial effort made by the police to prevent the occurrence of a criminal offense. This initial effort is carried out by conducting coaching activities with the intention of influencing the triggering and motivating factors so that a person does not commit a criminal offense. Therefore, despite the opportunities, this aspect of desire is lost in prevention efforts. The prevention efforts carried out by the Criminal Investigation unit of Laweyan police include socialization to the public with BiMas (community guidance) in public places such as villages or markets. In addition, through

---

<sup>15</sup> Barda Nawawi Arief, 2001, *Masalah Penegakan Hukum dan Kebijakan Penanggulangan Kejahatan*, Citra Aditya Bakti, Bandung, hal.48.

<sup>16</sup> Hasil Wawancara, Op.cit

social media the police always post an appeal for the public to be careful in transactions at ATM machines (Automatic Teller machines).

- b. Preventive crime prevention is also tried to avoid the formation or emergence of early crime. Avoiding crime is better than trying to educate criminals to be better again, just as the motto of Criminology is that efforts to correct criminals must be considered and shown to prevent crime from happening again, so avoiding crime is better than trying to educate criminals to be better. It is very reasonable if preventive efforts are prioritized because preventive efforts can be tried by anyone without special abilities and are cheap. Deterrence is better than eradication, deterrence in the theft of money by using a skimmer can be with methods such as coaching and supervision in the family, counseling by competent parties. This aims to reduce or eliminate the problem of money theft by using a skimmer. Preventive efforts carried out criminal unit laweyan police is to patrol the public place there is an ATM machine (Automatic Teller Machine) so as to minimize crime skimming.
- c. Repressive efforts, IPDA Lilik Haryanto explained : for this repressive effort, of course, we do it when there has been a crime/crime, where the actions taken in the form of law enforcement by immediately processing the perpetrators so that criminal sanctions are immediately imposed in this case are arresting and examining the perpetrators so that the file is immediately sent to the prosecutor's Office to be followed up on in the trial.

### **3. Legal protection of victims of criminal acts ATM burglary (Automatic Teller Machine) with card Skimming technique**

Legal protection is a protection given to the subject of law in the form of legal devices both preventive and repressive, both written and unwritten. In other words, legal protection as a description of the function of law, which is the concept where the law can provide justice, order, certainty, expediency and peace.

Theory of legal protection for society Philipus M. Hadjon said that there are two kinds of legal protection for the people, namely: preventive legal protection aimed at preventing disputes and repressive legal protection aimed at resolving disputes.

If the protection of the law according to Philip M. Hadjon associated with legal protection between banks and customers as ATM card users (Automatic Teller Machine) then :

- a. Preventive legal protection serves to provide protection for customers in terms of preventing disputes.
- b. Repressive legal protection serves to provide protection to customers in terms of resolving disputes.

Preventive legal protection against customers according to IPDA Lilik Haryanto can be seen in Article 4 letter e of Law No. 8 of 1999 consumer protection it has been clearly stated that: "the right to obtain advocacy, protection, and dispute resolution efforts Consumer Protection properly."

Based on the Electronic Information and Transaction Act in Article 31 paragraph (2) states "Everyone deliberately and without rights or against the law intercepts the transmission of Electronic Information and/or electronic documents that are not public from, to, and inside a computer and/or certain electronic systems belonging to others, either that does not cause any changes or that causes changes, disappearance, and/or termination of Electronic Information and/or electronic documents that are being transmitted".

Bank Indonesia also regulates in Article 14 of Bank Indonesia Regulation No. 9/15/PBI / 2007 on the application of Risk Management in the use of Information Technology by commercial banks stating that "the Bank shall ensure that information security is implemented effectively by taking into account at least the following matters:

- a. Information security is intended to maintain the Managed Information confidentiality (confidentiality), integrity (integrity) and availability (availability) effectively and efficiently by paying attention to compliance with applicable regulations;
- b. Information security is carried out on aspects of technology, human resources and processes in the use of Information Technology;
- c. Information security includes the management of bank assets related to information, Human Resources Policy, physical security, access security, operational security, and other aspects of the use of Information Technology;
- d. Incident Management in information security; and
- e. Information security is applied based on the results of risk assessment on the information owned by the Bank.

Beyond the preventive legal protection above, IPDA Lilik Haryanto also explained repressive legal protection regulated in Financial Services Authority Regulation Number 1/POJK.07/2013 on Consumer Protection of Financial Services Sector Article 29 states “Financial Services Business actors shall be responsible for consumer losses arising from errors and/or negligence, administrators, employees of Financial Services Business actors and/or third parties working for the benefit of Financial Services Business actors..”

Repressive measures in dispute resolution are also stipulated in Article 38 of the ITE Law which states that :

- a. Any person may file a lawsuit against a party that maintains an electronic system and/or uses information technology that causes harm.
- b. The public can file a lawsuit on behalf of the party that organizes Electronic Systems and/or uses information technology that results in harm to the community, in accordance with the provisions of laws and regulations.

Based on some of the rules mentioned above, it is clear that customers have legal protection, both preventive legal protection and repressive legal protection, and are in accordance with the theory proposed by Philipus M.Hadjon that the protection of the law is the protection of dignity and dignity, as well as the recognition of human rights owned by the subject of law based on the provisions of the law of arbitrariness. Legal protection is also a collection of rules or rules that will be able to protect one thing from other things. With regard to consumers, it means that the law provides protection of the rights of customers from something that results in the non-fulfillment of these rights.

## **Conclusion**

Based on the results of research and discussion, researchers can draw the following conclusions :

1. Skimming crime mode is by installing a skimmer to the ATM card slot (Automatic Teller Machine). In addition, usually the perpetrator also uses a surveillance camera (spy camera) to observe the movement of the customer's finger when entering the ATM card PIN (Automatic Teller Machine). However, due to the increasingly sophisticated skimmer tools used by the

2. perpetrators, surveillance cameras are rarely used. In case of PIN theft (Personal Identification Number), sophisticated Skimmers use a fake PIN PAD.
3. Skimming crime prevention efforts at Laweyan police consist of pre-emptive efforts, preventive efforts and repressive efforts. Pre-emptive efforts are by socializing to the public in public places, preventive efforts are by patrolling at ATM machines (Automatic Teller machines), while repressive efforts by Laweyan police are by processing complaints from the public.
4. The form of legal protection provided to victims of skimming crimes in the Laweyan Police Area is through preventive legal protection and repressive legal protection. Preventive legal protection contained in law No. 8 of 1999 on consumer protection in Article 4 paragraph 5, Law No. 11 year 2008 on information and Electronic Transactions Article 31 paragraph 2 and in Article 14 of Bank Indonesia Regulation Number 9/15/PBI/2007 on the application of Risk Management in the use of Information Technology by commercial banks. While repressive legal protection is contained in the Financial Services Authority Regulation Number 1/POJK.07/2013 on Consumer Protection of the Financial Services Sector Article 29 and in law No. 11 of 2008 on information and Electronic Transactions Article 38.

### **Suggestions**

Suggestions that researchers can convey based on the problems and discussions are :

1. It is expected that the government will make a regulation which regulates the obligation for banks to improve the security system of ATM machines (Automatic Teller Machine).
2. It is hoped that the public will always be vigilant and careful when making transactions at ATM machines (Automatic Teller machines) and do not be easily fooled by messages from unknown numbers.

### **References**

#### **Books**

Abdul Kadir Muhammad, 2004, *Hukum dan Penelitian Hukum*, Bandung: PT.Citra Aditya Bakti.

Andi Hamzah, 1994, *Asas-Asas Hukum Pidana*, Jakarta: PT. Tiara.

- Aris Prio Agus Santoso, dkk, 2022, *Pengantar Metodologi Penelitian*, Yogyakarta: Pustaka Baru Press.
- Bambang Purnomo, 1994, *Asas-asas Hukum Pidana*, Jakarta: Ghalia Indonesia.
- Barda Nawawi Arief, 2001, *Masalah Penegakan Hukum dan Kebijakan Penanggulangan Kejahatan*, Bandung : Citra Aditya Bakti.
- Budi Suhariyanto, 2013, *Tindak Pidana Teknologi Informasi (Cybercrime): Urgensi Pengaturan dan Celah Hukumnya*, Jakarta: Rajawali Pers.
- Gultom, Rudy, 2021, *Cyber Warfare: Sudah Siapkah Kita Menghadapinya?*, UNHAN Press.
- Kusuma Mahesa Jati, 2012, *Hukum Perlindungan Nasabah Bank*, Bandung: Nusa Media.
- Lexy Moleong, 2005, *Metodologi Penelitian Kualitatif*, edisi revisi, Bandung: Rosdakarya.
- Musthafa Abdullah, dan Ruben Ahmad, *Intisari Hukum Pidana*, Jakarta:Ghalia Indonesai.
- Moeljatno, 1993, *Asas-asas Hukum Pidana*, Jakarta: Rineka Cipta.
- Nidhom, dan Ahmad Mursyidun, 2019, *Pedoman Perawatan dan Perbaikan Komputer dalam Pendidikan Kejuruan*, Ahlimedia Book.
- Niniek Suparni, 2009, *Cyberspace Problematika dan Aplikasi Pengaturannya*, Jakarta: Sinar Grafika.
- P.A.F. Lamintang, 1994, *Dasar-Dasar Hukum Pidana Indonesia*, Bandung: Sinar Baru,.
- Pratama, Yohanssen, 2021, *Sistem Terdistribusi*, Malang: Ahlimedia Press.
- Sari, I.Y, dkk, 2020, *Keamanan Data dan Informasi*, Yayasan Kita Menulis.
- Sari, Ika Yusnita, Muttaqin, dan Muttaqin; Jamaludin, Jamaludin; Simarmata, Janner; Rahman, M. Arif; Iskandar, Akbar; Pakpahan, Andrew Fernando; Sugianto, Abdul Karim; Giap, Yo Ceng, *Keamanan Data dan Informasi*, Yayasan Kita Menulis.
- Sinaga, dkk, 2020, *Keamanan Komputer*, Solok: Insan Cendekia Mandiri.
- Soerjono Soekanto, 2014, *Pengantar Penelitian Hukum*, Jakarta: UI Press.
- Setiono, 2014, *Rule of Law (Supremasi Hukum)*, Semarang: Aneka Ilmu.
- Sudiro, A, Rahadian, P, dan Prima, N, 2011, *Sistem Informasi Manajemen*, Malang: Universitas Brawijaya Press.
- Suherdi, D , dkk, 2021, *Peran Literasi Digital di Masa Pandemi*, CV> Cattleya Darmaya Fortuna.
- Suprihadi, Eddy, 2021, *Sistem Informasi Bisnis: Dunia Versi 4.0*, Yogyakarta: ANDI.

Wirjono Prodjodikoro, 1986, *Asas-asas Hukum Pidana di Indonesia*, Bandung: Eresco.

## Journal

Andi Dico Gagarangga, Andi Maysarah, Sunarto, 2022, *Penegakkan Hukum Terhadap Tindak Pidana Pencurian Uang Menggunakan Skimmer (Studi di Subdit Cyber Polda Sumut)*, Universitas Dharmawangsa, Vol. 16, No. 2.

Dian Chisva Islami, Khodijah Bunga, dan Candiwan, 2016, *Kesadaran Informasi Pada Pegawai Bank X di Bandung Indonesia*, INKOM, Vol. 10, No. 1.

Jovin Ganda Ramadhan, dan Sumiyati, 2019, *Perlindungan Hukum terhadap Nasabah Korban Skimming Ditinjau Dari Undang-Undang Nomor 8 Tahun 1999*, Mimbar Keadilan, Vol. 12, No. 1.

Jr., R. M, dan Schell, G. P, 2008, *Sistem Informasi Manajemen* (edisi ke-10). Jakarta: Salemba Empat.

Komang Aldi Saskara, Ni Luh Gede Yogi Arthani, 2021, *Tinjauan Kriminologi Terhadap Kejahatan Skimming Melalui Atm Di Polda Bali*, Jurnal Mahasiswa Hukum Saraswati (JUMAHA), Vol. 01, No. 01.

Mahesa Jati Kusuma, 2012, *Hukum Perlindungan Nasabah Bank: Upaya Hukum Melindungi Nasabah Bank Terhadap Tindak Kejahatan ITE di Bidang Perbankan*, Bandung: Nusa Media.

Mahesa Jati Kusuma, 2013, *Perlindungan Hukum Terhadap Nasabah Bank yang Menjadi Korban Kejahatan di Bidang Perbankan*, Al" Adl, Vol. 5, No. 9.

Nevita Sari, 2019, *Perlindungan Hukum Bagi Konsumen Nasabah Dalam Card Skimming (Studi Kasus Bank BNI Syariah Pusat Di Jakarta)*, Jurnal Reformasi Hukum, Vol. 23, No. 2.

Sri Magfirah Indriani, 2016, *Perlindungan Hukum Terhadap Nasabah Bank Dalam Penyalahgunaan Deposito Berjangka (Studi Kasus Commonwealth Bank Cabang Palembang Putusan Nomor 59/Pdt.G/2013/PN.PLG)*, Diponegoro Law Journal Vol. 5, No. 4.

## Peraturan

Kitab Undang-Undang Hukum Pidana

UU No. 11 Tahun 2008

UU No. 8 Tahun 1999

UU No. 10 Tahun 1998

### Websites

Akhmad Zaenuddin, S.H, M.H, “*Kejahatan Skimming ATM, Begini Hukumnya*”, dalam Berita Kompas Tanggal 27 Juli 2021 yang Diakses Pada : [https://www.kompas.com/konsultasihukum/read/2021/07/27/060000780/kejahatan-skimming-atm-begini-hukumnya?page=all&jxconn=1\\*x0otaj\\*other\\_jxampid\\*SkIVc2ZThwSW9RdWMwM010X0d^MWtJMEo30Utx0DRcck9QRnPoU19LQIZFYw..#page2](https://www.kompas.com/konsultasihukum/read/2021/07/27/060000780/kejahatan-skimming-atm-begini-hukumnya?page=all&jxconn=1*x0otaj*other_jxampid*SkIVc2ZThwSW9RdWMwM010X0d^MWtJMEo30Utx0DRcck9QRnPoU19LQIZFYw..#page2) (Tanggal 14 Agustus 2022 Pukul 12.34 WIB).

Desy Setyowati, “*Selain BCA, Bank BUMN Pernah Hadapi Kasus Skimming*”, dalam Berita Katadata Tanggal 29 Maret 2022 yang Diakses Pada : <https://katadata.co.id/desysetyowati/digital/6242c72e3d223/selain-bca-bank-bumn-pernah-hadapi-kasus-skimming> (Tanggal 07 Agustus 2022 Pukul 13.00 WIB).

Kampus Virtual, “*Keamanan Fisik (Physical Security)*”, April 2016 yang Diakses Pada : <https://aripdwipurwanto.blogspot.com/2016/04/keamanan-fisik-physical-security.html?m=1> (Tanggal 14 Agustus 2022 Pukul 12.44 WIB).

Hardiyansah, dan Herru, “*Keamanan Komputer dan Jaringan*”, 07 Desember 2017 yang Diakses Pada : <https://blpsdmd.babelprov.go.id/contect/keamanan-komputer-dan-jaringan> (Tanggal 14 Agustus 2022 Pukul 12.57 WIB).

I.G.N Mantra, dan M.Kom, MM, “*Kesimpulan dari KEAMANAN TEKNOLOGI INFORMASI*” 2020 yang Diakses Pada : [elearning.teknik.univpancasila.ac.id](http://elearning.teknik.univpancasila.ac.id) (Pada Tanggal 10 Agustus 2022 Pukul 09.00 WIB).

Hanan Widiasmara, “*Pentingnya Keamanan Digital di Era Revolusi Industri 4.0*”, Berita Kumparan Tanggal 24 Januari 2021 yang Diakses Pada : <https://kumparan.com/hanan-widiasmara/pentingnya-keamanan-digital-di-era-revolusi-industri-4-0-1v2lzB5WDLX> (Tanggal 14 Agustus 2022 Pukul 14.05 WIB).

Wikipedia, “*Keamanan Ekonomi*”, yang Diakses Pada :  
[https://id.m.wikipedia.org/wiki/Keamanan\\_ekonomi](https://id.m.wikipedia.org/wiki/Keamanan_ekonomi) (Tanggal 12 Agustus 2022 Pukul 10.00 WIB).

Liputan6.com, “*Penyebab Terjadinya Pembobolan ATM*”, Berita Liputan 6 yang Diakses Pada :  
<https://www.liputan6.com/tekno/read/2049837/ini-penyebab-terjadinya-pembobolan-mesin-atm>, (Tanggal 1 Agustus 2022 Pukul 12.00 WIB).

Republika.co.id, “*Ini Sebab marak Skimming di perbankan Indonesia*”, Berita Reppublika yang Diakses Pada : <https://www.republika.co.id/berita/ekonomi/keuangan/18/03/27/p692t4368-ini-sebab-marak-skimming-di-perbankan-indonesia> (Tanggal 1 Agustus 2022 Pukul 12.30 WIB).