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The Legal Nature and Penalties for Data Capital Destruction: An Analytical Study in the Jordanian Penal Legislation

Abdallah Majed Alakayleh[1],
Mohammad Abdul Mohsen bin Treef [2*]

Abstract

This research analyzed the legal nature and penalties of data capital destruction. The descriptive analytical approach was used. Moreover, the findings revealed that the Jordanian legislator stressed the penalties imposed for crimes of data destruction. This is applicable whether in the form of deprivation of liberty or a financial penalty, and whether the crime was a misdemeanor or a felony. Furthermore, the legislator resorted to withholding the discretionary authority of the judiciary in choosing between the two penalties. The recommendations stressed that the legislator reconsider Articles 7 and 6 of the Cybercrime Law so that these articles will limit penalty to the crimes actually committed. The principle of technical referral contained in Article 26 of the Cybercrime Law should also be dispensed with.

Keywords: Data Capital, Crimes, Legislator, Information Network, Information System.

Introduction

The last century witnessed an unprecedented development in the field of inventions. The most important of these inventions is the Internet. This revolutionary network has been integral to different fields of human life, including the judicial field (Bowrey, (2005). Despite the great advantages of this network, represented in saving time and effort in judicial, administrative governmental and private transactions, it has become vulnerable to the commission of many crimes by Internet hackers (Broadhurst, 2006). In this respect, computer crimes in general and the destruction of data capital in particular are major negative consequences of this technology (Al-saaida, 2019. p78).

There is no doubt that the study's treatment of this topic and its use of analytical and critical approaches would provide the legal library with some information. This type of information would address the legislative shortcomings in some of the relevant legal texts limited to Articles 7, 6, 4, and 3 of the new Jordanian

[1] The Author is Associate Professor at Department of Public Law, Amman Arab University akakakak1988@yahoo.com, https://orcid.org/0009-0001-3818-1324
[2] The Author is Associate Professor at Department of Public Law, Amman Arab University m.bentareef@aau.edu.jo, https://orcid.org/0000-0003-3223-6838

Cybercrime Law. At the same time, it opens the way wide for fellow researchers to address this topic from other aspects (BinTreef, 2021. p78).

Furthermore, this research carefully analyzes the aforementioned legal texts. The focus is made on the texts related to acts of destruction of data capital. Significantly, it calls on the penal legislator to reconsider them through policies of criminalization and punishment. Therefore, the problem of the study is represented in data capital, and whether it is considered a moral or material entity (Sadowski, 2019). It is also represented in the legislator's adoption of a dual theory of criminalization and punishment for acts of data destruction; the formality and materiality of the crime.

Literature Review

The phenomenon of data capital destruction and the penalties prescribed for it by different legislations has been examined by different scholars. Significantly, those scholars used different terminologies to refer to the same phenomenon. In this respect, Bisogni (2020) used the term data breach to examine the effects of data breach notification laws. The study concluded with stressing the need to amend for European data breach notification policies.

Furthermore, Bisogni and Asghari (2020) used the same term to highlight the link between data breaches, identity theft, and data breach notification laws. The findings highlighted the importance of information technology. Besides, it stressed the need to amend data breach notification laws. In this respect, Ishii and Komukai (2016) compared data breaches in Japan, the US, and the UK. The findings revealed that massive data breach occurred in the US and recommended the amendment of the related laws.

Lesemann, D. J. (2010) analyzed the legal, technological, and policy issues involving data breach notification statutes. The study found an urgent need to amend data breach laws. Moreover, Rodrigues, et al. (2024) provided a global perspective to understand data breach, and reported massive data breach in India and Brazil. Furthermore, Simkus (2017) explored ways to prevent data breaches at law firms. The study concluded with stating that law firms have largely ignored the threat of data breaches.

Spinello (2021) analyzed the corporate data breaches. The research examined the phenomenon morally and legally. Legal issues such as the difficulty victims encounter trying to meet the constitutional standing requirement were found to be serious and in need of well-structured laws. Apart from this, Wang and Jiang (2017) examined data protection laws in 92 countries and regions and 200 data breaches in the world. The findings stressed the need to provide global data protection. Other scholars like Wong (2013) focused on data security

breaches and privacy in Europe. The book discussed the need to provide data protection and cybersecurity in Europe. Apart from this, the concept of capital has been usd in different contexts. For example, Zazzaro and Carillo (2000) used the term capital to identify human innovation. They significantly highlighted the effect of human capital obsolescence due to the introduction of technological innovations on the long-run growth rate.

It is obvious that all these researchers have used the term data breach to denote data destruction. However, none of their studies has examined the idea of data capital destruction. Besides, none of those studies has examined the phenomenon in the Jordanian context. Thus, this study seeks to fill this research gap.

Research Questions

This research raises the following questions:

1. What are the penalties for data capital destruction as stipulated by the Jordanian penal legislation?
2. What is the discretionary authority of the judiciary in crimes of capital destruction?

Methodology

This qualitative study resorted to the analytical and critical approaches to deal with the legal texts related to the topic. It analyzed them and identified the problems that they raise. Besides, it searched for solutions to many issues surrounding the crime of data destruction. The primary data is taken from the Jordanian Cybercrime Law, while the secondary data is taken from books and journal articles relevant to the research topic.

Results and Discussion

In the old version of Cybercrime Law, the Jordanian legislator did not adopt a unified general theory for data capital destruction. The texts criminalizing acts of destruction were scattered. This result is consistent with Bisogni (2020) and Rodrigues et al. (2024) who stressed the need to amend Cybercrime Laws. In this respect, the legislator had adopted a dual criminal policy to punish acts of destruction. The first is formal. It is stipulated in more than one place in the Cybercrime Law. The other policy is material, stipulated in Article 445 of the Penal Code. With the issuance of the new Cybercrime Law No. 17 of 2023, the legislator adopted a dual theory for crimes related to data destruction. This is due to the formality and materiality of the crime.

The Jordanian legislation does not explicate the concept of "destruction" or any of its elements in relation to electronic data. Rather, it merely mentioned

several forms in light of which the act of destruction could be achieved. These include cancellation, deletion, addition, destruction, blocking, modification, change, etc. (New Jordanian Cybercrime Law No. 17, 2023).

On the jurisprudential level, the concepts of destruction were largely similar (Boutmin, 2018, 212). The current study believes that destruction is achieved through the perpetrator entering, or rather accessing, the information system, such that this entry results in canceling, deleting, erasing, or disabling the intangible entities of the computer, whether completely or partially, in a way that makes them invalid. Rather, we see that the image of disruption carries within it all other images of the act of destruction. It includes the total or partial cancellation or alteration of data capital. Therefore, the current study believes that destruction in general means annihilating the material of an object, or at least introducing comprehensive changes to it, such that it becomes unusable for the purpose for which it would be used (Husseini, 2019. p78).

The legislator did not talk about the nature of data capital, whether as one of the types of immovable moral entities or movable physical entities. However, it spoke in clear texts about the policies of criminalization and punishment for formal and material crimes.

A formal crime means one whose legal structure is completed once the criminal conduct is committed, regardless of the occurrence of a tangible consequence. Article 3/B, which concerns the destruction of data capital for ordinary persons, stipulates that (if the entry or access stipulated in Paragraph "A" of this Article is to cancel, delete, add, destroy, disclose, publish, re-publish, block, modify or change...etc.) (New Cybercrime Law No. 17 of 2023).

Furthermore, Article 6 stipulates that (anyone who intentionally inserts, publishes, or uses a program to cancel, delete, add, destroy, disclose, damage or modify...etc.) shall be punished. The same matter is stated in Article 7, which states that "Anyone who intentionally and unjustly intercepts the flow of data or obstructs, alters, deletes... etc. shall be punished" (New Cybercrime Law No. 17 of 2023).

By extrapolating the previous texts, we see that the penal legislator in all legal articles has resorted to using the alternating method to punish intentional damage. It does so by mentioning synonyms for the act of destruction that came exclusively, even though this method has been criticized and does not comply with the good requirements of penal policy (Ananza, 2017 p.35).

From our point of view, we see that the legislator punishes this crime if it becomes clear that the perpetrator's goal of entering or accessing is to cancel, delete, disable, or destroy any electronic information or data owned by others. Perhaps proving the existence of this intention falls on the responsibility of the

Public Prosecution. This is something difficult to achieve, because it lies within the human soul.

Contrastingly, a material crime is defined as that crime whose legal structure is not complete unless a specific criminal result is achieved. This means that the criminal act must lead to a tangible change or rather harm in the real world. That is, merely committing criminal behavior is not enough. In this respect, the legislator provided penal protection from crimes of this kind, even if it was minimal compared to the formal protection. This is stipulated in the same previous legal Articles 4 and 3 of the Cybercrime Law. It is represented in increasing the penalty if the material criminal result of any of the acts of destruction is achieved (Al-Akaila, 2016. p.2205).

Apart from this, the position of jurisprudence on the nature of data capital involves subjecting the destruction of electronic data and information to traditional texts. According to this opinion, the destruction of electronic data and information is subject to the traditional provisions of the Penal Code, based on Article 445 thereof (Al-Aqeed, 2011. p.54). This is consistent with the findings of previous studies applied on different laws (Ishii & Komukai, 2016; Lesemann, 2010; Rodrigues et al., 2024; Simkus, 2017; Spinello, 2021; Wang & Jiang, 2017; Wong 2013; Zazzaro & Carillo, (2000). Significantly, this opinion adds that restricting the crime of destruction to movable property is an opinion that has no basis in law. Therefore, the crime of destruction of electronic data and information is subject to the aforementioned legal text, even if it is an intangible thing (Al-Qahwaji, 2000. p.35; Ababneh, 2005. p.204). Some of those who hold this opinion also provide arguments that traditional provisions of the Penal Code apply to the destruction of electronic data and information. Among the arguments presented in this regard is that programs are a physical entity that can be seen on a computer screen (Al-Manasa, 2017. p.131). This entity has an origin and a generator emanating from it. It is also possible to acquire these programs by running them on a computer. They even consider those who say that data capital cannot be acquired to be an inaccurate statement, as it leads to stripping it of the criminal protection stipulated in the Penal Code (Al-Masry, 2005. p.68).

The destruction of electronic data or information is also subject to special provisions. The proponents of this attitude say that destruction can only occur on movable material property. In terms of the concept of the violation, electronic data and information cannot constitute the crime of destruction according to the traditional texts stipulated in the Penal Code (Al-Saghir, 1992. p.96). In this respect, the criminalization of the destruction of electronic data and information depends on the extent to which the nature of this data and information is clarified as to whether it is considered money, either materially or morally. These data and

information fall outside the category of transferable funds that cannot be subject to the traditional provisions of the Penal Code (Al-Azmi, 2016. p.73). Rather, they are subject to the legal provisions stipulated in the Jordanian Cybercrime Law (Al-Ghoul, 2017. p.45; Khader, 2013. p.101).

The researcher believes that electronic data and information has legal nature. Perhaps this opinion implies that electronic information falls outside the category and description of physical movable property. Therefore, the claim that traditional texts apply to them entails an unjustified expansion of criminalization. In fact, this expansion leads to a violation of the principle of criminal legality. It is true that the Jordanian legislator did not explicitly stipulate the physical nature of the movable property that is considered the subject of the crime. However, the will of the legislator was directed towards that. Our words here may be interpreted by some as permitting the act of destroying electronic data and information. This is because we believe in the inapplicability of traditional texts. But this interpretation is not our intention. Therefore, we recognize the protection of electronic data and information from tampering with them, whether by erasing or destroying them partially or completely, or modifying them in a way that leads to them being unfit for use. But at the same time, we must not burden the traditional legal texts more than the legislator intended. Despite this, the legislator has criminalized these acts through explicit texts without examining their type, whether they involve moral or material entities.

With regard to the basic penalties for the crime of destroying data capital, the Jordanian legislator has provided in the Cybercrime Law criminal protection for electronic data and information from acts of destruction, whether the act of destruction is accomplished in any of its forms or the perpetrator aims to attack it with the intention of destroying or canceling... etc.

We refer here to the penalty in its misdemeanor form as a misdemeanor that is considered one of the three divisions of criminal penalties, and is punishable by imprisonment for a period of not less than one week and not more than three years, and a fine of not less than five Jordanian dinars and not more than two hundred Jordanian dinars, unless the law stipulates otherwise. With regard to the punishment of crime in its formal form, it seems that the Jordanian penal legislator has embraced the policy of punishing crimes in their formal form more than punishing them in their physical form. Besides, the legislator limited the misdemeanor crime in Article 3 to its paragraphs (b and c). Paragraph "B" stipulated the penalty of imprisonment for a period of no less than three months and no more than one year, and a fine of no less than 600 Jordanian dinars and no more than 3000 thousand Jordanian dinars. Accordingly, if the perpetrator entered the website with the intention of destroying, altering, or modifying any of its data

or information, the penalty shall be the same as the penalty imposed in Paragraph "B". The point is that the legislator mentioned the prison sentence as a minimum without mentioning the maximum limit, which is not less than three months. Referring to the general rules in the Penal Code, the maximum prison sentence for a misdemeanor is three years in accordance with Article 21 of the Penal Code. This means that the judge has absolute freedom to impose a prison sentence according to the circumstances of each individual case, provided that it does not exceed three years. Here too, the judge has discretionary power, as is the case with what we mentioned regarding the paragraph "B". However, we do not totally agree with the legislator as it does not require the achievement of a material criminal result for any of the acts of destruction, contrary to what was stated in the preceding paragraph.

Significantly, if the legislator has deprived the judge of exercising his discretionary authority in accordance with explicit texts, then this deprivation leaves room for the judge to exercise his freedom and have his say through the activation of some other legal texts. Accordingly, if the judge's ruling regarding this or other crime is limited to three months' imprisonment, he may replace this penalty with a fine if he deems the latter sufficient based on the text of Article 27/2 of the Penal Code. Rather, he may reduce the imprisonment penalty to less than the minimum.

It is noted that the legislator, in Articles 6 and 7/A, specified the limits of the fine penalty while specifying only the minimum penalty of imprisonment without mentioning its maximum limit. Therefore, the maximum imprisonment is three years, according to Article 21 of the Penal Code. It is also noted that the legislator restricted the judge's discretionary power, especially with regard to the prison sentence mentioned in both articles, which is specified for a period of no less than six months. But this restriction is not absolute, as the judge can reduce the imprisonment penalty to less than the minimum prescribed for the penalty for the crime, such that it may amount to imprisonment for a week or a fine of five Jordanian dinars if any of the circumstances mentioned in Articles 99 and 100 of the Penal Code are met, unless the offender shall not be a repeat offender.

In the context of the punishment for crime in its material form, according to what was stated regarding Paragraph "B" of Article 3, the legislator punished acts of destroying data capital if the perpetrator's action resulted in a criminal result. The said article stipulated that (...the penalty shall be imprisonment for a period not less than one year and no more than three years, and a fine of not less than 3,000 thousand dinars and not more than 15,000 thousand dinars if he manages to achieve the result). The criminal result here carries the material meaning, which is achieved by any act of destruction occurring on data or electronic information

owned by ordinary people. Therefore, the punishment also remains within the framework of the misdemeanor, but in a severe form, and is represented by both imprisonment and a fine.

The legislator's strictness in the imposed penalty appears by specifying and raising the limits of the imprisonment and fine penalties, in addition to requiring them to be pronounced together. In this respect, the minimum penalty of imprisonment is one year, and the maximum is three years, while the minimum fine is 3,000 thousand dinars, and the maximum is 15,000 thousand dinars. It is not necessary for the judge to adhere to the text and apply the two limits, as stated in the inability of the previous article. Rather, the judge is free to pronounce between the two limits, such as ruling by imprisonment for a year and a half and a fine of 4,000 thousand dinars, so his ruling in this case is consistent with and correct in law.

It is noted that the legislator in Articles 4/D and 7/C imposed very severe criminal penalties, whether in terms of imprisonment or a fine, while obliging the judge to pronounce both penalties together. However, the legislator remained silent in singling out penalties in Article 7/C if the criminal result was achieved by any of the acts of destruction, or if the perpetrator's intention of access was destruction, as he did in Article 4/D.

Conclusion

This study examined the legal nature and penalties of data capital destruction. It specifically addressed this issue through analyzing the articles of the Jordanian Cybercrime Law. The findings showed that in all legal articles related to data destruction, the Jordanian legislator resorted to using an alternating method in presenting types of criminal behavior for destruction crimes, which benefits their exclusivity. In this respect, the legislator generally stressed the penalties imposed for crimes of data destruction, whether in the form of imprisonment or a financial penalty.

Furthermore, the legator resorted to withholding the discretionary authority of the judiciary in choosing between the two penalties of imprisonment and financial penalties. In accordance with Article 3/B, the legislator punished the crime of destroying data capital in its formal form, which requires the verification of the intent to destroy or the presence of any of its forms. Under Paragraph "C" of Article 3, the legislator punished the crime of destroying data resources in its formal form only, which is related to the website of ordinary people, in contrast to what the legislator did in Paragraph "B", as the punishment included its formal and material forms. Besides, the legislator did not speak about the penalty for the crime in Articles 7/d if the criminal result is achieved.

Significantly, this study has made it obvious that the Jordanian legislator still embraces the principle of technical referral to other legislation to complete the policy of punishment, as it is evident through Article 26 of the Cybercrime Law. This was overlooked in Articles 6 and 7. Furthermore, the legislator punishes the attempt to commit a crime with the same penalty prescribed for the completed crime only if it is a felony.

Recommendations

- The legislator should dispense with this method and suffice with what indicates destruction, such as using the phrase "everyone who intentionally causes damage by any act of destruction…etc," in order to make it easier for the judiciary to exercise its discretionary power.
- The legislator should reduce criminal penalties, which include a penalty of deprivation of liberty, up to temporary labor, and fines of up to thousands of dinars.
- The legislator must leave some room for freedom for the judiciary to pronounce either penalty while at the same time stipulating his right to pronounce both of them.
- It is necessary to dispense with the formal punishment of the crime and keep its punishment in its physical form as stated in its incapacity, or at least reduce the punishment for the crime in its formal form with the necessity of stipulating that the discretionary power is left to the judge to pronounce either punishment.
- It is necessary for the legislator to stipulate the criminalization of destroying the website or any of its contents in their physical form only, and to dispense with punishment for their formal form.
- The legislator should reconsider the penalties stipulated in Articles (4/d) and (7/c) so that the penalty is at least in the event of interception of a data or information line in temporary works without specifying its minimum, with the fine reduced to its maximum.
- The legislator should reconsider Articles 7 and 6 of the Cybercrime Law so that it is sufficient to punish them if the criminal result is achieved and dispense with the formal punishment.
- The principle of technical referral contained in Article 26 of the Cybercrime Law should also be dispensed with, which refers the principle of criminalization in general and punishment in particular to other legislation for its serious violation of the principle of criminal legality on which the criminal law as a whole is based.

- There is a need for the legislator to punish the attempt to commit all crimes of destruction and not limit it to the crimes of Article Four of the Cybercrime Law.

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