

Protection of Consumers Data in E-Commerce Transaction: An Analysis Towards the Policy in Malaysian Law and Islamic Law

Rahmawati Mohd Yusoff (Corresponding Author) Department of Law, Universiti Teknologi MARA Cawangan Johor 85000 Segamat, Johor, Malaysia

> Mohammad Hidir Baharudin Sultan Ibrahim Johor Islamic University College, 80350 Johor Bahru, Johor, Malaysia

> > Nurkhairany Amyra Mokhtar

Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA Cawangan Johor 85000 Segamat, Johor, Malaysia

Ahmad Faiz Ghazali

Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA Cawangan Johor 85000 Segamat, Johor, Malaysia

Siti Afiqah Mohammad

Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA Cawangan Johor 85000 Segamat, Johor, Malaysia

 Received: Oct. 7, 2023
 Accepted: Nov. 8, 2023
 Online published: Nov. 17, 2023

 doi:10.5296/jpag.v13i3.21474
 URL: https://doi.org/10.5296/jpag.v13i3.21474



Abstract

The fast pace development in computing technology has emerged the development of online transactions and e-commerce. Notwithstanding with the emergence of e-commerce, the privacy and confidentiality of data of Internet consumers must be protected. Indeed, the consumers' data has been protected by the Malaysian and Islamic law. Hence, this paper aims to analyse the protection of consumers' data provided by the Malaysian and Islamic law. The discussion adopts the doctrinal analysis by examining the existing primary and secondary materials including statutory provisions, case law and other legal and non-legal literature. This paper finds that both Islamic and Malaysian law protects the right of privacy of each person relate to their privacy and rights to be safe and secure which can be seen through the law enacted in the Federal Constitution and Personal Data Protection Act 2010.

Keywords: protection, consumers data, e-commerce, Malaysian Law, Islamic Law

1. Introduction

The fast pace development in computing technology have changed the way we lives and interacts with the world. Online transactions by enterprises, businesses, and individuals has emerged into e-Commerce with the advent of Internet since decades ago. Information from the computerized systems such as marketing Decision Support Systems (DSS) has potential to emerge from e-commerce business transactions data. The items sold online are not only clothes and spare parts but also food. Previously, COVID-19 pandemic that hit around the world from 2019 had forced consumers to get their data online for e-commerce transactions in buying household necessities. Addresses and phone numbers was widely used and needs to be protected against fraud and identity thefts.

Privacy and confidentiality of data must be protected. Trust is the key for the consumer to use e-commerce transaction especially on daily basis. The issue is also on the service provider who monopoly the e-commerce systems and have a solid law to enable usage of consumer data. There are plenty of arguments of whether the first computer was abacus since 1620s or the analytical engine by British mathematicians, Charles Babbage since 1830s. However, Aljabar or Algebra which was the basic calculation and mathematics were invented much earlier than that by Al-Khwarizmi; around the year 800s. The importance of algebra translated into computer programming variables are the essential elements for storing data. Consumer data needs to be protected by law and awareness from the consumer themselves; otherwise, manipulation of information for profits among specific targeted groups can be unfair towards the privacy and enforced tracking of behaviour by avoiding actionable laws to be imposed by the enterprises.

2. Method

The research utilizes qualitative research methods, specifically content analysis and doctrinal analysis. Content analysis involves a comprehensive review of relevant literature concerning consumer data protection in e-commerce transactions, encompassing primary and secondary sources. On the other hand, doctrinal analysis entails the scrutiny of various materials, including statutory provisions, particularly those within Malaysian law, treaties, and a range



of legal and non-legal literature. Additionally, the study is rooted in the Islamic legal framework, exploring the subject through the lens of the Quran and the Sunnah, which serve as the primary sources of Islamic law.

3. Results and Discussion

3.1 The Emergence of E-Commerce and Internet Consumers

The number of Internet users rose by 3.0 percentage points from 81.2 % in 2018 to 84.2 % in 2019. The number of computer users rose by 1.6 percentage points from 70.5 % in 2018 to 72.1% in 2019. Meanwhile, the number of people using cell phones stood at 97.9% in 2019. Social networks (97.1 %) continue to be the most common activity among Internet users, with the key Internet activities of individuals participating in them. This was accompanied by things such as uploading photos, movies, videos or music; playing or downloading games (84.7%), seeking product or service details (83.5%), calling over the Internet/ VoIP (77.4%) and downloading apps or applications (77.1%) (Department of Statistics Malaysia, 2019).

In January 2023, Malaysia counted 33.03 million internet users, reflecting an internet penetration rate of 96.8% among its total population at the beginning of that year. According to analysis cited by DataReportal in 2023, internet users in Malaysia experienced a growth of 362 thousand individuals, representing a 1.1% increase between 2022 and 2023. The percentage of individuals aged 15 and above using computers in Malaysia rose from 80.0% in 2020 to 83.5% in 2021. Furthermore, internet usage among Malaysians increased to 96.8%, up from 89.6% in 2020, as reported by the Department of Statistics Malaysia in 2022.

The survey also revealed that in 2021, the penetration rate of smartphone users in Malaysia reached 94.8%. Several factors, including affordable devices, package deals, subsidies, fierce competition, and promotions from service providers, were observed to be driving this growth, according to the Malaysian Communications and Multimedia Commission in 2021. In terms of internet activities, the most popular in 2021 was participation in social networks, with 99.0% engagement, followed by downloading pictures, movies, videos, or music (91.8%), playing or downloading games (91.8%), seeking information about goods or services (89.4%), making phone calls via Internet/VoIP (89.2%), and downloading software or applications (86.3%), as reported by the Department of Statistics Malaysia in 2022.

Between 2015 and 2017, there was an annual 6% growth in e-commerce revenues in Malaysia, resulting in nearly RM50 billion in increased revenue, as reported by the Department of Statistics Malaysia (DoSM). According to data from the German online analytics portal Statista, the Malaysian e-commerce sector generated US\$3.68 billion (equivalent to RM15.2 billion) in sales in 2019, with an anticipated annual market growth rate exceeding 11.8% by 2023. In 2022, e-commerce revenue reached RM 1.1 trillion (\$240 billion), marking a 6 percent increase compared to the previous year (Technode Global, 2023). Within Malaysia, prominent e-commerce platforms like Shopee (which attracts an average of over 22 million monthly visits) and Lazada (with an average of 21 million monthly visits recorded between May and July 2019) aspire to lead the domestic online shopping industry. iPrice Group Sdn Bhd's E-commerce Map study for the third quarter of 2019 (3Q19) and



Google LLC's Play Store ratings indicate that Shopee has taken the lead in the industry, boasting the highest number of users who have installed its smartphone applications (Malaysian Investment Development Authority, 2019).

As per data from the Global Web Index, a substantial 80% of internet users in the age group of 16 to 64 in Malaysia have engaged in online shopping. Within this survey, 91% of respondents searched for products or services to purchase online, 88% visited online stores, 80% completed an online purchase, 37% made online purchases via their computers, and 62% made online purchases using their mobile phones. Notably, Malaysians collectively spent US\$483 million on online grocery shopping in 2018, marking a significant increase of US\$135 million compared to their spending in 2017 (Kemp, 2023). Apart from that, Revenue in the eCommerce market is projected to reach US\$8.75bn in 2023. The forecast suggests that the revenue is poised to exhibit a compound annual growth rate (CAGR) of 13.26% from 2023 to 2027. This trajectory is anticipated to lead to an estimated market size of US\$14.40 billion by the year 2027 (Statista, 2023). Figure 1 shows the retail e-commerce sales growth in 2019.

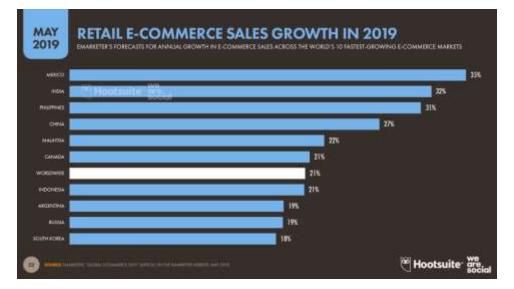


Figure 1. Retail E-commerce Sales Growth in 2019

3.2 The Issue of Data Intrusion and Cyber Crime

Abuse and technology misuse for illegal purposes have risen as the use of information and communication technologies (ICTs) has advanced. The Malaysia Computer Emergency Response Team recorded 10,699 incidents in 2018, with "fraud" accounting for the most incidents (5,123) and "intrusion attempt" accounting for the second highest (1,805). Malaysia has cybersecurity laws in place since 1997, and they are now being used to combat cyber criminals. The Malaysian Computer Crimes Act 1997, Copyright (Amendment) Act 1997, Communications and Multimedia Act 1998, Personal Data Security Act 2010, and Malaysian Penal Code have also been used to prosecute recent cases of online fraud (Tan, 2020).

Data breaches, hacking, cyber fraud, MACAU scams, malicious codes, cyber harassment, data comprising mobile phone numbers, identification card numbers, home addresses, IMEI



and SIM card data had been leaked (Abas, 2017).

3.3 Protection of Consumer Data in Law

Privacy issues are among the most pressing issues in the modern era. In the modern era, significant advancements and novel approaches have led to an unprecedented intrusion into human privacy. This has resulted in close connections between individuals and the diverse range of information that is collected and utilized by various entities, including marketing firms, banks, telecommunications companies, social media platforms, and more. By dealing with a bank or buying from a store with a credit card or recording some personal data on one of the websites for various purposes, a person's personal information such as phone number and email address is automatically stored and analyzed. In other situations, this information is sold to third parties for various purposes.

The majority of countries' laws acknowledge the right to privacy as a fundamental human right, considering it an inherent principle that must be safeguarded. By virtue of Article 12, United Nations Universal Declaration of Human Rights 1948: "No one should be subjected to arbitrary interference with his privacy, family, home, or correspondence, nor to attacks on his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks."

Article 5(1) of Federal Constitution provides that:

"No person shall be deprived of his life or personal liberty save in accordance with law."

In the case of *Sivarasa Rasiah v Badan Peguam Malaysia & Anor* [2010] 3 CLJ 507, the court held that the right to privacy is part of the right to personal liberty (Federal Constitution).

The right to privacy essentially entails the ability to be left alone and to live one's private life without fear of unwarranted or unwanted attention or public disclosure. A person's right to seclude himself or information about himself, and therefore selectively disclose himself, is also secured (Foong Cheng Leong, 2020).

The Court defined the right of privacy in the case of *Toh See Wei v Teddric Jon Mohr & Anor* [2017] 4 AMR 903. The right to privacy encompasses a wide range of issues. In today's culture, the right to privacy has been recognized both legally and in everyday speech. The right to privacy applies to an individual's ability to monitor how personal information is collected, used, and disclosed. Personal information may include, for example, personal interests, behaviors, and hobbies, as well as family records, education records, contact records, and medical records. A person could be easily affected by the presence of incorrect or deceptive computerized data about him that could be transmitted at high speed and for a low cost to an unauthorised third party. Personal data is readily available and communicable due to advanced technology, and there is an implicit tension between the right to privacy and data security. In a nutshell, the right to privacy applies to a person's right to be left alone, to be free of unwarranted publicity, and to live without undue intrusion from the government or any private citizen in matters that are not of public interest.



On November 15, 2013, Malaysia's personal data protection legislation, known as the Personal Data Protection Act 2010 (PDPA), went into effect. Since the PDPA is structured after the European Union Data Protection Directive 95/46/EC, its principles and stipulations closely resemble the data protection provisions of the UK's Data Protection Act 1998. In addition to the PDPA, various sector-specific regulations apply to sectors such as banking and finance, healthcare, and capital markets. These regulations specify unique data protection requirements that are customized to the needs of each sector and industry.

Under the Ministry of Communications and Multimedia Commission (MCMC), a Personal Data Protection Commissioner (Commissioner) has been designated to oversee the implementation of the PDPA's regulations. Additionally, the Minister has appointed a Personal Data Protection Advisory Committee to offer guidance to the Commissioner. This committee will comprise a Chairman, three members from the public sector, and a minimum of seven but no more than eleven other members.

The aim of the PDPA is to govern the processing of personal data in commercial transactions and to address issues that arise in the process. In other words, the PDPA protects an individual's privacy in relation to data and prevents personal data from being misused.

Section 5 of the PDPA notes that a data user's processing of personal data must adhere to the following Personal Data Security Principles, namely:

- i. the General Principle;
- ii. the Notice and Choice Principle;
- iii. the Disclosure Principle;
- iv. the Security Principle;
- v. the Retention Principle;
- vi. the Data Integrity Principle; and
- vii. the Access Principle.

Failure to meet the aforementioned principles is considered an offence. If convicted, the data consumer faces a maximum fine of RM300,000 or a maximum sentence of two years in jail, or both. (Section 5(2) of PDPA).

A data subject has a number of rights in relation to personal information held by data users. These are:

- i. the right of access to personal data;
- ii. the right to correct personal data;
- iii. the right to withdraw consent;
- iv. the right to prevent processing likely to cause damage or distress; and
- v. the right to prevent processing for purposes of direct marketing.

Macrothink Institute™

The PDPA prohibits data users from collecting and processing personal data without obtaining the data subject's consent. It also prohibits data consumers from disclosing or sharing their data with third parties without obtaining prior consent. The PDPA mandates that data users inform data subjects about the purpose of data collection, the potential recipients of the data, and the options available to data subjects regarding data usage.

Furthermore, the PDPA requires data users to implement appropriate safeguards and indemnity measures to protect the data they control from theft, misuse, unauthorized access, accidental disclosure, alteration, or destruction. Additionally, the Act grants data subjects the right to access, modify, and update their personal information.

3.4 Protection of Consumer Data in Islamic Law

The objectives of Islamic law (Shariah) are the protection of religion, protection of life, protection of intellect, protection of lineage, and protection of property. In consequence, Islamic law acknowledges all expression and conduct which are purposely for the protection of the objectives. Al-Ghazali explains that:

"The Shariah's purposes of the creation are five: to protect their religion, their life, their intellect, their lineage, and their property. Therefore, everything that includes protecting these five principles is considered as an interest (maslahah). In contrast, everything that contrary to these principles is harm that should be fought and tuned to an interest. The prohibition of failing or restraining these five principles has always been included in all religions and Shariah as Shariah comes for the interest of humankind." (Al-Ghazali, 1993).

Islamic law outlines some commands and prohibitions to protect the privacy of human being as these commands and prohibitions are indirectly related to data protection. By observe these commands and prohibitions, the five objectives of Islamic law will be protected. There are some examples of commands and prohibitions in Islamic law which pertain to the protection of privacy in the Holy Quran and the traditions of the Prophet PBUH.

First is the command of not entering into the house of others unless consent is manifestly granted in verses 27 and 28 of Surah al-Nur. Allah the Almighty said:

"O ye who believe! Enter not houses other than your own without first announcing your presence and invoking peace upon the folk thereof. That is better for you, that ye may be heedful. And if ye find no-one therein, still enter not until permission hath been given. And if it is said unto you: Go away again, then go away, for it is purer for you. Allah knoweth what ye do." (An-Nur, 27-28)

The rationale behind this is clear: if there is no response, it signifies that the occupants of the house do not desire any intrusion at that particular time. Entering someone's house without permission is not permissible, even if it appears unoccupied. This principle serves as a directive for respecting and safeguarding the privacy of a person's residence.

Second is the command of not entering into other family members' room predominantly in privacy period before asking leave. Allah the Almighty said in verses 58 and 59 of Surah



al-Nur:

"O ye who believe! Let your slaves, and those of you who have not come to puberty, ask leave of you at three times (before they come into your presence): Before the prayer of dawn, and when ye lay aside your raiment for the heat of noon, and after the prayer of night. Three times of privacy for you. It is no sin for them or you at other times when some of you go round attendant upon others (if they come into your presence without leave). Thus, Allah maketh clear the revelations for you. Allah is Knower, Wise. And when the children among you come to puberty then let them ask to leave even as those before they used to ask it. Thus, Allah maketh clear His revelations for you. Allah is Knower, Wise." (An-Nur, 58-59).

The three times are before the prayer of dawn (al-Subh), noon, and after the prayer of the night (al-Isha'). These are the three periods when a person's intimate parts are exposed due to the condition of sleeping or resting at noon or preparing for sleep. Therefore, a person must be asked to enter other family members' room, especially in the three-period for the protection of family members' privacy.

The third is the command of lowering down gaze for men and women to preserve chastity and guard others privacy. Allah the Almighty said in verses 30 and 31 Surah al-Nur:

"Tell the believing men to lower their gaze and be modest. That is purer for them. Lo! Allah is aware of what they do. And tell the believing women to lower their gaze and be modest, and to display of their adornment only that which is apparent, and to draw their veils over their bosoms." (An-Nur, 30-31).

The command is to preserve chastity and guard others privacy. By lowering downgaze, a person guards himself and herself against encroaching others' privacy. Besides, the command of being modest and hiding the adornment is intended to protect one's privacy.

Fourth is the prohibitions of the Prophet PBUH to expressions and conducts which are intruding the privacy of the other. For examples, the Prophet PBUH said:

"Do not harm the Muslims, nor revile them, nor spy on them to expose their secrets. For indeed whoever tries to expose his Muslims brother's secrets, Allah exposes his secrets wide open, even if he were in the depth of his house." (At-Tirmidhi, 1975).

"Do not cover the walls. He who sees the letter of his brother without his permission, sees Hell-fire." (Abu Dawud, n.d).

In an occasion, the Prophet PBUH said to Khalid bin al-Walid when he wanted to execute a man who insulted the Prophet PBUH:

"Perhaps he may be observing the prayer,"

Khalid said to the Prophet PBUH:

"How many observers of prayer are there who profess with their tongue what is not in their heart?"



The Prophet PBUH then replied:

"I have not been commanded to pierce through the hearts of people, nor to split their bellies (insides)." (Muslim, n.d).

Muslim scholars, guided by the aforementioned evidence (al-dalail) as well as other supporting evidence, assert that it is an individual's entitlement to be safe and secure. This includes the protection of their privacy within their home and the safeguarding of their life from intrusion through eavesdropping and surveillance by others. Thus, a person's right to protect his personal life and his personal information are guaranteed in Islam unless this right is protected, it will cause harm and destruction (al-mafsadah). For example, in cases of corruption, asset embezzlement, fraud, etc., then in such cases, it is allowed to infiltrate the data of others even if it violates their rights (Al-Sayyid, 2017).

4. Conclusion

In conclusion, both Islamic and Malaysian law protects the right of privacy of each person relate to their privacy and rights to be safe and secure. These can be understood by the objectives of Islamic law and some commands of Allah the Almighty and prohibitions of the Prophet PBUH which are indirect regarding the data protection. Nonetheless, it is allowable to breach someone's privacy when such action is necessitated by data protection concerns, particularly in situations where the rights of others are at risk of harm or destruction. By virtue of Malaysian law, the protection can be reflected through the laws enacted namely Federal Constitution, the PDPA.

Acknowledgments

The authors fully acknowledge the sponsorship from the Universiti Teknologi MARA Cawangan Johor Kampus Segamat under scheme entitled Inisiatif Pembiayaan Yuran Penerbitan Artikel (PYPA) @ UiTM Johor 2023.

References

Abas, A. (2017, November 28). Almost 10,000 online incidents reported to CyberSecurity Malaysia each year. News Straits Times. https://www.nst.com.my/news/nation/2017/11/308374/almost-10000-online-incidents-reporte d-cybersecurity-malaysia-each-year

Abu Dawud, Sulayman bin al-Ash'ath al-Azdi al-Sijistani (n.d.). *Sunan Abu Dawud*. Bayrut: Maktabah al-Asriyah.

Al-Ghazali, Abu Hamid Muhammad bin Muhammad (1993/1413). *Al-Mustasfa*. n.p.: Dar al-Kutub al-'Ilmiyah.

Al-Sayyid, Abd al-Majid. (2017). Ihtiram al-Khususiyah. Dar al-Ifta' al-Misriyah.

Al-Tirmidhi, Abu 'Isa Muhammad bin 'Isa al-Sulami al-Darir al-Bughi. (1975). *Jami' al-Tirmidhi*. Egypt: Syirkah Maktabah wa Matba'ah Mustafa al-Babi al-Halabi.

Department of Statistics Malaysia. (2019). Retrieved from



https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=395&bul_id=SFRacT RUMEVRUFo1Ulc4Y1J1LzBqUT09&menu_id=amVoWU54UTl0a21NWmdhMjFMMWcy Zz09

Department of Statistics Malaysia. (2022). *Statistics on ICT Use and Access by Individuals and Households, ICT Use and Access by Individuals and Households Survey Report, Malaysia, 2021.* Department of Statistics Malaysia. Retrieved from https://www.dosm.gov.my/portal-main/release-content/ict-use-and-access-by-individuals-and -households-survey-report-malaysia-2021#:~:text=ICT%20USE%20BY%20INDIVIDUALS, 89.6%20per%20cent%20in%20200

Foong Cheng Leong. (2020). *Foong's Malaysia Cyber, Electronic Evidence, and Information Technology Law.* Malaysia: Thomson Reuters Asia Sdn Bhd.

Kemp, S. (2023, February 13). *Digital 2023: Malaysia*. DataReportal. https://datareportal.com/reports/digital-2023-malaysia#:~:text=There%20were%2033.03%20 million%20internet%20users%20in%20Malaysia%20in%20January,percent)%20between%2 02022%20and%202023.

Malaysian Communications and Multimedia Commission. (2021). *Hand Phone Users Survey 2021. (HPUS 2021)*. Malaysia: Malaysian Communications and Multimedia Commission.

Malaysian Investment Development Authority (MIDA). (2019). Retrieved from https://www.mida.gov.my/home/9767/news/a-bountiful-year-for-e-commerce-/.

Muslim, Abu al-Husayn 'Asakir al-Din Muslim bin al-Hajjaj bin Muslim bin Ward bin Kawshadh al-Qushayri al-Naysaburi (n.d.). *Sahih Muslim*. Bayrut: Dar Ihya' al-Turath.

Statista. (2023). *eCommerce* – *Malaysia*. Statista. Retrieved from https://www.statista.com/outlook/dmo/ecommerce/malaysia#:~:text=Revenue%20in%20the %20eCommerce%20market,US%2414.40bn%20by%202027.

Tan, OSL, Vergara, RG, Phan, RCW, Khan, S and Khan, N. (2020). *Cybersecurity Laws in Malaysia, Encyclopedia of Criminal Activities and the Deep*. IGI Global Publisher.

Technode Global Staff. (2023, July 6). *Malaysia's E-Commerce Transactions Income Surges 10.4 Pct Year On Year In First Quarter*. Technode.Global. Retrieved from https://technode.global/2023/07/06/malaysias-e-commerce-transactions-income-surges-10.4pct-year-on-year-in-first-quarter/#:~:text=As%20for%202022%2C%20the%20e,compared%2 0to%20the%20previous%20year.

Copyright Disclaimer

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).