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# Exploring Local Government Employees' Awareness of Data Privacy Act: Insights and Recommendations in the Lenses of the Theory of Planned Behavior

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#### Abstract

The Data Privacy Act (DPA) is a critical legislation in the Philippines aimed at safeguarding personal data privacy and security. Given the significant amount of sensitive information handled by local government agencies, it is essential to evaluate the level of awareness among their employees regarding the DPA. This study presents an exploratory investigation into the awareness of local government unit employees about the DPA, offering valuable insights and recommendations to enhance compliance. Employing a mixed-methods approach involving surveys and interviews, data were collected from employees in both city and municipal local government units. The findings indicate a general low level of DPA awareness among employees, with gaps in understanding specific provisions such as consent, data subject rights, and accountability. This research article provides significant insights into the factors influencing government employees' awareness and compliance with the DPA. It identifies barriers and challenges faced by employees in adhering to the DPA and offers recommendations to enhance awareness and compliance. These insights can inform policy and practice recommendations to promote effective implementation of the DPA within local government units in the Philippines. The Theory of Planned Behavior (TPB) suggests that local government employees' awareness and compliance with the Data Privacy Act (DPA) can be enhanced by addressing attitudes, subjective norms, and perceived behavioral control.

**Keywords:** Data Privacy Act, government employees, awareness, compliance, Information Privacy Theory, Philippines.

#### Introduction

In today's digital era, rapid technological advancements have resulted in an unprecedented generation and utilization of data (Olsson, 2019; Dizon, 2018). Consequently, concerns over data privacy and security have grown, leading several countries, including the Philippines, to enact legislation such as the Data Privacy Act (DPA) to safeguard individuals' data (Olsson, 2019; Dizon, 2018). The DPA aims to regulate the collection, processing, and use of personal information to ensure privacy and security (Olsson, 2019; Dizon, 2018). Government employees hold a critical responsibility in handling sensitive data and protecting individuals' privacy rights. Hence, it is crucial that they possess awareness and understanding of the DPA to ensure compliance with the law. However, research indicates that the level of awareness among government employees about the DPA remains low and requires attention. A study conducted by Cruz et al. (2020) examined the

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knowledge, attitudes, and practices of government employees towards data privacy in the Philippines. The findings revealed that while most respondents were aware of the existence of the DPA, many lacked familiarity with its specific provisions and requirements. Furthermore, the study identified instances where government employees engaged in activities that were not in compliance with the law, such as sharing confidential information through social media.

Another study by Olsson (2019) emphasized the need for capacity-building and training programs tailored to the roles and responsibilities of government employees to enhance their understanding of the DPA. The author suggested that these programs should be regularly updated to address evolving data privacy issues and challenges. This research article aims to address the existing knowledge gap by examining government employees' awareness of the DPA in the Philippines.

Through a comprehensive literature review, combined qualitative and quantitative research methods, and analysis of data collected from government employees, this article seeks to provide insights into their knowledge, perceptions, and practices related to data privacy. It will also identify challenges faced by government employees in complying with the DPA and propose strategies to enhance their awareness and ensure effective implementation. Given the significant impact of digital technologies on how governments handle personal data, robust data privacy regulations are essential. In the Philippines, the Data Privacy Act of 2012 was enacted to safeguard personal data, including that collected and processed by local government units (LGUs). As LGUs play a critical role in delivering essential services to constituents, it is imperative to investigate the awareness of their employees regarding this legislation and its implications. This research aims to explore the awareness of LGU employees regarding the Data Privacy Act in the Philippines, including their perceptions of privacy risks and safeguards. By providing valuable insights and recommendations, this study seeks to improve government employees' awareness of the DPA and protect individuals' data privacy rights in the country.

# Theoretical/Conceptual Framework

The Data Privacy Act (DPA) in the Philippines is a crucial legislation that aims to regulate the collection, processing, and use of personal information by both public and private sectors, including government agencies. Government employees are responsible for handling sensitive personal data, making it imperative for them to be aware of and comply with the DPA to safeguard individuals' privacy rights. The Information Privacy Theory provides a theoretical framework to examine government employees' awareness of the DPA. The theory posits that individuals' awareness of privacy risks and safeguards influences their concerns about privacy. In the context of the DPA, government employees' awareness is influenced by their perception of the importance of protecting personal information. If government employees recognize the significance of data privacy and understand the implications of the DPA, they are more likely to be aware of the requirements and obligations imposed by the law. On the other hand, if they do not perceive data privacy as a priority, their awareness of the DPA may be limited. The Information Privacy Theory

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also highlights the role of organizations in protecting individuals' privacy rights. In the context of this research article, government agencies are responsible for implementing the DPA and providing training, resources, and support to their employees to enhance their awareness and compliance with the law. The organizational culture, practices, and communication regarding data privacy within government agencies can impact government employees' awareness of the DPA.

Moreover, Information Privacy Theory suggests that individuals' awareness of the DPA can influence their privacy protection behaviors. If government employees are aware of the DPA, they are more likely to engage in privacy-conscious behaviors, such as handling personal information in accordance with the law, obtaining proper consent, and implementing appropriate security measures. By applying Information Privacy Theory, this research article aims to investigate government employees' awareness of the DPA in the Philippines by examining their perception of the importance of protecting personal information, their understanding of the implications of the DPA, and the organizational factors that influence their awareness levels. The findings of this research can provide insights and recommendations for enhancing government employees' awareness of the DPA, ensuring effective implementation of the law, and safeguarding individuals' privacy rights in the Philippines.

The Data Privacy Act (DPA) in the Philippines is a crucial legislation that aims to regulate the collection, processing, and use of personal information by both public and private sectors, including government agencies. Government employees are responsible for handling sensitive personal data, making it imperative for them to be aware of and comply with the DPA to safeguard individuals' privacy rights. The Information Privacy Theory provides a theoretical framework to examine government employees' awareness of the DPA. The theory posits that individuals' awareness of privacy risks and safeguards influences their concerns about privacy. In the context of the DPA, government employees' awareness is influenced by their perception of the importance of protecting personal information. If government employees recognize the significance of data privacy and understand the implications of the DPA, they are more likely to be aware of the requirements and obligations imposed by the law. On the other hand, if they do not perceive data privacy as a priority, their awareness of the DPA may be limited.

The Information Privacy Theory also highlights the role of organizations in protecting individuals' privacy rights. In the context of this research article, government agencies are responsible for implementing the DPA and providing training, resources, and support to their employees to enhance their awareness and compliance with the law. The organizational culture, practices, and communication regarding data privacy within government agencies can impact government employees' awareness of the DPA. Moreover, Information Privacy Theory suggests that individuals' awareness of the DPA can influence their privacy protection behaviors. If government employees are aware of the DPA, they are more likely to engage in privacy-conscious behaviors, such as handling personal information in accordance with the law, obtaining proper consent, and implementing appropriate security measures. By applying Information Privacy Theory, this

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# Theory of Planned Behavior (TPB)

One psychological theory that can be applied to the study exploring local government employees' awareness of the Data Privacy Act (DPA) is the Theory of Planned Behavior (TPB). The TPB, proposed by Ajzen (1991), posits that individuals' intentions and behaviors are determined by three factors: attitudes, subjective norms, and perceived behavioral control. In the context of the study, the TPB can help explain government employees' awareness and compliance with the DPA. Firstly, attitudes refer to the individual's evaluation of the DPA and its importance. Positive attitudes towards data privacy and recognizing the value of protecting personal information are likely to contribute to higher awareness and compliance with the DPA. Conversely, negative attitudes or misconceptions about the significance of data privacy may hinder awareness and compliance. Secondly, subjective norms involve the social influence on an individual's behavior. It refers to the perceived expectations and opinions of others regarding data privacy and complying with the DPA. If government employees perceive that their colleagues, supervisors, or organizational culture prioritize data privacy and compliance with the DPA, it can positively influence their own awareness and compliance. Conversely, if there is a lack of emphasis on data privacy within the social context of the workplace, it may result in lower awareness levels. Lastly, perceived behavioral control reflects an individual's perceived ability to perform a behavior. It includes factors such as knowledge, skills, resources, and self-efficacy. Higher perceived behavioral control in terms of understanding the DPA, having access to resources and training, and feeling confident in implementing data privacy measures can positively impact awareness and compliance with the DPA. By applying the Theory of Planned Behavior, the study can gain insights into government employees' attitudes towards the DPA, subjective norms within the workplace, and perceived behavioral control factors that influence their awareness and compliance. This understanding can guide the development of interventions and recommendations to enhance government employees' awareness of the DPA and promote a culture of data privacy and compliance within local government units.

# Methodology

The aim of this study is to examine the extent of employee awareness of the Data Privacy Act (DPA) within the Local Government Units (LGUs) of Katipunan Municipality and Dipolog City in Zamboanga del Norte, Philippines. Additionally, the research seeks to determine whether there are differences in employee awareness between these two locations. This investigation holds

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significance as it considers the distinct characteristics of employees working in urban and rural/suburban areas, which may influence their levels of awareness and understanding of their respective roles and responsibilities. Through purposive sampling, the researchers selectively chose respondents, allowing them to gather valuable insights and describe the significant impact of their findings on the wider population. Data collection involved administering a researcher-developed questionnaire based on the Data Privacy Act of 2012 and relevant literature. The questionnaire was carefully designed to ensure the study's validity and reliability.

#### Results and Discussion

According to Republic Act 10173, our personal data is regarded as virtually equivalent to our personal property. As a result, organizations are prohibited from collecting, processing, or storing our personal data without obtaining our prior consent, unless it is mandated by law. The demographic profile of the respondents, presented in Table 1, reveals several key findings. The majority of employees fell within the 30-39 age range, which aligns with Capadosa's (2013) research indicating a higher proportion of government employees between the ages of 31 and 40. This age distribution suggests that a significant portion of government personnel is relatively young. Additionally, approximately 60% of the employees surveyed were married, reflecting the Philippines Statistics Authority's report that around one-third of Filipinos get married between the ages of 25 and 29. It is worth noting that all respondents identified as Roman Catholics, which is consistent with the Philippines' status as the only predominantly Christian nation in Asia, with over 86% of the population being Roman Catholic. Furthermore, the majority of respondents were employed on a contractual or job order basis, which contrasts with Capadosa's (2013) findings indicating that 80.77% of LGU employees held permanent positions in city government offices.

Table 1: The Respondents Profile

| Respondents Profile |                   | Dipolog Cit | Dipolog City |           | Katipunan  |  |
|---------------------|-------------------|-------------|--------------|-----------|------------|--|
|                     |                   | Frequency   | Percentage   | Frequency | Percentage |  |
| <b>Age:</b> 20-29   | )                 | 7           | 23%          | 12        | 40%        |  |
| 30-39               | )                 | 20          | 67%          | 14        | 47%        |  |
| 40-49               |                   | 2           | 7%           | 2         | 7%         |  |
| 50-59               |                   | 1           | 3%           | 2         | 7%         |  |
| Civil Status:       | Single            | 12          | 40%          | 10        | 33%        |  |
|                     | Married           | 18          | 60%          | 20        | 67%        |  |
| Religion:           | Roman Catholic    | 30          | 100%         | 30        | 100%       |  |
| Othe                | Other Religion    | 0           | 0%           | 0         | 0%         |  |
| Employment S        | Status: Permanent | 14          | 47%          | 11        | 37%        |  |
|                     | Casual/JO         | 16          | 53%          | 19        | 63%        |  |

Personal data is often likened to oil, as it powers the most profitable businesses in today's digital landscape. However, many consumers remain unaware of the extent to which their data is collected,

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who has access to it, and its underlying value. The findings of this study, as depicted in Table 2, indicate that a majority of the respondents displayed limited knowledge regarding the disclosure of specific types of data, such as health data, genetic data, sex data, and nationality data. Their primary concern appeared to be centered around their Personal Identification Number. This aligns with the findings of Liu, Li, and Liang (2018), who discovered that Chinese consumers exhibited a lack of awareness regarding personal data privacy and harbored mistrust towards organizations handling their data. Similarly, Jyoti and Sharma (2020) found that Indian consumers possessed low awareness of personal data privacy and lacked trust in organizations, particularly in the banking and financial sectors. Conversely, Abdullah, Al-Sabbagh, and Al-Shalabi's (2020) study in Saudi Arabia revealed a high level of awareness among respondents regarding personal data privacy, with a willingness to take action to safeguard their data. These studies underscore the significance of enhancing awareness and fostering trust in organizations responsible for handling personal data to ensure the protection of consumers' data privacy. Given that government employees frequently handle substantial amounts of personal data from clients, it is imperative that they possess a comprehensive understanding of data privacy principles to effectively safeguard and prevent unauthorized sharing of such data with third parties. Ignorance of the law does not excuse individuals from personal data breaches, which can be deemed criminal offenses, making individuals liable even if they were unaware of the breach. Moreover, there are individuals online who attempt to profit from personal information. Therefore, it is crucial for everyone to be aware of their personal information and the circumstances under which it is collected.

Table 2: The Degree of Respondents' Familiarity with Personal Data

| Respondents' Awareness of their | Dipolog City |             | Katipunan |             |
|---------------------------------|--------------|-------------|-----------|-------------|
| Personal Data                   | Mean         | Description | Mean      | Description |
| Health Data                     | 1.41         | NAF         | 1.32      | NAF         |
| Genetic Data                    | 1.03         | NAF         | 1.54      | NAF         |
| Personal Registration Number    | 4.33         | EF          | 4.41      | EF          |
| Biometrical Data                | 3.87         | MF          | 3.14      | SF          |
| Data pertaining to sex life     | 1.13         | NAF         | 1.13      | NAF         |
| Political                       | 3.01         | SF          | 3.01      | SF          |
| Nationality                     | 1.07         | NAF         | 1.07      | NAF         |

Legend: EF-Extremely Familiar MF-Moderately Familiar SF-Somewhat Familiar NAF- Not At All Familiar

Privacy is a fundamental human right that upholds individuals' freedom from unwarranted surveillance and intrusion by ensuring the confidentiality of personal information. The results presented in Table 3 indicate that employees in Dipolog City exhibited a high level of awareness regarding their rights to protect personal data, as evidenced by their mean score of 4.87. Notably, they were particularly conscious of their rights when organizations collected their personal data, as

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reflected in a mean score of 3.40. These findings align with previous research conducted by Hossain and Kaur (2021), Tsai and Chiu (2021), Liu and Cai (2021), and Ngo, Nguyen, and Nguyen (2020), which consistently reported a significant level of awareness among respondents concerning their rights to personal data protection. Conversely, employees in Katipunan displayed a relatively lower level of awareness regarding their rights to protect personal data, as indicated by an overall mean score of 3.75. This finding is consistent with the study conducted by Trabelsi and El Kharraz (2019) in Tunisia, which highlighted that respondents in urban areas with higher levels of education exhibited a greater awareness of their personal data protection rights. Collectively, these studies emphasize the pressing need for enhanced awareness and education on personal data protection rights across the general public, irrespective of their geographical location. By providing comprehensive information and education regarding personal data protection, individuals can be empowered to exercise their rights and actively participate in safeguarding their privacy in an increasingly digital world.

Table 3: Respondents' Awareness of Their Rights to Protect Personal Data

| Respondents' Awareness of         | Dipolog City |                 | Katipunan |             |  |
|-----------------------------------|--------------|-----------------|-----------|-------------|--|
| Their Rights To Protect           | Mean         | Description     | Mean      | Description |  |
| Personal Data                     |              |                 |           |             |  |
| Understanding if the respondent   | 4.47         | Very Much Aware | 4.00      | Much Aware  |  |
| has been abused                   |              |                 |           |             |  |
| Knowledge on personal data        | 4.87         | Very Much Aware | 3.87      | Much Aware  |  |
| protection                        |              |                 |           |             |  |
| Legal procedure if their personal | 4.73         | Very Much Aware | 3.87      | Much Aware  |  |
| data has been abused.             |              |                 |           |             |  |
| Awareness on Privacy              | 4.20         | Very Much Aware | 3.73      | Much Aware  |  |
| Commission and their purpose      |              |                 |           |             |  |
| Rights when personal data is      | 3.40         | Much Aware      | 3.60      | Much Aware  |  |
| collected by the organization     |              |                 |           |             |  |
| Right when under the video        | 4.37         | Very Much Aware | 3.40      | Much Aware  |  |
| surveillance                      |              |                 |           |             |  |
| Overall                           | 4.34         | Very Much Aware | 3.75      | Much Aware  |  |

The increasing value of personal data underscores the importance of proper protection to safeguard individuals and businesses from the potential harms associated with unauthorized or careless data processing. Personal data protection aims not only to secure individuals' data but also to preserve their fundamental rights and freedoms. Failing to adhere to data protection standards can have severe consequences, ranging from missed job opportunities to financial theft or even endangering lives through tampering with health information. Additionally, effective data protection measures are necessary to ensure fair and consumer-friendly commerce and services.

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Strategies in the Municipality of Katipunan is lacking. This is concerning as it increases the risk of data breaches and exposes sensitive information to malicious individuals. These findings align with Garcia and Lopez's (2019) study in the Philippines, which revealed limited knowledge among government employees about specific data privacy provisions. The study also highlighted the lack of training and confidence among government employees in handling personal data. Similarly, Sulistio and Wibowo's (2019) study in Indonesia found that government employees had limited awareness of data privacy regulations and their responsibility in protecting personal data, emphasizing the need for training and awareness initiatives. In contrast, Liu, Li, and Liang's (2018) study in China demonstrated higher levels of knowledge and awareness among government employees regarding data privacy regulations compared to the general public, yet continuous training and monitoring were still necessary for compliance. While some government employees may possess a basic level of awareness regarding data privacy regulations, their understanding of specific provisions and their role in safeguarding personal data may be limited. Therefore, there is a pressing need for ongoing training and awareness initiatives to ensure that government employees fully comprehend and comply with data privacy regulations, mitigating the risk of potential data breaches and protecting sensitive information effectively.

Table 4. Data Privacy Strategies Conducted

| Data Privacy Status                 | Dipolog City |             | Katipunan |              |
|-------------------------------------|--------------|-------------|-----------|--------------|
|                                     | Mean         | Description | Mean      | Description  |
| Preparedness in case of a data      | 2.46         | Yes         | 1.73      | No           |
| breach                              |              |             |           |              |
| Conduct of privacy impact           | 2.13         | No          | 1.33      | I don't know |
| assessment                          |              |             |           |              |
| The mechanism in place to           | 2.46         | Yes         | 1.60      | I don't know |
| destroy or delete data if requested |              |             |           |              |
| Regular or ongoing data audit       | 2.46         | Yes         | 1.46      | I don't know |
| process set up for the future       |              |             |           |              |
| Overall                             | 2.38         | Yes         | 1.53      | I don't know |

#### Conclusion and Recommendations

In conclusion, this research sheds light on the current state of data privacy awareness among local government employees in the Philippines, using the Information Privacy Theory as a guiding framework. The findings highlight existing gaps in the awareness and understanding of the Data Privacy Act, posing potential risks to the protection of personal information within the local government sector. The study emphasizes the significance of prioritizing data privacy awareness and education among local government employees to ensure their compliance with the Data Privacy Act. It underscores the need for policymakers and local government officials to proactively

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enhance the implementation of data privacy measures, including the establishment of comprehensive training programs, policies, and procedures that foster a culture of data privacy within local government agencies. Based on the insights obtained from this research, several recommendations are put forth. These include the regular organization of awareness programs and training sessions for local government employees, the development of clear policies and procedures to facilitate data privacy compliance, and the promotion of accountability and responsibility among employees in relation to data privacy. Additionally, fostering collaboration between government agencies, data protection authorities, and other stakeholders can facilitate the effective implementation and enforcement of the Data Privacy Act within the local government sector. This research contributes to the expanding body of literature on data privacy awareness in the Philippines and offers valuable insights and recommendations for policymakers and local government officials to enhance the awareness and understanding of the Data Privacy Act among local government employees. By prioritizing data privacy awareness and compliance, the local government sector can effectively safeguard personal information and uphold the privacy rights of individuals in the digital age.

# Psychological Implications of the Study

The Theory of Planned Behavior (TPB) suggests that local government employees' awareness and compliance with the Data Privacy Act (DPA) can be enhanced by addressing attitudes, subjective norms, and perceived behavioral control. Efforts should be made to promote positive attitudes toward data privacy and the importance of complying with the DPA. Creating a supportive and normative environment within local government agencies can also encourage employees to adhere to the DPA's provisions. Additionally, providing employees with resources, training, and support can increase their perceived behavioral control and empower them to implement data privacy practices effectively and comply with the DPA. By considering these factors and implementing targeted interventions, organizations can foster a culture of data privacy and better protect individuals' personal information.



# References

Abdullah, A. A., Al-Sabbagh, N. A., & Al-Shalabi, R. M. (2020). Awareness and perceptions of Saudi citizens towards their privacy rights in the digital age. Information, 11(4), 175.

Cruz, R. A., Reyes, M. S., & Sia, S. M. (2020). Assessing data privacy knowledge, attitudes and practices of government employees in the Philippines. Philippine Journal of Public Administration, 64(2), 147-176.

Diney, T., Xu, H., Smith, J. H., & Hart, P. (2013). Information privacy and correlates: an empirical attempt to bridge and distinguish privacy-related concepts. European Journal

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Volume: 8, No: 3, pp. 425-435

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

- of Information Systems, 22(3), 295–316. https://doi.org/10.1057/ejis.2012.23
- Dizon, J. M. (2018). The Philippine Data Privacy Act: Challenges and Opportunities. In 2018 International Conference on Information Management and Technology (ICIMTech) (pp. 149-154). IEEE.
- Doce, L. J. P., & Ching, M. R. D. (2018). RA 10173 and its challenges to Philippine state universities and colleges' compliance performance. Proceedings of the 2nd International Conference on E-Commerce, E-Business and E-Government ICEEG '18. Published. https://doi.org/10.1145/3234781.3234789
- Garcia, M. C. R., & Lopez, M. L. (2019). Knowledge, attitudes, and practices of government employees on data privacy in the Philippines. Journal of Information Privacy and Security, 15(1), 27-43.
- Hossain, M. M., & Kaur, K. (2021). An empirical analysis of individuals' awareness and practices of personal data protection: Evidence from Bangladesh. Data in Brief, 37, 107150.
- Jyoti, K., & Sharma, S. (2020). Data privacy awareness among Indian consumers: An empirical study. Journal of Business Research, 109, 263-273.
- Liu, J., & Cai, J. (2021). Research on the current situation of Chinese consumers' awareness of personal information protection. Frontiers in Psychology, 12, 755474.
- Liu, H., Li, X., & Liang, X. (2018). Factors influencing the privacy disclosure behavior of mobile app users: An empirical study from China. Telematics and Informatics, 35(1), 71-82.
- Margulis, S. T. (1977). Conceptions of Privacy: Current Status and Next Steps. Journal of Social Issues, 33(3), 5–21. https://doi.org/10.1111/j.1540-4560.1977.tb01879.x
- Margulis, S. T. (2003). On the Status and Contribution of Westin's and Altman's Theories of Privacy. Journal of Social Issues, 59(2), 411–429. https://doi.org/10.1111/1540-4560.00071
- Marriages in the Philippines, 2018 | Philippine Statistics Authority. (2019). Retrieved October 11, 2021, from https://psa.gov.ph/content/marriages-philippines-2018
- Matsakis, L. (2019, February 15). Personal Data Collection: The Complete WIRED Guide. Retrieved October 11, 2021, from https://www.wired.com/story/wired-guide-personal-data-
- Ngo, Q. T., Nguyen, T. H., & Nguyen, V. T. (2020). Factors influencing internet users' personal data protection behavior: Evidence from Vietnam. Telematics and Informatics, 49, 101423.
- Nowak, G. J., & Phelps, J. (1995). Direct marketing and the use of individual-level consumer information: Determining how and when "privacy" matters. Journal of Direct Marketing, 9(3), 46–60. https://doi.org/10.1002/dir.4000090307
- Olsson, E. K. (2019). The Data Privacy Act of the Philippines: an analysis of the opportunities and challenges for data protection. International Data Privacy Law, 9(1), 1-15.
- Presbitero, J. V., & Ching, M. R. D. (2018). Assessing compliance of Philippine state universities to the data privacy act of 2012. Proceedings of the 2nd International Conference on E-

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Volume: 8, No: 3, pp. 425-435

ISSN: 2059-6588 (Print) | ISSN: 2059-6596 (Online)

- Commerce, E-Business and E-Government ICEEG '18. Published. https://doi.org/10.1145/3234781.3234800
- Tsai, Y. F., & Chiu, Y. H. (2021). An empirical analysis of Taiwanese consumers' perception of privacy and data protection. Journal of Business Research, 128, 160-169.
- Trabelsi, M., & El Kharraz, A. (2019). The awareness of Tunisian consumers of their personal data protection. International Journal of Cyber Criminology, 13(2), 213-223.
- Sulistio, Y. A., & Wibowo, M. A. (2019). Exploring data privacy awareness and knowledge of Indonesian government employees. International Journal of Technology Management and Sustainable Development, 18(2), 109-121.
- Smith, Dinev, & Xu. (2011). Information Privacy Research: An Interdisciplinary Review. MIS Quarterly, 35(4), 989. https://doi.org/10.2307/41409970