



Perception of Adoption of Technologies in Modern Policing: A Case Study in Mati City

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DEDICATION

First, this thesis would not be possible without the undying support of our loving parents, their encouragement, and their belief in us throughout our college journey. The Researchers will always be grateful for the unconditional love they have showered on us both good and desperate times.

Second, to our mentors and advisers who tirelessly imparted us knowledge and ideas and guided us in completing this thesis. Without their unwavering support and accommodation, we would not be able to put ourselves into limits, thank you so much!

And lastly, to ourselves, for always believing in our capabilities and not giving up on our dreams, having a thirst for success, and striving for the best and perseverance. This accomplishment is not just ours, but to all people who have been part of our journey in completing this thesis. Thank you for believing and seeing the best version of ourselves.

The Researchers

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The Researchers

ABSTRACT

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This study aimed to determine perceptions towards adopting technologies in Mati City, focusing on the perspective of police officers. The study analyzed data collected through surveys and structured questionnaires to assess various domains of perceived utility, privacy and ethical concerns, risk perception, and organizational support and infrastructure. The study revealed a positive reception towards technology adoption among 100 police officers in the Davao Oriental Police Provincial Office (DOPPO), recognizing the benefits for law enforcement. The respondents perceived modern technologies as useful in the organization and recognized the privacy and ethical issues associated with operations, the technicalities and malfunctions of using these technologies, and the organizational support of the social system. The study underscored the critical role that organization plays, including prime advocates for adequate training, resources, and leadership, in fostering successful technology adoption. Addressing these concerns and engaging in comprehensive technology training programs within the police force to facilitate efficiency and foster a culture of positive perceptions of innovations in modern policing, are crucial for successful technology implementation and enhancing officer acceptance. The analysis of the indicators across demographic profiles revealed that there is no significant difference in whether these domains were analyzed with age, gender, rank, length of service, and ethnicity which failed to reject the null hypothesis. This indicates that perceptions towards technologies integrated into modern policing are seen as universally beneficial and necessary for the PNP officers regardless of their demographic backgrounds.

Keywords: *Perception of Adoption of Technologies, Modern Policing, Police Officers, Case Study, City of Mat.*

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CHAPTER ONE

INTRODUCTION

The adoption of wearable technologies prompts a significant shift in law enforcement operations, potentially reshaping officers' roles and interactions with the community (Sesay et.al., 2017). Understanding officers' perceptions becomes crucial for effective implementation and utilization since emerging technologies are commonly associated with potential ethical issues for their lack of establishment in society (Brey 2017). As emphasized by Huh-Yoo and Rader (2020), the successful integration of such technologies relies heavily on addressing officers' concerns regarding privacy, ethics, utility, ease of use, organizational support, and risk perception between the adoption of these modern technologies.

In the global context, the use of modern technologies such as Live Facial Recognition in London-based study domineers real-time identity checks of an individual in public spaces with automated capacity (Bradford et al. 2020). Koper et al. (2019) and Hendrix et al. (2019) underscore the magnitude of using Artificial Intelligence Technologies such as location and Hot Spot Analysis Technologies in prevention and crime reduction by highlighting strategic uses of IT within its operational activities. As noted by Ho et.al. (2023), the adoption of such technologies prompts crucial considerations regarding awareness, utility, ease of use, privacy and ethical concerns, organizational support, infrastructure, and risk perception among police officers. Amidst the diverse demographic landscape characterized by varying ages, genders, and ranks within the force, understanding the nuanced perceptions towards technologies becomes imperative for successful implementation and utilization.

In the Philippine context, General Rommer Francisco Marbil emphasized the need to concede with the emerging technologies as new police leadership to adapt to this ever-changing landscape of modern policing that poses a threat to peace and order of the country in combatting local and transnational crimes in conjunction to the innovative technological setting (Manila Bulletin, 2024). To prosper the adoption of innovative practices, General Marbil intends to enhance technological advancement by supporting the police force and becoming accountable to the highest standards. Despite this, there is existing research that lies in the lack of comprehensive understanding regarding police officers' perceptions towards the adoption of technologies. While some studies have explored similar themes in other regions or contexts, there remains a dearth of empirical evidence focusing specifically on the demographic characteristics of police officers, such as age, gender, rank, length of service, and ethnicity, and how these factors influence their perceptions towards technologies.

At the local level, the City Of Mati, as emphasized in the Davao Regional Development Plan 2023-2028, generally pointed out the Peace and Prosperity (PAPs) in its jurisdiction where people feel secure and protected from all forms of criminality through the implementation of Simultaneous Anti-Criminality Law Enforcement Operations (SACLEO) that aims to strengthen and expand police engagements with communities on crime deterrence, reporting, and resolution, including relevant regional policies or local ordinances. However, the evolution of technology across various platforms affects the criminal landscape in the region as it continues to become more sophisticated and even translational and thus there's a need for technological advancement (National Economic and Development Authority Regional Office XI, 2023).

Therefore, this study sought to fill these gaps through a comprehensive investigation of not only the characteristics of the demographic profile of police officers, and their perceptions towards modern technologies but solely the organization's unfamiliarity towards modern technologies in perceiving its utility, privacy and ethical concerns, lack in terms of access to modern tools and organizational support, stagnant with regards to adoption of technologies, and unavailability of management in securing and storing pieces of evidence thereby contributing to a more nuanced understanding of technology adoption within the law enforcement sector. This study, situated in PNP Mati City, sought to explore these multifaceted perceptions, with the overarching goal of informing not just policy and practice but also showcasing the importance of modern tools about police transparency and public opinion and the perks of having positive thoughts towards PNP personnel not only within the local context but also contributing to the broader discourse on modern technology adoption in law enforcement.

This study aimed to determine police officers' perceptions toward the adoption of technologies. Specifically, the objectives are: 1. To characterize the demographic characteristics 2. To assess the level of police officers' perceptions towards the adoption of technologies 3. To determine if there is a significant difference in police officers' perceptions towards the adoption of modern technologies across different demographic profiles.

The null hypothesis various domains such as perceived utility, privacy and ethical concerns, risk perception, and organizational support and infrastructure towards technology adoption into modern policing do not have significant differences across demographic profiles. This study investigated the perceptions of police officers in PNP DOPPO regarding the integration of modern technologies in policing. The researchers encapsulated an exploration of various facets, including demographic characteristics such as age, gender, rank, length of service, and ethnicity. Moreover, it aimed to gauge the level of perceived utility, privacy, ethical concerns, organizational support, and infrastructure, as well as risk perception associated with the adoption of technologies among police officers. The scope encompassed a comprehensive understanding of how these officers perceive the integration of such technologies into their daily operations and the potential implications on their work environment.

While this study endeavored to provide valuable insights into police officers' perspectives on technologies in PNP DOPPO, several limitations were acknowledged. Firstly, the research was constrained by its focus solely on this specific locality, which limited the generalizability of the findings to other contexts. Additionally, the study's timeframe spanned from May to August 2024. Furthermore, the reliance on self-reported data from a limited pool of respondents may have introduced biases, affecting the overall validity of the results. Despite these limitations, this research sought to offer valuable contributions to the understanding of the perceptions surrounding modern technologies among police officers within the specified time and context.

The study focused on understanding police officers' perceptions toward the adoption of modern technologies. The result of the study would be beneficial to the Department of the Interior and Local Government - this study would help departments assess the readiness and acceptance of these technologies within their ranks. Successful integration of modern technologies could highly promote operational efficiency while improving the overall wellness of the public and the peace and order of the country in general. This could be a platform that interchanges perception to increase awareness and campaigns into successful utilization of various technologies in modernizing policing strategies. The demographic characterization can provide insights into the diversity within the police force and how different groups might perceive modern technologies differently. Findings related to perceived utility, ease of use, privacy concerns, organizational support, and risk perception can inform departments about the potential challenges and benefits associated with adopting technologies, additionally to the community - the findings of this study would be beneficial to the community with regards to fostering positive trust towards the police force. Enhancing community relationships could boost the citizen's positive perception of police efficacy in crime prevention and reduction. The legitimacy of the law enforcement agency would also be established provided that the community already manifested the transparency of police operations through various technological platforms.

➤ Conceptual Framework

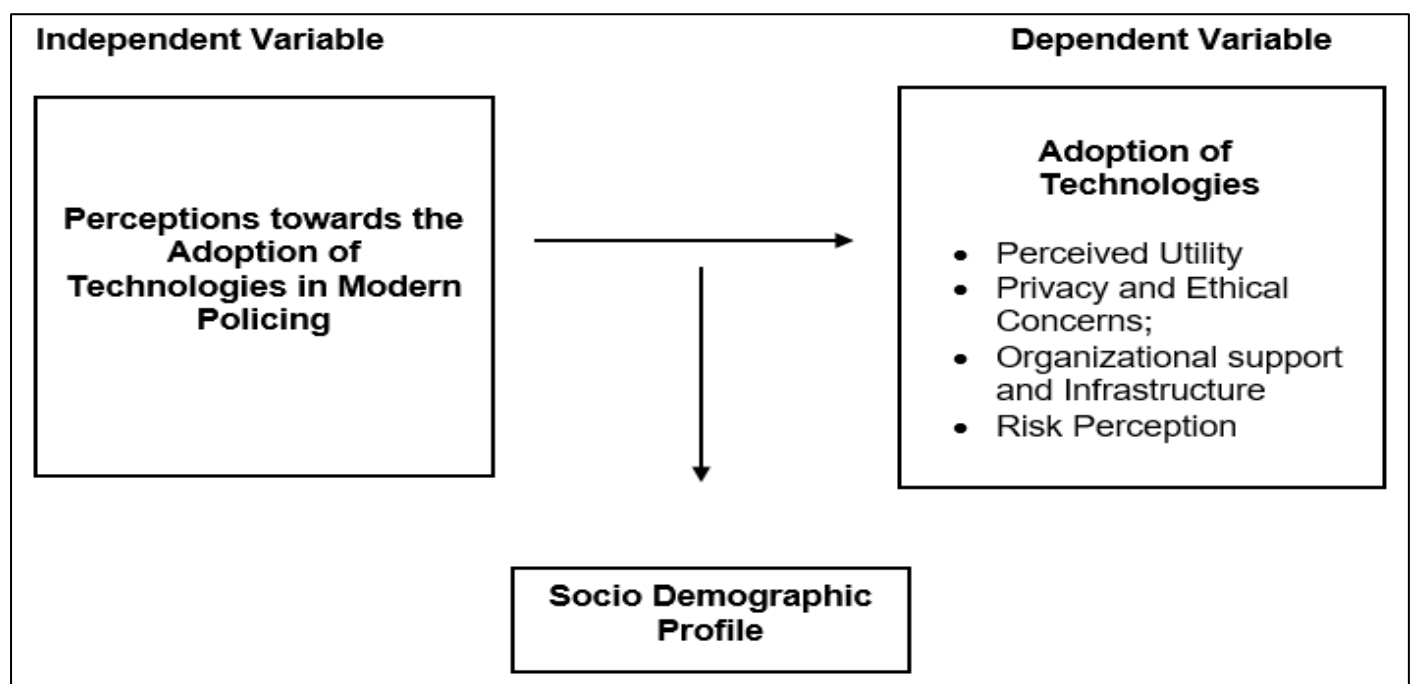


Fig 1 Conceptual Framework

Figure 1 presents the conceptual framework of this study which is grounded in the Technology Acceptance Model (TAM) augmented by demographic characteristics as potential moderators. The Technology Acceptance Model posits that users' perceptions toward adopting new technologies are influenced by perceived usefulness and ease of use. In this context, the test variables encompassed perceived utility, privacy and ethical concerns, organizational support and infrastructure, and risk perception. These variables collectively shape police officers' attitudes toward the adoption of technologies. Additionally, demographic characteristics such as age, gender, rank, length of service, and ethnicity are proposed as moderating variables. The study aimed to investigate whether these demographic factors significantly moderate the relationship between the aforementioned perceptions and officers' willingness to adopt modern technologies.

This study encompassed investigating the relationship between the perception of adoption of the police officers towards modern technologies (independent variable) and the adoption of PNP officers towards modern technologies in policing (dependent variable) and additionally, the demographic factors that play as moderating variable to determine if there is difference towards these various profiles in assessing the perceptions of police officers in PNP DOPPO in regards to adoption of modern technologies in policing.

CHAPTER TWO METHOD

This chapter presents the research steps and procedures employed in our study. It includes research design, source of data, instrument, sampling technique, data gathering, and analysis of data.

This research was conducted in the Davao Oriental Police Provincial Office (DOPPO), Menzi, Barangay Dahican, City of Mati, Davao Oriental. It took place during the academic year of 2024-2025. The study aimed to explore the police officers' perception toward the adoption of technologies in modern policing. Through employing this research, valuable insights were acquired thereby effectively corresponding to the various characterizations of the perception of the police officers towards integrating tools in law enforcement operations in the city. Studying the perception of adoption of technologies in modern policing at Davao Oriental Police Provincial Office is crucial since the rapidly evolving technologies nowadays becomes an integral part of law enforcement worldwide, and by understanding the perception on how PNP officers at DOPPO are adopting these tools into modern policing, the researchers can significantly determine and assess the impact of these tools on police practices, officer performance, and community relations. Understanding the perception on how the PNP officers are utilizing technologies can provide valuable insights into various domain where improvements can be made and any gaps associated in technology adoption. Accordingly, Mati City, Davao Oriental, served as the research locale for the study.

➤ *Research Design*

This study used a quantitative research design, employing a correlational survey method to gather data (Nardi, 2018) from police officers within the PNP DOPPO. The survey questionnaire was designed to capture demographic characteristics such as age, gender, rank, length of service, and ethnicity, in alignment with the first objective of the study. This allowed for the characterization of the sample population and provided insights into potential variations in perceptions based on these demographic factors (Yin, 2018).

Furthermore, the survey instrument included Likert-scale items to assess the level of police officers' perceptions towards adopting technologies, addressing the second objective. Constructs such as perceived utility, privacy and ethical concerns, organizational support and infrastructure, and risk perception were also measured. Each construct was operationalized into multiple items to comprehensively capture the officers' perceptions on various aspects related to technology adoption.

➤ *Research Sampling*

The instrument of this study comprised a structured questionnaire designed to achieve the outlined objectives. Demographic characteristics such as age, gender, rank, length of service, and ethnicity were assessed using appropriate items. To measure police officers' perceptions towards the adoption of technologies, multiple dimensions were considered: perceived utility, privacy and ethical concerns, organizational support and infrastructure, and risk perception. Each dimension was evaluated through relevant questions, with responses measured on Likert-type scales. Additionally, to ascertain any significant differences in perceptions across demographic profiles, appropriate statistical analyses were incorporated.

The sampling technique employed in this study focused on complete enumeration, aimed to include all police officers within the PNP DOPPO jurisdiction, comprising a total of 100 respondents. This method ensured comprehensive coverage of the population under investigation, aligning with the research objective of understanding police officers' perceptions towards the adoption of modern technologies. By encompassing the entire population of interest, this approach facilitated a thorough examination of demographic characteristics, such as age, gender, rank, length of service, and ethnicity, as outlined in the research objective. Additionally, complete enumeration enabled the assessment of police officers' perceptions across various demographic profiles, allowing for the exploration of potential differences in attitudes toward technology adoption within the PNP DOPPO. The decision to employ complete enumeration reflected a commitment to maximizing the representativeness and generalizability of findings, particularly in a context where the entire population of interest is accessible and feasible to study (Santelli et al., 2017). Moreover, by encompassing all eligible participants, complete enumeration minimizes the risk of sampling bias and enhances the credibility of conclusions drawn regarding police officers' perceptions towards technology adoption in PNP DOPPO.

➤ *Source of Data*

This research was comprised of primary data collected through a self-made survey questionnaire administered to police officers within the PNP Mati City jurisdiction. These surveys were designed to gather insights into officers' perceptions regarding the adoption of technologies. Specifically, demographic characteristics such as age, gender, rank, length of service, and ethnicity, were captured to characterize the sample group. Additionally, the surveys assessed officers' perceptions across various dimensions including perceived utility, privacy and ethical concerns, organizational support and infrastructure, and risk perception, aiming to comprehensively understand their attitudes toward technology adoption. Subsequently, statistical analyses were conducted to determine significant differences in these perceptions across different demographic profiles within the police force. The questionnaire was developed based on previous literature and expert consultation, ensuring its relevance and reliability for the study.

Table 1 Likert Scale for the Perception of Adoption of Technologies in Modern Policing in Mati City

Scale	Descriptive Level	Effectiveness Interpretation
5	Always	Perceptions towards the adoption of modern technologies is manifested all the time.
4	Often	Perceptions towards the adoption of modern technologies is manifested oftentimes.
3	Sometimes	Perceptions towards the adoption of modern technologies is manifested sometimes.
2	Rarely	Perceptions towards the adoption of modern technologies is rarely manifested.
1	Never	Perceptions towards the adoption of modern technologies is never manifested.

To ensure that the researchers can use the questionnaire with confidence, knowing that the data collected is reliable, the questionnaire successfully underwent reliability testing and passed through the Cronbach Alpha Reliability Test. The overall total value of .901 implied that the questionnaire items correlated well and the questions in the survey collectively captured the intended variables accurately and also suggested trustworthiness as a tool for measuring the variables of the study. Consequently, this validation process enhanced the credibility and validity of the research findings, providing researchers with confidence in the reliability of the data gathered. The table below was used to interpret the range of means of the questionnaire.

➤ Data Gathering Procedure

The data-gathering phase of this research on police officers' perceptions towards the adoption of technologies in PNP-DOPPO involved a comprehensive approach to meet the outlined objectives. Firstly, demographic characteristics such as age, gender, rank, length of service, and ethnicity were characterized to provide a holistic understanding of the sample population. This enabled the researchers to identify any potential demographic trends or patterns that may influence officers' perceptions of modern technologies. Additionally, the level of police officers' perceptions was assessed across various dimensions including perceived utility, privacy and ethical concerns, organizational support and infrastructure, and risk perception.

Furthermore, the research endeavored to determine if there existed a significant difference in police officers' perceptions towards the adoption of wearable technologies across different demographic profiles. This comparative analysis provided insights into how factors such as age, gender, rank, length of service, and ethnicity, influenced officers' attitudes and acceptance of modern technologies within the PNP DOPPO context. Valuable data gathered in the course of action as the means of the completion of the overall study contained the possibility of a potential conflict of interest. To ensure that participants were fully aware of any potential biases, disclosing potential conflicts of interest is essential to maintaining the trust and integrity of the research process and allows them to decide whether or not to participate in the study based on all available information. Through these rigorous data-gathering methods, this study aimed to contribute valuable insights to the discourse on modern technology adoption in law enforcement settings.

In this research study, several statistical tools were utilized to analyze the data and draw meaningful conclusions regarding police officers' perceptions towards the adoption of technologies in PNP Mati City. Likert Scale and Standard Deviation were also utilized to analyze the data and draw meaningful conclusions regarding police officers' perceptions towards the adoption of modern technologies in the PNP Davao Oriental Provincial Police Office. This tool was crucial for understanding the relationships between various factors and drawing statistically sound conclusions from the result. The statistical tools used include:

Table 2 Range of Means with Descriptive Equivalent and Interpretation Measure

Interval of Means	Descriptive Equivalent	Interpretation
4.25-5.00	Very High	This indicates that the police perceptions towards the adoption of modern technologies is manifested all the time.
3.50-4.24	High	This indicates that the police perceptions towards the adoption of modern technologies is manifested oftentimes.
2.50-3.49	Moderate	This indicates that the police perceptions towards the adoption of modern technologies is manifested sometimes.
1.75-2.49	Low	This indicates that the police perceptions towards the adoption of modern technologies is rarely manifested.
1.00-1.74	Very Low	This indicates that the police perceptions towards the adoption of modern technologies is never manifested.

➤ Ethical Consideration

The researchers observed ethical considerations in administering a survey to ensure the validity of data in the study of the perception of the adoption of technology in modern policing in Davao Oriental. To ensure participants fully understood the study's purpose, risks, benefits, and potential conflict of interest that may arise in the course of action, and freely choose to participate without coercion, informed consents were administered. This important aspect allowed the respondent to be informed and decide whether or not to participate in the study. The process mainly involved providing the participants the clear information regarding the study's purpose, procedures, risks, and benefits for an informed decision about their participation in the study (Denison, 2024).

Voluntary participation was the uppermost priority ensuring that individuals participated in free will without any consequences. Confidentiality was also maintained safeguarding participants' privacy by protecting their identity and ensuring data confidentiality. Take steps to minimize harm or any potential physical and psychological harm to participants throughout the study. In the event of a research-related injury, researchers must seek immediate medical attention and should notify the supervisors of the research project as soon as possible to guide them in seeking medical treatment and in responding to any necessary support services. The health and safety of the individuals involved in the study were the utmost priority in preventing unforeseen circumstances that may arise in the conduct of the study. Maintaining transparency and accountability in the research process and being accountable for ethical decision-making, including addressing any conflicts of interest and ensuring unbiased conduct and reporting. At any time, the researchers must inform the participants that they can withdraw without consequences (Enago Academy, 2023).

CHAPTER THREE

RESULTS AND DISCUSSION

The results and discussion section of this study provides a comprehensive analysis of the police officers' perceptions toward the adoption of modern technologies in policing in the City of Mati, Davao Oriental. Understanding PNP officers' perceptions helps identify potential challenges or resistance to technology adoption. By recognizing these concerns, the PNP-DOPPO can develop strategies to address them, ensuring a smoother transition to technology-enhance policing (Rogers, 2024).

With the quantitative data insights derived from respondent's feedback, this discussion aims to offer valuable perspectives on integrating these various tools into modern policing and the improvement of daily police operations. Through a detailed examination of the data presented in this section, readers will gain an understanding of the perception of police officers towards technology adoption in modern policing, eventually contributing to informed decision-making and policy formulation aimed at enhancing police efficiency in responding to crimes and safety in the City of Mati.

➤ *Socio-Demographic Profile of Respondents*

In this section, the researchers present the results and discussion of our study in Table 3, focusing on the profile of the respondents who participated in exploring the perceptions of police officers towards technology adoption in modern policing in the City of Mati, Davao Oriental. The socio-demographic profile of the respondents on the perception of the adoption of technologies in modern technologies reflected a diverse range of individuals from various age groups, genders, ranks, length of service, and ethnicity within the police force. This study aimed to capture a comprehensive understanding of how demographic factors influence the attitudes of the PNP personnel towards technology adoption situated in PNP-DOPPO.

Table 3 Respondent's Age Distribution

Age	Frequency	Percentage
31-40 Years Old	55	55.00
41-50 Years Old	25	25.00
29 Years Old below	13	13.00
51 Years Old or Above	7	7.00
Total	100	100.00

Respondent age was categorized into four brackets: 29 and under, 31-40, 41-50, and 51 and over (refer to Table 3). The 31-40 age group exhibited the highest frequency followed by the 41-50 group. The youngest bracket (29 and under) comprised 13 participants, while the oldest bracket (51 and over) had the lowest frequency. The mean respondent age was 38.07 years old.

The socio-demographic profile of PNP personnel respondents revealed that the largest age group falls between the ages of 31-40 years old. This suggests that the majority of PNP officers are in their prime working years and likely have significant experience in law enforcement. The second largest age group was 41-50 years old, indicating a slightly older population of officers who may have more seniority within the force. Moreover, the data showed that the age group of 29 years old and below was the third largest, suggesting that there is also a significant proportion of younger officers joining the PNP. The age group of 51 years old and above was the smallest among the respondents, indicating that there is a lower number of older officers in the force. This could be due to retirement rates among older officers, or it could reflect a general trend towards a younger and more dynamic police force (Isles, 2018).

Table 4 Respondent's Gender Distribution

Gender	Frequency	Percentage
Male	64	64.00
Female	36	36.00
LGBTQ	0	0
Prefer not to say	0	0
Total	100	100.00

Of the 100 respondents, 64 identified as male and 36 as female. The categories LGBTQ and Prefer Not to Say had no data entries for gender classification as see in Table 4. The socio-demographic profile of the PNP personnel respondents indicates a significant gender disparity, with male respondents comprising the majority at 64 individuals, with female respondents representing a smaller proportion with a total of 36 individuals. Moreover, there were no respondents who identified as LGBTQ or others who preferred not to say their gender within the surveyed group of officers (Xinhua, 2019).

The critical role of gender diversity in modern policing, emphasizing its importance in fostering trust and legitimacy within communities as highlighted by Yu and Viswanath (2022). Citing the President's Task Force on 21st Century Policing (2015), they underscored the recommendation to create a diverse workforce, encompassing race, gender, and cultural backgrounds, to enhance

understanding and effectiveness in serving all communities. However, addressing them is crucial for the overall functionality and development of law enforcement agencies, including the Philippine National Police, achieving a more balanced workforce with equitable opportunities for both men and women can lead to a more effective and well-rounded police force.

Table 5 Respondent's Length of Service Distribution

Length of Service	Frequency	Percentage
6-10 Years	41	41.00
16-20 Years	15	15.00
3-5 Years	15	15.00
11-15 Years	13	13.00
21 Years and Above	6	6.00
2 Years Below	2	2.00
Total	100	100.00

Regarding years of service, the distribution was as follows: 2 respondents had served for 2 years or less, 15 for 3-5 years, 41 for 6-10 years (the largest group), 13 for 11-15 years, 15 for 16-20 years, and 6 for 21 years or more as see in Table 5. The data indicates that the majority of respondents fall within the 6-10 years bracket, suggesting a significant portion of mid-career officers within the police force. This could imply a group of individuals who have gained substantial experience and expertise in their roles over the years, potentially influencing decision-making and leadership within the organization.

Following the 16-20 years bracket, indicating a sizeable number of veterans who likely hold key positions and play crucial roles in mentoring and guiding their juniors. The distribution shows fewer respondents in the 2 years below bracket, which may suggest a lower rate among newer recruits or a smaller intake of entry-level personnel in recent years. The 21 years and above group represents long-serving members who have dedicated a significant portion of their careers to law enforcement. Their presence highlights the institutional knowledge and stability they bring to the organization, possibly serving as pillars of wisdom and experience.

Table 6 Respondent's Rank Distribution

Rank	Frequency	Percentage
Non-Commissioned	94	94.00
Commissioned	6	6.00
Total	100	100.00

To maintain confidentiality and preserve anonymity regarding rank, the specific number of commissioned and non-commissioned personnel within the Davao Oriental Provincial Police Office (DOPPO) has not been disclosed. However, the study revealed that 6 out of the 100 respondents were commissioned officers, while the remaining 94 were non-commissioned officers as see in Table 6. The socio-demographic of PNP respondents as to their ranks reveals clear distribution with a significant majority of 94 personnel being non-commissioned officers. This representation of non-commissioned officers signifies the backbone of the PNP force, showcasing the vital role played by this group in day-to-day operational activities and overall law enforcement functions.

The numerical strength suggests that the non-commissioned officers form the operational workforce within the PNP-DOPPO, emphasizing their critical contribution to maintaining law and order in the community. The data shows a smaller segment of 6 commissioned officers among the respondents. While their numbers are proportionately fewer compared to non-commissioned officers, commissioned officers hold significant positions of authority within the PNP-DOPPO hierarchy. Their presence highlights the supervisory and managerial roles within the organization, overseeing broader strategic planning and decision-making processes.

Table 7 Respondent's Ethnic Distribution

Ethnicity	Frequency	Percentage
Bisaya	55	55.00
Mandaya	41	41.00
Kagan	2	2.00
Ilocano	2	2.00
Manobo	1	1.00
Total	100	100.00

Demographic analysis of the Davao Oriental Provincial Police Office (DOPPO) respondents reveals a male-to-female ratio of 16:9, indicating a male-dominated workforce. The average age of respondents is 38.07 years old. The ratio of commissioned to non-commissioned personnel is 3:47, suggesting a significantly larger proportion of non-commissioned officers. The average years of service among respondents is 10.38 years. Ethnically, the majority of respondents identify as Bisaya as see in Table 7.

The respondents in this analysis reveal a diverse mix of ethnicities, with Bisaya emerging as the predominant group with 55 respondents. The prevalence of Bisaya ethnicity among the respondents suggests a significant representation of individuals from Mindanao and the Visayas Region, showcasing its strong presence in the organization. Moreover, Mandaya Tribe is the second largest reflecting the inclusion of indigenous communities within the PNP workforce. The presence of Kagan, Ilocano, and Manobo ethnic groups further underscores the broad cultural backgrounds within the organization, highlighting a commitment to diversity and inclusivity. The ranking of these ethnicities showcases the distribution of local and regional influences and demographics within the PNP.

➤ *Police Officers Perceptions Towards the Context of Modern Policing Technology*

• *Adoption*

This study, conducted through interviews with 100 respondents from the Davao Oriental Provincial Police Office (DOPPO), revealed a diverse range of perceptions regarding the modernization and development of policing. Individual perceptions varied significantly, influenced by factors such as generational differences, technological proficiency, adaptability, and cultural and religious beliefs. These factors contributed to a multifaceted understanding of how technology is perceived within the police force.

• *Perceived Utility*

The perceived utility of the PNP officers towards the adoption of technologies in modern policing plays a crucial role in enhancing law enforcement activities. By embracing modern tools and various technologies, PNP officers can efficiently work towards police operations, improve response times towards emergencies, and enhance overall performance in combating crimes. The integration of various tools into policing not only empowers the officers to solve cases faster but also helps in preventing crimes through the use of systematic analysis and real-time information sharing. Acknowledging the advantages of technological tools plays a vital role as it shapes positive reception and enhancing their proficiency in integrating these tools into policing (Escalona, 2020).

Adopting modern tools by PNP officers can boost public trust and confidence, and when they perceived these technologies as important, they can carry out their duties more effectively creating a safer space for the citizens enables to stay ahead of criminals who employ latest advancement for illegal activities (Tolentino, 2024).

Table 8 Means and Descriptive Equivalent of Responses for Perceived Utility.

Perceived Utility	Mean	Descriptive Equivalent
1. I believe that modern technologies can enhance the safety of both officers and the public.	4.98	Very High
2. Using technologies would make it easier to gather and document evidence at crime scenes.	4.91	Very High
Modern technologies can provide valuable data and insights that can aid in decision-making and crime prevention.	4.86	Very High
3. The features offered by wearable technologies are relevant and beneficial to my daily duties.	4.84	Very High
5. Wearable technologies can significantly improve the efficiency of law enforcement tasks.	4.70	Very High
Total	4.85	Very High

Table 8 presents a statistical analysis of respondents' perceptions toward modern policing technologies, revealing an overall positive outlook with an average score of 4.85. Key findings indicate strong support for the safety benefits of modern technologies for both officers and the public, their effectiveness in evidence gathering and documentation, and their valuable contribution to data-driven decision-making and crime prevention. Furthermore, respondents expressed high levels of agreement regarding the relevance of wearable technology features, and can significantly improve the efficiency of law enforcement tasks.

This domain highlights a high level of enthusiasm and approval for the perceived utility of new devices among the respondents. This finding stands in existing research in the field. Goodison et al (2020) conducted a comprehensive survey of law enforcement officers and found that while most were aware of wearable tech, their understanding of functionalities and applications remained limited. Similarly, Goetschel et al (2017) investigated police officer perceptions of body-worn cameras (BWCs) and discovered a gap between familiarity and an in-depth understanding of the technology's capabilities. These prior studies emphasize the crucial role of knowledge and awareness campaigns in facilitating the successful adoption of new technologies within law enforcement.

The perceived efficiency and effectiveness of these tools drive their practical application in law enforcement operations, when officers recognize the advantages that technologies offer to their organization, they are more likely to embrace them, leading to increased motivation and encouragement for integration, ultimately enhancing productivity (Lum, 2017). Sesay et al (2017) found that officers often perceive technologies, such as body cameras and smartwatches, as valuable tools that enhance their situational awareness, facilitate evidence collection, and improve communication among team members. The integration of modern technologies in law enforcement provides seamless gathering and documentation of evidence, this not only enhances efficiency in various investigations but also ensures the accuracy and integrity of the collected evidence. It highlighted the significance of

perceived utility in influencing officers' attitudes toward modern technologies, emphasizing its role in shaping their willingness to adopt and integrate these tools into their professional routines (Ferreira et al 2021).

Furthermore, Nelson (2022) highlighted the importance of clear benefits and perceived usefulness in driving technology adoption. Officers are more likely to prioritize technologies that offer clear advantages, such as streamlining time-consuming investigations and facilitating faster communication. These perceived benefits and operational advantages directly influence officers' decisions regarding the implementation of specific technologies within their work.

- *Privacy and Ethical Concern*

Table 9 Privacy and Ethical Concerns Responses Mean and Descriptive Equivalent.

Privacy and Ethical Concerns		Mean	Descriptive Equivalent
1.	I believe that strict protocols should be in place to safeguard the privacy of individuals recorded by wearable cameras.	4.88	Very High
2.	I support the implementation of policies and regulations to ensure responsible use of wearable technologies within the department.	4.87	Very High
3.	Ethical considerations related to surveillance and data collection are important factors to consider when adopting modern technologies.	4.79	Very High
4.	Transparency about how data collected by wearable technologies is used and stored is essential.	4.67	Very High
5.	I am concerned about the potential risks to data privacy associated with using modern technologies.	4.27	Very High
Total		4.69	Very High

Table 9 presents a statistical analysis of respondent perceptions regarding privacy and ethical concerns associated with modern policing technologies. The highest mean was 4.88 with the descriptive equivalent of very high on keeping strict protocols in place to safeguard the privacy of individuals recorded by wearable cameras. The lowest mean was 4.27 with a descriptive equivalent of very high on the concern about the potential risks to data privacy associated in using modern technologies. The overall mean was 4.69, categorized as very high, means that the 100 respondents within the workforce demonstrated a strong emphasis on the importance of privacy and ethical considerations within the context of modern policing technology adoption.

A definitive example of this is the study of Newell (2021) which investigated the potential for civilian privacy violations arising from the widespread use of body-worn cameras by police officers. The study highlighted concern regarding the constant recording enabled by these devices, emphasizing the potential for infringements on individual privacy rights in public spaces and the risk of data misuse or unauthorized access. Similarly, Karkazis and Fishman (2017) examined the ethical implications of law enforcement utilizing biometric sensors integrated into wearable technologies. Their research focused on the ethical dilemmas surrounding the collection and storage of sensitive biometric data, raising critical questions about informed consent, data security, and the potential for misuse or abuse of this sensitive information by authorities. The lack of proper regulations and oversight in the use of technologies leads to privacy violations and surveillance abuse that negatively impacted the citizens.

The high level of concern regarding privacy and ethical considerations may be attributed to cultural, religious, and moral factors, particularly concerns related to health and privacy. Taylor (2016) highlighted that surveillance technologies, such as body-worn cameras, can expose sensitive personal information by constantly recording interactions with individuals, including those with mental health issues. This constant recording poses significant privacy concerns and may have severe consequences for individuals.

Miller et al (2014) suggested that these privacy concerns may deter individuals from cooperating with law enforcement authorities. The fear of having personal information recorded and potentially disclosed can hinder individuals from engaging with law enforcement, impacting investigations and community trust. They might feel that providing personal information or collaborating with personnel could compromise their privacy and expose them to potential risks associated with the use of modern tools.

- *Organizational Support and Infrastructure*

Table 10 Organizational Support and Infrastructure Responses Mean and Descriptive Equivalent.

Organizational Support and Infrastructure		Mean	Descriptive Equivalent
1.	I believe that the department is committed to staying updated with advancements in wearable and modern technologies to enhance policing efforts.	4.64	Very High
2.	There are clear guidelines and procedures in place for the procurement, maintenance, and upgrading of wearable and modern technologies.	4.10	High

3.	I feel encouraged by departmental leadership to embrace and utilize wearable and modern technologies in my work.	4.05	High
4.	The current infrastructure (e.g., software, hardware, connectivity) is adequate for supporting the use of wearable technologies.	3.98	High
5.	My department provides sufficient support and resources for adopting and integrating wearable or modern technologies.	3.87	High
Total		4.12	High

Table 10 presents a statistical analysis of respondent perceptions regarding organizational support and infrastructure for modern policing technologies. With an average score of 4.12, categorized as High, the 100 respondents within the workforce expressed strong confidence in the organization's readiness and ability to effectively support and sustain the adoption of modern policing technologies.

Indicators 1,2,3, and 4 corresponds to 3.87, 3.98, 4.05, and 4.10 respectively. The mean of indicators 1,2,3 and 4 earned a High descriptive equivalent implying that the police perceptions towards the adoption of modern technologies are manifested oftentimes. The responses may have been noted to be the only domain of perception to have the High descriptive equivalent compared to the other domains. Thus, the descriptive equivalent also denotes conclusively that the level of organizational support and infrastructure capability of the Davao Oriental Provincial Police Office has been manifesting on a high level. As supported by the studies conducted in the different landscapes of law enforcement, the research emphasized the critical role of organizational support in shaping police officer perceptions towards wearable technologies. NZAI and MAKOKHA (2024) highlighted the importance of both organizational commitment and leadership endorsement in fostering positive attitudes toward technological integration. Their findings suggested that officers who perceived strong support from their superiors were more likely to embrace new technologies, including wearables, as tools to enhance operational effectiveness and officer safety.

However, the respondents believe that the department is committed to staying updated with advancements in wearable and modern technologies to enhance policing efforts with the descriptive equivalent of Very High. The successful integration of technologies, such as Artificial Intelligence (AI), into police operations heavily relies on strong organizational support. To effectively implement these technologies, organizations must ensure that police departments have access to adequate training, resources, and robust infrastructure. This critical support, as highlighted by Oestmo (2024), is essential for the successful integration and utilization of AI within law enforcement.

The study AI for Smarter Policing (2024), emphasized that while modern technologies are critical for maintaining public order, deterring crime, enabling rapid incident response, and fostering community engagement, their successful implementation hinges on strong leadership support. The study highlighted that without adequate leadership and support, initiatives may lack direction and encounter resource shortages, hindering their effectiveness.

- *Risk Perception*

Table 11 Risk Perception Mean and Descriptive Equivalent of Recorded Responses.

Risk Perception		Mean	Descriptive Equivalent
1.	Proper training and guidelines are necessary to mitigate risks associated with using wearable technologies in the field.	4.85	Very High
2.	I am concerned about the potential technical malfunctions or failures of modern technologies during critical situations.	4.48	Very High
3.	I believe that improper use or misuse of wearable technologies could lead to unintended consequences or errors.	4.38	Very High
4.	The accuracy and reliability of data collected by wearable technologies are important considerations for me.	4.32	Very High
5.	I am cautious about the long-term effects of continuous use of wearable technologies on my health and well-being.	4.31	Very High
Total		4.46	Very High

Table 11 presents a statistical analysis of respondent perceptions regarding risk perception associated with modern policing technologies. With an average score of 4.46, categorized as Very High, the 100 respondents within the workforce demonstrated a strong emphasis on the technical and long-term reliability of the equipment within the context of modern policing technology adoption.

The multifaceted nature of concerns about the risk perception of law enforcement personnel of DOPPO may include the influence of intrapersonal characterization such as the sense of privacy and personal space beyond duty subjecting unrefined demarcation of morality and ethics as well as organizational factors apart from technical, reliability, usage, and long-term effect of

adopting the modernization concept and practice of policing. Lee et al (2023), investigated police officer perceptions of risks associated with body-worn cameras (BWCs), their findings revealed that concerns regarding privacy, data security, and potential misuse significantly impacted officers' acceptance of these devices. The study identified issues such as officer surveillance, trust in the technology, and fears of malfunction as critical factors influencing officers' attitudes toward its adoption. These studies highlight the multifaceted nature of risk perception among police officers regarding technology adoption. They emphasize the importance of addressing diverse concerns to enhance officer acceptance and ultimately, the effectiveness of the technologies themselves.

The elevated level of risk perception can be effectively mitigated through strategic interventions facilitated by the organization's human resources department. Research by Hu et al (2019) emphasized the crucial role of organizational culture in shaping officer risk perceptions. Their findings highlighted that a supportive organizational culture, characterized by clear communication, comprehensive training programs, and robust feedback mechanisms, can significantly diminish perceived risks and foster greater acceptance of innovative technologies.

Furthermore, research by Zeng et al (2022) underscored the pivotal role of leadership in mitigating risk perceptions. Their findings emphasized the importance of leaders' attitudes and behaviors in cultivating officer trust and confidence in new technologies. They emphasized the critical need for strategic interventions at the organizational level, such as fostering a supportive and inclusive culture and promoting positive and encouraging leadership behaviors, to enhance the successful adoption of technologies within law enforcement settings.

- *Statistical Variation of Perceived Utility, Privacy and Ethical Concern, Organizational Support and Infrastructure, and Risk Perception within the Context of Modern Policing Technology Adoption*

Table 12 Statistical Results of the Domain of Perception

Domain of Perception	Mean	Variance
Privacy and Ethical Concerns	4.69	0.25
Perceived Utility	4.46	0.45
Risk Perception	4.46	0.22
Organizational Support and Infrastructure	4.12	0.29

Table 12 presents descriptive statistics for four key domains of perception regarding the adoption of modern policing technologies within a sample of 100 respondents. These domains include Perceived Utility, Privacy and Ethical Concerns, Organizational Support and Infrastructure, and Risk Perception. For each domain, the table provides the mean score and variance.

The analysis reveals a mean score of 4.46 for Perceived Utility, indicating a generally positive view of modern policing technologies among respondents. A variance of 0.45 suggests moderate diversity in these perceptions. It highlights the importance of perceived utility as PNP officers consider these tools as valuable in facilitating evidence collection and providing clear benefits to their professional routine (Ferreira et al, 2021). Regarding Privacy and Ethical Concerns, respondents demonstrated a high level of concern with a mean score of 4.69 and a low variance of 0.25, suggesting strong consensus on the importance of these issues. As mentioned by Taylor (2016), surveillance technologies can expose sensitive personal information as they capture real-time interactions with individuals. For Organizational Support and Infrastructure, a mean score of 4.12 with a variance of 0.29 indicates high confidence in organizational support, albeit with moderate variability in individual perceptions. Finally, Risk Perception exhibited a mean score of 4.46 and a low variance of 0.22, suggesting widespread concern regarding potential risks associated with the adoption of modern policing technologies.

This table provides valuable insights into the key perceptions and concerns of law enforcement personnel regarding the adoption of modern policing technologies. The data suggests a generally positive outlook on the utility of these technologies but also highlights significant concerns regarding privacy, ethical considerations, and the potential risks associated with their implementation (Healey et al, 2017).

- *Analysis on the Differences of the Respondents' Responses about Perception of the Adoption of Technologies in Modern Policing Across Demographic Profiles*

Table 13 presents the results of the Analysis on the Differences between respondents' responses about the adoption of technologies in modern policing situated in the City of Mati. This analysis aims to explore the significant difference between the perception of PNP officers across demographic profiles. The table provides insights into how the perception of the respondents is distributed across demographic profiles and assessments of positive reception towards technology adoption within the organization.

Through examining the p-value of each domain, this analysis offers valuable implications for enhancing policies toward the successful adoption of technologies in modern policing. These findings are essential for policymakers and officers who seek advancement, aid to various time-consuming investigations, and assistance with day-to-day police operations.

Table 13 Statistical Analysis of the Domain of Perception

	Age	Gender	Rank	Length of Service	Ethnicity
Perceived Utility	0.143 Not Significant	0.726 Not Significant	0.693 Not Significant	0.083 Not Significant	0.208 Not Significant
Privacy and Ethical Concerns	0.324 Not Significant	0.642 Not Significant	0.311 Not Significant	0.097 Not Significant	0.907 Not Significant
Risk Perception	0.600 Not Significant	0.499 Not Significant	0.150 Not Significant	0.134 Not Significant	0.931 Not Significant
Organizational Support and Infrastructure	0.618 Not Significant	0.366 Not Significant	0.131 Not Significant	0.122 Not Significant	0.855 Not Significant
Overall	Not Significant				0.448

Table 13 presents the analysis of the differences in the respondents' responses about the perception of PNP officers towards technology adoption situated in Mati City. The analysis reveals varied relationships across different domains such as perceived utility, privacy and ethical concerns, risk perception, and organizational support and infrastructure. The p-value obtained from the analysis was greater than 0.05, suggesting that the differences observed in the indicators whether analyzed with age, gender, rank, length of service, and ethnicity do not have significant differences. These findings suggest that the variations in the indicators analyzed are not influenced by the demographic characteristics. Therefore, the null hypothesis was not rejected.

Moreover, this indicates that perceived utility, privacy and ethical concerns, risk perception, and organizational support and infrastructure analyzed across demographic characteristics do not have significant differences since this could suggest that technologies integrated into modern policing are seen as universally beneficial and necessary for the PNP officers regardless of their demographic backgrounds. PNP officers are aware of the widespread advantages and importance of integrating modern tools into their policing practices and provide solutions leading to a more standardized view among officers.

Additionally, the challenges and the nature of the police work that the personnel face daily might create a shared understanding and appreciation for modern technologies as tools to enhance safety, efficiency, and effectiveness in law enforcement operations. Regardless of the demographic characteristics, the perception of the PNP officers towards technology adoption into modern policing does not have significant differences across age, gender, rank, length of service, and ethnicity of the respondents.

CHAPTER FOUR

SUMMARY, CONCLUSION, AND RECOMMENDATION

➤ *Summary*

This study investigated police officers' perceptions toward adopting modern technologies within the Davao Oriental Police Provincial Office (DOPPO). Objectives included characterizing officer demographics (age, gender, rank, service length, ethnicity), assessing their perceptions regarding perceived utility, privacy and ethical concerns, risk perception, and organizational support and infrastructure, and identifying potential differences in these perceptions across demographic profiles. A quantitative research design employing a correlational survey method was utilized, with data collected from all 100 police officers within DOPPO through self-made questionnaires. Data analysis involved the use of mean the measurement of central tendency and the t-test or analysis of variance (ANOVA). Ethical considerations included obtaining informed consent, ensuring voluntary participation, maintaining confidentiality, and upholding transparency and accountability throughout the research process. This research aimed to provide valuable insights into police officer perceptions of modern technology adoption within the DOPPO.

Key findings of the socio-demographic profiles include the predominance of male respondents (64%) with an average age of 38 years and a majority having served for 6-10 years as non-commissioned officers. In addition, the study delved into the various facets of technology integration within law enforcement that shed light on the officers' perspectives and acceptance levels.

As to the perceived utility of technology adoption, through surveys conducted with PNP personnel across different ranks and departments, this study reveals enthusiasm and recognition of the benefits that technological advancements bring to policing operations. Through a comprehensive analysis of the perspectives and attitudes of law enforcement officers, the study explores the strong enthusiasm exhibited by PNP personnel towards the importance of privacy and ethical concerns associated with the adoption of technology in modern policing. The study reveals challenges and opportunities posed by integrating advanced technologies into police practice while safeguarding privacy rights and upholding ethical standards.

Furthermore, as to the risk perception about the adoption of technologies within modern policing practices, it possesses crucial aspect and by examining the attitudes and beliefs of these individuals towards technological adoption, the findings reveal predominantly positive perceptions among personnel regarding the risk associated with technology adoption in law enforcement practices. Through surveys, the study highlights that PNP officers believe that the benefits of technology, such as improved efficiency and effectiveness in crime prevention and investigation, outweigh the potential risks involved in adopting new technological tools in policing.

Moreover, the study found that there exists robust organizational support and infrastructure that facilitates the adoption of modern technologies within policing practices. It reveals that PNP personnel benefit from strong leadership that encourages and enables the integration of technological advancements into their day-to-day operations, ultimately enhancing their efficiency and effectiveness in law enforcement efforts. This strong organizational support highlights the importance of embracing technology as a pivotal component in modern policing strategies to improve service and crime prevention.

As to the third objective, the analysis reveals varied relationships across different domains such as perceived utility, privacy and ethical concerns, risk perception, and organizational support and infrastructure. The p-value obtained from the analysis was greater than 0.05, suggesting that the differences observed in the indicators whether analyzed with age, gender, rank, length of service, and ethnicity do not have significant differences. These findings suggest that the variations in the indicators analyzed are not influenced by the demographic characteristics. Therefore, the null hypothesis was not rejected. However, areas for improvement were identified in user interface intuitiveness and proactive information seeking. Respondents expressed confidence in the organization's support for technology adoption, particularly its commitment to staying updated with advancements. The study revealed a strong emphasis on privacy and ethical considerations, with concerns including constant recording by body-worn cameras and potential misuse of biometric data.

Overall, respondents were receptive to modern technologies, acknowledging their benefits for safety, evidence gathering, and data-driven policing. Finally, the study identified significant risk perceptions among officers, including concerns about technical reliability, data security, and potential misuse of new technologies.

➤ *Conclusion*

The study reveals a positive reception of modern technologies among police officers in the Davao Oriental Police Provincial Office (DOPPO), recognizing their benefits for law enforcement. However, significant concerns regarding privacy and ethical considerations, including data security and potential misuse, were evident. The study underscores the critical role of strong organizational support, including adequate training, resources, and leadership, in fostering successful technology adoption. Based on the findings and outcomes of this study, several significant conclusions can be drawn concerning the theories anchored in this study.

As to the first objective of the study, to characterize the demographic characteristics in terms of age, gender, length of service, rank, and ethnicity. It was found out that 31-40 years old have the highest frequency with 64 identified male respondents and 6-10 years have highest frequency as to the length of service. Moreover, non-commissioned officers dominated and majority of the respondents' identified as Bisaya.

As to the second objective of the study, the Unified Theory of Acceptance and Use of Technology (UTAUT) provides a comprehensive framework for understanding factors influencing technology adoption within organizations, such factors include the demographic characteristics that provide insight into moderating the relationship between the perception of police officers in their intention of adoption of technologies into policing supported the second objective as demographic characteristics being employed to assess various domains of perception of PNP officers towards technology adoption.

As to the third objective, Roger's Diffusion of Innovations Theory, offers insights regarding the diffusion process of innovations within a social system. The theory was anchored in the third objective of the study in which demographic characteristics affecting the perception of PNP officers towards technology adoption were assessed to determine which diffusion curve the respondents fall. Based on the findings, the various domains do not have significant difference whether assessed across demographic profiles therefore this theory do not support the third objective as the perception of PNP officers across demographic characteristics towards technology adoption were generally viewed as effective and vital among PNP officers as a tool to enhance their effectiveness in maintaining law and order whether assess across different ages, gender, ranks, length of service, and ethnicity.

The study concluded positive reception of technology adoption among PNP respondents as the theory of the Technology Acceptance Model (TAM) positively supported and postulates that individual's perceptions of modern technologies significantly influence their adoption behavior demonstrated positive reception among PNP personnel with strong consensus on the importance of privacy and ethical issues as statistical analysis of the respondents shows a high level of enthusiasm for the perceived utility of modern technologies being integrated into policing. Thus, suggesting the perceived efficiency, organizational leadership, and effectiveness of various modern technologies in policing will influence the officer's practical application of these tools in law enforcement operations. When PNP officers are aware of the useful benefits of these tools that they could offer to the organization, they are more likely to embrace them which leads to a positive integration of these tools into modern policing.

➤ *Recommendations*

Based on the results and findings of this study, several key recommendations have been identified to have a comprehensive understanding of the perception of PNP officers towards technology adoption in modern policing in Mati City. These recommendations aim to address identified issues that may arise in the future integration of technologies into police operational activities. The following recommendations are proposed:

- *To Department of the Interior and Local Government*

To effectively address the challenges and opportunities associated with the adoption of modern technologies, the organization must invest in comprehensive technology training programs, provide ongoing support, and ensure easy access to technical resources. Addressing privacy and ethical concerns through robust data security measures, transparent communication, and regular audits is crucial. Fostering a culture of innovation and experimentation, encouraging open communication, and providing adequate resources are essential for enhancing organizational support. Proactively addressing officer concerns regarding risk, improving user interfaces, and encouraging proactive information-seeking is also vital. Moreover, conducting further research to understand officer needs and regularly evaluating technology implementation will be essential for continuous improvement and successful technology adoption within the DOPPO or other organizations, ultimately enhancing public safety and community trust.

- *To Community*

The research findings provide benefits such as a positive perception of police efficacy in terms of addressing crimes. Integrating modern technologies into the community provides initiatives that emphasize building trust therefore improving relationships between law enforcement and the community as well as addressing local concerns collaboratively. The community being accountable for the establishment of modern technologies creates independent oversight to ensure that the use of modern technologies by the PNP aligns with the ethical standards, legal requirements, and community expectations.

- *Future Researchers*

Finally, the study serves as a valuable resource for future researchers in modern policing. This study provides a diverse range of PNP officer's perspectives on technology adoption, benefits, challenges, and training needs. It also explores factors influencing PNP officers' attitudes towards technology adoption such as demographic characteristics and prior exposure to technologies. Continuing upon these findings, future research endeavors can contribute to the advanced examination of the impact of organizational culture, policies, and leadership support on PNP officers' willingness to embrace new technologies.

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