Implications of digital payments on market appreciation of MSMEs in Naga City

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Abstract:

Digital payments are transforming the economic landscape of the Philippines, yet their effects on local economies, especially micro, small, and medium enterprises (MSMEs), are still under-researched. This study investigates the influence of digital payment systems on consumer behavior, spending power, and perceptions of MSMEs in Naga City. Using a descriptive-correlational research approach, the researchers surveyed 100 MSME consumers to identify factors affecting digital payment adoption. The findings indicate that demographic factors such as age, education, and income significantly influence the adoption of digital payments, with awareness also playing a crucial role in purchasing decisions. A notable relationship between digital payment adoption and consumer purchasing behavior across demographic segments was established. In response, the study proposes the "Empowering Digital Transactions" initiative, aimed at enhancing digital payment adoption over one year. This initiative includes a marketing strategy to increase awareness, provide incentives, and prepare businesses for effective digital transactions, fostering sustainable growth for both MSMEs and consumers in Naga City.

Keywords:

Digital Payments, MSMEs (Micro, Small, and Medium Enterprises), Market Appreciation.

INTRODUCTION

The use of digital payment technology has seen significant global growth, with its broad applications and increasing worldwide impact (Ramayanti, et al., 2023). Digital payments refer to the use of online resources and payment methods for the purpose of exchanging value over the Internet. Examples of digital payment methods include credit cards, electronic cash, online banking, mobile banking, QR code payment, and e-check (Torane, 2019). Consumers have the ability to use their smartphones for in-person transactions (Triant et al., 2023). An individual's bank account may be connected to a digital payment application, allowing for the wireless transmission of vouchers to the seller's terminal via NFC technology. According to GSMA's 2022 report, mobile technology and services contributed 5% to the global GDP, amounting to an economic value added of $5.2 trillion (GSMA, 2022).

MSMEs are vital contributors to the development of the Philippine economy. Micro, Small, and Medium Enterprises (MSMEs) alleviate poverty by generating job opportunities for the country's growing workforce and promoting economic development in rural and isolated areas. Furthermore, MSMEs play a crucial role as suppliers and providers of support services to big organizations. They also serve as catalysts and incubators for rising entrepreneurs and large enterprises (Tripolo and Schmidhuber, 2018). MSMEs customers may use digital payment systems to settle their service fees. Research suggests that electronic payment methods play a significant role in shaping consumers' buying choices, contributing to an increase in consumer expenditure (Oyelami et al., 2020). Users benefit from several benefits when using digital payments, such as the convenience of one-click purchases, the elimination of the need to carry physical currency, the simplicity of monitoring minor transactions, access to discounts and reward programs, and, notably, enhanced security. Digital payments have proven to be a successful invention in several industrialized nations due to its significant role in saving time, effort, and money (Alkhowaiter, 2022).

However, even though digital payments have seen a rise in usage for retail transactions across the Philippines, accounting for 42. 1% of transactions and 40. 1% in monetary value (Central Bank of the Philippines, 2022), there is still limited knowledge about their impact on aspects within micro-to-medium enterprises (MMSEs). As digital payment options become more prevalent, understanding how they impact consumer behavior specifically in Naga City's unique economic and cultural context becomes crucial. The problem that motivates this study is that research on the application of digital payment technologies is lagging behind their rapid evolution, particularly in local economies such as Naga City. The research motive also stems from from a marketing perspective. In a marketing lens, Digital payments are crucial to market and advertise because they represent a shift towards more efficient, secure, and inclusive financial transactions (Madhusree & Kushal, 2021). Promoting digital payment options can significantly influence a consumer's behavioral intention, which in turn affects their actual usage of these systems (Chaveesuk et al., 2021).

Research Objectives

The study's main objective was to assess digital payment's impact on the market appreciation of MSMEs in Naga City. Specifically, it aimed to answer the following research questions:

1. To identify the profile of the customers in terms of age, gender, civil status, educational attainment, household income, and preferred digital payment option.

2. To identify the degree of influence of digital payment towards customers' purchasing decisions along with spending power, awareness, and incentives.

3. To evaluate the impact of digital payments to MSMEs along with system adoption, business readiness and consumer behavior.

4. To ascertain if there is a significant relationship between the profile of customers and the degree of influence.

5. To ascertain if there is a significant relationship between the degree of influence and the impact of digital payments.

6. To develop a marketing strategy for faster adoption of Digital Payments by MSMEs in Naga City based on the findings of the study.
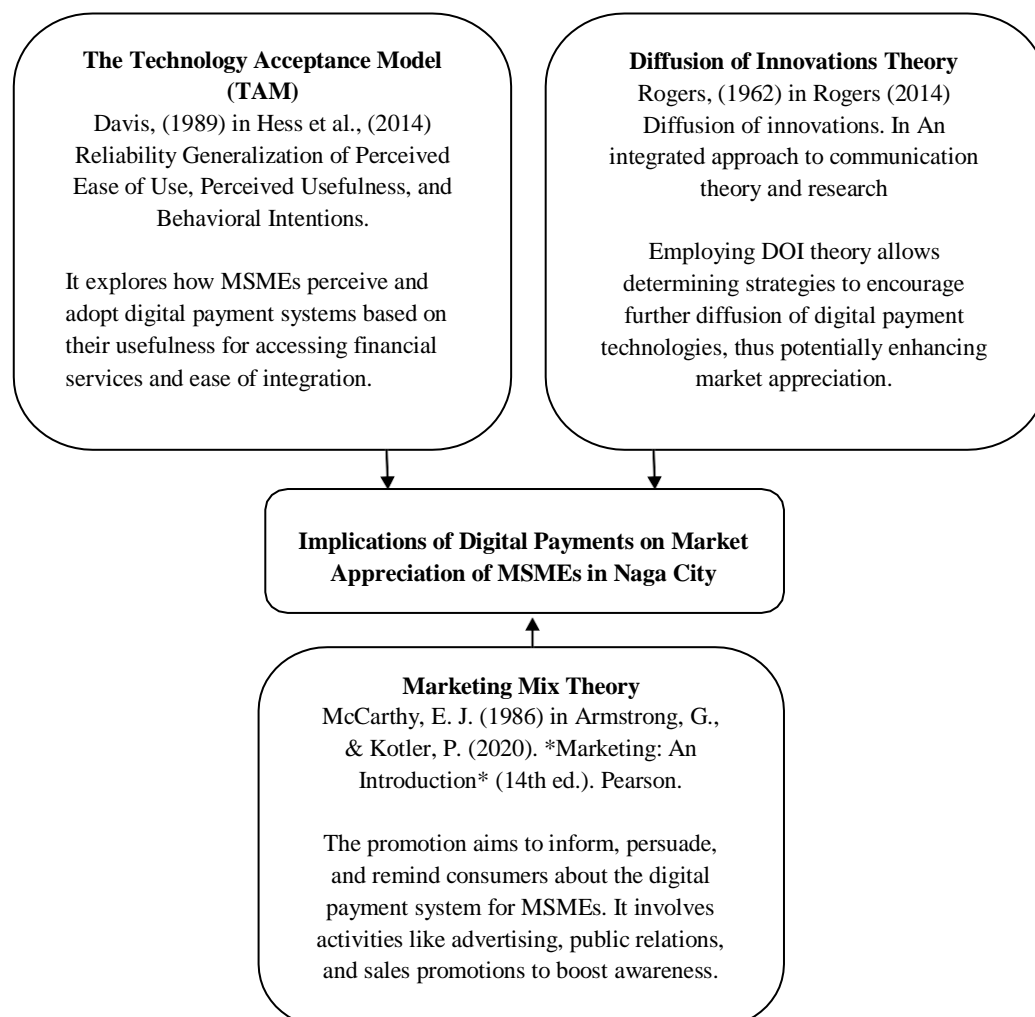
Theoretical Framework

The Technology Acceptance Model (TAM)
Davis, (1989) in Hess et al., (2014) Reliability Generalization of Perceived Ease of Use, Perceived Usefulness, and Behavioral Intentions.

It explores how MSMEs perceive and adopt digital payment systems based on their usefulness for accessing financial services and ease of integration.

Diffusion of Innovations Theory
Rogers, (1962) in Rogers (2014) Diffusion of innovations. In An integrated approach to communication theory and research

Employing DOI theory allows determining strategies to encourage further diffusion of digital payment technologies, thus potentially enhancing market appreciation.

Implications of Digital Payments on Market Appreciation of MSMEs in Naga City

Marketing Mix Theory
McCarthy, E. J. (1986) in Armstrong, G., & Kotler, P. (2020). *Marketing: An Introduction* (14th ed.). Pearson.

The promotion aims to inform, persuade, and remind consumers about the digital payment system for MSMEs. It involves activities like advertising, public relations, and sales promotions to boost awareness.

Figure 1. **Theoretical Paradigm**

Figure 1 outlines a structured approach to studying the impact of digital payments on the market appreciation of MSMEs in Naga City. The research framework highlights that customer demographics—age, gender, civil status, education, income, and preferred digital payment methods—are key to understanding purchasing behaviors and their interaction with digital payment systems.

The Technology Acceptance Model (TAM), created by Davis in 1989, posits that the acceptance of technology depends on users' perceptions of its ease of use and usefulness. In Naga City, TAM is pertinent for understanding how consumers and Micro, Small, and Medium Enterprises (MSMEs) adopt digital payment systems. It suggests that people are more likely to embrace these technologies if they believe they enhance performance and require little effort to use, highlighting the role of subjective perceptions in the adoption process.

The Diffusion of Innovations Theory, proposed by Rogers in 1962, explains how new ideas and technologies spread, focusing on four elements: the innovation, communication channels, time, and social systems. It categorizes adopters into five segments: innovators, early adopters, early majority, late majority, and laggards. This theory is relevant for understanding the adoption of digital payment technologies among MSMEs and their customers in Naga City, helping identify factors that influence adoption and strategies to promote it. Successfully integrating these technologies with existing financial practices can enhance their uptake.

The Marketing Mix Theory, known as the "4Ps" (product, price, place, and promotion), serves as a vital framework for marketing strategies. This research focuses on the promotion aspect, specifically for digital payment systems used by Micro, Small, and Medium Enterprises (MSMEs) in Naga City. It aims to identify effective communication strategies to educate users about the benefits of digital payments, emphasizing ease of use, security, and transaction speed. By exploring various promotional techniques, the study seeks to enhance the adoption of digital payments among MSMEs, ultimately supporting their growth and benefiting the local economy.
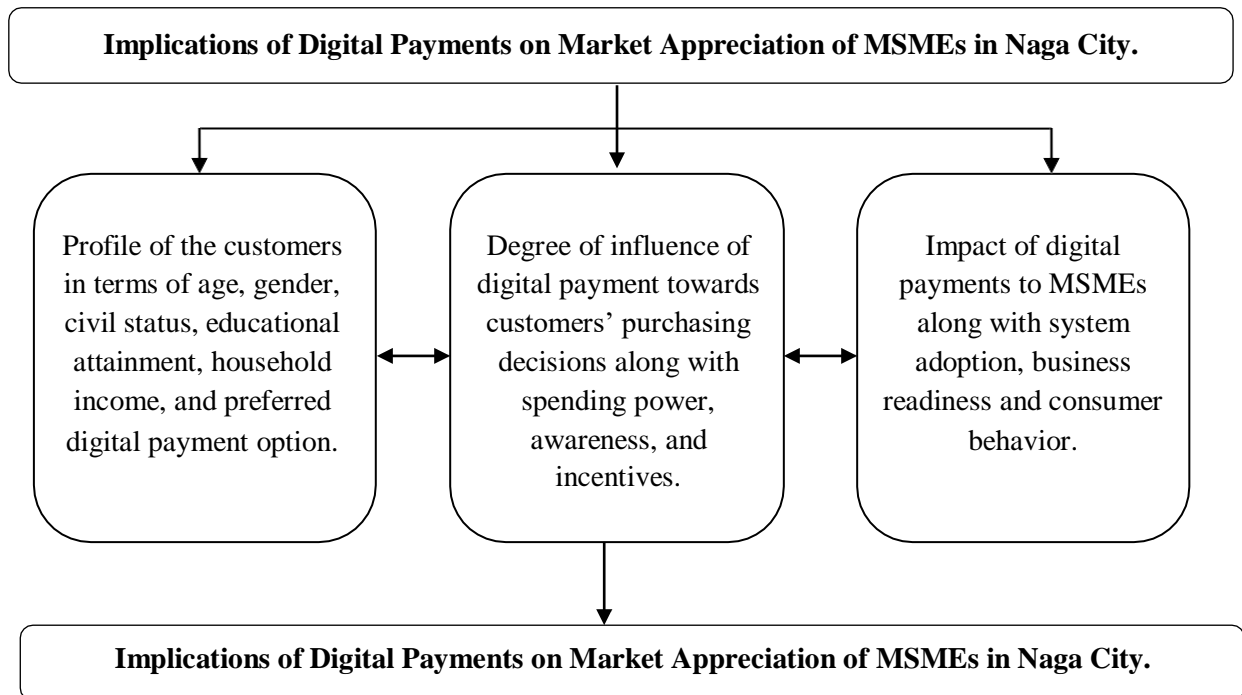
Conceptual Framework

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| Profile of the customers in terms of age, gender, civil status, educational attainment, household income, and preferred digital payment option. | Degree of influence of digital payment towards customers' purchasing decisions along with spending power, awareness, and incentives. | Impact of digital payments to MSMEs along with system adoption, business readiness and consumer behavior. |

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Figure 2. Conceptual Paradigm

Figure 2 illustrates the conceptual paradigm focusing on the promotion strategies used to inform potential users about the benefits of digital payment systems for Micro, Small, and Medium Enterprises (MSMEs) in Naga City. Effective promotional activities such as advertising and public relations can enhance awareness and encourage adoption among MSMEs by emphasizing the ease of use, security, and speed of transactions. The research explores how different promotional techniques can influence consumer behavior and market appreciation, ultimately supporting the growth of local businesses and strengthening the economy.

METHODS

Research Methods

This research employed a mixed methods approach to assess the impact of digital payments on market appreciation among 100 MSME customers in Naga City. Data collection was facilitated through a researcher- developed survey questionnaire, which was distributed across various channels, including in-person meetings, email, and digital platforms, depending on participant accessibility. The questionnaire consisted of four key sections: the first section collected demographic information to facilitate an analysis of digital payment preferences across different customer segments; the second section evaluated the influence of digital payments on purchasing decisions, incorporating

variables such as spending power and awareness of payment options; the third section examined the impact of digital payment adoption on MSMEs, focusing on aspects such as system readiness and shifts in consumer behavior. A semi-structured interview guide was utilized to gather qualitative insights aimed at developing a marketing strategy for the accelerated adoption of digital payments in Naga City. This guide included open-ended questions designed to elicit detailed participant experiences and perceptions regarding the use of digital payment systems and the readiness of MSMEs to adapt to these changes.

Sampling Procedure

This study's respondents were 100 MSME customers in Naga City. The respondents were ensured to have adequate experience and familiarity with the market dynamics and digital payment systems in Naga City. Convenience and purposive sampling were employed in this study to determine the individuals who were readily accessible and met the pre-defined criteria relevant to the research study.

Any data gathered is treated with utmost confidentiality and only used for the purpose of the study. Lastly, the researchers guaranteed that the privacy of the participants was rigorously maintained. Anything that was collected from the participants that they might be able to identify was made anonymous to safeguard private data in compliance with the Data Privacy Act 2012.

RESULTS AND DISCUSSION

Profile of the Respondents

The respondents' profiles in Table 1 show the demography of the customers surveyed in Naga City. A vast majority, 89%, falls within the 18-28 age group, with 10% aged 29-39 and only 1% between 40-50. Gender distribution reveals that 67% of customers are male, 32% female, and 1% undisclosed. About civil status, 93% are single, 6% are married, and 1% prefer not to say. Most respondents are either undergraduates or college students at 53%, with only 2% having master's degrees. The average household income is distributed from PHP 20,001 to PHP 50,000, with 32% and 4% above PHP 50,000. Lastly, the digital platform preferred is mobile wallets, where the majority used 58%, and other platforms ranked at 1%.

Based on the result above, it can be concluded that digital payment adoption in Naga City is primarily driven by younger generation, single individuals who are either currently pursuing higher education or have recently graduated. This demographic is typically more open to new technologies and more likely to engage in online transactions, making them ideal adopters of digital payment methods. The concentration of respondents within the PHP 20,001 to PHP 50,000 income bracket suggests that these individuals have enough disposable income to engage in regular transactions. The preference for mobile

wallets indicates a trend towards easy-to-use, accessible financial tools that align with the lifestyle of younger, digitally connected consumers.

The findings of this study align with an existing research that highlights the significant role of age, education, and income in digital payment adoption. Younger individuals, particularly those in the 18-28 age group with higher education levels, are more likely to use digital payment systems, reflecting trends noted by Abegao- Neto and Figueiredo (2023) and Kristensen and Solvoll (2019). The data also shows that middle-income earners, who typically have more disposable income, are more inclined to engage in digital transactions, supporting observations by Antonijević et al. (2021) and Ponsree et al. (2021). While gender differences in adoption are less clear, existing literature suggests that perceptions of security and ease of use might vary between men and women, as indicated by Makkonen et al. (2021). Overall, these findings reinforce the importance of demographic factors in the adoption of digital payment systems.

Table 1
Demographic profile of the customers

PARAMETERS	FREQUENCY	PERCENTAGE	RANK
Age			
18-23	75	75.00%	1
24-29	17	17.00%	2
30-36	7	7.00%	3
43-48	1	1.00%	4
Total	**100**	**100.00%**	
Gender			
Male	67	67.00%	1
Female	32	32.00%	2
Prefer not to Say	1	1.00%	3
Total	**100**	**100.00%**	
Civil Status			
Married	6	6.00%	2
Single	93	93.00%	1
Prefer not to say	1	1.00%	3
Total	**100**	**100.00%**	
Educational Attainment			
Bachelor's degree	39	39.00%	2
Doctoral degree	3	3.00%	3
High school	3	3.00%	3
Master's degree	2	2.00%	4
Undergraduate (College Student)	53	53.00%	1

Total	100	100.00%	
Household Income			
Below PHP 10,000	13	13.00%	4
PHP 10,000 to PHP 20,000	30	30.00%	2
PHP 20,001 to PHP 50,000	32	32.00%	1
PHP 50,001 to PHP 100,000	16	16.00%	3
PHP 100,001 to PHP 200,000	5	5.00%	5
Above PHP 200,000	4	4.00%	6
Total	100	100.00%	
Preferred Digital Payment Options			
Bank transfers	13	13.00%	3
Credit/Debit cards	28	28.00%	2
Mobile wallets (e.g., GCash, Alipay, Shopee Pay)	58	58.00%	1
Other digital payment platforms	1	1.00%	4
Total	100	100.00%	

Degree of Influence of Digital Payment Towards Customers' Purchasing Decisions

This part examines the impact of digital payments on customers' purchasing decisions, including spending power, awareness, and incentives.

Influence in terms of Spending Power

The data in Table 2 shows that spending power significantly influences customers' purchasing decisions, with an average weighted mean of 3.75. The highest-ranked parameter is the "urge to spend more with digital payments," averaging 4.06 and considered "Influential." The lowest-ranked is "frequent online purchases with digital payments," with a mean of 3.61, also deemed "Influential."

Table 2
Degree of influence of digital payment towards customers' purchasing decisions in terms of spending power

PARAMETERS	M	RANK	INTERPRETATION
The urge to spend more when using digital payments compared to cash.	4.06	1	I
Managing monthly budget through the help of digital payments.	3.70	3	I
Making unplanned purchasing due to the convenience of digital payments.	3.72	2	I

Frequent online purchases when using digital payments.	3.61	5	I
Spending habits change due to digital payments.	3.68	4	I
Overall Mean	**3.75**		I

Notes: 4.50-5.00 Highly Influential (HI);3.50-4.49 Influential (I);2.50-3.49 Moderately Influential (MI);1.51-2.49 Somewhat Influential (SI);1.00-1.50 Not Influential (NI)

The results show that digital payments significantly affect spending behavior, and spending behavior is often influenced towards impulse buying. This can be attributed to the convenience of using digital payments since the instant deduction of funds is less tangible than with cash. Digital payments, though convenient for online shopping, extend beyond online purchases into many buying contexts.

The study's findings on the influence of digital payments on spending power are supported by existing research, which shows that the convenience of digital payments can lead to increased spending and impulsive purchases. Studies by Kurniawan et al. (2019) and Rafee et al. (2022) highlight how digital payments reduce the psychological barriers of spending, making consumers more likely to spend more.

Influence in terms of Awareness

Table 2.1 reveals that the mean weighted average of customers' purchase decisions is primarily driven by awareness, at 3.90. The highest ranking parameter is "understanding digital payments in choosing payment methods," which stood at 3.93, while "social influence of digital payments from friends and family" had the lowest score of 3.82. Thus, the general sense from the data is that awareness drives customers' choices regarding digital payments.

The results indicate that customers prioritize their understanding and awareness of digital payment systems over social influences when choosing payment methods. While social factors matter, individual knowledge and confidence take precedence. This underscores the importance of awareness programs and security features, as customers are more likely to use digital payments when they feel informed and secure.

These findings align with existing literature, such as Le Uyen et al. (2023) work, which emphasizes the importance of performance expectations and ease of use in digital payment adoption. The study also echoes the findings by Shah and Zala (2018), who noted the critical role of awareness and education in influencing the adoption of digital payments among consumers. The Technology Acceptance Model (TAM) further supports this by suggesting that perceived usefulness and ease of use are key to technology adoption, which can be enhanced through awareness and education initiatives.

Arevalo, A. T., Cordial, J., Lonceras, L. F., Magat, J. F., Ogarte, N., & Raygon, G. J. (2024). Implications of digital payments on market appreciation of MSMEs in Naga City. *GPH-International Journal of Business Management*, 7(12), 227-251. https://doi.org/10.5281/zenodo.14578140

Table 2.1
Degree of influence of digital payment towards customers' purchasing decisions in terms of awareness

PARAMETERS	M	RANK	INTERPRETATION
The awareness about the different types of digital payments available.	3.92	2	I
The influence of understanding digital payments in choosing payment methods.	3.93	1	I
The confidence of using digital payments because of awareness programs.	3.91	3	I
The social influence of digital payments brought by friends and family.	3.82	4	I
The awareness of the security features available in digital payments	3.91	3	I
Overall Mean	**3.90**		I

Influence in terms of Incentives

Table 2.2 shows that digital payments significantly impact customer purchasing decisions, with an average weighted mean of 3.81. The highest-ranked factor is the "additional benefit of digital payments compared to cash," with a mean of 3.95, while "purchasing due to promotional offers via digital payments" has the lowest mean at 3.68. It can be concluded that incentives are significant in stimulating the use of digital payments, probably because of convenience perceptions.

Table 2.2
Degree of influence of digital payment towards customers' purchasing decisions in terms of incentives

PARAMETERS	MEAN	RANK	INTERPRETATION
Financial incentives like cashback available in digital payments.	3.69	3	I
Discounts and rewards available in digital payments.	3.87	2	I
Additional benefit of digital payments compared to cash.	3.95	1	I
Change of payment preference because of the ease and incentives brought by digital payments.	3.87	2	I
Purchasing products because of promotional offers via digital payments.	3.68	4	I
Overall Mean	**3.81**		I

Notes: 4.50-5.00 Highly Influential (HI);3.50-4.49 Influential (I);2.50-3.49 Moderately Influential (MI);1.51-2.49 Somewhat Influential (SI);1.00-1.50 Not Influential (NI)

Customers value the inherent benefits of digital payments, such as ease of use and security, more than direct financial incentives, such as cashback. Ease of use and effective transaction management are more enormous motivators in purchasing than monetary rewards.

Long-term benefits might be a better motivator than immediate financial rewards for customers.

These findings align with existing literature that highlights the role of perceived usefulness and ease of use in the adoption of digital payments, as discussed in the Technology Acceptance Model (TAM) (Davis, 1989). The importance of ease and utility is further supported by research from Abegao-Neto and Figueiredo (2023), who emphasize the significant influence of these factors on digital payment adoption. Moreover, Allen et al. (2022) highlight that while financial incentives like cashback are effective, they are often secondary to the broader benefits that digital payments offer, such as convenience and security.

Influence of digital payments on customers' purchasing decisions

Table 2.2 shows that digital payments significantly impact customer purchasing decisions, with an average weighted mean of 3.81. The highest-ranked factor is the "additional benefit of digital payments compared to cash," with a mean of 3.95, while "purchasing due to promotional offers via digital payments" has the lowest mean at It can be concluded that incentives are significant in stimulating the use of digital payments, probably because of convenience perceptions.

Table 2.3
Influence of digital payments on customers' purchasing decisions across key factors

PARAMETERS	MEAN	RANK	INTERPRETATION
Spending Power	3.75	3	I
Awareness	3.90	1	I
Incentives	3.81	2	I
Overall Mean	**3.82**		**I**

Notes: 4.50-5.00 Highly Influential (HI);3.50-4.49 Influential (I);2.50-3.49 Moderately Influential (MI);1.51-2.49 Somewhat Influential (SI);1.00-1.50 Not Influential (NI)

Customers value the inherent benefits of digital payments, such as ease of use and security, more than direct financial incentives, such as cashback. Ease of use and effective transaction management are more enormous motivators in purchasing than monetary rewards. Long-term benefits might be a better motivator than immediate financial rewards for customers.

These findings are consistent with existing literature that underscores the importance of awareness in adopting digital payments. Le Uyen et al. (2023) emphasized that performance expectations and social influence significantly impact digital payment adoption, aligning with this study's high awareness ranking. The role of incentives is also well-supported by the research of Allen et al. (2022) and Zhao et al. (2019), who found that financial incentives like cashback and discounts are significant motivators for adopting digital payments.

Impact of digital payments to MSMEs

This part discusses the impact of digital payments to MSMEs in terms of system adoption, business readiness and consumer behavior.

System Adoption

Table 3 presents the impact of digital payments on MSMEs in terms of system adoption. The highest- ranked influence is "making business financial transactions faster and easier through the help of digital payments," with a mean score of 4.16, indicating it is considered influential (I). "Enhanced operational efficiency of MSMEs because of digital payments" is ranked last with a mean score of 3.77. All parameters fall within the "Influential" category, and the overall mean is 3.98, confirming that digital payments have a generally influential impact on MSMEs' system adoption.

MSMEs, like digital payments, have direct, tangible advantages, precise speed, and ease of use, which drive operational improvement and longer-term competitiveness. Digital payments are considered a sine qua non for survival in a digital economy. At the same time, a lower emphasis on overall operational efficiency indicates that some MSMEs might require assistance in fully integrating these systems into operations.

These findings are consistent with existing literature on the impact of digital payments on MSMEs. For instance, Widayani et al., (2022) highlight how digital payments improve the efficiency of financial transactions, which aligns with the high ranking of transaction speed and ease in this study. Additionally, Kaur and Devi (2022) discuss the role of digital payments in enhancing business growth and sustainability, supporting the finding that MSMEs see long-term benefits in adopting these technologies. The emphasis on market competition is also

Table 3

Impact of digital payments to MSMEs in terms of system adoption

PARAMETERS	MEAN	RANK	INTERPRETATION
Enhanced operational efficiency of MSMEs because of digital payments.	3.77	5	I
The help of digital payments in managing MSMEs business transactions security and efficiency.	3.92	4	I
Making business financial transactions faster and easier through the help of digital payments.	4.16	1	I
The ability of MSMEs to compete in the market by adopting digital payments.	3.99	3	I
Growth and sustainable business due to digital payment technologies.	4.05	2	I

	Overall Mean	3.98	I

affirmed by Raharja et al., (2020), who note that digital payment adoption can significantly improve MSMEs' market position. Furthermore, the study's findings align with the TAM which suggests that perceived usefulness and ease of use are critical to the adoption of new technologies, further supporting the importance of transaction speed and efficiency in MSMEs' decision to adopt digital payments (Davis, 1989). Overall, the results affirm the literature, suggesting that digital payments are crucial for enhancing MSMEs' operational effectiveness and market competitiveness.

Business Readiness

Table 3.1 presents the impact of digital payments on MSMEs in terms of business readiness. The highest- ranked influence is "MSMEs who train and support their employees to manage digital payment solutions," with a mean score of 4.02, indicating it is considered "Influential".

Table 3.1
Impact of digital payments to MSMEs in terms of business readiness

PARAMETERS	MEAN	RANK	INTERPRETATION
Businesses that are prepared to integrate and manage digital payment systems.	3.88	5	I
Business who possessed the necessary digital literacy in utilizing digital payments.	3.95	3	I
MSMEs who support and continuously adopt digital payment systems.	3.97	2	I
MSMEs who actively update and maintain digital payments systems.	3.92	4	I
MSMEs who train and support their employees to manage digital payment solutions.	4.02	1	I
Overall Mean	**3.95**		**I**

The lowest-ranked factor is "businesses that are prepared to integrate and manage digital payment systems," with a mean score of 3.88. All parameters fall within the "Influential" category, and the overall mean is 3.95, confirming that digital payments have a generally influential impact on MSMEs' business readiness.

Results indicated that training and support for employees in MSMEs is an essential factor in adopting and using digital payment systems. This means that MSMEs recognize the importance of skilled workers in successfully implementing digital technologies. A lower focus on overall preparedness suggests that even though these businesses see the

value of digital payments, they still need to improve their infrastructure and system management to benefit from these technologies.

These findings are consistent with existing literature that emphasizes the importance of training and continuous support for employees in the adoption of digital payment systems. Widayani et al. (2022) highlight the role of digital literacy and the need for ongoing support in ensuring the successful adoption of digital payments, which aligns with the high ranking of employee training in this study. Similarly, Pratama et al. (2023) discuss the critical role of business readiness, particularly in terms of infrastructure and continuous system updates, which is reflected in the rankings of system maintenance and overall preparedness. The findings also resonate with the Technology Acceptance Model (TAM), which posits that perceived ease of use and the necessary skills to manage new technology are vital for successful adoption (Davis, 1989). Furthermore, the Diffusion of Innovations (DOI) Theory (Rogers, 2003) supports the idea that the successful adoption of new technologies, like digital payments, often hinges on the readiness of the organization, including the preparedness of its workforce and its capacity to support ongoing technological updates.

Consumer Behavior

Table 3.2 shows the influence of digital payments on MSMEs regarding consumer behavior. The most influential factor is "Customer appreciation for the convenience of digital payments," with a mean score of 3.96. The least influential is "Customers feel secure using digital payments," with a mean score of 3.60. All factors are classified as "Influential," with an overall mean of 3.81, meaning that digital payments generally positively influence consumer behavior in MSMEs.

Table 3.2
Impact of digital payments to MSMEs in terms of consumer behavior

PARAMETERS	MEAN	RANK	INTERPRETATION
Customer appreciation about the convenience offered by digital payments	3.96	1	I
Customers feel secure when using digital payments in transactions.	3.60	5	I
Availability of digital payments on MSMEs.	3.88	2	I
Digital payment meets customer expectations in terms of ease and security.	3.81	3	I
Other customer recommendations about businesses that use digital payment systems.	3.80	4	I
Overall Mean	**3.81**		**I**

Notes: 4.50-5.00 Highly Influential (HI);3.50-4.49 Influential (I);2.50-3.49 Moderately Influential (MI);1.51-2.49 Somewhat Influential (SI);1.00-1.50 Not Influential (NI)

The results indicate that the convenience of digital payments strongly influences positive consumer behavior, and customers prefer MSMEs that provide easy and fast

transactions. The lesser emphasis on security suggests that customers are confident in the security of digital payment systems, making it a less critical factor in their decisions.

These findings align with existing literature emphasizing the importance of convenience and ease of use in the adoption of digital payments. According to Davis (1989) and the Technology Acceptance Model (TAM), perceived usefulness and ease of use are critical factors in the adoption of new technologies, which explains why convenience ranks so highly in this study. The Diffusion of Innovations (DOI) Theory by Rogers (2003) also supports the idea that consumers adopt new technologies when they perceive clear advantages, such as the convenience offered by digital payments.

Impact of digital payments to MSMEs

Table 3.3 depicts the effect of digital payments on MSMEs based on three essential factors: system adoption, business readiness, and consumer behavior. "System Adoption" has the highest mean score at 3.98, followed by "Business Readiness" at 3.95, both deemed influential. Consumer Behavior ranks third with a score of 3.81, still within the influential category. All factors indicate that digital payments have a substantial effect on MSMEs.

Table 3.3
Impact of digital payments to MSMEs

	MEAN	RANK	INTERPRETATION
System Adoption	3.98	1	I
Business Readiness	3.95	2	I
Consumer Behavior	3.81	3	I

Notes: 4.50-5.00 Highly Influential (HI);3.50-4.49 Influential (I);2.50-3.49 Moderately Influential (MI);1.51-2.49 Somewhat Influential (SI);1.00-1.50 Not Influential (NI)

The results show that system adoption is the most critical factor for MSMEs to benefit from digital payment systems. Business readiness is also imperative, indicating the need to integrate these systems to be competitive. However, consumer behavior is less critical, as MSMEs seek to secure their operational capacities before considering consumer-related matters.

The findings of this study align with the existing literature on the impact of digital payments on MSMEs, particularly regarding system adoption and business readiness. As highlighted by Widayani et al. (2022) and Kaur and Devi (2022), system adoption is crucial for MSMEs to streamline operations and enhance financial management, which is reflected in the high ranking of this factor in the study. The importance of business readiness, as indicated by Raharja et al. (2020) and Pratama et al. (2023), is also affirmed by this study's results, showing that MSMEs must be well-prepared to integrate digital payment systems effectively to remain competitive in the digital economy.

Relationship between the profile of customers and the degree of influence on customer purchasing behaviors.

This part discusses the significant relationship between customers' profiles and the degree of influence on customer purchasing behavior.

Table 4

Relationship between the profile of customers and the degree of influence on customer purchasing behaviors.

	SPENDING POWER	AWARENESS	INCENTIVES
Age	$p = 0.7458$	$p = 0.06934$	$p = 0.2063$
Gender	$p = 0.5137$	$p = 0.293$	$p = 0.925$
Civil Status	$p = 0.83$	$p = 0.9565$	$p = 0.747$
Educational Attainment	$p = 0.2634$	$p = 0.3952$	$p = 0.4993$
Household Income (per month)	$p = 0.68$	$p = 0.529$	$p = 0.1284$
Preferred Digital Payment Option	$p = 0.3176$	$p = 0.1245$	$p = 0.06864$

Note: *** p is significant ($p<0.05$)

Table 4 Relationship between the type of customer profiles and how digital payments influence purchasing behavior about spending power, awareness, and incentive. No demographic factors have emerged, including age, gender, civil status, education, income, or mode preferred, which showed a statically significant relationship with these variables; since all p-values in the table were more critical than 0.05, this leads to the acceptance of the null hypothesis, and hence no significant association exists.

The results suggest that digital payments influence customers' buying behavior across the different demographic groups in Naga City, irrespective of age, gender, and income. This would indicate that the digital payment system is perceived to be equally valued and accessible, thereby leading to their wide acceptance as a tool for transaction purposes. The overall effect of digital payments reflects their integration into life in Naga City.

These findings affirm existing literature that highlights the growing ubiquity of digital payments across demographic lines. Studies like those of Le Uyen et al. (2023) and Kurniawan et al. (2019) suggest that while demographic factors such as age and income can shape preferences for certain payment methods, digital payments, in general, are widely adopted due to their convenience and ease of use. Furthermore, the Technology Acceptance Model (TAM) by Davis (1989) posits that perceived usefulness and ease of use are critical factors in technology adoption, which could explain the broad influence of digital payments regardless of customer profiles.

Relationship between the degree of influence on purchasing decisions and the impact of digital payments.

This part discusses the significant relationship between the degree of influence on purchasing decisions and the impact of digital payments.

Table 5 shows that digital payment's influence on purchasing decisions is highly significant across all stages: system adoption, business readiness, and consumer behavior ($p < 0.001$). Strong correlations were seen between the system adoption and awareness $r = .781$ and incentives $r = .711$. Business readiness has robust correlations, mainly with stage awareness, $r = .776$. The influence of consumer behavior was generally strong but lower than the two others, with spending power showing the weakest correlation at ($r = .581$).

Table 5
Relationship between the degree of influence on purchasing decisions and the impact of digital payments

	SPENDING POWER	AWARENESS	INCENTIVES
SYSTEM ADOPTION	p < .001***	p < .001***	p < .001***
	Strong	Strong	Strong
BUSINESS READINESS	p < .001***	p < .001***	p < .001***
	Strong	Strong	Strong
CONSUMER BEHAVIOR	p < .001***	p < .001***	p < .001***
	Moderate	**Strong**	**Strong**

Note: *** p is significant ($p < 0.05$)

The findings show that system adoption and business preparedness are critical factors affecting consumer purchase decisions by raising awareness and providing incentives. The high correlation between system adoption and awareness shows that businesses actively inform consumers of the benefits of digital payment. Moreover, prepared businesses that are ready to use digital payments can offer attractive promotions. Consumer behavior is moderately correlated with spending power. Though the ease of spending via digital payments can influence consumer behavior, it cannot significantly alter the level of consumer spending.

These findings align with the Technology Acceptance Model (TAM) and Diffusion of Innovations (DOI) theory, both of which emphasize that awareness and perceived ease of use are critical for technology adoption. Le Uyen et al. (2023) and Kurniawan et al. (2019) similarly noted that businesses that educate consumers and promote the advantages of digital payments are more likely to influence consumer behavior positively.

Proposed Marketing Strategy for MSMEs for the faster adoption of Digital Payments by MSMEs in Naga City.

This segment outlines the marketing strategy developed by the researchers, encompassing the input, process, and output of the marketing strategy for the faster adoption of Digital Payments by MSMEs in Naga City.

Input

1. Primary resources. The marketing strategy was developed using data from survey forms collected from

100 customers in Naga City by the researchers.

2. Secondary resources. The researchers developed survey questionnaires by utilizing various secondary resources, including relevant literature, scholarly articles, and related studies to inform their ideas and establish a solid framework for data collection. A thematic review of the literature was conducted to explore supporting concepts related to the key variables and objectives in formulating the Marketing Strategy. The literature was reviewed and obtained from academic websites such as Google Scholar, sciencedirect.com, doi.org, researchgate.com, and ijstr.org.

Process

The formulation of a marketing strategy for the faster adoption of Digital Payment by MSMEs in Naga City are as follows:

Step 1: Performed an in-depth analysis of the factors influencing customer behavior and perceptions in digital payments to identify relevant indicators for the research questionnaire.

Step 2: created a structured survey questionnaire for the respondents, incorporating a Likert scale and open-ended questions to gather quantitative and qualitative data.

Step 3: Conducted an online survey via Google Forms with 100 customers in Naga. It included general respondent information, a 5-point Likert scale to gauge perceptions and open-ended questions for developing a marketing strategy.

Step 4: Gathered survey responses, organized, analyzed, and interpreted.

Step 5: Based on the evaluated findings and feedback, the Marketing Strategy plan was introduced and developed using a playbook.

Output

Based on the study's findings, the researchers formulated the **"Empowering Digital Transactions: A Year-Long Strategy to Enhance Digital Payment Adoption and Engagement in Naga City."**

This marketing calendar leverages the research findings and recommendations to create a comprehensive, year-long marketing strategy to promote digital payment adoption in Naga City. Each quarter builds on awareness, incentives, and business readiness to foster consistent growth in digital payment usage among MSMEs and consumers.

Quarter 1: January – March

The campaign aims to increase awareness and accessibility of digital payments by focusing on education and practical experience over the first quarter. In January, a social media and in-store campaign will launch, training MSME staff on the benefits and security of digital payments to improve their facilitation of transactions. February will feature in-store demonstrations, allowing customers to gain hands-on experience with digital payment systems and build trust in the technology. In March, online workshops will be conducted to educate a broader audience on secure digital payment practices and effective budgeting, addressing critical concerns about security and financial management that influence consumer adoption. This comprehensive strategy seeks to overcome barriers to digital payment adoption through targeted outreach and engagement.

Q2: April-June

The strategy emphasizes boosting customer engagement and regular digital payments, starting with an April loyalty program offering cashback and rewards for middle-income and younger consumers. Research shows that such incentives significantly influence payment choices. In May, partnerships with financial institutions and mobile wallet providers will enable joint promotional campaigns offering transaction discounts, along with influencer collaborations to increase visibility among younger audiences. By June, the focus will shift to gathering customer feedback through surveys and in-store forms to improve services, highlighting the importance of consumer insights for MSMEs to enhance their offerings.

Q3: July-September

The goal is to enhance digital payment reach and business readiness. July focuses on exclusive weekend discounts to incentivize mobile wallet usage, with a mean score of 3.81 reflecting the impact of such promotions. August targets universities and conducts MSME staff training to boost awareness (3.90) and readiness (3.95) for digital payments. September emphasizes security through a campaign that shares tips and guides to build customer confidence, scoring 3.91 in security awareness. Overall, the strategy leverages incentives, education, training, and security to encourage broader adoption of digital payments.

Q4: October - December

The objective is to enhance customer adoption and loyalty through holiday-focused incentives. In October, a social media campaign highlighting testimonials builds trust in digital payments, as customer awareness plays a crucial role in adoption. November introduces a holiday cashback program to leverage peak shopping activity, backed by customer feedback to shape future incentives, emphasizing the appeal of financial rewards over cash. December focuses on an end-of-year digital payment drive in partnership with

financial institutions, supported by regular updates and a comprehensive review of strategies based on feedback and transaction data. This approach emphasizes the importance of continuous training for staff and responsive strategies to meet customer needs, ultimately fostering loyalty and increasing digital payment adoption.

ANNUAL BUDGET FOR MARKETING PLAN

The annual budget for the marketing plan outlines the expenses required to effectively promote digital payments among MSMEs and consumer groups in Naga City, focusing on impactful and cost-effective marketing strategies.
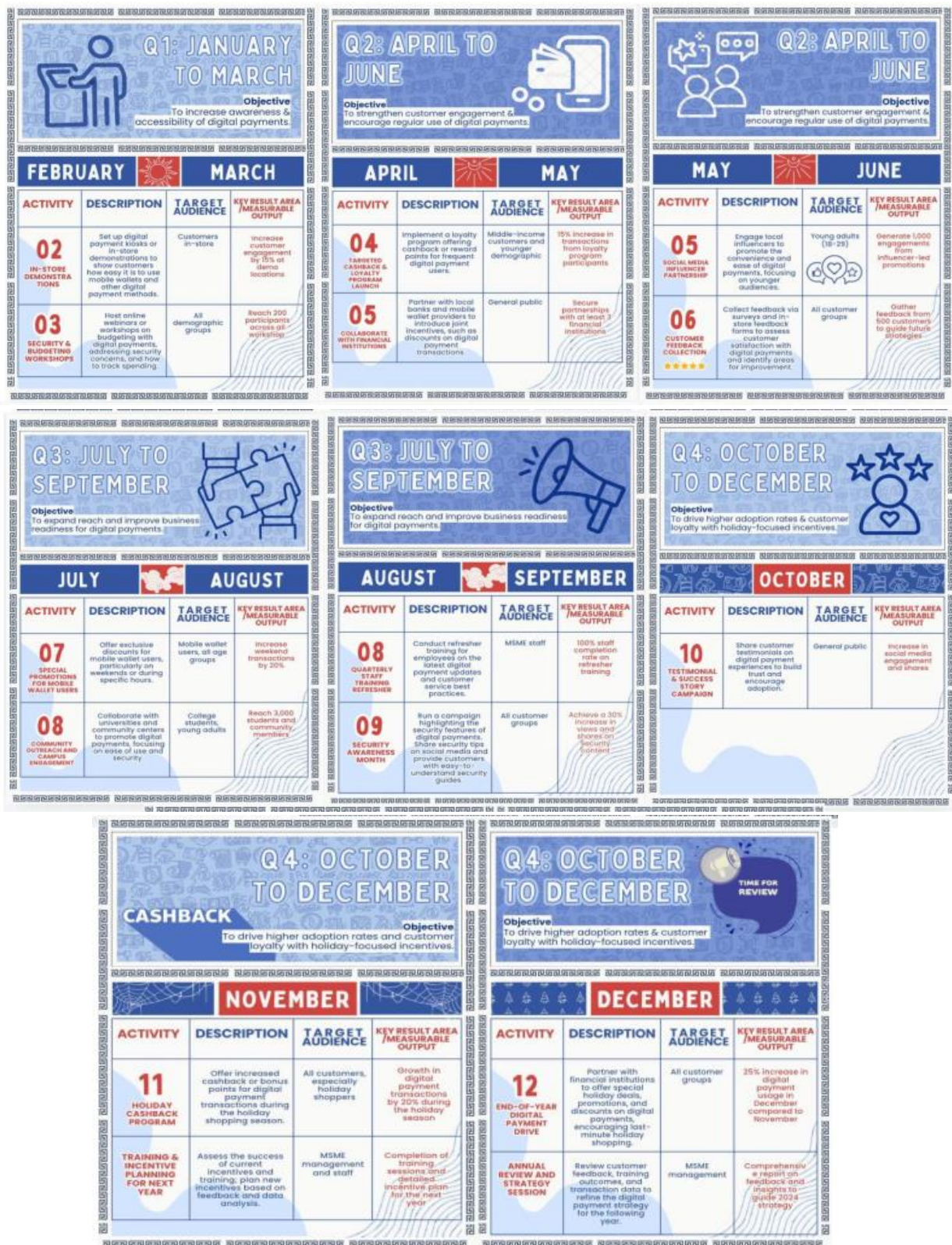
Figure 1 Empowering Digital Transactions Q1-Q4

Conclusion and Recommendations

This chapter presents the findings obtained from the data analysis. The conclusions drawn in addressing the gaps, and the recommendations to enhance the digital payment systems, focusing on increasing accessibility, awareness, and incentives to encourage broader adoption among consumers and businesses.

Profile of MSMEs Customers

1. **Age**. Digital payment adoption in Naga City is highest among young individuals aged 18-23. MSMEs and financial providers should target this group with marketing campaigns on popular social media, highlighting features that appeal to tech-savvy users.

2. **Gender.** The sample predominantly consists of male respondents, but there is no significant gender preference for digital payments. Marketing efforts should focus on security and ease of use rather than gender, as these factors may resonate with a wider audience.

3. **Civil Status.** Single individuals often have fewer financial obligations, making them more inclined to use digital payment systems. MSMEs and digital payment platforms should target this group with promotions and consider partnerships with brands that resonate with younger singles.

4. **Educational Attainment.** Higher education correlates with greater adoption of digital payments due to enhanced digital literacy. MSMEs and payment providers can increase usage by promoting awareness and engaging students through campus events.

5. **Household Income.** Middle-income individuals use digital payments frequently, indicating accessibility. Financial institutions and MSMEs can attract more users by offering incentives like cashback, discounts, or loyalty points for both middle and lower-income groups.

6. **Preferred Digital Payment Options.** The rise of mobile wallets reflects consumer demand for convenient payments. MSMEs should promote these wallets with special deals and compatibility with popular platforms, while payment providers can attract users by enhancing features like installment payments.

Degree of Influence of Digital Payment Towards Customers' Purchasing Decisions

1. **Spending Power.** Digital payments simplify budgeting but can encourage unplanned spending. MSMEs in Naga City should offer budgeting tools and educate customers on mindful spending, providing rewards for healthy financial habits.

2. **Awareness.** Customer awareness is essential for digital payment adoption. MSMEs should focus on education and collaborate with financial institutions to build trust while promoting benefits like security and convenience.

3. **Incentives.** Customer awareness is crucial for digital payment adoption. MSMEs should invest in education through demos and tutorials and collaborate with financial institutions for support. Highlighting benefits like speed and convenience can further encourage use over traditional methods.

Impact of Digital Payments to MSMEs
1. **System Adoption.** MSMEs in Naga City embrace digital payments for speed, cost savings, and improved customer service, while partnering with financial institutions can enhance security and efficiency. Regular evaluations can help identify further improvements.
2. **Business Readiness.** MSMEs should enhance employee digital literacy and invest in training to effectively manage payment systems, ensuring long-term business readiness and adaptability to digital trends.
3. **Consumer Behavior.** Consumers value convenience in digital payments. MSMEs can attract customers with user-friendly systems and enhance accessibility. Trust can be built through clear security communication and customer recommendations.

Significant Relationship Between the Profile of Customers and The Degree of Influence on Customer Purchasing Behaviors.
Digital payments are effective for all demographics, emphasizing their convenience. MSMEs should promote them widely and build trust through user-friendly features. Personalized offers based on transaction history may be more appealing than demographic-based incentives.

Significant Relationship Between the Degree of Influence on Purchasing Decisions and The Impact of Digital Payments.
System adoption is crucial for consumer decisions on digital payments, requiring businesses to educate customers and offer incentives. MSMEs in Naga City should improve user experience through regular updates and staff training. Effective communication about the ease and security of digital payments, along with customer feedback, can enhance engagement and showcase benefits.

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