



Coffee Shop Owners' Decision and Use of Point-of-Sale (POS) System

Rayniel Jade R. Boado¹, Janna Marie D. Francisco², Vianca Nicole R. Lingat³, Raven Arni D. Reobaldo⁴, Justine Shane L. Resurreccion⁵, Bryan DC. Gabriel, PhD⁶, Jomar V. Villena, CPA⁷, Francis Allan C. Bernales, MBA^{8*}

^{1,2,3,4,5}3rd Year BSAIS, National University Philippines, School of Business and Accountancy, Baliwag City, Bulacan, 3006, Philippines

⁶Assistant Professor III, National University Philippines, Baliwag City, Bulacan, 3006, Philippines

⁷Instructor, National University Philippines, Baliwag City, Bulacan, 3006, Philippines

⁸Instructor, National University Philippines, Baliwag City, Bulacan, 3006, Philippines

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ABSTRACT

The food and beverage industry continually adopts modern technology, specifically through the implementation of Point-of-Sale (POS) systems in coffee shop operations. While POS systems are known to improve transactional processing, inventory management, and overall efficiency, coffee shop owners' perceptions and decision to adopt them have varied due to costs, complexity, and perceived benefits. This study determined the perceptions of coffee shop owners in Baliwag City regarding the introduction of POS systems and factors that influenced their decision making. A quantitative research design, specifically descriptive and correlational research methodology was employed. Coffee shop owners were purposively sampled, and data were collected using structured questionnaires available online and offline to assess perceptions regarding POS system advantages, complexity, adoption, compatibility, technological and environmental contexts. The data were analyzed using descriptive statistics through the JAMOVI software. Findings indicated that coffee shop owners acknowledged the value of POS systems, particularly in enhancing business performance and efficiency. Challenges in integrating POS systems were present. Despite these, respondents expressed a strong intent to adopt POS systems, citing compatibility and the need to be competitive. Moreover, adoption decisions were largely related to technological context, particularly employee preparedness and infrastructural support. While owners were aware of the necessity of POS systems for competitiveness, concerns about complexity and workflow adaptation persisted. Accordingly, the choices made by coffee shop owners regarding POS system adoption were driven by perceived advantages, compatibility, and competitive necessity. It is suggested that businesses look for user-friendly POS systems, provide proper training, and integrate these systems gradually into their operations.

Keywords: *Adoption, Advantages, Coffee Shop Owners, Compatibility, Complexity, Environment Context, Purposive Sampling Method, Quantitative Research Design, Technology Context*

1. INTRODUCTION

The food and beverage industry are among the world's largest private sectors. With its dynamic and competitive landscape, it continues to evolve alongside technological improvements, particularly in the use of Point-of-Sale (POS) systems in business operations. In this industry, an increase in coffee consumption has paved the way for the establishment of more coffee shops. POS systems enable these businesses to improve transaction processing, inventory management, customer connections, and overall operations. However, the mere availability of these technologies does not guarantee successful implementation operational improvement. While the benefits of POS systems are well recognized, coffee shop owners' adoption and usage patterns have varied significantly. Studies have shown that POS systems enhance inventory control, reduce order errors, and generate valuable sales data. However, there remains a lack of understanding regarding the specific perceptions and factors that influence coffee shop owners' decisions to adopt and utilize POS systems. While some studies have focused on the technical features of POS systems, less attention has been paid to the human factors, such as owners' perceptions of the advantages and drawbacks of these systems.

This gap is particularly significant in emerging economies, where SMEs' technology adoption may be influenced by factors such as cost, perceived complexity, and the availability of technical support. In many developing countries, the coffee shop industry has expanded rapidly in recent years, with the emergence of countless individual cafes and local chains. These coffee shops serve a diverse customer base, resulting in a competitive market where efficient operations and customer satisfaction are essential for success.

The business industry in Baliwag has evolved since the city attained its cityhood on December 17, 2022. One notable shift has been the widespread adoption of the Point-of-Sale (POS) system among businesses, particularly in the coffee shop sector. Based on the researchers' observations, over 52% of coffee shops in Baliwag City utilize POS systems, highlighting their growing importance in business operations. POS systems play a crucial role in businesses as they speed up transactions, minimize human errors, and enhance inventory control, ensuring accurate stock management and reducing

shortages. Businesses can utilize real-time sales statistics and analytics to track revenue, monitor top-selling products, and make data-driven decisions to increase profitability. Additionally, POS systems assist in managing daily operations, simplify tasks, and enhance customer service through valuable business insights.

Despite this increasing adoption, little is known about the specific perceptions and motivations driving POS adoption among coffee shop owners in newly established cities like Baliwag. Understanding the factors influencing these decisions is crucial for system developers, as it enables them to tailor their products to the specific needs of these businesses. A study Hidayati et al. (2023) titled “Analysis of Point-of-Sale System Implementation in Coffee Shop” examined the challenges and benefits of POS implementation in a specific coffee shop context, further highlighting the need for more localized research.

This study examines perceptions of coffee shop owners in Baliwag City regarding POS systems, exploring the perceived benefits and their impact on adoption decisions within this growing sector. It contributes to the understanding of technology adoption among SMEs in a competitive market.

2. THEORETICAL FRAMEWORK

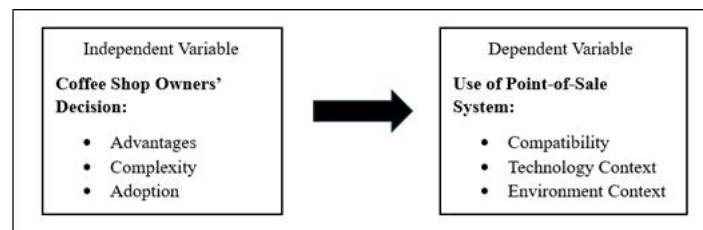
Technology Acceptance Model or TAM was developed by Davis (1989) to understand technology adaptation in different industries. This theory suggests that an individual's decision to adopt new technology is influenced by the Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) (Venkatesha & Bala, 2008). Previous studies have suggested that business owners are more likely to adopt or implement the POS technology if they perceive it as beneficial for business operations, such as minimizing transaction errors and enhancing customer service (Chauhan et al., 2021). Ramayah et al. (2016) stated that perceived usefulness significantly influences small business owners' intention to use technology. They are likely to adopt POS systems if they recognize clear advantages such as improved sales tracking and inventory management. Additionally, perceived ease of use plays a significant role in adoption decisions, as owners prefer systems that are user-friendly and require minimal effort to learn and operate (Oliveira et al., 2014).

The Diffusion of Innovations (DOI) Theory was developed by Rogers (2003) to explain how new technologies spread within society and industry. This theory identifies five characteristics that influence the adoption of POS systems: Compatibility, Relative Advantage, Complexity, Observability, and Trialability. The DOI framework helps analyze how the coffee shop owners make adoption decisions based on internal and external factors, such as customer expectations and evolving market trends. Mohamad et al. (2020) indicated that relative advantage and compatibility are crucial factors in POS adoption. Business owners tend to opt for a technology that will naturally merge with their existing work cycles and processes.

3. CONCEPTUAL FRAMEWORK

Figure 1

Conceptual Framework



The first frame represents the independent variable of the study, which is the Coffee Shop Owners' Decision categorized into Advantages, Complexity, and Adoption. The second frame illustrates the dependent variable of the study, which is the Use of Point-of-Sale System assessed in terms of Compatibility, Technology Context, and Environment Context.

The arrow connecting the independent variable to the dependent variable indicates that coffee shop owners' decision based on perceived advantages, complexity, and adoption have an influence on the use of the Point-of-Sale system in terms of compatibility, technological context, and environmental context. This framework assumes that the coffee shop owners' decisions are potentially influential in determining the adoption and utilization of POS system in coffee shops within Baliwag City, Bulacan.

4. RESEARCH QUESTIONS

This study aims to evaluate coffee shop owners' perceptions of the advantages and factors influencing the utilization of the Point-of-Sale (POS) system in Baliwag City.

Specifically, this study seeks to answer the following research questions:

1. How may the coffee shop owners' perceptions of the Point-of-Sale (POS) system be described in terms of:
 - 1.1 Advantages

- 1.2 Complexity
- 1.3 Adoption
2. How may the factors influencing coffee shop owners' decision to utilize POS systems be described in terms of:
 - 2.1 Compatibility
 - 2.2 Technology Context
 - 2.3 Environmental Context
3. Do coffee shop owners' perceptions of the Point-of-Sale significantly influence their decision to utilize it?

5. SIGNIFICANCE OF THE STUDY

This study is significant as it provides coffee shop owners with relevant insights into the impact and benefits of implementing a Point-of-Sale (POS) system in Baliwag City. The findings enhance the understanding of how such a system influences business operations, efficiency, and profitability. Technology providers and developers gain a deeper understanding of the needs and issues faced by these owners, enabling them to customize and enhance their systems accordingly. Future researchers find this study a valuable resource for further investigating POS systems in small businesses, opening opportunities for comparative studies across different locations and industries

6. SCOPE AND DELIMITATION

This study aims to evaluate coffee shop owners' perception of the advantages and factors influencing the utilization of the Point-of-Sale (POS) systems. It seeks to identify the benefits and challenges associated with POS system adoption.

This study focuses primarily on specific aspects such as relative advantages, complexity of use, adoption, compatibility with business practices, technology context, and environmental context. However, it does not include other factors such as customer satisfaction, or the quality of customer service. Moreover, the participants are limited to coffee shop owners who utilize POS system in their operations in Baliwag City. Data gathering involves distributing questionnaires online via Google Forms and providing printed copies if preferred by the respondents.

7. RESEARCH DESIGN

This utilizes a quantitative research design. Specifically, it employs both descriptive evaluation and descriptive correlation research designs. The descriptive evaluation is used to describe the coffee shop owners' perceptions of the Point-of-Sale (POS) system in terms of its advantages, complexity, and adoption. Additionally, it examines the factors influencing coffee shop owners' decision to utilize POS systems, in terms of the system's compatibility, technological context, and environmental context.

Furthermore, the descriptive correlational research design is applied to determine whether a significant relationship exist between the coffee shop owners' perceptions and the factors influencing their decision to adopt and utilize POS systems.

8. RESPONDENTS

The respondents of this study are coffee shop owners operating within Baliwag City who utilize Point-of-Sale (POS) systems. They are selected because they have firsthand experience with the adoption and use of POS systems in their businesses. Moreover, they can provide valuable insights into the advantages and challenges of adopting POS systems.

The respondents were selected using purposive sampling technique, based on the following criteria:

- (1) The business must be a coffee shop.
- (2) The business must utilize a POS system
- (3) The business must be operating within Baliwag City.

The researchers chose purposive sampling technique because it ensures that participants can provide relevant insights into the advantages about the advantages and challenges POS system adoption. Additionally, this technique helps ensure that the data collected is highly relevant to the objectives of the study.

9. INSTRUMENT

The primary instrument used in this study is a survey questionnaire. The questionnaire is adapted from the existing study titled "Determinants of Decision-making in Micro-Small Enterprises' Adoption of Point-of-Sale Systems" by Zamzami et. al. (2024). It is made available in both printed and online formats via Google Forms to accommodate respondents' preferences and convenience. The questionnaire is divided into two parts: (1) Coffee shop owners' perceptions of the Point-of-Sale system (2) Factors influencing coffee shop owners' decision to utilize Point-of-Sale systems.

Both parts utilize a 4-point Likert-scale, with response options as follows: Strongly Agree-(1), Agree (2), Disagree (3), and Strongly Disagree (4). The first part consists of 8 items categorized into three indicators: relative advantages, complexity, and adoption. The second part consists of 11 items categorized into three indicators: compatibility, technology context, and environmental context.

To ensure the reliability and validity of the instrument, several steps are undertaken:

1. the survey is pilot tested with a small group of coffee shop owners, consisting of approximately 5 to 10 respondents. Their feedback is used to refine the questionnaire, ensuring clarity and relevance to the study's context.
2. The survey's internal consistency is tested using Cronbach's Alpha, with a target value of 0.70 or higher, indicating acceptable reliability.
3. The instrument undergoes a final review by the research adviser or research panel to ensure its readiness for data collection.

10. DATA GATHERING PROCEDURE

Before initiating data collection, the researchers surveyed coffee shops in Baliwag City to identify those utilizing a Point-of-Sale (POS) system in their operations. Coffee shops using POS systems were identified and listed for data gathering. Permission was sought from owners willing to participate, and the study's purpose, confidentiality measures, and data handling procedures were explained. The survey underwent a pilot test with 5 to 10 coffee shop owners to ensure clarity and relevance, and their feedback was used to refine the questionnaire.

Upon securing approval from the participating coffee shop owners, the survey was administered using both online Google Forms (online) and printed copies, allowing owners to choose their preferred format. The online forms were sent via Facebook Messenger (personal or shop pages) or email, while printed questionnaires were delivered directly to the coffee shops. Clear instructions were provided in both formats to guide respondents through the process.

After collecting the responses, the data was reviewed for completeness and accuracy. Unclear or incomplete responses were clarified with the participants. The verified data were securely stored, ensuring confidentiality and limited access to authorized personnel. The data collected was analyzed using statistical tools, including descriptive statistics, to examine the relationships between POS system usage and business performance.

11. DATA ANALYSIS

The researchers used the statistical software JAMOVI for the analysis and interpretation of the collected data. JAMOVI features a simple, user-friendly interface while offering advanced analysis and graphing capabilities. It is widely used in academic research, business analytics, and social science, where it allows its users to conduct statistical tests efficiently. Descriptive statistics such as the mean, standard deviation, and frequency distribution, were used to analyze coffee shop owners' perceptions and the influencing factors in their decision to utilize a Point-of-Sale (POS) system.

12. ETHICAL CONSIDERATIONS

This study adheres to ethical standards that prioritize the well-being and privacy of all involved, especially the respondents. The researchers strictly comply with the Data Privacy Act of 2012 (RA 10173). All data collected is used solely for this research and is securely stored to protect it from unauthorized access. Participants are treated with respect and their contributions are valued. Data is retained only as long as necessary and is then securely destroyed to ensure confidentiality.

13. RESULTS AND DISCUSSION

This section discusses the quantitative analysis of the level of coffee shop owners' perceptions of the advantages and factors influences the utilization the Point-of-Sale (POS) systems in Baliwag City.

Studies shows that the utilization of digital registration machines, such as Point-of-Sale (POS) systems, offers convenience in both inventory monitoring and control, as well as instant processing of financial summaries. The researchers found that most of the coffee shop owners who utilize a POS system firmly believe that it enhances their business operations. Furthermore, other coffee shop owners believe that a POS system is highly compatible with their current business activities and that its utilization and adoption has become a key strategic requirement to sustain a competitive edge in the market.

The transition from the manual tracking or traditional business approaches of a digitalized Point-of-Sale (POS) system has become a critical factor in creating a competitive structure in the current market. This claim is further supported by Nangnia (2017), who stated that a POS system is one of the technologies that can increase businesses efficiency. Similarly, Olenski (2016), argued that the SMEs that fail to adapt to technological changes will not remain competitive, survive, or sustain their operations.

Respondent's Profile

This section describes how may the respondents' profile in terms of Business Type and Business Length. The total number of respondents is fourteen (14).

Table 1 Frequencies of Business Type

Business Type	Frequency	Percentage
Sole Proprietorship	14	100%
Partnership	0	0%
Total	14	100%

As shown in Table 1, all fourteen (14) respondents (100%) operate their business under Sole Proprietorship, while none (0%) run their business under as a Partnership.

Table 2 Frequencies of Business Length

Business Length	Frequency	Percentage
Under 1 Year	6	42.9 %
Within 1 Year	8	57.1 %
Within 2 Years	0	0%
Within 3 Years	0	0%
Within 4 Years	0	0%
Within 5 Years	0	0%
Total	14	100%

Table 2 presents the frequencies of the respondents' Business Length. The tables shows that six (6) respondents (42.9%) have been operating their coffee shops for less than one (1) year, while eight (8) respondents (57.1%) have been in operation for exactly one (1) year. Furthermore, none (0%) of the respondents have been operating for more than a year.

Table 3

Coffee Shop Owners' Perceptions of The Point-Of-Sale (POS) System in Terms of:	1	2	3	4	Mean	SD	VI
1.1 RELATIVE ADVANTAGES							
1.1.1 POS will improve our business efficiency	f -	-	7	7	3.50	0.519	SA
	% -	-	50.0	50.0			
1.1.2 POS will improve our business performance	f -	-	5	9	3.64	0.497	SA
	% -	-	35.7	35.7			
* 1.1.3 POS provides timely information for decision-making	f 9	5	-	-	1.36	0.497	SD
	% 64.3	35.7	-	-			
Overall					2.83	0.364	A

LEGEND:

Scale	Verbal Interpretation (VI)
3.25-4.00	Strongly Agree (SA)
2.50-3.24	Agree (A)

1.75-2.49 Disagree (D)

1.00-1.74 Strongly Disagree (SD)

Table 3 presents the mean and standard deviation of the fourteen (14) respondents' perceptions of the Point-of-Sale (POS) system in terms of its relative advantages. Among all the items, item one 1.1.2 which states "POS will improve our business performance," obtained the highest mean score of 3.64 indicating that the respondents strongly agree that a POS system enhances business performance.

Conversely, item 1.1.3, which states "POS provides timely information for decision-making," received the lowest mean score of 1.36, suggesting that the respondents strongly disagree that a POS system provides real-time and accurate data insights for informed decision-making.

Overall, the results indicate that while respondents recognize the benefits of adopting a POS system, they are concerned about its limitations in providing real-time data for decision-making. This is evidenced by an overall mean of 2.83 and a standard deviation of 0.364.

These findings suggest that coffee shop owners generally perceive that the POS system as beneficial to their business. Similarly, a study by the National Restaurant Association found that adopting a POS system improved customer satisfaction by 20%.

Table 4

Coffee Shop Owners' Perceptions of The Point-Of-Sale (POS) System in Terms of:		1	2	3	4	Mean	SD	VI
1.2 COMPLEXITY								
1.2.1 POS is difficult to use	f	3	3	6	2	2.50	1.02	A
	%	21.4	21.4	42.9	14.3			
1.2.2 Integrating POS in our business is difficult	f	2	4	3	5	2.79	1.12	A
	%	14.3	28.6	21.4	35.7			
1.2.3 Our business may experience some difficulties in maintaining POS	f	-	8	6	-	2.43	0.514	D
	%	-	57.1	42.9	-			
Overall						2.57	0.364	A

LEGEND:

Scale	Verbal Interpretation (VI)
3.25-4.00	Strongly Agree (SA)
2.50-3.24	Agree (A)
1.75-2.49	Disagree (D)
1.00-1.74	Strongly Disagree (SD)

Table 4 presents the mean and standard deviation of the fourteen (14) respondents' perceptions of the Point-of-Sale (POS) system in terms of its complexity.

The results indicate that item 1.2.2, which states "Integrating POS in our business is difficult," received the highest mean score, suggesting that respondents generally agree that incorporating the system into their operations presents challenges.

Conversely, item 1.2.3, which states "Our business may experience some difficulties in maintaining POS," received the lowest mean score of 2.43, indicating that respondents do not experience challenges in maintaining POS system. The overall mean of 2.57 with a standard deviation of 0.756 suggests that while respondents find POS systems challenging to adopt, they generally perceive them as easy to maintain.

A study by Liu et al. (2021), titled "The impact of digital payment solutions on small businesses: A study of POS system adoption," found that small business owners often struggle with POS system integration due to unfamiliarity with the technology. This supports the current findings, which indicates that respondents agree that incorporating a POS system into their operations presents challenges. Furthermore, Choi et al. (2020) highlighted that most small business owners find maintenance simple due of quick customer support and user-friendly interfaces.

Table 5

Coffee Shop Owners' Perceptions of The Point-Of-Sale (POS) System in Terms of:	1	2	3	4	Mean	SD	VI
1.3 ADOPTION							
1.3.1 We strongly intend to use POS	f -	-	4	10	3.71	0.469	SA
	% -	-	28.6	71.4			
1.3.2 The government encourages the use of POS	f -	-	8	6	3.43	0.514	SA
	% -	-	57.1	42.9			
Overall					3.57	0.385	SA

LEGEND:

Scale	Verbal Interpretation (VI)
3.25-4.00	Strongly Agree (SA)
2.50-3.24	Agree (A)
1.75-2.49	Disagree (D)
1.00-1.74	Strongly Disagree (SD)

Table 5 presents the mean and standard deviation of the fourteen (14) respondents' perceptions of the Point-of-Sale (POS) system in terms of its adoption in business operations.

The results indicate that item 1.3.1 which states "We strongly intend to use POS," obtained the highest mean score of 3.71, suggesting that the respondents resolutely plan to integrate and use POS in their operations.

In contrast, item 1.3.2, which states "The government encourages the use of POS," received the lowest mean score of 3.43. Despite this, the results still indicate that the respondents strongly agree that the government POS system utilization.

The result shows an overall mean of 3.57 with a standard deviation of 0.385 which is interpreted as Strongly Agree (SA). This suggests that the respondents full support the adoption of POS system in their business operations.

A study by the National Restaurant Association, titled "The Impact of a Small Business POS System on Efficiency and Customer Satisfaction," found that adopting the POS system increased operational efficiency by 30% and improved customer satisfaction by 20%. Furthermore, Patel et al. (2019) highlighted how POS systems improve financial security by minimizing cash handling and preventing theft, supporting the findings that respondents strongly intend to adopt the POS systems. Lastly, Dreyer & Nygaard (2020) stated that some governments encourage businesses to utilize POS systems to promote cashless transactions.

Table 6

Factors Influencing Coffee Shop Owners' Decision to Utilize POS Systems in Terms of:	1	2	3	4	Mean	SD	VI
2.1 COMPATIBILITY							
2.1.1 POS is compatible with current business activities	f -	-	6	8	3.57	0.514	SA
	% -	-	42.9	57.1			
2.1.2 POS is compatible with current business values and objectives.	f -	1	5	8	3.50	0.650	SA
	% -	7.1	35.7	57.1			
* 2.1.3 POS is compatible with current work styles.	f 8	6	-	-	1.43	0.514	SD
	% 57.1	42.9	-	-			
Overall					2.83	0.408	A

LEGEND:

Scale	Verbal Interpretation (VI)
3.25-4.00	Strongly Agree (SA)

2.50-3.24	Agree (A)
1.75-2.49	Disagree (D)
1.00-1.74	Strongly Disagree (SD)

Table 6 presents the mean and standard deviation of the fourteen (14) respondents' perceptions of the factors influencing their decision to utilize the Point-of-Sale (POS) system in terms of compatibility.

The item 2.1.1 which states "POS is compatible with current business activities," received the highest mean score of 3.57, indicating that the respondents agree that the POS system aligns with the existing business operations.

Conversely, item 2.1.3, which states "POS is compatible with current work styles," received the lowest mean score of 1.43, suggesting that respondents disagree that the POS system fits their work routines.

The overall mean of 2.83 with a standard deviation of 0.408 is interpreted as Agree (A), suggesting that while respondents find the POS system suitable for their business activities, they do not perceive it as fully compatible with their work practices.

A study by Hidayati et al. (2023), titled "Analysis of Point-of-Sale System Implementation in Coffee Shop," highlights the major benefits of adopting POS systems such as improved inventory management and an easier payment process supporting the finding that the POS system aligns with current business activities. Additionally, a study by Lin et al. (2015), found that employees, especially with no prior experience, may face challenges in the adopting modern technologies such as POS system.

Table 7

Factors Influencing Coffee Shop Owners' Decision to Utilize POS Systems in Terms of:		1	2	3	4	Mean	SD	VI
2.2 TECHNOLOGY CONTEXT								
2.2.1 Our employees are generally aware of the POS function.	f	-	-	6	8	3.57	0.514	SA
	%	-	-	42.9	57.1			
2.2.2 Our employees are well trained in using POS.	f	-	-	5	9	3.64	0.497	SA
	%	-	-	35.7	64.3			
2.2.3 Our business is supported by specialized employees regarding POS.	f	-	1	8	5	3.29	0.611	SA
	%	-	7.1	57.1	35.7			
2.2.4 Our business has a good Information and Communication Technology (ICT) infrastructure to implement POS.	f	-	1	10	3	3.14	0.535	A
	%	-	7.1	71.4	21.4			
2.2.5 Our business has IT resources available to implement POS (computers and internet).	f	-	2	5	7	3.36	0.745	SA
	%	-	14.3	35.7	50.0			
Overall						3.40	0.422	SA

LEGEND:

Scale	Verbal Interpretation (VI)
3.25-4.00	Strongly Agree (SA)
2.50-3.24	Agree (A)
1.75-2.49	Disagree (D)
1.00-1.74	Strongly Disagree (SD)

Table 7 presents the mean and standard deviation of the fourteen (14) respondents' perceptions towards the factors influencing coffee shop owners' decision to utilize POS systems in terms of technological context.

The item 2.2.2, which states "Our employees are well trained in using POS," received the highest mean score of 3.64, indicating that respondents strongly agree that their employees are well-equipped with the necessary knowledge to operate POS systems.

Conversely, item 2.2.4, which states "Our business has a good Information and Communication Technology (ICT) infrastructure to implement POS," received the lowest mean score of 3.14. This suggests that respondents agree that their business have adequate ICT resources to implement POS system.

The overall mean of 3.40 and a standard deviation of 0.422 indicates that the respondents have the necessary resources to adopt the POS system, including trained employees and ICT infrastructure.

According to Apoorva (2024), employees who are trained POS system functionalities are less likely to experience errors and have a higher chance of identifying any problem that may arise. Additionally, an article by Sakib (2024) states that a strong ICT foundation facilitates easier integration of POS systems, leading to streamlined operations, accurate inventory management, and improved transaction processing.

Table 8

Factors Influencing Coffee Shop Owners' Decision to Utilize POS Systems in Terms of:		1	2	3	4	Mean	SD	VI
2.3 ENVIRONMENTAL CONTEXT								
2.3.1 The use of POS is a strategic requirement to compete in the market	f	-	-	9	5	3.36	0.497	SA
	%	-	-	64.3	35.7			
2.3.2 Our business will be at a competitive disadvantage if we do not use POS	f	1	3	5	5	3.00	0.961	A
	%	7.1	21.4	35.7	35.7			
2.3.3 We believe we will lose market share if we do not adopt POS	f	2	5	4	3	2.57	1.02	A
	%	14.3	35.7	28.6	21.4			
Overall						2.98	0.722	A

LEGEND:

Scale	Verbal Interpretation (VI)
3.25-4.00	Strongly Agree (SA)
2.50-3.24	Agree (A)
1.75-2.49	Disagree (D)
1.00-1.74	Strongly Disagree (SD)

Table 8 presents the mean and standard deviation of the fourteen (14) respondents' perceptions towards the factors influencing coffee shop owners' decision to utilize POS systems in terms of environmental context.

The item 2.3.3, which states "We believe we will lose market share if we do not adopt POS," received the highest mean score of 3.57, suggesting that respondents strongly agree that failing to adopt POS system could lead them to lose a market share.

Conversely, item 2.3.3, which states "We believe we will lose market share if we do not adopt POS," received the lowest mean score of 2.57, indicating that while the respondents acknowledge the importance of adopting POS systems, some remain uncertain about its necessity for maintaining market position.

The overall mean score of 2.98 and standard deviation of 0.722 implies that respondents generally agree that utilizing a POS system is essential for staying competitive in the market.

Several studies have highlighted how POS systems improve efficiency, inventory management, and customer satisfaction, all of which contributes to competitiveness in a fast-evolving market (Grand View Research, 2024). Additionally, businesses that do not implement POS systems bear the risk of falling behind their rivals and losing market share (Core Payment Solutions, 2023).

14. SUMMARY OF THE FINDINGS

The purpose of this study is to examine the perceptions of coffee shop owners and impacts of the POS system in Baliwag City. Specifically, it aims to describe their perceptions in relation to advantages, complexity, adoption, and other factors that influence their decision to use POS systems in terms of compatibility, technological context, and environmental context. The study also seeks to determine whether owners' perceptions significantly affect their decision to adopt this system.

Using the procedures described in the preceding chapter, the finding is summarized to the problems in this study were summarized as follows:

For the advantages of the POS system, out of all the items, the "POS will enhance our business performance" item was rated the highest (Mean = 3.64), suggesting that respondents strongly agreed that the POS system enhances their business operations.

Furthermore, the survey item "Integrating POS in our business is difficult," complexity received the highest mean of 2.79 (Mean=2.79) on the complexity scale. This finding means that, in general, respondents agreed that it is difficult to introduce operating with the POS system in the business.

Moreover, the highest-rated item for adoption was "We are very much inclined to use POS" (Mean = 3.71). This indicates that the respondents have a very clear intention to integrate the use of a POS system into their day-to-day operations of business activities. A combination with the result affirms that coffee shop owners are very likely to adopt the POS system despite concerns about complexity, further supported by the recognition of government encouragement.

For compatibility, the statement "The POS is compatible with current business activities" obtained the highest mean score (Mean = 3.57). Therefore, respondents strongly agreed that this prevails over their accustomed operations of undertaking business.

In the same manner, the technological context item rated the highest is "our staff are well trained in the use of discuss POS" (Mean = 3.64), suggesting with strong attestations from the respondents that their personnel can operate the system. The results show that businesses are technically ready for the integration of the POS system since employees are knowledgeable about how to use such a system.

Finally, for the environmental context, among all items, the highest rated item is "the use of POS is a strategic requirement to compete in the market" (Mean = 3.36). This implies that the respondents strongly agree that the adoption of a POS system is key to sustaining competitiveness. The result tends to show that the business managers recognize the growing need for POS technology to remain competitive in their industries.

Overall, the study found that coffee shop owners' perceptions of the POS system significantly influence their adoption decisions. Positive perceptions of its advantages, compatibility, and technological readiness motivate owners to adopt the system. On the other hand, concerns regarding complexity and alignment with current work styles were noted as potential barriers to adoption.

15 CONCLUSION

Findings revealed that coffee shop owners are aware of the potential of Point-of-Sale systems to improve business operations and performance. They strongly believe in the advantages of this systems. However, their integration presents challenges, particularly in terms of complexity. Despite this, owners still expressed their intention of adopting POS systems in their operations.

The owners perceive POS systems as highly compatible with their current business activities. In the same manner, they have strong attestations that their personnel can operate the system. Technological context is positively perceived indicating that the business is technically prepared to implement these systems. Finally, the respondents strongly agree that the adoption of a POS system is key to sustaining competitiveness. Owners consider the environmental context as a significant driver for POS adoption. They believe that the use of POS systems will help them compete strategically in the industry.

Coffee shop owners' decisions to use POS systems are heavily influenced by their perceptions. Positive views on the advantages, compatibility, and staff readiness for the system strongly encourage adoption. However, concerns about complexity and workflow disruptions hinder it. Ultimately, owners' perceptions on POS systems significantly affect their decision to use them.

The Technology Acceptance Model (TAM) and Diffusion of Innovations (DOI) Theory offer a comprehensive framework for understanding technology adoption. This study, which examined coffee shop owners' adoption of POS systems, demonstrates the relevance of both models. TAM is evidenced by owners prioritizing perceived usefulness, particularly in enhancing efficiency. While DOI is reflected in the emphasis on compatibility with existing operations and the perceived competitive advantage gained through POS adoption. While complexity presented a challenge, the perceived benefits and relative advantage ultimately drove adoption, highlighting their crucial role in technology integration among coffee shops in Baliwag City.

16. RECOMMENDATION

Considering the findings and conclusions of the study, the following key recommendations were identified to ensure that the organization achieves maximum benefits and minimize challenges and apply POS technology strategies to improve operations and maintain competitiveness. Specifically, they include:

1. Coffee shop owners must undergo proper training and utilize user-friendly POS solutions to minimize integration challenges with smooth transitions in their business operations.
2. While POS systems are designed for ease of use, coffee shop owners must maximize their compatibility by investing in staff training, leveraging all technical features, and utilizing data-driven insights to remain competitive.
3. Businesses should integrate easy-to-use POS solutions, train dedicated personnel to handle complaints and implement gradual POS system integrations. These steps enable POS platform providers to manage complexity and workflow disruptions, fostering a more positive perception of POS systems.

4. By adopting a POS system, coffee shop owners must apply the Technology Acceptance Model (TAM) and Diffusion of Innovations (DOI) Theory to enhance ease of use, highlight perceived benefits, and ensure compatibility with existing operations, ultimately increasing efficiency and competitive advantage.
5. Coffee shop owners should strategically utilize POS systems by choosing solutions that enhance efficiency, streamline operations, and offer a competitive edge, ensuring the new-age business sustains its growth in the long run and survives in the industry.

References

- Choi, J., Park, S., & Kim, H. (2020). Small business technology adoption: The role of ease-of-use in POS system maintenance. *Journal of Business Technology*
- Liu, H., Park, S., & Kim, Y. (2021). The impact of digital payment solutions on small businesses: A study of POS system adoption. *Technology and Innovation Journal*
- National Restaurant Association (n.d.). The Impact of a Small Business POS System on Efficiency and Customer Satisfaction. *Alexandria Computers*
- Dreyer, M. & Nygaard, K. (2020). Governments Encourage SMEs to Adopt New Technology. *Yale School of Management*
- Patel, R., Singh, A., & Carter, P. (2019). Financial Security and Risk Reduction Through POS System Adoption. *Small Business Journal*
- Hidayati, I. et al. (2023). Analysis of Point-of-Sale System Implementation in Coffee Shop
- Lin, Y. C., Ha, N.-H., & Lin, K.-S. (2015). The Role of mPOS System in Process Change and Strategy Change: A Situated Change Perspective. *Technologies*, 3(4), 198-218.
- Sakib, M. (2024, June 23). The impact of POS systems on small businesses. *OS Digital World*
- Apoorva Blogger (2024). The importance of training staff on your POS system.
- Grand View Research (2024). Point-of-Sale (POS) Software Market Analysis.
- Core Payment Solutions (2023). POS Systems and Market Competitiveness.
- Nangia, A. (2017, October 1). Six kinds of software SMEs must have. *YourStory*.
- Olenski, S. (2016, June 8). Adapt or die: The dangers of hanging onto legacy technologies. *Forbes*.