Understanding the Influence of Consumer Demographics and Factors Driving Online and Offline Shopping: Implications for Businesses and Policymakers in Antique

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Abstract: This study explores the influence of consumer demographics on preferences for online and offline shopping in the province of Antique. With the rapid growth of e-commerce and the changing retail landscape, understanding the factors that drive consumer decisions is crucial for businesses and policymakers. A quantitative research design was employed, and data was collected through an online questionnaire distributed to consumers in Antique. The results indicate that there is no significant relationship between demographic characteristics (*i.e.*, gender, age, educational attainment, marital status, and occupation) and the preference for online or offline shopping. However, convenience, access to customer reviews, competitive prices, and the ability to compare items were identified as key factors driving online shopping preferences. On the other hand, the sensory experience, immediate product availability, personalized customer service, and the avoidance of shipping fees and delays were significant factors in offline shopping preferences. Businesses in Antique should focus on establishing a strong online presence, optimizing websites, and providing competitive pricing. They should also enhance the offline shopping experience and adopt an omnichannel strategy. Policymakers can support businesses by promoting e-commerce development and facilitating digital literacy programs. By aligning their strategies with these findings, businesses and policymakers can effectively cater to consumer preferences and drive growth in the province of Antique.

1. Introduction

The growth of e-commerce has revolutionized the way customers purchase in today's quickly changing retail landscape. With the introduction of e-commerce platforms, people can now buy things

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from the comfort of their own homes [1]. Traditional brick-and-mortar retailers, on the other hand, continue to thrive, providing individualized encounters and instant product pleasure. As consumer preferences change, it is critical to fully understand the components that influence their decision between online and offline shopping.

This study presents an intriguing case study for analyzing the effects of consumer demographics on their preferences for online or offline shopping in the province of Antique. Renowned for its natural attractions and tourist spots, Antique is nestled in the Western Visayas region, offering a remarkable blend of captivating landscapes [2]. With its beautiful white beaches, enchanting islands, and thriving diving spots, Antique has emerged as a favored destination for travelers seeking an authentic and off-the-beaten-path experience.

However, beyond its tourism appeal, Antique provides a unique opportunity to explore the dynamics between consumer demographics and their shopping preferences. With a rich historical background and a steadily growing population, the province has evolved into a significant market. As of 2020 [3], Antique boasted a population of 612,974, showing consistent growth since 1903. Its landscape comprises 18 municipalities and 590 barangays, reflecting a diverse array of communities and consumer profiles [4].

In the era of e-commerce's exponential growth, the global retail landscape has undergone a profound transformation, and the Philippines is no exception. With increasing internet access and the convenience offered by online shopping platforms, consumers now have more choices than ever before. However, it is crucial to recognize that consumer preferences can vary significantly based on demographic factors such as age, income level, education, and geographic location [5].

Conducting a detailed analysis of consumer demographics in Antique, as well as their preference for online or offline purchasing, has the ability to provide significant insights into the local market and create profitable prospects for businesses. This study aims to address several key questions: How do consumer demographics, including gender, age, educational attainment, marital status, and occupation, influence their preference for online or offline shopping? What are the underlying factors that drive consumers to choose between online and offline shopping in Antique? Lastly, what are the implications of these findings for businesses and policymakers operating in the province?

By exploring these fundamental inquiries, this research seeks to shed light on the factors shaping consumer behavior in Antique, ultimately providing valuable insights for businesses aiming to optimize their marketing strategies and adapt to the rapidly evolving retail landscape. Moreover, the findings of this study can also inform policymakers about designing effective initiatives that align with the needs and preferences of Antique's diverse consumer base.

2. Methodology

The study adopts a quantitative research design to gather data on consumer demographics and their shopping preferences in Antique, Philippines. This design will enable the collection of structured and measurable data that can be analyzed statistically to identify relationships between consumer demographics and shopping preferences. The population of this study consists of consumers residing in Antique, Philippines. Sampling is done using a convenience sampling technique. The research instrument used is a questionnaire that is distributed online via Google Forms during April–May 2022, which resulted in 392 responses. The distribution of questionnaires is carried out online to reach a wider range of respondents. The authors employ the Statistical Package for Social Sciences (SPSS) to assess the study hypothesis using non-parametric statistical tests such as Chi-Square and Kruskal-Wallis.

3.   Results and Discussion

What is the effect of consumer demographic characteristics, including age, gender, educational attainment, marital status, and occupation, on their preferences for shopping for products offline or online?

The questionnaire was distributed online via Google Form, which resulted in 393 responses. The demographic characteristics of the respondents in this study are presented in Table 1. The sample consisted of both male and female respondents, with males comprising 40.50% of the total and females making up 59.50%. In terms of age distribution, the majority of the respondents fell into the 18-24 age group, accounting for 70% of the sample. The next largest age group was 25-34, representing 22.90% of the respondents. Smaller proportions were observed in the 35-44 (4.30%) and 45-54 (2.80%) age groups. Notably, there were no respondents aged 55 and above in this study. This is in line with the report from Adobe Analytics [6], which indicates that the respondents are dominated by young people, particularly those in their twenties and early thirties. This was also supported by the findings of businesswire.com, which state that digitally native consumers are the most frequent cross-border e-commerce shoppers [7]. A significant majority of respondents (84%) held a college or university degree, while 11.70% had a high school education or below. A small proportion (4.30%) possessed a postgraduate degree. In terms of marital status, the majority of respondents were single (88%), while 12% were married.

Considering occupation, the largest category was students, comprising 71.80% of the respondents. Among the employed respondents, 14% were employed full-time, 7.10% were employed part-time, and 4.60% were self-employed. Additionally, a small percentage (2.30%) were unemployed, while none of the respondents identified as retired.

Finally, when it came to the preferred shopping method, the majority of respondents (59.50%) expressed a preference for online shopping, while 40.50% preferred offline shopping.

Table 1. Demographic Characteristics of Respondents

Category	Items	Frequency	Percentage
Gender	Male	234	40.50%
	Female	159	59.50%
Age	18-24	275	70.00%
	25-34	90	22.90%
	35-44	17	4.30%
	45-54	11	2.80%
	55 and above	0	0.00%
Educational Attainment	High School or below	46	11.70%
	College/University degree	330	84.00%
	Postgraduate degree	17	4.30%
Marital Status	Single	346	88.00%
	Married	47	12.00%

Occupation	Employed (Full-time)	55	14.00%
	Employed (Part-time)	28	7.10%
	Self-employed	18	4.60%
	Unemployed	9	2.30%
	Student	282	71.80%
	Retired	0	0.00%
Preferred Shopping Method	Offline	159	40.50%
	Online	234	59.50%

Table 2 depicts the cross-tabulation breakdown of preferred shopping methods based on gender. Based on the findings, more than half of the respondents (59.5%) prefer to purchase products online rather than at traditional retail stores (40.5%). The results differ from the study of Sisca, Grace, Candra, and Sidabutar [8], where participants expressed a preference for purchasing items from brick-and-mortar stores rather than online. The data in the table indicates that both females and males have relatively equal preferences for both offline and online shopping. However, there is a slightly higher percentage of females who prefer online shopping (35.6%) compared to males (23.9%). The findings were supported by the study of Jonyoa and Oduor [9], which states that female shoppers found shopping online to be enjoyable as compared to male shoppers.

Table 2. Preferred Shopping Method and Based on Gender

Gender * Preferred_Shopping_Method Crosstabulation			Preferred_Shopping_Method		
			Offline	Online	Total
Gender	Female	Count	94	140	234
		% within Gender	40.2%	59.8%	100.0%
		% within Preferred_Shopping_Method	59.1%	59.8%	59.5%
		% of Total	23.9%	35.6%	59.5%
	Male	Count	65	94	159
		% within Gender	40.9%	59.1%	100.0%
		% within Preferred_Shopping_Method	40.9%	40.2%	40.5%
		% of Total	16.5%	23.9%	40.5%
Total		Count	159	234	393
		% within Gender	40.5%	59.5%	100.0%
		% within Preferred_Shopping_Method	100.0%	100.0%	100.0%
		% of Total	40.5%	59.5%	100.0%

The value of the Pearson Chi-Square statistic is 0.020 as indicated in Table 3. The asymptotic significance (2-sided) associated with this test is 0.888. This indicates that there is no statistically significant relationship between the gender of the consumer and their choice of preferred shopping method. These findings contradict the research findings by Cho and Workman [10] and Kolyesnikova, Dodd, and Wilcoxx [11], which demonstrate that gender will influence one's online shopping behavior.

Table 3. Chi-Square Tests for Preferred Shopping Method and Gender

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.020[a]	1	.888		
Continuity Correction[b]	.001	1	.971		
Likelihood Ratio	.020	1	.888		
Fisher's Exact Test				.917	.485
N of Valid Cases	393				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 64.33.

b. Computed only for a 2x2 table

Table 4. Kruskall-Wallis Tests for Preferred Shopping Method and Gender

	Preferred_Shopping_Method
Kruskal-Wallis H	0.020
df	1
Asymp. Sig.	0.888

a. Kruskal Wallis Test

b. Grouping Variable: Gender

Table 4 presents the asymptotic significance value from the Kruskal-Wallis test and proves that there is no significant difference between the education level of consumers and their decision of preferred shopping method (p = 0.888 > 0.05).

Table 5. Chi-Square Tests for Preferred Shopping Method and Marital Status

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.097[a]	1	.755		
Continuity Correction[b]	.024	1	.878		
Likelihood Ratio	.097	1	.756		
Fisher's Exact Test				.754	.436
N of Valid Cases	393				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.02.

b. Computed only for a 2x2 table

The value of the Pearson Chi-Square statistic is 0.097, as seen in Table 5. The asymptotic significance (2-sided) associated with this test is 0.755; the results prove that there is no statistically significant relationship between the marital status of the consumer and the decision of preferred shopping method.

Table 6 presents the asymptotic significance value from the Kruskal-Wallis test and proves that there is no significant difference between the marital status of consumers and their decision of preferred shopping method (p = 0.755 > 0.05).

Table 6. Kruskal-Wallis Tests for Preferred Shopping Method and Marital Status

	Preferred_Shopping_Method
Kruskal-Wallis H	0.097
df	1
Asymp. Sig.	0.755
a. Kruskal Wallis Test	
b. Grouping Variable: Marital_Status	

Table 7. Chi-Square Tests for Preferred Shopping Method and Occupation

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.279[a]	4	.685
Likelihood Ratio	2.458	4	.652
Linear-by-Linear Association	.839	1	.360
N of Valid Cases	393		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.05.

The Pearson Chi-Square test yielded a value of 2.279, with 4 degrees of freedom, and an asymptotic significance (two-sided) of 0.685 as indicated in Table 7. Similarly, the Likelihood Ratio test produced a value of 2.458 with 4 degrees of freedom and an asymptotic significance (two-sided) of 0.652. These values suggest that there is no strong evidence to support a relationship between the variables.

Table 8. Kruskal-Wallis Tests for Preferred Shopping Method and Occupation

	Preferred_Shopping_Method
Kruskal-Wallis H	2.274
df	4
Asymp. Sig.	0.686
a. Kruskal Wallis Test	
b. Grouping Variable: Occupation	

Table 8 presents the asymptotic significance value from the Kruskal-Wallis test and proves that there is no significant difference between the occupation of the consumers and their decision of preferred shopping method (p = 0.686 > 0.05).

As seen in Table 9, the Pearson Chi-Square test yielded a value of 1.926 and an asymptotic significance (2-sided) of 0.382. Similarly, the Likelihood Ratio test produced a value of 1.945 and an asymptotic significance (2-sided) of 0.378. These findings suggest that there is no strong evidence to support a relationship between the preferred shopping method and the educational attainment of consumers.

Table 9. Chi-Square Tests for Preferred Shopping Method and Educational Attainment

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.926[a]	2	.382
Likelihood Ratio	1.945	2	.378
Linear-by-Linear Association	.006	1	.940
N of Valid Cases	393		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.88.

Table 10. Kruskal-Wallis Tests for Preferred Shopping Method and Educational Attainment

	Preferred_Shopping_Method
Kruskal-Wallis H	1.922
df	2
Asymp. Sig.	.383

a. Kruskal Wallis Test

b. Grouping Variable: Educational_Attainment

Table 10 presents the asymptotic significance value from the Kruskal-Wallis test and proves that there is no significant difference between the occupation of the consumers and their decision of preferred shopping method ($p = 0.383 > 0.05$).

What are the most preferred product categories among the respondents?

Table 11. Most preferred product categories among the respondents
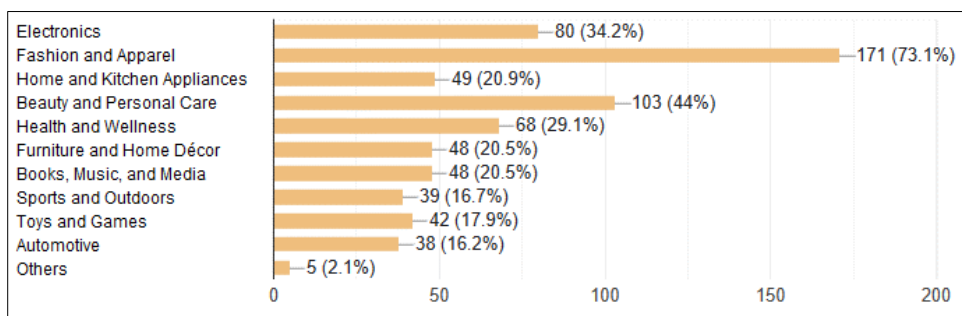
Table 11 presents the distribution of product categories based on frequency and percentage responses. Fashion and apparel were the most popular category, chosen by 73.1% of respondents (171 instances), followed by beauty and personal care, selected by 44.0% (103 instances). Electronics ranked third with 34.2% (80 instances), and health and wellness products were chosen by 29.1% (68 instances). Home and kitchen appliances, furniture and home décor, and books, music, and media each accounted for 20.9% (49 instances) and 20.5% (48 instances) of responses, respectively. Sports and outdoors, toys and games, and automotive products ranged between 16.2% and 17.9% of respondents, while the "others" category represented 2.1% (5 instances). The results provide insights into the preferences of respondents, with fashion and apparel and beauty and personal care being the most favored categories.

What are the underlying factors that drive consumers to choose between online and offline shopping?

Table 12. Factors that drive consumers to choose online shopping
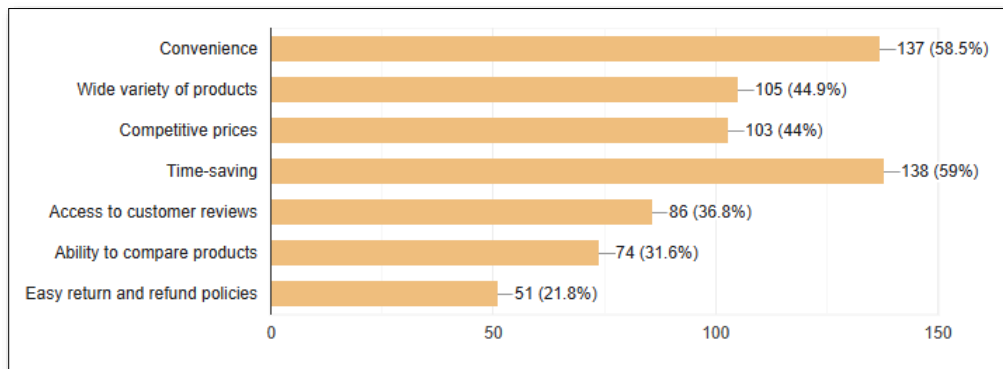
The data presented sheds light on the key reasons why respondents choose online or in-store shopping. Convenience appeared to be the most important element in online shopping, with 137 respondents (58.50%) citing it as their primary reason. This shows that consumers value the convenience and flexibility of buying at any time and from any location. Access to customer reviews (said by 86 respondents, accounting for 36.80%), competitive prices (discussed by 103 respondents, accounting for 44%), and the ability to compare items (mentioned by 74 respondents, accounting for 31.60%) were all important reasons for preferring online shopping.

Table 13. Factors that drive consumers to choose offline shopping
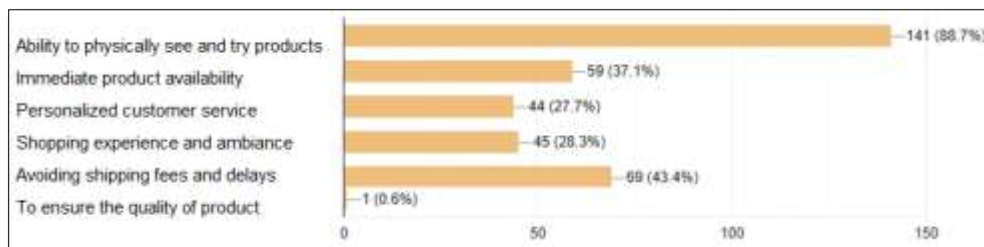
The capacity to physically see and sample things, on the other hand, ranked highest among those who preferred offline shopping, with 141 respondents (88.7%) citing this as their key reason. This shows that the sensory experience and the confidence of viewing and testing things in person have a significant impact on their decision. Other significant reasons for preferring offline shopping included avoiding shipping fees and delays (*i.e.*, cited by 69 respondents, accounting for 43.4%), immediate product availability (*i.e.*, cited by 59 respondents, accounting for 37.1%), and personalized customer service (*i.e.*, cited by 44 respondents, accounting for 27.7%).

Surprisingly, online shopping was preferred due to characteristics such as convenience, access to information, and cost savings, while physical shopping was preferred due to its capacity to create a concrete and immersive buying environment. These findings illustrate the various motives and considerations that customers have when deciding between online and offline purchasing, emphasizing the significance of catering to these aspects in retail strategies and experiences to fulfill consumers' unique requirements and preferences.

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