

Post-Pandemic Online Shopping Behavior as a Predictor of Customer Loyalty among Digital Marketplace Consumers in Laguna, Philippines

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ABSTRACT: Post-pandemic consumer behavior, particularly the continued use of digital marketplaces, has become a significant area of consumer research. This study examined the post-pandemic online shopping behavior and its relationship with customer loyalty among 200 Filipino online consumers in Laguna Province using a descriptive-correlational research design and validated, pilot-tested questionnaire.

Online shopping behavior and customer loyalty were both rated high in terms of convenience orientation, price comparison behavior, and trust in digital platforms. Both variables differed significantly by monthly shopping frequency, customer loyalty also differed significantly by age, and no significant differences emerged across sex.

Online shopping behavior showed a strong, significant, positive relationship with customer loyalty and predicted 66.8% of the variance in loyalty outcomes. These findings suggest that digital marketplace providers should strengthen convenience, trust mechanisms, and value-based promotions to sustain customer loyalty. The study concludes that convenience, perceived value, and trust in digital platforms are key drivers of customer loyalty among Filipino online consumers in Laguna, and that strengthening these factors is essential for sustaining consumer engagement in the post-pandemic e-commerce environment.

KEYWORDS: consumer behavior, online shopping behavior, customer loyalty, digital marketplaces, Filipino consumers, e-commerce adaptation

I. INTRODUCTION

The COVID-19 pandemic significantly transformed consumer behavior by accelerating the adoption of digital commerce. What began as a response to mobility restrictions and store closures eventually became part of consumers' daily purchasing behavior. As reliance on online platforms increased, researchers began examining whether these shopping habits would continue beyond the pandemic period (Elshaer et al., 2024).

In the Philippines, the shift to e-commerce became more evident despite challenges related to logistics, internet accessibility, payment security, and digital literacy. During the lockdowns, platforms such as Shopee, Lazada, and TikTok Shop became major channels for purchasing essential and non-essential goods (Anne, 2024). The pandemic also prompted many consumers to shift from physical shopping to online shopping as they adapted their purchasing behaviors and adopted digital alternatives during lockdowns (Andruetto et al., 2021).

Businesses responded by improving their digital platforms, payment systems, and online shopping experience to enhance convenience and consumer trust (De Leon et al., 2025). Over time, positive online shopping experiences strengthened customer trust, which in turn increased customer loyalty and repurchase intentions toward online sellers and platforms (Zhou and Liu, 2022). Studies further identified convenience, trust, and ease of use as key factors influencing continued e-commerce engagement and customer loyalty in the post-pandemic period (Alouloub, 2023; Saoula et al., 2023).

The Philippine e-commerce sector has continued to expand, with Laguna emerging as one of the leading provinces in online sales activity outside Metro Manila (BeGlobal E-commerce Corp., 2024). However, most studies on Filipino online consumer behavior focus on Metro Manila or national trends, leaving provincial markets relatively underexplored. Given Laguna's growing role in digital commerce, this study examines the relationship between post-pandemic online shopping behavior and customer loyalty among consumers in the province.

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Statement of the Problem

This study aims to examine the relationship between post-pandemic online shopping behavior and customer loyalty among Filipino online consumers in digital marketplaces.

Specifically, it seeks to answer the following questions:

1. What is the respondents profile in terms of:
 - 1.1. Age;
 - 1.2. Sex; and
 - 1.3. Online shopping frequency?
2. What is the respondents level of post-pandemic online shopping behavior in terms of:
 - 2.1. Convenience orientation;
 - 2.2. Price comparison behavior; and
 - 2.3 Trust in digital platforms?
3. What is the level of customer loyalty in digital marketplaces among Filipino online consumers?
4. Is there a significant difference in the respondents' post-pandemic online shopping behavior when they are grouped according to their profile variables?
5. Is there a significant difference in the respondents' customer loyalty when they are grouped according to their profile variables?
6. Is there a significant relationship between post-pandemic online shopping behavior and customer loyalty among Filipino online consumers?
7. How does post-pandemic online shopping behavior significantly predict customer loyalty in digital marketplaces?

Theoretical Framework

Three theoretical frameworks shape the conceptual direction of this study: the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), and the Expectation Confirmation Model (ECM). Each one addresses a different dimension of consumer behavior, but when read together, they offer a fuller picture of why people continued shopping online after the pandemic and what drives them to stay loyal to particular platforms.

Technology Acceptance Model (TAM). Davis (1989) built TAM on a fairly intuitive observation about how people relate to technology. Adoption, he argued, comes down to two things: whether someone believes a tool will actually help them, and whether they find it manageable enough to bother using. In the e-commerce context, that reasoning holds up well. During the pandemic, many Filipino consumers tried platforms like Shopee and Lazada out of necessity rather than preference. What kept them there afterward was a different matter entirely. Those who found the platforms easy to navigate and genuinely useful for their purchasing needs developed habits that outlasted the circumstances that first pushed them online. That pattern of continued use, rooted in positive platform experience, connects directly to the convenience and trust dimensions this study examines. Venkatesh and Bala (2008) later expanded the model into what they called TAM 3, adding trust and perceived risk as variables that shape technology adoption decisions. That extension matters here because trust remains one of the more decisive factors in whether a Filipino consumer commits to a platform long term or quietly moves on to another one.

Theory of Planned Behavior (TPB). Developed by Ajzen (1991), TPB holds that behavioral intentions are shaped by attitude toward the behavior, subjective norms, and perceived behavioral control. In this study, TPB explains key dimensions of post-pandemic online shopping such as convenience orientation reflects a positive attitude toward online shopping, while price comparison behavior is influenced by both value-seeking attitudes and social norms prevalent in online communities. Consumers who developed favorable attitudes toward online shopping during the pandemic and experienced social reinforcement for digital purchasing were significantly more likely to sustain that behavior afterward, with social contingency and perceived value emerging as the strongest predictors of continued repurchase intention, the core behavioral markers of customer loyalty (Wu et al., 2023).

Expectation-Confirmation Model (ECM). Adapted by Bhattacharjee (2001) from Oliver's (1980) satisfaction model, ECM explains continued use of a technology through the confirmation of initial expectations. When consumers' expectations of an online platform regarding delivery, product quality, security, and convenience are met or exceeded, satisfaction is generated, which in turn drives continued commitment to and loyalty toward that platform. ECM directly bridges the online shopping behavioral dimensions in this study to customer loyalty outcomes, providing the theoretical basis for the hypothesized significant relationship between the two constructs.

Together, these three theoretical frameworks TAM, TPB, and ECM form an integrated conceptual foundation for the present study. TAM explains the initial and continued adoption of digital platforms based on perceived usefulness and ease of use. TPB

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accounts for the role of attitudes, social influences, and perceived control in shaping specific online shopping behaviors. ECM bridges the behavioral and loyalty dimensions by explaining how confirmation of expectations through satisfactory experiences generates the satisfaction that sustains customer loyalty. The convergence of these frameworks underscores the multi-dimensional nature of post-pandemic online shopping behavior and its theoretically grounded relationship to customer loyalty in digital marketplaces.

II. METHODS

This study used a descriptive-correlational design to examine the relationship between post-pandemic online shopping behavior and customer loyalty among Filipino consumers using digital marketplaces. The descriptive component focused on describing respondents' online shopping behavior in terms of convenience orientation, price comparison behavior, and platform trust. The correlational component assessed the strength and direction of the relationship between these behavioral dimensions and customer loyalty. This design was selected as it is appropriate for describing naturally occurring phenomena while testing relationships between variables, consistent with Creswell and Creswell (2022) and Sekaran and Bougie (2020).

The respondents of the study consisted of Filipino online consumers who were 18 years of age or older, residing in the province of Laguna, Philippines, and who had made at least one purchase through a digital marketplace after the COVID-19 pandemic. The selection of Laguna as the study site was intentional, as it is one of the leading provinces in e-commerce activity outside Metro Manila, accounting for approximately nine percent of provincial online transactions alongside Cavite (BeGlobal E-commerce Corp., 2024). This delimitation was also based on the researchers' access to respondents and the need to maintain contextual consistency.

Since the population did not have a fixed or complete sampling frame, purposive sampling was used. This non-probability technique involved selecting respondents based on specific criteria relevant to the study objectives (Tongco, 2021). Purposive sampling was chosen over convenience sampling because it allowed the researchers to deliberately screen respondents against explicit criteria, namely being 18 years of age or older, residing in Laguna, and having made at least one post-pandemic digital marketplace purchase, ensuring that all participants had direct experience with post-pandemic online shopping in a way that convenience sampling could not guarantee. A total of 200 respondents were included in the study. This sample size was considered adequate for correlation analysis, as prior methodological studies suggest that a minimum of 149 respondents is sufficient for Pearson correlation with acceptable statistical power (Bujang, 2024). A total of 200 valid responses were collected and analyzed.

The primary instrument for data collection was a structured online questionnaire developed by the researchers based on relevant literature and validated instruments on consumer behavior, e-commerce adoption, and customer loyalty. The questionnaire consisted of three parts. Part 1 covered respondents' demographic profiles, including age, gender, and monthly online shopping frequency. Part 2 focused on post-pandemic online shopping behavior, specifically convenience orientation, price comparison behavior, and platform trust. Part 3 assessed respondents' customer loyalty in digital marketplaces.

Data were gathered using a structured online survey questionnaire comprising three parts: demographic profile (Part 1), post-pandemic online shopping behavior across 15 items organized under three indicators (Part 2), and customer loyalty across 15 items organized under four sub-dimensions (Part 3). Both Parts 2 and 3 used a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The instrument underwent expert validation, in which three experts in marketing research and quantitative methods evaluated the questionnaire for content clarity and relevance, followed by a pilot test administered to 20 online shoppers in Laguna not included in the main study. Reliability was assessed using Cronbach's alpha, yielding coefficients of .887 for the online shopping behavior scale and .923 for the customer loyalty scale, both indicating good to excellent internal consistency (George & Mallery, 2022). The survey was distributed via Google Forms through social media platforms and online communities. Participation was voluntary, and all responses were kept strictly confidential and anonymous. Because the study did not fall under a formal institutional ethics review requirement, all respondents were provided with an informed consent statement outlining the purpose of the study, the voluntary nature of participation, and the confidentiality of their responses before proceeding to the questionnaire.

Frequency count and percentage distribution described respondents' demographic profiles. Weighted mean scores and standard deviations determined the levels of both variables. One-way ANOVA with Scheffe post hoc tests was used for profile variables with three or more categories, and an independent samples t-test was used for sex. Pearson correlation assessed the relationship between the two main variables, with effect sizes computed as r^2 and interpreted using Cohen's (1988) benchmarks. Multiple linear regression determined the predictive capacity of online shopping behavior on customer loyalty. All analyses were conducted using IBM SPSS Statistics and evaluated at $\alpha = .05$.

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III. RESULTS

This section presents the key findings of the study on post-pandemic online shopping behavior and its relationship with customer loyalty among Filipino online consumers in the Province of Laguna. It details how post-pandemic shopping behaviors are expressed across three indicators, namely convenience orientation, price comparison behavior, and trust in digital platforms, and connects these to customer loyalty. The analysis also explores how responses varied based on the demographic characteristics of respondents, including age, sex, and monthly online shopping frequency, and establishes the extent to which online shopping behavior predicts customer loyalty through simple linear regression. The survey instrument demonstrated strong internal reliability, with Cronbach's alpha coefficients of .887 for the online shopping behavior scale and .923 for the customer loyalty scale, both indicating good to excellent internal consistency (George & Mallery, 2022).

Table 1: Profile of the Respondents

Profile	Frequency	Percentage
Age		
18-24 years old	22	11.0
25-34 years old	81	40.5
35-44 years old	66	33.0
45-54 years old and above	31	15.5
Sex		
Male	59	29.5
Female	141	70.5
Online Shopping Frequency		
Once a month	67	33.5
2-3 times a month	85	42.5
Once a week	20	10.0
2 or more times a week	28	14.0
Total Number of Respondents = 200	Total Number of Respondents = 200	Total Number of Respondents = 200

Table 1 presents the demographic profile of the 200 respondents from Laguna who participated in the study. This provides important context for understanding post-pandemic online shopping behavior and customer loyalty.

Findings revealed that in terms of age, the 25 to 34 years age group was highest at 40.5%. Second was the 35-44 years age group at 33.0%, followed by the 45-54 years age group at 15.5%. The 18-24 years age group was lowest at 11.0%.

As for sex, women have a majority of respondents having 70.5%, while men having 29.5%. This is broadly consistent with what consumer behavior research has found wherein that women tend to shop online more frequently and across a wider range of categories than men. In the Philippine context, women's participation in digital marketplaces has been found to be significant, reflecting their active role in online purchasing and e-commerce activities (Bayudan-Dacuycuy & Dacuycuy, 2022).

When it comes to how often respondents shopped online each month, the majority of the responses was 2–3 times a month, having 42.5% of participants. Another 33.5% reported shopping once a month. Those who shopped at least twice a week made up 14.0% of the sample, and the smallest group just 10.0% who shopped once a week. The fact that most respondents fell in the moderate-frequency range points to online shopping having become a routine, if not a daily, part of life for consumers in Laguna after the pandemic. Frequent, near-daily purchasing remains a behavior limited to a more digitally engaged minority.

Taken together, these demographic characteristics lay the groundwork for interpreting how different groups perceive and practice online shopping and brand loyalty in the post-pandemic period particularly as later sections test whether these variables produce statistically meaningful differences across the study's key constructs.

Table 2: Respondents' Post-Pandemic Online Shopping Behavior in terms of Convenience Orientation

Indicators	WM	Interpretation	Rank
I shop online more frequently now compared to before the COVID-19 pandemic.	3.74	High	5
I find online shopping more convenient than purchasing from physical stores.	4.40	Very High	1
I prefer online shopping because it allows me to purchase at any time of the day.	3.86	High	4
Shopping online saves me significant time and effort compared to visiting stores in person.	3.92	High	2

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The availability of home delivery services makes online shopping more appealing to me.	3.90	High	3
Average Weighted Mean	3.96	High	

Legend: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Moderate; 1.81-2.60 = Low; 1.00-1.80 = Very Low

Table 2 shows the level of post-pandemic online shopping behavior among respondents in terms of convenience orientation. Item 2, on finding online shopping more convenient than physical stores, obtained the highest weighted mean at 4.40 (Very High), while Item 1, on shopping more frequently than before the pandemic, obtained the lowest at 3.74 (High); the remaining items, on 24/7 availability, time savings, and home delivery, all fell within the High range (3.86-3.92).

Overall, respondents value convenience primarily for its qualitative benefits, such as ease, flexibility, and time efficiency, rather than for the sheer increase in how often they shop, a practical signal that platforms should continue prioritizing seamless, time-saving purchasing experiences.

The average weighted mean of 3.96, which falls within the High interpretation range, indicates that Filipino online consumers in Laguna generally exhibit a high level of convenience-driven online shopping behavior in the post-pandemic period. This finding aligns with the Technology Acceptance Model's proposition that perceived ease of use is a critical driver of sustained platform engagement (Davis, 1989), and is consistent with Shabbir et al. (2024), who documented that post-pandemic consumers in emerging markets increasingly cite convenience and time efficiency as primary motivators for continued digital marketplace use.

Table 3: Respondents' Level of Post-Pandemic Online Shopping Behavior in terms of Price Comparison Behavior

Indicators	WM	Interpretation	Rank
I regularly compare prices across multiple digital marketplaces before making a purchase.	4.02	High	2
I look for discount vouchers, flash sales, or promotional offers before completing an online purchase.	4.11	High	1
I consider online marketplaces more cost-effective than physical stores for most product categories.	3.80	High	4
I delay purchasing until a sale event (e.g., 11.11, 12.12) to take advantage of lower prices.	3.68	High	5
Price is among the most important factors I consider when choosing which platform to buy from.	3.90	High	3
Average Weighted Mean	3.90	High	

Legend: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Moderate; 1.81-2.60 = Low; 1.00-1.80 = Very Low

Table 3 shows the respondents' level of post-pandemic online shopping behavior in terms of Price Comparison Behavior. All indicators were rated High, with weighted means ranging from 3.68 to 4.11. Item 7, on seeking discount vouchers and promotional offers, obtained the highest weighted mean at 4.11, followed by Item 6, on regularly comparing prices across platforms, at 4.02; Item 9, on delaying purchases until a sale event, was lowest at 3.68. Price was also confirmed as one of the most important factors respondents consider when choosing a platform.

To sum up, these results are supported by Wu et al. (2023), who found that price sensitivity and promotion-seeking remain among the most persistent behavioral traits carried over from the pandemic era into digital commerce, particularly in markets marked by intense platform competition and modest average income.

Table 4: Respondents' Level of Post-Pandemic Online Shopping Behavior in terms of Trust in Digital Platforms

Indicators	WM	Interpretation	Rank
I trust the digital marketplace I use most frequently when providing my payment information.	3.46	High	4
I feel confident that products purchased online will be delivered as described by the seller.	3.34	Moderate	5
Seller ratings and buyer reviews significantly influence my trust in online purchases.	3.82	High	1
I trust that the digital marketplace I use has sufficient measures to protect my personal data.	3.49	High	3
My trust in online marketplaces has increased since I began shopping online more frequently.	3.61	High	2
Average Weighted Mean	3.54	High	

Legend: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Moderate; 1.81-2.60 = Low; 1.00-1.80 = Very Low

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Table 4 presents the level of post-pandemic online shopping behavior in terms of trust in digital platforms. Item 13, on the influence of seller ratings and buyer reviews, obtained the highest weighted mean at 3.82 (High), reflecting the central role that social proof mechanisms play in building trust within Philippine digital marketplaces, where community-validated seller reputations serve as a practical substitute for the tactile and relational assurances traditionally provided by in-person retail interactions (Kobayashi et al., 2024).

Item 15, on increased trust with sustained shopping experience, ranked second at 3.61, followed by Item 14 on data privacy protection (3.49) and Item 11 on payment information trust (3.46), all within the High range. Item 12, on confidence that products will be delivered as described, was lowest at 3.34 (Moderate), pointing to a persistent reservation surrounding order accuracy and seller description fidelity, a concern that continues to characterize online retail in markets where product verification prior to delivery remains limited.

Overall, the average weighted mean of 3.54 falls within the High range, indicating that while trust in digital platforms is generally strong among Laguna online consumers, it remains slightly more tempered than the convenience orientation and price comparison dimensions. This corroborates with the study of Bhattacharjee's (2001) Expectation-Confirmation Model, which identifies post-adoption trust as a function of accumulated experience suggesting that trust levels are likely to continue rising as Filipino consumers accumulate more transactional history with their preferred platforms.

Table 5: Summary Table of the Level of Post-Pandemic Online Shopping Behavior

Indicators	WM	Interpretation	Rank
Convenience Orientation	3.96	High	1
Price Comparison Behavior	3.90	High	2
Trust in Digital Platforms	3.54	High	3
Average Weighted Mean	3.80	High	

Legend: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Moderate; 1.81-2.60 = Low; 1.00-1.80 = Very Low

Table 5 summarizes the overall level of post-pandemic online shopping behavior across the three indicators. Convenience orientation received the highest average weighted mean of 3.96, indicating that the perceived ease, time-efficiency, and accessibility of online shopping remain the most salient behavioral drivers among respondents. Price comparison behavior followed closely at 3.90, reflecting that active value-seeking through cross-platform comparison and promotional responsiveness is nearly as prominent a behavioral characteristic. Trust in digital platforms, while still rated within the High range at 3.54, ranked 3rd suggesting that although trust has been meaningfully established in the post-pandemic period, it remains the most nuanced and conditionally held of the three behavioral dimensions.

The overall average weighted mean of 3.80, which falls within the High interpretation range, indicates that Filipino online consumers in Laguna demonstrate a high overall level of post-pandemic online shopping behavior. This consistent high-level performance across all three indicators reflects a consumer population that has not merely maintained pandemic-era shopping habits but has integrated digital marketplace engagement as a normalized and deliberately chosen feature of their purchasing lives. These findings are aligned with Elshaer et al. (2024), who documented that across post-pandemic markets, behavioral persistence in digital commerce is most robustly predicted by the internalization of convenience and value perceptions that were first formed under crisis conditions.

Table 6: Respondents' Level of Customer Loyalty in Digital Marketplaces

Indicators	WM	Interpretation	Rank
1. I intend to continue purchasing from the same digital marketplace I currently use most frequently.	3.70	High	1.5
2. When I need to buy something online, my preferred marketplace is always my first choice.	3.70	High	1.5
3. I am likely to repurchase from a seller on my preferred marketplace even if I encounter minor issues.	3.14	Moderate	15
4. I would choose my preferred online marketplace over a new or unfamiliar platform, even if the latter offers slightly lower prices.	3.47	High	13.5
5. My intention to continue using my preferred digital marketplace has strengthened over the past year.	3.58	High	7

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6. I consistently prefer using one specific digital marketplace over others for most of my purchases.	3.47	High	13.5
7. I feel more comfortable and confident navigating my preferred marketplace compared to others.	3.56	High	9.5
8. The features, interface, and services of my preferred marketplace are superior to competing platforms.	3.55	High	11
9. My strong preference for one marketplace influences where I begin my product searches.	3.59	High	6
10. The products I purchase from my preferred marketplace consistently meet or exceed my expectations.	3.52	High	12
11. I am satisfied with the speed and condition in which my orders are delivered.	3.66	High	3.5
12. I am satisfied with how my preferred marketplace handles returns, refunds, or complaints.	3.57	High	8
13. My overall satisfaction with online shopping has contributed to my loyalty toward a specific platform.	3.62	High	5
14. I would recommend my preferred digital marketplace to family and friends.	3.66	High	3.5
15. I share positive reviews, ratings, or feedback about sellers on my preferred marketplace.	3.56	High	9.5
Average Weighted Mean	3.55	High	

Legend: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Moderate; 1.81-2.60 = Low; 1.00-1.80 = Very Low

Table 6 presents the level of customer loyalty in digital marketplaces, with an overall weighted mean of ****3.55 (High)****, indicating that Filipino online consumers in Laguna generally exhibit strong loyalty toward their preferred online marketplace.

Among the four dimensions, respondents showed the strongest agreement with indicators reflecting continued platform preference, repeat purchase intention, and willingness to recommend their preferred marketplace to others. Conversely, the lowest-rated indicator was respondents' willingness to repurchase from a seller after experiencing minor issues, suggesting that service failures remain a critical factor that can weaken customer loyalty despite generally positive platform experiences. Similarly, relatively lower ratings for product expectations meeting actual experience indicate that inconsistencies between product presentation and actual quality continue to influence long-term loyalty.

Overall, the findings suggest that customer loyalty is primarily driven by positive platform experiences, satisfaction, and trust, while effective service recovery and consistent product quality remain essential for sustaining repeat patronage. These results support the Expectation Confirmation Model (Bhattacharjee, 2001), which posits that satisfaction resulting from confirmed expectations strengthens continuance intentions. The findings also align with Rather et al. (2022), who concluded that positive customer experiences reinforce customer loyalty through stronger brand identification.

Table 7: Difference in the Respondents' Post-Pandemic Online Shopping Behavior in terms of Convenience Orientation When the Respondents Are Grouped According to Profile Variables

Indicators	Mean	Statistical Test	p-value	Interpretation
Age	X1 (18-24) = 4.3091 X2 (5-34) = 3.8864 X3 (35-44) = 3.9121 X4 (45 and above) = 4.0194	F = 1.434	0.234	Not Significant
Sex	X1 (Male) = 4.1017 X2 (Female) = 3.9035	T = 1.441	0.151	Not Significant
Online Shopping Frequency	X1 (once a month or less) = 3.8119 X2 (2-3 times a month) = 4.0659 X3 (once a week) = 3.6000 X4 (2 or more times a week) = 4.2643	F = 3.317	0.021	Significant

0.05 level of significance

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As shown in the table 7, for the difference in the post-pandemic online shopping behavior in terms of convenience orientation when the respondents are grouped according to age and sex, p values of 0.234 and 0.151 were obtained, which were higher than the 0.05 level of significance. These showed that there is no significant difference in the post-pandemic online shopping behavior in terms of convenience orientation when the respondents are grouped according to age and sex. The post-pandemic online shopping behavior in terms of convenience orientation is the same regardless of the respondents' age and sex. However, for the difference in the post-pandemic online shopping behavior in terms of convenience orientation when the respondents are grouped according to online shopping frequency, a p value of 0.021 was obtained, which was lower than the 0.05 level of significance. This showed that there is significant difference in the post-pandemic online shopping behavior in terms of convenience orientation when the respondents are grouped according to online shopping frequency. Respondents with online shopping frequency of 2 or more times per week had shown behavior that highly considered convenience than the rest of the respondents.

This corroborates the findings of Andruetto et al. (2023), who found that consumers' shopping behavior during the pandemic varied according to socio-demographic characteristics and household structure, influencing the extent to which they transitioned to online shopping.

Table 8: Difference in the Respondents' Post-Pandemic Online Shopping Behavior in terms of Price Comparison Behavior When the Respondents Are Grouped According to Profile Variables

Indicators	Mean	Statistical Test	p-value	Interpretation
Age	X1 (18-24) = 4.4364 X2 (25-34) = 3.7580 X3 (35-44) = 3.8970 X4 (45 and above) = 3.9032	F = 3.477	0.017	Significant
Sex	X1 (Male) = 3.7932 X2 (Female) = 3.9461	T = 1.109	0.269	Not Significant
Online Shopping Frequency	X1 (once a month or less) = 3.7642 X2 (2-3 times a month) = 4.0047 X3 (once a week) = 3.4400 X4 (2 or more times a week) = 4.2429	F = 4.281	0.006	Significant

0.05 level of significance

As shown in the table 8, for the difference in the post-pandemic online shopping behavior in terms of price comparison behavior when the respondents are grouped according to sex, a p value of 0.269 was obtained, which was higher than the 0.05 level of significance. This showed that there is no significant difference in the post-pandemic online shopping behavior in terms of price comparison behavior when the respondents are grouped according to sex. The online shopping behavior in terms of price comparison is the same for male and female respondents. However, for the difference in the post-pandemic online shopping behavior in terms of price comparison when the respondents are grouped according to age and online shopping frequency, p values of 0.017 and 0.006, respectively, were obtained, which were lower than the 0.05 level of significance. This showed that there is significant difference in the post-pandemic online shopping behavior in terms of price comparison when the respondents are grouped according to age and online shopping frequency. The younger group of respondents, with age bracket 18-24 years old, had highly considered price comparison than the rest of the respondents. Also, respondents with online shopping frequency of 2 or more times per week had shown behavior that highly considered price comparison than the rest of the respondents.

As stated by Gupta and Kiran (2024), consumers with greater familiarity and experience in online shopping exhibit stronger behavioral intentions to use digital marketplaces, as their confidence in technology and digital payment systems enhances their ability to evaluate alternatives and make informed purchasing decisions.

Table 9: Difference in the Respondents' Post-Pandemic Online Shopping Behavior in terms of Trust in Digital Platforms When the Table 10: Respondents Are Grouped According to Profile Variables

Indicators	Mean	Statistical Test	p-value	Interpretation
Age	X1 (18-24) = 3.6182 X2 (25-34) = 3.4840 X3 (35-44) = 3.5606 X4 (45 and above) = 3.6065	F = 0.246	0.864	Not Significant

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Sex	X1 (Male) = 3.5661 X2 (Female) = 3.5333	T = 0.245	0.806	Not Significant
Online Shopping Frequency	X1 (once a month or less) = 3.2716 X2 (2-3 times a month) = 3.6871 X3 (once a week) = 3.2400 X4 (2 or more times a week) = 3.9714	F = 6.701	0.000	Significant

0.05 level of significance

As shown in the table, for the difference in the post-pandemic online shopping behavior in terms of trust in digital platforms when the respondents are grouped according to age and sex, p values of 0.864 and 0.806 were obtained, which were higher than the 0.05 level of significance. These showed that there is no significant difference in the post-pandemic online shopping behavior in terms of trust in digital platforms when the respondents are grouped according to age and sex. The post-pandemic online behavior in terms of trust in digital platforms is the same regardless of the respondents' age and sex. However, for the difference in the post-pandemic online shopping behavior in terms of trust in digital platforms when the respondents are grouped according to online shopping frequency, a p value of 0.000 was obtained, which was lower than the 0.05 level of significance. This showed that there is significant difference in the post-pandemic online shopping behavior in terms of trust in digital platforms when the respondents are grouped according to online shopping frequency. Respondents with online shopping frequency of 2 or more times per week had shown behavior that showed high level of trust on digital platforms than the rest of the respondents.

As stated by Mokofeng (2023) that frequent online shoppers develop significantly higher levels of platform trust over time, as accumulated positive transaction experiences reinforce confidence in digital marketplace reliability, security, and overall service quality.

Table 10: Difference in the Level of Customer Loyalty in Digital Marketplaces When the Respondents Are Grouped According to Profile Variables

Indicators	Mean	Statistical Test	p-value	Interpretation
Age	X1 (18-24) = 3.5636 X2 (25-34) = 3.5898 X3 (35-44) = 3.4750 X4 (45 and above) = 3.6258	F = 0.282	0.838	Not Significant
Sex	X1 (Male) = 3.4029 X2 (Female) = 3.6181	T = 1.565	0.119	Not Significant
Online Shopping Frequency	X1 (once a month or less) = 3.4200 X2 (2-3 times a month) = 3.7178 X3 (once a week) = 2.9940 X4 (2 or more times a week) = 3.7807	F = 4.992	0.002	Significant

0.05 level of significance

As shown in the table, for the difference in the level of customer loyalty in digital marketplaces when the respondents are grouped according to age and sex, p values of 0.838 and 0.119 were obtained, which were higher than the 0.05 level of significance. These showed that there is no significant difference in the level of customer loyalty in digital marketplaces when the respondents are grouped according to age and sex. The respondents' level of loyalty in digital marketplaces is the same regardless of the respondents' age and sex. However, for the difference in the level of loyalty in digital marketplaces when the respondents are grouped according to online shopping frequency, a p value of 0.002 was obtained, which was lower than the 0.05 level of significance. This showed that there is significant difference in the level of customer loyalty in digital platforms when the respondents are grouped according to online shopping frequency. Respondents with online shopping frequency of 2 or more times per week had higher level of customer loyalty in digital platforms than the rest of the respondents.

This corroborates with the study of Cuesta-Valino et al. (2023) that shopping frequency is a significant predictor of customer loyalty in digital marketplaces, as consumers who engage more regularly with online platforms tend to develop stronger attachment, higher satisfaction, and greater commitment to their preferred marketplace over time.

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Table 11: Relationship between the Respondents' Post-Pandemic Online Shopping Behavior and Level of Customer Loyalty in Digital Marketplaces

Variables	Pearson r	p value	Interpretation
Post-Pandemic Online Shopping Behavior in terms of Convenience Orientation	Post-Pandemic Online Shopping Behavior in terms of 0.755	Post-Pandemic Online Shopping Behavior in terms of 0.000	Post-Pandemic Online Shopping Behavior in terms of Significant
Price Comparison Behavior	0.723	0.000	Significant
Trust in Digital Platforms	0.727	0.000	Significant

0.01 level of significance

As shown in the table, for the relationship between the respondents' post-pandemic online shopping behavior in terms of convenience orientation, price comparison behavior, and trust in digital platforms, and their level of customer loyalty in digital marketplaces, Pearson r values of 0.755, 0.723 and 0.727, respectively were obtained. The p values obtained were lower than the 0.01 level of significance, indicating significant relationships between the respondents' post-pandemic online shopping behavior and customer loyalty. The Pearson r values ranging from 0.723 to 0.755 indicate strong positive relationships, suggesting that higher levels of convenience orientation, price comparison behavior, and trust in digital platforms are associated with higher levels of customer loyalty.

According to the study of Alouloub (2023) demonstrated that perceived convenience and perceived value are significant positive predictors of repurchase intention in online shopping, and that consumer trust further strengthens these relationships by acting as a key mediator indicating that shoppers who find a platform both convenient and trustworthy are considerably more likely to return to and commit to that same platform over time. To further affirm the precision of these estimates, 95% confidence intervals were computed using Fisher's z-transformation ($n = 200$). The resulting intervals were [.688, .809] for convenience orientation, [.649, .783] for price comparison behavior, and [.654, .786] for trust in digital platforms. The narrow width of all three confidence intervals confirms the reliability and stability of the correlation estimates, indicating that the observed relationships are not attributable to sampling variability.

Table 12: Predictive Power of Post-Pandemic Online Shopping Behavior on Customer Loyalty in Digital Marketplaces

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817 ^a	.668	.663	.51687
a. Predictors: (Constant), trust_digital_platform_ave, convenience_orientation_ave, price_comparison_behavior_ave				

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	105.208	3	35.069	131.272	.000 ^b
	Residual	52.361	196	.267		
	Total	157.570	199			
a. Dependent Variable: customer_loyalty_ave						
b. Predictors: (Constant), trust_digital_platform_ave, convenience_orientation_ave, price_comparison_behavior_ave						

As disclosed in the table, there was correlation between online shopping behavior and customer loyalty. The R-value of 0.817 indicates a high level of prediction of the dependent variable, customer loyalty. The R-Square value of 0.668 indicates that 66.8% of the variance in customer loyalty is explained by post-pandemic online shopping behavior. This reflects a substantial predictive effect, suggesting that online shopping behavior is a strong predictor of customer loyalty among Filipino online consumers. This reflects a substantial predictive effect, suggesting that online shopping behavior is a strong predictor of customer loyalty among Filipino online consumers. The ANOVA table showed an F value of 131.272, with the regression model statistically predicting the dependent variable significantly well, as shown by the p value of 0.000 which is less than the significance level of 0.05.

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Table 13: Regression Coefficients for Predicators of Customer Loyalty

Predictor	B	Std. Error	β	t	Sig.	VIF
(Constant)	.085	.179	—	.472	.638	N/A
Convenience Orientation	.384	.071	.384	5.406	.000	N/A
Price Comparison Behavior	.170	.074	.170	2.295	.023	N/A
Trust in Digital Platforms	.363	.062	.350	5.858	.000	N/A

Dependent Variable: Customer Loyalty

As shown in the coefficients table, convenience orientation was the strongest predictor of customer loyalty ($\beta = .384$, $t = 5.406$, $p < .001$), followed by trust in digital platforms ($\beta = .350$, $t = 5.858$, $p < .001$) and price comparison behavior ($\beta = .170$, $t = 2.295$, $p = .023$). All three predictors contributed significant, unique variance to customer loyalty. Collinearity diagnostics (VIF, Tolerance) were not requested in the SPSS regression syntax used for this analysis; the VIF column above is marked N/A and should be completed by re-running the regression with Collinearity Diagnostics selected under Statistics if this information is required by the target journal.

IV. DISCUSSION

This study examined the relationship between post-pandemic online shopping behavior and customer loyalty among Filipino online consumers in Laguna. The findings revealed high levels of convenience orientation, price comparison behavior, and trust in digital platforms, indicating that online shopping has become a normalized part of consumers' purchasing behavior even after the pandemic period. Customer loyalty was likewise rated high, suggesting that consumers continue to engage with and prefer specific digital marketplaces due to positive and consistent shopping experiences. Regression analysis further showed that post-pandemic online shopping behavior significantly predicts customer loyalty, explaining 66.8% of the variance in loyalty outcomes.

Among the behavioral dimensions, convenience orientation emerged as the strongest factor associated with customer loyalty. This may be explained by the continued normalization of digital purchasing, where consumers increasingly prioritize time efficiency over traditional in-store shopping experiences. This suggests that consumers increasingly value the accessibility, time efficiency, and flexibility offered by digital marketplaces. The findings support the Technology Acceptance Model, which emphasizes perceived usefulness and ease of use as important drivers of continued technology adoption (Davis, 1989). Similar trends have been observed globally, particularly in post-pandemic markets where consumers retained digital purchasing habits because of the convenience and efficiency provided by e-commerce platforms (Shabbir et al., 2024; Elshaer et al., 2024).

Price comparison behavior also demonstrated a strong positive relationship with customer loyalty. This is likely because value-seeking behavior and platform loyalty are not mutually exclusive in a market where most major players offer comparable promotions; once a platform consistently matches or beats competitors on price, the incentive to keep switching diminishes. This indicates that consumers who actively compare prices and seek promotions are not necessarily less loyal, but instead remain committed to platforms that consistently provide perceived value. In highly competitive digital marketplaces, consumers tend to develop loyalty toward platforms that regularly meet their expectations in terms of affordability and promotional benefits. Comparable findings have been reported in other Asian and emerging digital economies, where promotional campaigns, discount vouchers, and flash sales strongly influence repeat purchasing behavior (Wu et al., 2023).

Trust in digital platforms likewise showed a significant positive relationship with customer loyalty. This can be attributed to the fact that trust functions as a risk-reduction mechanism in a market where buyers cannot physically inspect goods before purchase, making social proof and platform assurances necessary substitutes for direct product verification. Respondents particularly relied on seller ratings and buyer reviews when evaluating online purchases, emphasizing the importance of social proof in building trust. However, confidence in receiving products exactly as described remained comparatively lower, indicating continuing concerns regarding product reliability and order accuracy. Similar trust-related concerns have also been observed in global e-commerce studies, particularly in emerging markets where consumers cannot physically inspect products prior to purchase (Saoula et al., 2023). These findings highlight the importance of platform transparency, seller accountability, and effective customer service in strengthening long-term customer relationships.

The study also found significant differences in online shopping behavior and customer loyalty based on monthly shopping frequency. Respondents who shopped online more frequently demonstrated higher levels of convenience orientation, price comparison behavior, trust, and customer loyalty. This suggests that repeated exposure to digital marketplaces contributes to stronger familiarity, confidence, and platform commitment over time. Similar patterns have been documented in international

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studies, where frequent online shoppers tend to exhibit stronger platform attachment and higher repurchase intentions due to accumulated positive experiences (Mokofeng, 2023).

Overall, the findings indicate that post-pandemic online shopping behavior has evolved beyond temporary pandemic-driven adoption and has become a sustained consumer practice. The results reinforce broader global evidence showing that convenience, perceived value, and trust remain central drivers of customer loyalty in digital commerce. For digital marketplace operators, these findings emphasize the importance of improving user experience, maintaining competitive pricing strategies, and strengthening trust-building mechanisms to sustain customer engagement in the long term.

Conclusion

This study demonstrates that post-pandemic online shopping behavior, particularly convenience orientation, price comparison behavior, and trust in digital platforms, is significantly and positively associated with customer loyalty among Filipino online consumers in Laguna, with online shopping behavior accounting for a substantial share of the variance in loyalty outcomes. Theoretically, these findings extend the applicability of the Technology Acceptance Model, Theory of Planned Behavior, and Expectation-Confirmation Model to a provincial Filipino context, showing that frameworks largely validated in urban and international settings also hold explanatory power among consumers outside Metro Manila. Practically, the results indicate that convenience, value, and trust are not independent drivers but interdependent levers that digital marketplace providers must manage jointly to sustain long-term customer engagement. For future research, the persistence of these behaviors beyond the immediate post-pandemic period, and their generalizability to other provincial markets, remain open questions worth pursuing.

V. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are offered:

1. Digital marketplaces should improve buyer protection, particularly around order accuracy and seller description fidelity, since these were identified as the weakest points in both online shopping behavior and customer loyalty.
2. Strengthen review and rating verification mechanisms, given that seller ratings and buyer reviews emerged as the strongest driver of consumer trust.
3. Improve delivery transparency and tracking, as satisfaction with delivery speed and condition was closely tied to loyalty outcomes.
4. Sustain consistent, value-based promotions, since price comparison behavior remained a strong predictor of loyalty even among habitual shoppers.
5. Future researchers should include rural consumers and other provinces beyond Laguna to determine whether these relationships hold in less digitally saturated markets.

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