

Determinants of Online Shopping Cart Abandonment among Working Millennials in Dasmariñas City, CaviteHershey R. Cenizal¹, John Lester A. Lungcay², Anna Darah C. Nuñez³,Angelo Aster T. Pillarina⁴, Vernon Christopher B. Valdez⁵, Darrel Jake D. Macalawa⁶¹⁻⁶Lyceum of the Philippines University Cavite, General Trias City, Philippineshershey.cenizal@lpunetwork.edu.ph¹, john.lungcay1@lpunetwork.edu.ph², anna.nunez@lpunetwork.edu.ph³, angelo.pillarina@lpunetwork.edu.ph⁴,vernon.valdez@lpunetwork.edu.ph⁵, darrel.mactalawa@lpu.edu.ph⁶¹<https://orcid.org/0009-0003-8748-6575>; ²<https://orcid.org/0009-0000-2804-322x>; ³<https://orcid.org/0009-0004-1636-0534>; ⁴<https://orcid.org/0009-0005-5045-4531>;⁵<https://orcid.org/0009-0008-7054-6814>; ⁶<https://orcid.org/0009-0008-0404-3223>

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Abstract— Online shopping cart abandonment has become a growing concern for online shops in the country, affecting potential revenue and customer retention. This study aims to identify the most influential determinants of online shopping cart abandonment among working millennials in Dasmariñas City, Cavite—a first-class component city and a major urban hub in the region—based on Hawkins Stern’s Impulse Buying Theory. A descriptive-correlational research design was employed, involving 120 purposively selected respondents composed of full-time, part-time, and self-employed millennials. Data were gathered through a validated online survey and analyzed using frequency, percentage, mean, standard deviation, and the Chi-square Test of Independence. The findings revealed that service quality, promotion strategies, and motivation were the most influential determinants of online shopping cart abandonment, while outstanding shop displays, product features, and price showed lower influence. No significant relationship was found between the respondents’ employment type and the influence of these determinants. The results provide practical recommendations for online business owners, e-commerce developers, marketers, society, and future researchers to help minimize online shopping cart abandonment. Furthermore, a model called the Digital Service Quality–Cart Outcome Model (DSQ-COM) was developed as an output of this study. This research offers key insights into Filipino millennial consumer behavior.

Keywords— consumer behavior, Hawkins Stern’s Impulse Buying Theory, online shopping cart abandonment, working millennials.

I. INTRODUCTION

Over the past few decades, the internet has developed into a vast global marketplace due to its convenience. Consumers have utilized the Internet for several purposes within the business-to-consumer online retail cycle. These purposes may include searching for product features, comparing prices, reading reviews, selecting a product, placing orders, and making payments. After completing these initial steps, products are then delivered through various channels, followed by post-sales support in case of any anomalies which may be provided digitally or through traditional methods [1].

In the Philippines, Filipinos have increasingly resorted to online shopping. Since the COVID-19 pandemic in 2020, it is predicted that online shopping will grow four times higher by 2025 amounting to \$12 billion [2]. Meanwhile, in 2021, the e-commerce sales in the Philippines reached \$17 billion from its 73 million active online users which is estimated to reach \$24 billion by 2025, increasing sales to 17% [3]. After the COVID-19 pandemic, online shopping has become the norm.

Within this context, consumer behavior has shown patterns of both planned purchases and impulse buying. However, between decision making and the completion of a purchase, many consumers tend to abandon their online shopping carts. Online shopping cart abandonment is a situation where customers add items to their virtual shopping carts but do not complete their purchase influenced by numerous factors [4]. 69.82% of online shopping carts are abandoned where in every 10 customers, 7 leave without completing their purchase. This affects the business causing significant revenue loss and adds traffic to live purchases acquiring. There is a 21% online shopping cart abandonment rate for those who are aged 25-34. It is then followed by the 35-44 age group with 20% online shopping cart abandonment rate and the 45-54 year olds at 13% [5]. Though the phenomenon of online shopping cart abandonment applies to various age groups, the respondents are a relevant participant to this study as they are varying in employment types and are the most prominent among the existing generational groups [6]. This research focuses only on three employment types, namely full-time employees, part-time employees, and self-employed. There are numerous advantages to working full time which include having steady income, having time paid off, insurance, social security benefits and the likes. Though it may seem that having a consistent income is beneficial, this puts most people in debt, especially when they are only average-earning workers [7]. Since full-time employees are mostly adults who are parents and/or the breadwinner of the household, nearly half (25%) of the 800 workers surveyed in their research are worried about their financial situation as they are finding it hard to keep up with their monthly expenses [8]. This situation can be an influence on their spending behavior causing them to abandon their online shopping carts.

Part-time employees’ spending pattern is influenced by their immediate needs. Primarily, income is for settling debts, transportation, studies, family, and self needs. While they save money from their part-time job income, online purchases that may be needed inside the home or personal needs are also considered. With this, consumers may prioritize their immediate needs over completing a check out process—especially if it’s not urgently needed [9]. This spending behavior could be a determinant as to why respondents leave items in their carts for more pressing financial obligations.

Self-employed individuals include those who freelance and/or own their own businesses. Though it may seem comfortable, they are the ones responsible for their own finances and cash flow [10]. With this, there isn’t a steady stream of income, when this happens, consumers may become hesitant in completing a purchase—as they are also uncertain about their financial standing or emergency/upcoming expenses. This spending behavior could be a factor as to why they abandon their carts. When millennials engage in online shopping, they are innately inclined to evaluate reviews, check the brand’s reputation, and look for available discounts before making purchases in contrast to Generation Z’s shopping behavior where they are more influenced by visual content and influencer endorsements [11]. These differences make them an important group for understanding online shopping patterns. In relation to this, preferred online shopping platforms also play a role of this phenomenon where algorithm-based tailored suggestions and recommendation is one of the factors which boost sales [12].

Additionally, consumers compare prices and prefer Cash on Delivery. Shopee surpassed both Lazada and TikTok Shop in customer service, detailed product description, and the overall shopping experience. Consumers favored Shopee for its product prices, selection, seller reliability, delivery speed, and user interface. Pricing promotions, product quality and customer service were the crucial elements that affected buying decisions among Shopee users, making its marketing strategies effective and establishing it as the favored platform among students. This shift in preference reflects the growing importance of platform reliability and customer-focused features in the e-commerce landscape. Shopee’s focus on competitive pricing, promotions, and customer service meets the needs of the demographic, making it the go-to platform for many [12]. This study attempts to fill several gaps. Firstly, there is lack of studies that focus on online shopping cart abandonment with focus on the respondents. Furthermore, while Hawkins Stern’s Impulse Buying Theory has been widely used to explain spontaneous purchasing behavior, there is lack of research on how its factors correlate with online shopping cart abandonment. Additionally, although the effects of online shopping cart abandonment on the online retail industry have been studied globally, little research about this phenomenon has been done within the Philippine market. By addressing these gaps, this study seeks to gain a deeper understanding of this consumer behavior, particularly in relation to how their employment types affect their tendency to abandon their online shopping carts.

II. OBJECTIVES OF THE STUDY

This research aims to identify the most influential determinants affecting online shopping cart abandonment based on Hawkins Stern’s Impulse Buying Theory among the respondents. Particularly, it attempts to determine the socio-economic profile of the respondents, identify how the factors in the Hawkins Stern’s Impulse Buying Theory – namely price, outstanding shop displays, product features, service quality, promotion strategies, and motivation – influence online shopping cart abandonment among the respondents, and lastly this research aims to assess the relationship between the respondents’ employment type and the influence of the determinants of online shopping cart abandonment.

III. METHODOLOGY

A. Research Method.

A descriptive correlational research design and comparative research design was used in this study. The descriptive aspect is used to collect data into what constitutes a phenomenon, in this case, online shopping cart abandonment [13]. On the other hand, the correlational aspect, a non-experimental type of research design, focuses on how two or more things are correlated by not assuming anything about the cause and effect [14]. Descriptive correlational research design

involves investigating, describing, and explaining the variables to identify the relationship of online shopping cart abandonment and the factors contributing to it. This design was fitted to this research since it allows the researchers to explore the relationship of the dependent and independent variable without manipulating it. By using this hybrid design, researchers can easily identify how the respondents of this research correlate to the determinants of online shopping cart abandonment.

B. Sampling Technique

As the population is difficult to define or enumerate due to the absence of definitive and up-to-date data on the working millennials within the city, the researchers used purposive sampling. In using the purposive sampling, a non-probability method, researchers select participants by intentionally choosing people who meet the criteria: full-time employees, part-time employees, and self-employed – working millennials in Dasmariñas City, Cavite, ensuring that they meet the target profile of the study. This method allows the researchers to access and study the target population efficiently while focusing on the participants who are directly aligned with the research objectives – ensuring that the data collected is valid and that the respondents have the necessary experience and characteristics needed to provide responses for the betterment of the study.

C. Participants of the Study

Millennials are the most dominant online shoppers in the Philippines [15]. In addition, at least 100 or more participants is a general rule of thumb in conducting online surveys to ensure the integrity of the survey being conducted [16]. Furthermore, the common sample size for most quantitative studies is 40 to offer a reliable result [17]. With this, the participants of this study will consist of 120 currently employed – 40 full-time employees, 40 part-time employees, and 40 self-employed – individuals in Dasmariñas City, Cavite, that are engaged in online shopping that will be selected through purposive sampling. This method allowed the researchers to ensure a variety of perspectives and experiences relevant to the study on online shopping cart abandonment.

D. Research Locale

The study was conducted in Dasmariñas City, Cavite, which is a city belonging to the CALABARZON region of the Philippines. Dasmariñas City is one of the most populated and commercially active cities in the province [18]. With a population of 702,141 which represents 16.18% of the total population of the province of Cavite and 4.34% of the total population of CALABARZON [19].

Dasmariñas City, Cavite is a commercial hub with malls, shopping centers, universities, schools, office complexes, and other establishments [20–21]. Given the scope and limitations of the study, the target population will be working individuals, either full-time, part-time, or self-employed, that are users of TikTok Shop, Shopee, and Lazada. Dasmariñas City, Cavite is an ideal setting for examining behaviors on shopping online, specifically the reasons for online shopping cart abandonment.

E. Research Instrument

To ensure that the questions were aligned with the study, the researchers designed and formulated the questionnaires by referencing the relevant articles and literature review. The questionnaire contains two sections—the socio-economic profile of the respondents, online shopping cart abandonment factors, and online shopping cart behavior. Section I of the survey questionnaire contains the respondents’ socio-economic profile, such as age, employment type, preferred online shopping platforms, and online shopping frequency. While section II focuses on the factors affecting online shopping cart abandonment and determines the reasons that influence the respondent to abandon their online shopping cart. Questions in this section are arranged by specific factors to attain unbiased answers from the respondents. In this study, Likert scale was used to formulate the survey questionnaire. A Likert scale is a tool used to measure opinions, attitudes, or behaviors. It presents a statement or question with five or seven response options, ranging from strongly agree to strongly disagree. Respondents choose the option that best aligns with their perspective [22].

TABLE I. FOUR-POINT LIKERT SCALE INTERPRETATION TABLE

Scale	Mean Range	Remarks	Interpretation
1	1 – 1.74	Strongly Disagree (SD)	Very low level of influence (VLLI)
2	1.75 – 2.49	Disagree (D)	Low level of influence (LLI)
3	2.50 – 3.24	Agree (A)	High level of influence (HLI)
4	3.25 – 4.00	Strongly Agree (SA)	Very high level of influence (VHLI)

The initial draft of the questionnaire was subjected to content validation by experts to assess its clarity, relevance, and appropriateness. Their feedback was carefully considered, and necessary revisions were made to improve the survey questionnaire based on their recommendations seen in the appendices.

After the validation process, a pilot test was conducted with 68 respondents that shared the similar eligibility criteria with the target population who were then excluded from the actual data gathering. The data gathered from the pilot test were then subjected to reliability testing using Chronbach’s alpha to determine the consistency of each factor, where ≥ 0.9 refers to excellent reliability, 0.7 to 0.9 is good reliability, 0.6 to 0.7 means that there is moderate reliability, and < 0.6 indicates poor reliability. The results were as follows: Price (0.761), Outstanding Shop Displays (0.658), Product Features (0.722), Service Quality (0.774), Promotion Strategies (0.742), and motivation (0.498). Most factors showed acceptable consistency while the ‘motivation’ factor showed poor reliability. With this, the researchers revised and improved the wording of the questions in this category to enhance clarity and alignment with the objectives of the study before the actual data gathering.

F. Data Gathering Procedure

To achieve the study’s objectives, a mixed-methods approach was employed. Primary data will be collected through a researcher-designed survey, which contains questions directly aligned with the research objectives. The survey questionnaire will be composed of questions about the respondents’ socio-economic profile and a Likert scale, both containing carefully selected questions designed to address the research objectives. Before conducting the survey, it will be validated by the adviser and experts to ensure its content is relevant, reliable, and consistent with the study’s purpose and policy. To ensure participant eligibility and facilitate data collection, the researcher will personally ask and distribute the online survey to the respondents. This approach will help identify individuals who meet the specific criteria of the study. The participants will be given adequate time to respond and complete the survey. Secondary data, gathered from a variety of sources including reliable and scientific studies, complemented the primary data and provided a broader context for analysis. The researcher will be the person responsible for obtaining, gathering, and securing the data that has been collected. After gathering the data, the researchers will analyze and interpret the results with the assistance of experts. This process will involve tallying, computing, and checking the information to ensure accuracy.

G. Data Analysis

To analyze the data as per the research objectives and the statistical question, the first step is to calculate the frequency and percentage of the respondent’s socio-economic profile—age, employment type, preferred online shopping platform, and online shopping frequency.

Secondly, calculate the mean and standard deviation for each factor namely price, outstanding shop displays, product features, service quality, promotion strategies, and motivation. Each factor has five questions that are being measured using the four-point Likert scale ranging from 1 for “Strongly Disagree” to 4 for “Strongly Agree”. To determine how the respondents agree or disagree with the six factors, the mean score for each determinant will be calculated to determine its strength by averaging the responses to each question per sub-section. The standard deviation will also be calculated to measure the responses’ variability. Depending on its variability, a low standard deviation indicates that there is consistency in the responses, while a higher standard deviation suggests that there is an inconsistency among the responses [23]. After calculating the mean and the standard deviation for each factor, they were ranked based on the mean scores and standard deviation – highest mean represents most influential and lowest mean represents least influential. This ranking helps answer one of the objectives and will provide valuable insight regarding each determinant’s strength. Lastly, to determine the relationship between the employment type and the influence of the determinants of online shopping cart abandonment, the Chi-Square Test of Independence also known as the Pearson Chi-Square was applied. This statistical test checks if two categorical or nominal variables are likely to have a relationship or not where it will help determine if there is a significant relationship between the employment types and the responses to each of the six factors [24].

H. Ethical Considerations

The researchers observe ethical conduct during data collection and prioritize the respondents’ data privacy, confidentiality, and well-being. Data security measures will be implemented to protect the respondents’ information by adhering to the Data Privacy Act of 2012. Informed consent will be obtained from the respondents to clearly state the voluntary participation, the survey’s purpose, and the confidentiality of the data collected. The questionnaires prepared by the

researchers are designed to avoid bias, sensitive subjects, and cultural sensitivity. Moreover, data analysis will be conducted accurately to avoid misinterpretations and ensure research integrity, transparency, and accuracy. The researchers can conduct online surveys responsibly and contribute to meaningful research by conforming to these ethical principles.

IV. RESULTS AND DISCUSSION

The data gathered from the online survey conducted by the researchers about the determinants of online shopping cart abandonment among 120 working millennials – 40 full-time employees, 40 part-time employees, and 40 self-employed – in Dasmariñas City, Cavite identified the most influential determinants based on Hawkins Stern’s Impulse Buying Behavior affecting the respondents.

TABLE III. SOCIO-ECONOMIC PROFILES OF THE RESPONDENTS

Profile	Frequency <i>n=120</i>	Percent
Age		
29-32 years old	66	55
33-36 years old	21	17.5
37-40 years old	18	15
41-44 years old	15	12.5
Employment Type		
Full-time Employment	40	33.3
Part-time Employment	40	33.3
Self-employed	40	33.3
Preferred online shopping platform		
TikTok Shop		
Shopee	50	41.7
Lazada	46	38.8
	24	20
Online shopping frequency		
Rarely (1-2 times per month)	34	28.3
Occasionally (3-5 times per month)		
Frequently (6-5 times per month)	53	44.2
Often (More than 10 times per month)	19	15.8
	14	11.7

The majority of the participants fell within the age range of 29-32, with a frequency of 66 or 55%. This was followed by the age range of 33-36 and then 37-40 and lastly, the age range of 41-44. These results agree with the latest study of Statista in June of 2023 where the age range of 29-32 falls into the majority of the Filipino online shoppers that are the main drivers of e-commerce in the country which are in the 25-34 age range (35.6%).

The respondents are evenly distributed across the three employment type categories. Each group all had 40 respondents (frequency), accounting for 33.3% of the total sample. This equal distribution was purposefully designed by the researchers to ensure that there is an equal representation among the three different employment types. The most preferred online shopping platform among the respondents was TikTok Shop with a frequency of 50 or 41.7%. This was closely followed by Shopee with Lazada as the least preferred platform. These results suggest that newer platforms like TikTok Shop are gaining traction and possibly overtaking more established online shopping platforms like Shopee and Lazada in terms of user preference [25].

The data shows that most respondents shop occasionally with 53 respondents (frequency) or 44.2% making 3-5 purchases per month. This is followed by rare shoppers, who buy 1-2 times per month with 34 respondents (frequency) or 28.3%. Those who shop five times or less in a month, have a more intentional purchasing behavior, which may result in having more items in their online shopping carts, as they are likely to plan and are deliberate with their purchases [26]. Those who shop frequently (6-10 times per month) came in third. Lastly, only 14 respondents (frequency) or 11.7% shop more than 10 times per month, indicating that those who shop often are less common among the respondents. Additionally, those who shop more often are generally familiar with product offering and promotional strategies which can lead to buying impulsively that is linked to lower cart abandonment [26].

TABLE IIIII. LEVEL OF INFLUENCE OF PRICE AS A DETERMINANT OF ONLINE SHOPPING CART ABANDONMENT

Statement	M	SD	Remarks	Interpretation
1. Sudden increase on the price of the item due to the shipping fee prevents me from completing the checkout process.	2.99	0.939	A	HLI
2. I compare prices of different product listings on the same online shopping platform leading me to abandon my cart.	3.18	0.879	A	HLI
3. I compare prices of different product listings across other platforms leading me to abandon my cart.	3.02	0.930	A	HLI
4. When there are limited payment options I tend to not continue with my purchase.	3.08	0.846	A	HLI
5. I abandon my cart when the voucher/discount I expected does not apply to my purchase.	3.04	0.911	A	HLI
Grand Total	3.07	0.901	A	HLI

Note: For interpretation the following remarks apply to the mean interval: 4.00-3.25 for Strongly Agree (Very high level of influence), 3.24 – 2.50 for Agree (High level of influence), 2.49 – 1.75 for Disagree (Low level of influence), and 1.74 – 1.00 for Strongly Disagree (Very low level of influence)

The statement “I compare prices of different product listings on the same online shopping platform, leading me to abandon my cart” received the highest mean score of 3.18. Comparison process on the same platform might highlight the possibility of finding even better deals. Statista highlights that one of the main reasons consumers abandon their online shopping carts is to compare prices and search for better deals before making a final purchase decision [27]. On the other hand, the statement “Sudden increase on the price of the item due to the shipping fee prevents me from completing the checkout process” got the lowest mean score of 2.99. Suggesting that even when the shipping fee gets unexpectedly high, consumers still proceed to complete their purchases. In terms of a customer’s decision on buying an item it doesn’t seem as likely for them not to push through with the purchase as they wouldn’t mind shouldering the shipping fee, however, once the shipping fee is higher than their perceived standard for shipping fees that’s when they begin to hesitate, but if the shipping fee is acceptable it barely affects their decision [28]. Price was placed last with the same grand mean as Product Features, which was 3.07 but with a grand standard deviation of 0.901. It is interpreted as the respondents agreeing that pricing and distribution affect online shopping cart abandonment. While there is a high level of influence, it suggests that although sudden increases in total prices and price comparisons across and within platforms can lead to abandonment [29], they are slightly less influential compared to the rest of the factors.

TABLE IVV. LEVEL OF INFLUENCE OF OUTSTANDING SHOP DISPLAYS AS A DETERMINANT OF ONLINE SHOPPING CART ABANDONMENT

Statement	M	SD	Remarks	Interpretation
1. I am likely to abandon my cart if the online shop's profile lacks professional presentation.	3.25	0.802	SA	VHLI
2. I abandon my cart if the shop’s ratings and reviews seem unreliable.	3.52	0.686	SA	VHLI
3. I am less likely to purchase if the shop does not have a verified badge.	3.03	0.879	A	HLI
4. I am less likely to purchase if the shop is not endorsed as an official store.	2.94	0.910	A	HLI
5. Little to no social media presence of the online shop makes me abandon my cart.	2.94	0.964	A	HLI
Grand Total	3.14	0.848	A	HLI

Note: For interpretation the following remarks apply to the mean interval: 4.00-3.25 for Strongly Agree (Very high level of influence), 3.24 – 2.50 for Agree (High level of influence), 2.49 – 1.75 for Disagree (Low level of influence), and 1.74 – 1.00 for Strongly Disagree (Very low level of influence)

The statement “I abandon my cart if the shop’s ratings and reviews seem unreliable,” got the highest mean score of 3.52. This indicates that the respondents are more likely to abandon their cart if the online shop’s profile rating is low. Research shows that 93% of consumers say online reviews will affect shopping choices, indicating that most consumers have the habit of reading online reviews regularly and rely on the comments for their purchasing decisions [30].

Meanwhile, the statements “I am less likely to purchase if the shop is not endorsed as an official store” and “Little to no social media presence of the online shop makes me abandon my cart,” got a 2.94 mean score. Trust and convenience both exert a positive and significant influence on purchasing decisions, meaning that customer trust isn’t the only factor; convenience also plays an essential role in completing a purchase [31].

Outstanding Shop Displays, as illustrated in Table 4, ranked fourth with a grand mean of 3.14 and a grand standard deviation of 0.848. This suggests that while this factor is less influential compared to others, it still affects online shopping cart abandonment. The importance of professional presentation, verified badges, and a credible shop rating for decision-making [32], which means that if online stores do not present their storefront with these, shoppers are more likely to not proceed with their purchase.

TABLE V. LEVEL OF INFLUENCE OF PRODUCT FEATURES AS A DETERMINANT OF ONLINE SHOPPING CART ABANDONMENT

Statement	M	SD	Remarks	Interpretation
1. I abandon my cart when the product’s description is lacking or unclear.	3.36	0.765	SA	VHLI
2. Repeated or identical product images reduce my confidence in product authenticity.	3.08	0.871	A	HLI
3. I often doubt the quality and originality of products being sold online.	3.10	0.824	A	HLI
4. I abandon my cart if the product does not have a certification or quality assurance	2.98	0.948	A	HLI
5. I am less likely to buy if there is no product demo video.	2.94	0.947	A	HLI
Grand Total	3.07	0.871	A	HLI

Note: For interpretation the following remarks apply to the mean interval: 4.00-3.25 for Strongly Agree (Very high level of influence), 3.24 – 2.50 for Agree (High level of influence), 2.49 – 1.75 for Disagree (Low level of influence), and 1.74 – 1.00 for Strongly Disagree (Very low level of influence)

The item with the highest mean is “I abandon my cart when the product’s description is lacking or unclear,” with a grand total mean of 3.36. Detailed and clear product descriptions significantly influence online purchase decisions by providing consumers with the necessary confidence to proceed with their transactions [33]. A lack of proper or complete information increases perceived risk and creates uncertainty, leading many customers to abandon their carts rather than risk purchasing an item that may not meet their needs or expectations. They further emphasized that comprehensive product descriptions—covering specifications, usage instructions, dimensions, and even customer reviews—serve as a bridge to establish trust between the consumer and the retailer. When product descriptions are vague, incomplete, or misleading, consumers are more likely to delay their purchase decisions or abandon their shopping journey altogether, especially in highly competitive online environments where alternatives are just a click away. Meanwhile, the item with the lowest mean is “I am less likely to buy if there is no product demo video,” with a grand total mean of 2.94. Although product videos can greatly enhance a consumer’s understanding and confidence regarding a product, their absence is not typically the main cause of shopping cart abandonment [34]. Thus, even in the absence of a product demo video, if the essential elements that reduce perceived purchase risk are in place, consumers are still likely to complete their purchases. While product videos serve as helpful persuasive tools, they are secondary compared to more fundamental aspects that directly influence purchasing behavior. Product Features ranking fifth with the grand mean of 3.07 and with a standard deviation of 0.871, indicates an overall high level of agreement that product features are critical determinants in online shopping cart abandonment behavior. Subsequently, while demo videos add value by demonstrating functionality, highlighting features, and reducing ambiguity, customers prioritize more critical factors such as transparent pricing, a seamless checkout process, clear return policies, and trust signals like customer reviews and brand reputation [34].

TABLE VI. LEVEL OF INFLUENCE OF SERVICE QUALITY AS A DETERMINANT OF ONLINE SHOPPING CART ABANDONMENT

Statement	M	SD	Remarks	Interpretation
1. Unreliable or unresponsive customer service makes me rethink my purchase.	3.13	0.819	A	HLI
2. I prefer online shops that actively update my order status.	3.28	0.871	SA	VHLI
3. Clear and simple FAQs make me more likely to complete my purchase.	3.36	0.797	SA	VHLI
4. A clear return and refund policy boosts my confidence in buying.	3.49	0.756	SA	VHLI
5. I reconsider buying from an online store if customer ratings indicate poor service quality.	3.44	0.828	SA	VHLI
Grand Total	3.34	0.814	SA	VHLI

Note: For interpretation the following remarks apply to the mean interval: 4.00-3.25 for Strongly Agree (Very high level of influence), 3.24 – 2.50 for Agree (High level of influence), 2.49 – 1.75 for Disagree (Low level of influence), and 1.74 – 1.00 for Strongly Disagree (Very low level of influence)

The item with the highest mean is “A clear return and refund policy boosts my confidence in buying,” with a grand total mean of 3.49. Having a transparent and consumer-friendly return and refund policy plays a crucial role in reducing perceived risk in online shopping [35]. When customers know that they can easily return or get a refund for a product, it increases their sense of security and trust toward the seller, making them more likely to complete their purchase. Their research emphasized that clear return policies not only minimize purchase hesitation but also enhance brand loyalty, as consumers associate flexible return options with a brand’s commitment to customer satisfaction. Moreover they added that online retailers with well-communicated return policies experience lower rates of cart abandonment because these policies serve as a psychological safety net, encouraging consumers to finalize their purchases without fear of loss.

Meanwhile, the item with the lowest mean is “Unreliable or unresponsive customer service makes me rethink my purchase,” with a grand total mean of 3.13. Although customer service responsiveness is important, it is often not the primary factor driving cart abandonment compared to more immediate issues such as pricing surprises, long delivery times, or complicated checkout processes [36]. Their study explained that while poor service can affect long-term brand perception and future shopping behavior, customers are more immediately sensitive to transaction-related barriers during the checkout phase. The researchers further noted that while service quality impacts overall satisfaction, online shoppers may still proceed with purchases if the product value, pricing, and delivery assurances meet their expectations, even if service interactions are lacking.

Service Quality ranking first, with the grand mean score is 3.34 with a standard deviation of 0.814, corresponding to a “Strongly Agree” remark and interpreted as “Very high level of influence”. These results conclude that reliability, responsiveness, assurance, and empathy from the seller play a crucial role in the likelihood of completing an online purchase [37].

TABLE VII. LEVEL OF INFLUENCE OF PROMOTION STRATEGIES AS A DETERMINANT OF ONLINE SHOPPING CART ABANDONMENT

Statement	M	SD	Remarks	Interpretation
1. I wait for sales to buy the items in my cart.	3.09	0.898	A	HLI
2. Free shipping makes me more likely to buy.	3.45	0.787	SA	VHLI
3. I often feel that more promotions or discounts would influence my purchasing decisions.	3.45	0.787	SA	VHLI
4. Cashback or rewards make me buy more.	3.21	0.907	A	HLI
5. I buy from specific shops with the best discounts or deals.	3.35	0.795	SA	VHLI
Grand Total	3.31	0.835	SA	VHLI

Note: For interpretation the following remarks apply to the mean interval: 4.00-3.25 for Strongly Agree (Very high level of influence), 3.24 – 2.50 for Agree (High level of influence), 2.49 – 1.75 for Disagree (Low level of influence), and 1.74 – 1.00 for Strongly Disagree (Very low level of influence)

Based on the findings, the highest mean score was observed for items related to “Free shipping makes me more likely to buy.” and “I often feel that more promotions or discounts would influence my purchasing decisions.”, with a grand total mean of 3.45. The demand for free shipping acts as a significant motivator by negating the perceived cost of delivery, thereby offering immediate economic advantages to consumers [38]. Moreover, when free shipping is combined with discounts, which together can strongly incentivize impulsive buying behavior among Shopee customers. Similarly, attractive promotions and discounts significantly boost how happy customers are and what they decide to buy [39]. These deals draw consumers in, encouraging them to purchase more and stick with a brand instead of choosing competitors. The widespread use of digital media has amplified the impact of these promotions, making them even more powerful in shaping purchasing choices

Conversely, the lowest mean score was associated with waiting for sales to purchase cart items (grand total mean of 3.09). This suggests that cart abandonment is more strongly linked to factors such as the desire for enjoyment or practicality, risk perceptions, and checkout process difficulties, rather than solely anticipating price reductions [40]. This indicates that shoppers often use the cart for reasons beyond immediate purchase, such as saving items for future consideration.

Furthermore, Promotion Strategies presented in Table 7 with a grand mean of 3.31 and a grand standard deviation of 0.835, ranked second in its influence on online shopping cart abandonment. Promotional strategies, particularly free shipping and discounts are critical determinants in influencing online purchasing decisions and mitigating cart abandonment. Moreover, the specific agreement of respondents collectively emphasizes that offering effective promotions is not merely beneficial but essential in driving purchase completion and preventing customers from abandoning their online shopping carts [41].

TABLE VIII.LEVEL OF INFLUENCE OF MOTIVATION AS A DETERMINANT OF ONLINE SHOPPING CART ABANDONMENT

Statement	M	SD	Remarks	Interpretation
1. Friends’ and family’s opinions influence my buying decisions.	2.84	1.021	A	HLI
2. I hesitate to buy products when I read about recent negative customer experiences.	3.48	0.722	SA	VHLI
3. No ratings or reviews make me abandon my cart.	3.36	0.896	SA	VHLI
4. I trust and consider buying a product more if it is endorsed by a famous influencer I follow.	2.82	0.958	A	HLI
5. When I really need a product, I am more motivated to complete my purchase quickly.	3.50	0.772	SA	VHLI
Grand Total	3.20	0.864	A	HLI

Note: For interpretation the following remarks apply to the mean interval: 4.00-3.25 for Strongly Agree (Very high level of influence), 3.24 – 2.50 for Agree (High level of influence), 2.49 – 1.75 for Disagree (Low level of influence), and 1.74 – 1.00 for Strongly Disagree (Very low level of influence)

The item “I hesitate to buy products when I read about recent negative customer experiences” significantly deter online purchases and contribute to cart abandonment, emerging as the factor with the highest mean (3.48). This proves that even moderately negative reviews can have a lasting detrimental effect on a business's online reputation and discourage potential buyers [42]. This suggests that consumers are highly sensitive to negative feedback and its presence can directly lead to them abandoning their shopping carts. Conversely, the item influence of endorsements from famous influencers or “I trust and consider buying a product more if it is endorsed by a famous influencer I follow” appears to be less impactful, registering the lowest mean (2.82). While influencers can play a role in shaping purchase intentions, only specific influencer characteristics, such as trustworthiness, creativity, and design quality, significantly affect consumer attitudes [43]. Attributes like attractiveness, expertise, and information quality, however, do not show a significant influence, suggesting a more nuanced and limited impact of influencer endorsements on immediate purchase decisions. Furthermore, "motivation," as presented in Table 8 with a grand mean of 3.20 and a grand standard deviation of 0.864, ranks third in its influence on online shopping cart abandonment. Moreover, personal need and motivation play a considerable role in purchasing decisions, and the presence of negative reviews or lack of social proof further discourages consumers from completing their online transactions [44]. The respondents demonstrate a reliance on both their own needs and external validation, with negative experiences proving particularly effective in causing cart abandonment.

TABLE IX.OVERALL RANKING OF THE DETERMINANTS OF ONLINE SHOPPING CART ABANDONMENT

Rank	Determinant	Grand Mean	Grand SD	Remarks	Interpretation
1	Service Quality	3.34	0.814	SA	VHLI
2	Promotion Strategies	3.31	0.835	SA	VHLI
3	Motivation	3.20	0.864	A	HLI
4	Outstanding Shop Displays	3.14	0.848	A	HLI
5	Product Features	3.07	0.871	A	HLI
6	Price	3.07	0.901	A	HLI

Service Quality ranked first with the highest mean score of 3.34 indicating a very high level of influence in affecting the respondent’s decision to abandon their online purchase. Following closely is Promotion Strategies, ranking second with a mean score of 3.31 and also interpreted as having a high level of influence suggesting that discounts, vouchers, and free shipping can encourage or discourage the check-out process. Motivation ranked third with a mean score of 3.20 and having a high level influence which reflects the respondent’s personal need or impulse motivation playing a role in finalizing an online purchase. Meanwhile though it still has a high level of influence, Outstanding Shop Displays ranked fourth with a mean of 3.14 indicating that shop’s verified badges and the likes does affect the respondents’ perception whether to continue their purchase or not but it isn’t as important as the other factors. Despite both Product Features and price sharing the lowest mean score of 3.07, Product Features ranked fifth for its lower standard deviation and price ranking last with 0.901 standard deviation indicating its consistency in the answers. In relation to Outstanding Shop Displays, these determinants still were interpreted with a high level of influence meaning that they all remain important considerations for the respondents. Overall, the findings imply that while all the factors influence online shopping car abandonment, Service Quality emerged as the most influential factor among the respondents of the study.

TABLE X.RELATIONSHIP BETWEEN EMPLOYMENT TYPES AND THE INFLUENCE OF THE DETERMINANTS OF ONLINE SHOPPING CART ABANDONMENT

Determinant	N of Valid Cases	Pearson Chi-Square	p-value	Decision
Price	120	1.039	0.59	Accept Ho
Outstanding Shop Displays	120	0.457	0.796	Accept Ho
Product Features	120	2.424	0.298	Accept Ho
Service Quality	120	1.875	0.392	Accept Ho
Promotion Strategies	120	1.527	0.466	Accept Ho
Motivation	120	0.218	0.897	Accept Ho

If the p-value of the relationship between the employment types and the influence of the determinants of online shopping cart abandonment is a high value or >0.05, it means that there is no statistical relationship. On the other hand, if the p-value is low or ≤0.05 there is a statistically significant relationship between the employment types and the influence of the determinants of online shopping cart abandonment.

Table 10 depicts the relationship between the employment types and the influence of the determinants of online shopping cart abandonment. It presents the summary of the chi-square test results for all six determinants of online shopping cart abandonment. In all factors, the Chi-Square Test of Independence p-values are all greater than 0.05, indicating that there are no statistically significant relationships between the employment types and the determinants, namely price, Outstanding Shop Displays, Product Features, Service Quality, Promotion Strategies, and motivation. These results suggest that regardless of whether the respondents are full-time, part-time, or self-employed, it does not have a meaningful impact on how they perceive these factors related to online shopping cart abandonment. With this, the null hypothesis is accepted. In line with this, a lack of statistical significance between working status and online shopping cart abandonment factors shows that employment type plays no major role in online shopping cart abandonment. People regardless of full-time or part-time work or self-employed status maintain the same reactions to pricing elements and product display alongside service quality and promotional approaches during online shopping decisions. The data demonstrates that online shopping influences experience quality and perceived value and psychological attributes rather than personal characteristics—like employment types. The mindset of the consumers determines that the online shopping cart abandonment behavior is much more powerful than their personal background and/or occupational profile [36]. The research reveals that no matter what professional background, the consumers’ purchasing behaviors are influenced by more subconscious factors like mood, situations, or the internal dilemma. In contrast, the findings show that there can be exceptions, depending on the type of customer. Employment status demonstrates substantial influence on online shopping habits toward demographic segments including urban women [38]. Women employed in Rawalpindi Pakistan conducted online purchases differently from those who were unemployed based on frequency patterns and selection choices and promotional responses. Working women executed their purchases through completion rates but jobless female consumers often paused shopping carts because of money shortages or doubts about necessary items. The working status of individuals affects their ability to obtain disposable income as well as their free time and shopping preferences and these aspects influence their online purchasing habits. These opposing research results show psychological along with platform variables matter most yet employment type effects could possibly appear when certain socioeconomic conditions or cultural aspects exist. Marketing strategies alongside research approaches must combine universal behavior studies with localized characteristics because of this discovery.

V. CONCLUSION AND RECOMMENDATION

The majority of respondents were aged 29-32 and were evenly distributed among full-time, part-time, and self-employed workers. Most respondents preferred TikTok Shop as their online shopping platform and engaged in occasional shopping, approximately three to five times per month.

Based on the survey made, the researchers identified service quality as the most influential factor affecting online shopping cart abandonment, emphasizing the importance of responsive customer support and efficient problem resolution in completing purchases. This result has prompted the researchers to develop a model for online businesses which may serve as their guide in ensuring checkout completion anchored in service quality – Digital Service Quality–Cart Outcome Model (DSQ-COM).

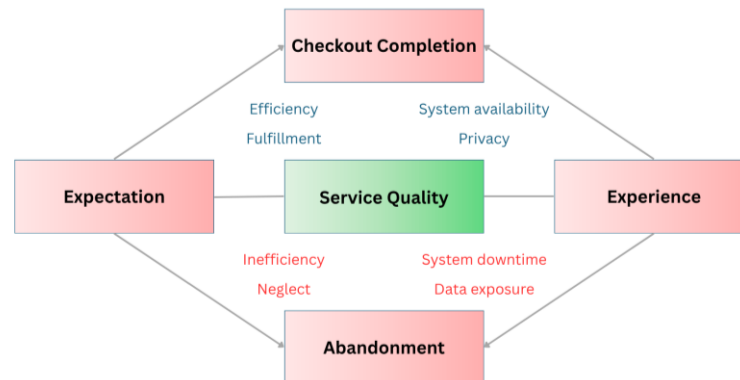


Fig. 1 Digital Service Quality–Cart Outcome Model (DSQ-COM)

DSQ-COM is based on E-Service Quality (E-SERVQUAL) which puts emphasis on its key determinants – efficiency, fulfillment, system availability and privacy. Combining the user’s expectation and experience on these factors may help online businesses ensure checkout completion. Conversely, inefficiency, neglect, system downtime and data exposure may lead to abandonment.

Promotion strategies ranked second in influence – with discounts, deals, and special offers motivating shoppers to complete their transactions. Motivation – urgency and social influences from family and friends, was the third most significant factor, highlighting the emotional and social drivers behind online purchase decisions. Outstanding shop displays and product features were found to play supporting rather than primary roles in cart abandonment. Pricing had the lowest level of influence, suggesting that respondents were more tolerant of pricing issues when other factors were favorable. Employment type showed no significant relationship with cart abandonment behavior, indicating other factors exert stronger influence.

With this, the researchers recommend that online business owners capitalize on TikTok Shop’s popularity by creating accounts and using the platform’s live streaming features to conduct regular selling events. Utilizing platform-specific promotions such as exclusive vouchers, flash sales, and involving celebrities or influencers can help attract a wider customer base and increase sales.

Maintaining competitive pricing and ensuring clear communication of discounts while incorporating promotion strategies enhance perceived value. With this result, the researchers also recommend that platform developers should improve the visibility of verified shop badges on TikTok Shop, Lazada, and Shopee. In addition, these badges should be awarded carefully to sellers with established accounts, and an additional trusted seller badge based on customer feedback and policy compliance could help consumers in identifying reliable shops. To enhance product presentation, stricter policies should require multiple high-quality product images to reduce confusion and hesitation during checkout.

Given the importance of service quality, the researchers suggest businesses hire dedicated customer service staff to promptly address various customer inquiries. Marketing efforts should emphasize strong customer support coupled with attractive promotions and leverage user-generated content, customer reviews, and influencer partnerships to further motivate shoppers.

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REFERENCES

- [1] Chen, J. After-sales Support. Investopedia. URL: (<https://www.investopedia.com/terms/a/aftersales-support.asp>), date retrieved: August, 2024
- [2] Lokal - E-commerce Is Booming in the Philippines. Ww.lkl.ai. URL: (<https://www.lkl.ai/why-is-e-commerce-booming-in-the-philippines>), date retrieved: April, 2025
- [3] International Trade Administration. Philippines - eCommerce. International Trade Administration. URL: (<https://www.trade.gov/countrycommercial-guides/philippines-ecommerce>), date retrieved: August, 2024
- [4] Kapoor, A. P., & Vij, M. (2021). Following You Wherever You go: Mobile Shopping “cart-checkout” Abandonment. *Journal of Retailing and Consumer Services*, 61(102553), 102553.
- [5] Jason. Shopping Cart Abandonment Statistics (2024) - SellersCommerce. SellersCommerce. URL: (<https://www.sellerscommerce.com/blog/shopping-cart-abandonmentstatistics>), date retrieved: August 13, 2024
- [6] McCoy, A. Millennials’ Future Employment Expectations and Challenges Millennials’ Future Employment Expectations and Challenges. URL: (<https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=12277&context=dissertations>), date retrieved: August, 2024
- [7] Indeed Editorial Team. 12 Advantages of Full-Time Employment. Indeed Career Guide. URL: (<https://www.indeed.com/career-advice/finding-a-job/advantages-of-employment>), date retrieved: September, 2024
- [8] Russell, Z. A look into office workers’ spending habits. Chain Store Age; Chain Store Age. URL: (<https://chainstoreage.com/look-officeworkers-spending-habits>), date retrieved: September, 2024
- [9] Anupriya, C., & Ganesha Moorthy, K. (2024). Spending Pattern Of Part Time Job Goers Among College Students In Sivakasi. *International Journal of Creative Research Thoughts (IJCRT)*, 12(8), 2320–2882.
- [10] Gorilla Accounting. Self-Employed Budget Advice: How to Manage your Budget. Gorilla Accountants. URL: (<https://gorillaaccounting.com/blog/how-to-manage-your-budget-whenyou-re-self-employed/>), date retrieved: September, 2024
- [11] Achmad Syamsudin, Sabirin Sabirin, & Elliyana, E. (2025). Generational Differences in Online Shopping: Millennials VS. Generation Z. *Journal of Production Operations Management and Economics*, 5(51), 51–62.
- [12] Burdeos-Seclon, C. M., & Conales, M. (2024). Assessing Consumer Behavior and Attitudes Towards E- Commerce Platforms and Social Media Marketplaces: a Comparative Study of Lazada, Shopee, and TikTok Shop. *Asian Journal of Entrepreneurship*, 5(2), 38–55.
- [13] Brodowicz, M. Descriptive Correlational Design in Research. Aithor.com. URL: (<https://aithor.com/essay-examples/descriptive-correlational-design-in-research>), date retrieved: October, 2024
- [14] Bhandari, P. Correlational Research | Definition, Methods and Examples. Scribbr. URL: (<https://www.scribbr.com/methodology/correlational-research/>), date retrieved: October, 2024

- [15] Balita, C. Weekly online shopping activities of internet users philippines Q3 2023. Statista. URL: (<https://www.statista.com/statistics/1125430/philippines-e-commerce-activities-internet-users/>), date retrieved: October, 2024
- [16] Schiesel, B. How Many Research Participants Do I Need For Sound Study Results? Blink. URL: (<https://blinkux.com/ideas/how-many-research-participants-do-i-need>), date retrieved: April, 2025
- [17] Budi, R., & Moran, K. How many participants for quantitative usability studies: A summary of sample-size recommendations. Nielsen Norman Group. URL: (<https://www.nngroup.com/articles/summary-quant-sample-sizes/>), date retrieved: April, 2025
- [18] Dasmariñas City (Philippines): Barangays - Population Statistics, Charts and Map. (2020, May 1). Wwww.citypopulation.de. URL: (<https://www.citypopulation.de/en/philippines/dasmarinas/>), date retrieved: April, 2025
- [19] PhilAtlas. Dasmariñas City, Cavite Profile – PhilAtlas. Wwww.philatlas.com. URL: (<https://www.philatlas.com/luzon/r04a/cavite/dasmarinas.html>), date retrieved: April, 2025
- [20] City of Dasmariñas | Cavite. Cavite.gov.ph. URL: (<https://cavite.gov.ph/home/cities-and-municipalities/city-of-dasmarinas/>), date retrieved: October, 2024
- [21] The Philippine Star. Dasmariñas, Cavite: A growing hub for business and residential living. Magzter.com; Magzter. URL: (<https://www.magzter.com/stories/newspaper/The-Philippine-Star/DASMARIAS-CAVITE-A-GROWING-HUB-FOR-BUSINESS-AND-RESIDENTIAL-LIVING>), date retrieved: October, 2024
- [22] Bhandari, P., & Nikolopoulou, K. What is a likert scale? | guide & examples. Scribbr. URL: (<https://www.scribbr.com/methodology/likert-scale/>), date retrieved: October, 2024
- [23] Nagel, J. Standard Deviation: Everything You Need to Know for Surveys. Limesurvey.org. URL: (<https://www.limesurvey.org/blog/knowledge/standard-deviation-everything-you-need-to-know-for-surveys>), date retrieved: October, 2024
- [24] JMP Statistical Discovery. Chi-Square Test of Independence. Jmp.com. URL: (<https://www.jmp.com/en/statistics-knowledge-portal/chi-square-test/chi-square-test-of-independence>), date retrieved: December, 2024
- [25] Cabansag, R. A., Caballero, M. N., Librado, C. R., Rose, A., & Perrater. (2025). A Comparative Analysis on Impulse Buying among TikTok Shop, Lazada, and Shopee. 4(1), 44–61.
- [26] Rodrigues, R. I., Lopes, P., & Varela, M. (2021). Factors Affecting Impulse Buying Behavior of Consumers. *Frontiers in Psychology*, 12(1). Frontiersin.
- [27] Gelder. Shopping cart abandonment rate by industry. Statista. URL: (<https://www.statista.com/statistics/457078/category-cart-abandonment-rate-worldwide/>), date retrieved: April, 2025
- [28] Kindi, A., Hernandez, Gabrielle, K., Fernandez, R., & Manapul, K. (n.d.). *Journal of Business and Management Studies* Influence of Shipping Fees in Customer Purchase Decisions for Online Retailers Residing within the Philippines.
- [29] Wang, S., Ye, Y., Ning, B., Cheah, J.-H., & Lim, X.-J. (2022). Why Do Some Consumers Still Prefer In-Store Shopping? An Exploration of Online Shopping Cart Abandonment Behavior. *Frontiers in Psychology*, 12(829696).
- [30] Chen, T., Samaranayake, P., Cen, X., Qi, M., & Lan, Y.-C. (2022). The Impact of Online Reviews on Consumers' Purchasing Decisions: Evidence from an Eye-Tracking Study. *Frontiers in Psychology*, 13(13), 1–13. Frontiersin.
- [31] Ningsih, N., Yanti, D., & Ony, J. (2024, June 3). The Influence of Trust and Convenience on Purchasing Decisions in Shopee E-commerce [Review of The Influence of Trust and Convenience on Purchasing Decisions in Shopee E-commerce]. *Jurnal Pemasaran Kompetitif; Jurnal Pemasaran Kompetitif*.
- [32] The Strikingly Blog. 13 Product Display Ideas for Your Online Retail Store. 13 Product Display Ideas for Your Online Retail Store. URL: (<https://www.strikingly.com/blog/posts/13-product-display-ideas-online-retail-store>), date retrieved: October 7, 2024
- [33] Mayo, N. J. A., Layante, N. J. P., De Lara, N. R. P., Macasojot, N. R. C., See, N. a. L. C., & Melo, N. M. C. F. (2022). Perceived risk and online purchase intention of selected public school teachers: A study in Calapan City, Oriental Mindoro, Philippines. *World Journal of Advanced Research and Reviews*, 16(2), 908–925.
- [34] Jiang, D., Zhang, G., & Wang, L. (2021). Empty the Shopping Cart? The Effect of Shopping Cart Item Sorting on Online Shopping Cart Abandonment Behavior. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(6), 1973–1996.
- [35] Hipólito, F., Dias, Á., & Pereira, L. (2025). Influence of Consumer Trust, Return Policy, and Risk Perception on Satisfaction with the Online Shopping Experience. *Systems*, 13(3), 158.
- [36] Rubin, D., Martins, C., Ilyuk, V., & Hildebrand, D. (2020). Online shopping cart abandonment: a consumer mindset perspective. *Journal of Consumer Marketing*, ahead-of-print(ahead-of-print).
- [37] Zygiaris, S., Hameed, Z., Alsubaie, M. A., & Rehman, S. U. (2022). Service Quality and Customer Satisfaction in the Post Pandemic World: A Study of Saudi Auto Care Industry. *Frontiers in Psychology*, 13(1), 1–9. Frontiersin.
- [38] Imran, M., Asif, M., & Sajjad, W. (2022). Impact of Employment Status on Online Shopping Preferences: A Case Study of Women in Rawalpindi. *Journal of Business Insight and Innovation*, 1(1), 19–28.