



A Study on Customer Dissonance on Laptop with Focus on Consumers in Ernakulam City

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ABSTRACT

Modern technology has impacted different sections of life. Among the electronic products, laptops have become an indispensable part of the business world. Customers always have high expectations from the products they purchase. The results of difference in the results obtained after purchase compared to expectations generates the theme of this research paper which is known as Customer dissonance. This research investigates the disruptive effects of customer dissonance in the laptop market, stemming from confusing specifications, hidden costs, and planned obsolescence. The research used a descriptive design with a judgmental sampling technique to get 220 responses from the region of Ernakulam city, Kerala. The analysis included proportionate analysis and exploratory factor analysis (EFA) using IBM SPSS v23. The study emphasizes simplifying specifications, ensuring cost transparency, and extending product lifespans as strategies to mitigate dissonance.

Keywords: *Customer Dissonance, Laptop Market, Consumer Behaviour, Exploratory Factor Analysis, Technical Features.*

1. Introduction

One of the most important factors influencing purchase decisions, especially in the technology industry, is the issue of customer dissonance. This term refers to the psychological discomfort that consumers experience when they have conflicting thoughts or feelings about a purchase after it has already been made. This can significantly impact the overall satisfaction and loyalty of customers, making it essential for brands that sell laptops to see how customer dissonance can affect their sales and customer relationships. Laptops One of the most commonly purchased technology products, laptops have become an essential part of daily life for most professionals and consumers. As the demand for high-performance computers continues to grow, understanding how customer dissonance affects consumers' attitudes and behaviours when purchasing laptops is crucial for companies that aim to retain and attract customers.

The purchase of a laptop is a significant decision for many consumers, as it involves a significant financial investment and is a product that they will rely on for several years. However, this decision can be complicated by a variety of factors, including the vast array of options available, the rapidly changing technology, and the importance of after-sales service.(Idrees et al., 2020). One of the key issues that can arise is customer dissonance, where consumers experience conflicting thoughts and feelings about their purchase decision. This can be particularly prevalent in the laptop market, where consumers are faced with a wide range of options, each with their own unique features and price points (Abdillah, 2022) .Some consumers may be primarily focused on the price, while others may prioritize factors such as quality, technology, or brand reputation.(Idrees et al., 2020)

One major factor that influences customer dissonance when buying laptops is the choice overload. Customers are presented with a vast array of laptops with varying specifications, prices, and features, which can overwhelm them and cause them to doubt their decisions. Some consumers may be more price-sensitive, while others may be willing to pay a premium for a brand that they perceive as high-quality or technologically advanced.(Mishra & Aithal, 2021). This can result in hesitancy to make a purchase or dissatisfaction after the purchase. The importance of customer dissonance in laptop purchases becomes evident when analyzing return rates and customer complaints.

1.2 Objective Of The Study

The research paper has several key objectives aimed at understanding and mitigating customer dissonance in the laptop market:

1. An investigation of the demographics of the target population and a general survey on the usage of laptops.
2. Factors Influencing the purchase of Laptops among consumers
3. Factors Influencing Consumer Dissonance With Laptop among Consumers.

2. Literature Review

2.1 Laptop Purchase Behaviour Of Customers

Existing studies on consumer purchasing behaviour for laptops have identified several key determinants influencing their decision-making process (Adithya, 2013; and Dhal, 2015; Chakkambath et al, 2022).. Factors such as product design, brand reputation, and pricing have been found to significantly impact customer satisfaction levels. Additionally, attributes like pre-installed software, storage capacity, and processor performance have also been linked to overall consumer contentment with their laptop purchases. (Chakkambath et al, 2022). The core technical features of laptops, such as performance, memory, and storage capacity, are crucial considerations for consumers when purchasing laptops. These features directly impact the laptop's ability to meet the user's needs, making them a critical factor in the decision-making process (Nasir et al, 2006; (Rai & Budhathoki, 2023)

2.2 Customer Dissonance and Purchase

Cognitive dissonance is a well-studied phenomenon in the marketing literature that describes the psychological discomfort experienced by consumers after making a purchase decision. Research has shown that cognitive dissonance can have significant impacts on consumer behavior and marketing outcomes. Several studies have explored the causes of cognitive dissonance in the marketing context. Individual factors such as personality traits socio-environmental factors like social norms and peer influence and organizational factors like product quality and marketing communications have all been identified as potential triggers of cognitive dissonance (Bolia, 2016; Sweeney et al, 2000, Telci, Maden & Kantur, 2011). For example, a consumer may experience dissonance if their purchase decision conflicts with their personal values or if they receive negative feedback from friends about their purchase (Bolia, 2016; Sweeney et al, 2000).

The effects of cognitive dissonance on individuals and organizations have also been well-documented. At the individual level, cognitive dissonance can lead to buyer's remorse, product returns, and negative word-of-mouth (Bolia, 2016; Sweeney et al, 2000; Egan, Santos & Bloom, 2007). Consumers may also become less loyal to the brand and less likely to recommend it to others (Sweeney et al, 2000; Egan, Santos & Bloom, 2007) [. From an organizational perspective, cognitive dissonance can result in substantial financial losses through lost sales, increased marketing costs, and brand erosion (Bolia, 2016; Maden & Kantur, 2011) . To mitigate the negative impacts of cognitive dissonance, marketers have employed various strategies. These include providing post-purchase reassurance, offering extended warranties, and engaging in effective communication to address consumer concerns (Bolia, 2016; Maden & Kantur, 2011 ; Egan, Santos & Bloom, 2007). For example, a study found that allowing consumers to share their purchase experiences online can help reduce dissonance by providing an outlet for their feelings (Egan, Santos & Bloom, 2007).

3. RESEARCH METHODOLOGY

Research Design: a descriptive research design was used to investigate the customer dissonance among laptop users in Ernakulam city. A structured questionnaire was used in data collection in which the respondents were selected using judgemental sampling.

Population of the Study: The target group is from different regions across Kerala. The city of Ernakulam is one of the booming IT hubs in the country with a sizeable population of youth working or pursuing IT and related fields. 220 respondents gave their feedback from the 400 questionnaires circulated.

Data Collection: The information was sourced from primary and secondary references. The questionnaire was self-administered which included a collection of demographic characteristics of the population. The latter portion of the questionnaire focused on factors influencing laptop purchases and customer dissonance among the target population in Kerala.

Statistical Tools and Techniques Used for Analysis: The statistical techniques and tools employed in this study's analysis consist of Google Forms. The software used was SPSS (Statistical Package for The Social Sciences). Proportionate analysis using Microsoft Excel. EFA with principal component analysis and varimax rotation was executed using IBM SPSS v23.

4. Results And Discussion

4.1 Demographic Characteristic & General Survey On Laptop Usage Among Consumers

The survey included a structured questionnaire to collect the data from respondents residing in Ernakulam city, Kerala. The City is the IT hub of the State of Kerala with major companies located in Infopark. This has attracted many laptop brands to focus on the city with its rising young population drifting to techy jobs.

Table 1: Demographic characteristic

Age Group	n	%
Under 18years	20	9.3
18-24	69	31.5

25-34	65	29.6
35-44	33	14.8
45 or Older	33	14.8
Gender		
Male	81	37
Female	86	38.9
Prefer not to say	53	24.1
Education		
Graduation	83	37.5
Postgraduation	55	25
Other	83	37.5
Occupation		
Student	77	35.2
Professional	90	40.7
Retired	20	9.3
Homemaker	33	14.8

Note: Sample size n=220

The demographic information from this study (N = 220) suggests a focus on young adults (18-34 years old) in Ernakulam, Kerala, who are considering laptop purchases. The majority of respondents fell within this age range (71.1%, n = 154), with the largest occupational groups being students (35.2%, n = 77) and professionals (40.7%, n = 90). Gender distribution was fairly balanced (males: 37.0%, n = 81; females: 38.9%, n = 86), with a smaller segment identifying as preferring not to say (24.1%, n = 53). Educational backgrounds were diverse, with nearly equal representation for graduation degrees (37.5%, n = 83) and other qualifications (possibly vocational training or diplomas, 37.5%, n = 83). Postgraduates made up a quarter of the sample (25.0%, n = 55).

Table 2: How often do you use a laptop?

Frequency of usage	n	%
Daily	49	22%
Several times in a week	81	37%
Occasionally	53	24%
Rarely	33	15%
Never	4	2%

Note: Sample size , n= 220

In a study examining laptop purchase dissonance (N = 220), participants reported varying frequencies of laptop use. The most frequent usage category was "Several times in a week" (37%, n = 81), followed by "Daily" use (22%, n = 49). "Occasionally" using a laptop was reported by 24% (n = 53) of participants, while "Rarely" (15%, n = 33) and "Never" (2%, n = 4) usage constituted smaller segments. These findings suggest that a significant portion of the sample (59%, n = 130) relies on their laptops at least several times a week, highlighting the potential importance of these devices in their daily lives.

4.2 Exploratory Factor Analysis (EFA): Features That Influence The Purchase Of A Laptop.

Table 3: KMO & Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.791
	Approx. Chi-Square	327.469
Bartlett's Test of Sphericity	df	45
	Sig	<.05

The table 3, shows that the values of Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity are within the acceptable limits as sighted in the literature (Field,2015; Polit & Beck, 2016).

Table 4: Rotated Component Matrix, Eigen Values, and Total Variance Percentage for Components obtained by Principal Component Analysis with Varimax Rotation Method

Statement	Component	
	1	2
Storage	0.885	
CPU	0.772	
Battery Life	0.683	0.455
Screen size	0.641	
Display quality	0.62	0.512
Build quality and durability	0.606	0.53
Biometric security		0.904
Audio quality		0.74
Warranty and support		0.709
Connectivity ports	0.453	0.553
Eigenvalues	5.75	1.2
Percentage of total variance	57.505	9.174

Note: Factor loadings <.044 have been omitted from the table.

The table 4 from the factor analysis using Principal Component Analysis with Varimax Rotation provides insights into the key components that influence consumer purchase of laptops. EFA results of varimax rotation of the solution are shown in Table 1. When loadings less than 0.44 were omitted, the analysis yielded a two-factor solution with a simple structure. The total variance percentages show that these four components together explain 66.67 % of the variance in consumer preference for laptop purchases.

The exploratory factor analysis revealed two distinct components influencing laptop purchase decisions. Component 1, named "Functional Features," included high loadings on hardware performance factors such as storage, CPU, and battery life, as well as user experience factors like screen size, display quality, build quality and durability, and biometric security. Component 2, labelled "User-Centric Benefits," comprised long-lasting performance factors, also with high loadings on storage, CPU, and battery life, and immersive and secure experience factors, including screen size, display quality, build quality and durability, and biometric security (see Table 1). These components underscore the importance of both functional performance and user-centric features in consumer decision-making processes. Similar literature has sighted core technical features to be relevant in the purchase of laptops (Tampi et al., 2016; Idrees et al., 2020; Chakkambath et al,2022).

4.3 Factor Analysis: Factors Influencing Consumer Dissonance With Laptop

Table 5: KMO & Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.725
	Approx. Chi-Square	188.929
Bartlett's Test of Sphericity	df	45
	Sig	0

The table 5 shows that the values of Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity are within the acceptable limits as sighted in the literature (Field,2015; Polit & Beck, 2016).

Table 6: Rotated Component Matrix , Eigen Values and Total Variance Percentage for Components obtained by Principal Component Analysis with Varimax Rotation Method

Statement	Component			
	1	2	3	4
Online reviews and ratings influence my decision-making process when considering a laptop purchase.	0.81			
My laptop consistently performs well under various workloads.	0.77			
Considering my experience with my current laptop, I would consider purchasing from the same brand again.	0.65	0.56		
I believe my laptop offers good value for the price I paid.	0.63			
The battery life of my laptop meets my expectations.		0.87		
I find the user interface of my laptop's operating system intuitive and easy to use.		0.69		
I have experienced software compatibility issues with my laptop.			0.85	
The customer support provided for my laptop has been responsive and effective.			0.79	
I have encountered frequent hardware issues with my laptop.				0.8
I have considered switching to a different laptop brand due to dissatisfaction with my current laptop.		0.51		0.67
Eigenvalues	3.94	1.29	1.2	1.04
Percentage of total variance	39.4	12.9	12	10.4

Note: Factor loadings <.044 have been omitted from the table.

The table 6, from the factor analysis using Principal Component Analysis with Varimax Rotation provides insights into the key components that influence consumer dissonance regarding laptop purchases. EFA results of varimax rotation of the solution are shown in Table 1. When loadings less than 0.44 were omitted, the analysis yielded an four-factor solution with a simple structure. The total variance percentages show that these four components together explain 74.7% of the variance in consumer perceptions and behaviours regarding laptop purchases. The exploratory factor analysis identified four key components influencing consumer perceptions and behaviours regarding laptop purchases. Factor 1, labelled "Performance and Brand Loyalty," included variables such as the influence of online reviews and ratings on decision-making, consistent performance under various workloads, consideration of repurchasing from the same brand, and perceived value for the price paid. Literature shows that higher brand loyalty decreases cognitive dissonance, thereby influencing consumer complaint behaviour (Yakin et al., 2023). It is noteworthy that brand loyalty alone does not exert a significant direct effect on complaint behaviour (Yakin et al., 2023). Factor 2, "Battery Life and User Interface," encompassed battery life meeting expectations and an intuitive, easy-to-use interface. Previous literature on post-purchase dissonance among laptop consumers in India found that "battery life and connectivity" was one of the key factors that determined buyer satisfaction(Chakkambath et al,2022).

Factor 3, "Software Issues," was characterized by problems with software compatibility. Finally, Factor 4, "Hardware Issues and Dissatisfaction," included frequent hardware issues and considerations of switching to a different brand. These factors highlight the multifaceted nature of consumer satisfaction and dissonance in the laptop market, underscoring the importance of both functional performance and user experience. Previous studies identified seven key factors linked to satisfaction and three key factors linked to dissonance in laptop consumers (Chakkambath et al, 2022). Gender, occupation, and age did not significantly impact satisfaction or dissonance, while offline buyers valued "pre-loaded software and durability" more than online buyers. Rural respondents were most influenced by "pricing and post-purchase experience" and "pre-loaded software and durability," with middle-income groups experiencing emotional dissonance (Chakkambath et al, 2022).

5. Conclusion

The symphony of innovation in the laptop market can be disrupted by customer dissonance caused by confusing specifications, hidden costs, and planned obsolescence. This research explores these factors, highlighting their psychological and economic impact on consumer behavior. The demographics showed that the youth were the major consumers of laptops with higher usage multiple times over a week by both genders. The findings help consumers make informed decisions and guide manufacturers to align marketing with real-world experiences by simplifying specifications, promoting cost transparency, and extending product lifespans. The EFA results generated two factors- "functional features" and "User-centric benefits" related having to influence customer preference during the purchase of laptops while the EFA for customer dissonance generated four factors- "performance and brand loyalty", "Battery Life and User Interface", "Software Issues," and "Hardware Issues and Dissatisfaction". Future research should explore online reviews' role and marketing strategies' psychological impact on dissonance. By understanding and addressing these issues, the laptop market can better deliver on its promise, enhancing satisfaction for both consumers and manufacturers.

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