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Factors Influencing the Laptop Buying Behavior of Students in Vietnam

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Abstract

This study examines the various factors related to sales and laptop features that directly impact the buying behavior of students in Hanoi. Specifically, it demonstrates how specifications, enhanced features, price and payment conditions, design, and brand directly influence students' laptop buying decisions. This was done through the design and distribution of questionnaires. The study obtained 214 responses that were encrypted and cleaned using SPSS software, followed by reliability testing, exploratory factor analysis, correlation, and multivariate regression analysis.

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1. Introduction

In the era of the fourth industrial revolution, marked by high economic growth rates, the living standards of people are consistently improving. Mentioning this era, it is impossible not to note the significant progress made in the field of science and technology. Technology is increasingly playing an essential role in everyone's life, penetrating almost all aspects of social life, from education, manufacturing, business, commerce, to entertainment. As people's lives improve, needs beyond the basic ones emerge, such as travel, entertainment, shopping. Modern equipment and machinery, including laptops, are gaining more attention alongside daily consumer products.

Like other devices such as smartphones or tablets, laptops can connect users to the internet for data research, information gathering, or staying updated on global events. Laptops play a crucial role in work, facilitating users in document editing, calculations, and safe document storage. They also aid in conducting online meetings or exchanging

information efficiently. For students, laptops simplify finding learning materials and storing lessons. They also support the use of specialized technical graphic learning software, which tablets or phones cannot handle.

Recognizing the potential of laptops to replace pen and paper, they offer modern tools that make work and learning more convenient and straightforward. It can be said that owning a laptop can significantly aid in work, study, and meeting entertainment needs. However, students should critically determine whether their needs justify owning a laptop. Given the diverse price range of laptops in the market, it is essential to understand their functions and performance before deciding to purchase one. It is not advisable to buy expensive laptops if one cannot utilize all their functions and configurations. Conversely, buying cheap, low-profile models for high-performance tasks is also not recommended. Therefore, further research is needed to understand the factors influencing students' laptop buying behavior, thus contributing to theory and practice. This study attempts to answer the following questions:

First, what are the factors that influence students' laptop buying behavior?

Second, how do these factors influence students' laptop buying behavior?

2. Theoretical Framework and Research Hypothesis

2.1. Theory of Reasoned Action (TRA) Model

The Theory of Reasoned Action (TRA) was proposed by Ajzen and Fishbein in the late 1960s and extensively revised in the 1970s. According to the TRA, the intention to perform a specific behavior, known as behavior intention, is the most critical determinant of human behavior. Behavioral intention is influenced by two factors: a person's attitude about the behavior and a subjective norm related to the behavior.

Limitations of the model: The most significant limitation of this theory comes from the assumption that behavior is entirely under the control of will. In other words, this theory is only applicable to conscious, pre-meditated behavior. It does not adequately explain irrational or habitual actions, or behaviors that are not consciously considered. ^[1]

2.2. Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) is an improved development of rational action theory. According to Ajzen, TPB intentional behaviorism emerges due to the limits of behavior over which people have little control, despite having high subjective attitudes and standards. In some cases, individuals do not perform the behavior due to the effects of external conditions on behavioral intentions. This theory has been supplemented by Ajzen since 1991 with the proposal of Perceived Behavioral Control. The perception of behavioral control reflects how easy or difficult it is to perform the behavior alone and whether the implementation of the behavior is controlled or restricted. According to the TPB model, motivation or intention is the underlying motivating factor of consumer behavior. This motivation or intention is guided by three basic components: attitudes, subjective norms, and cognitive behavioral control.

However, the TPB model has some limitations in predicting behavior. First, it does not consider other determinants of intention beyond attitudes, subjective norms, and perceived behavioral control. Second, there can be a significant time gap between assessments of behavioral intentions and actual behavior evaluation [2]. Over time, an individual's intentions may change. Third, TPB is a predictive model that may not always accurately predict an individual's actions based on certain criteria.

2.3. Technical Specification

Laptops are essential for users in various tasks such as working, studying, and playing games. Depending on each person's specific needs, laptops will have certain specifications. For example, the technical industry group requires sophistication and high accuracy, while the office industry group demands basic applications without putting much emphasis on the processor. To ensure smooth performance, it is important to match the laptop's specifications with the user's needs. When purchasing a laptop, attention should be given to the CPU, RAM, HDD, and SSD [3].

The specification reflects the immediate feelings of consumers.

- [H1] *The specification is positively related to students' laptop buying behavior.*

2.4. Enhanced Features

Digital technology is continuously evolving to meet specific work demands, and laptops are also becoming more versatile with features like touch screens and 360-degree rotation. For example, individuals specializing in graphics, drawing, and designing will need a laptop that integrates tablet-like functions to facilitate their work [3].

- [H2] *Enhanced features are directly related to students' laptop buying behavior.*

2.5. Design

Understanding the psychology of today's youth, it is clear that they are interested in sleek, lightweight, and elegantly designed laptops with neat corners and appealing colors. Besides product quality, modern laptops constantly change designs to align with the aesthetics of the times [4][3].

- [H3] *Design is directly related to the buying behavior of students.*

2.6. After-sales Service

The factor "After-sales service" includes indicators of warranty and technical support after purchasing a laptop, such as the warranty period, warranty cost, quality after the warranty, and customer service after the purchase. Ensuring individual benefits and prolonging laptop usage while minimizing costs, the research subjects pay close attention to this factor [5][3].

- [H4] *After-sales service has a favorable relationship with the buying behavior of students at the Faculty of Business*

Management of Hanoi University of Industry.

2.7. Brands

The "Brand" factor includes indicators of brand image, positioning, and brand value of both the manufacturing and distribution companies of the laptops. In studies, a team of U.S. experts found that 80 percent of consumers say brand recognition influences their buying behavior. Brands instill a sense of security and confidence in customers when purchasing products [2][3].

- [H5] *The brand has a favorable relationship with students' laptop buying behavior.*

2.8. Price and Payment Conditions

The "Price and payment conditions" factor includes indicators of prices, payment conditions, promotions, and discounts when buying a laptop. As most students rely on their families for financial support or have limited income, price factors and payment conditions greatly influence their buying decisions [2][3].

- [H6] *Product prices are directly related to students' laptop buying behavior.*

2.9. Reference Group

Since the subjects of the study are students with limited knowledge of laptops, they often seek advice from friends, relatives, teachers, and counselors. The reference group has an influence on the beliefs, attitudes, and buying behavior of the subjects, helping them better understand the product, secure their interests, and make informed purchasing decisions [2][3].

- [H7] *The reference group has a direct relationship with students' laptop buying behavior.*

3. Research Methodology

3.1. Questionnaire Design

To test the relationships proposed earlier, this study used a survey method employing questionnaires to collect data. The scales utilized in this study were adapted from previous research but adjusted to fit the specific context of our study. A 5-point Likert scale was employed, ranging from 1 (strongly disagree) to 5 (fully agree). The customer care scale consisted of 5 observations adapted from the study by Kaladhar (2015) and Kaladhar (2016a). The personal connection scale included 5 observations from the studies by Delcourt (2013a) and Delcourt (2015). The scale for employee competence was derived from 7 observations by Ahearne (2007a) and Ramezani (2013). The product knowledge scale incorporated 5 observations from Wang and Hazen (2016) and Jefriansyah et al. (2018). Lastly, the satisfaction scale comprised 5 observations from Harzaviona and Syah (2020) and Bambale, Ghani, and Ado (2020).

3.2. Data Collection

The primary objective of this study was to understand the factors influencing students' laptop buying behavior. As such, the research subjects were students studying at schools in Hanoi. The random sampling method was applied in this study, and questionnaires were randomly distributed to the participants. The questionnaire consisted of 29 main questions, and according to Hair, Black, Babin, Anderson, & Tatham, the minimum sample size for analysis should be 214 valid data points, which corresponds to a response rate of 93.3%. The demographics and behaviors of the respondents are described in the following:

| Question | Answer | Frequency | Percent (%) |
|--------------|---------------------|-----------|-------------|
| Gender | Male | 86 | 40,2 |
| | Female | 128 | 59,8 |
| | Different | 0 | 0 |
| Student-year | First-year student | 32 | 15,0 |
| | Second-year student | 45 | 21,0 |
| | Third-year student | 112 | 52,3 |
| | Final-year student | 25 | 11,7 |

4. Research Results

Based on the research model proposed above, the study aims to identify factors influencing students' laptop buying behavior. The scales used in this study were derived from previous research and adapted to the specific research context. Once all the data has been collected, we will use SPSS software to analyze and clean the data for further verification. This method is appropriate as the study focuses on relationships within the model and is suitable for a small sample size ($n=214$). The research model includes 7 specification elements: enhanced features, price and payment conditions, design style, price and payment conditions, and brand.

4.1. Evaluation of the Reliability of the Scales

The Cronbach's Alpha test is used to assess the reliability of the scales. It measures the sum of observed variables associated with the total variable to eliminate inconsistent or low correlation coefficient observation variables in relation to the total variable. For exploratory analysis, it is essential to conduct a test of the scale's reliability using Cronbach's Alpha. A scale is considered to have good reliability when the Cronbach's Alpha coefficient is greater than 0.7. If the Cronbach's Alpha is > 0.6 or higher, it is acceptable, especially in cases where the scale concept is new or unfamiliar to respondents in the context of the study. A variable-total correlation coefficient of 0.3 or higher is also deemed acceptable.

Table 2. Cronbach's Alpha Coefficient Statistics Table

| Variable | Total variable correlation | Cronbach's Alpha if kind of variable |
|---|----------------------------|--------------------------------------|
| Specifications (DD): Cronbach's Alpha = 0.867 | | |
| DD1: I will buy a laptop with a hard drive, RAM with a large capacity | 0,592 | 0,857 |
| DD2: I will buy a laptop with a high-speed processor | 0,633 | 0,850 |
| DD3: I'm going to buy a laptop with a high display resolution | 0,695 | 0,839 |
| DD4: I will buy a laptop with a graphics card | 0,683 | 0,842 |
| DD5: I will buy a laptop with an optical drive | 0,693 | 0,840 |
| DD6: I will buy a laptop with a highly sensitive keyboard and touchpad | 0,690 | 0,840 |
| Boosting Features (TN): Cronbach's Alpha = 0.729 | | |
| TN1: I will buy a laptop with a waterproof keyboard | 0,500 | 0,678 |
| TN2: I will buy a laptop with a 360/detachable touchscreen/rotating screen | 0,487 | 0,684 |
| TN3: I will buy a laptop with the ability to upgrade hardware | 0,504 | 0,677 |
| TN4: I will buy a laptop with fingerprint and voice recognition | 0,459 | 0,693 |
| TN5: I will buy a laptop with the ability to upgrade the battery | 0,494 | 0,680 |
| Design (KD): Cronbach's Alpha = 0.730 | | |
| KD1: I will buy a laptop with a thin size | 0,490 | 0,714 |
| KD2: I will buy a lightweight laptop | 0,571 | 0,622 |
| KD3: I'm going to buy a sleek laptop | 0,602 | 0,582 |
| After-service (DV): Cronbach's Alpha = 0.815 | | |
| DV1: I will buy a laptop with many gifts or components included | 0,678 | 0,734 |
| DV2: I will buy a laptop from a distribution company with many technical support points | 0,627 | 0,786 |
| DV3: I will buy a laptop with a good warranty. | 0,696 | 0,716 |
| Brand (TH): Cronbach's Alpha = 0.796 | | |
| TH1: I will buy a laptop with a famous brand. | 0,654 | 0,709 |
| TH2: I will buy a laptop from a good branded distribution company. | 0,669 | 0,691 |
| TH3: I have a need to buy laptops from the distribution company in large quantities. | 0,599 | 0,766 |
| Price and Payment Conditions (GC): Cronbach's Alpha = 0.821 | | |
| GC1: I will buy a laptop at a reasonable price. | 0,675 | 0,752 |
| GC2: I will buy a laptop with good payment conditions. | 0,682 | 0,746 |
| GC3: I will buy a laptop with many attractive discounts, promotions and discounts. | 0,666 | 0,762 |
| Reference group (TK): Cronbach's Alpha = 0.626 | | |
| TK1: I refer to information about laptops from relatives and friends | 0,430 | 0,534 |
| TK2: I consulted information about laptops from owners and salespeople | 0,481 | 0,458 |
| TK3: I refer to information about laptops on the internet, newspapers, media, | 0,395 | 0,584 |
| Buy behavior (HV): Cronbach's Alpha = 0.796 | | |
| HV1: I'm happy with the laptop I chose. | 0,641 | 0,720 |
| HV2: I will continue to come back to buy this laptop when the need arises. | 0,656 | 0,706 |
| HV3: I would recommend this laptop to others. | 0,622 | 0,741 |

From the table above, we can observe that all the Cronbach's Alpha coefficients for the variables are good, being greater than 0.7, and the total variable correlation coefficients for the elements are also greater than 0.3. Therefore, we will proceed with the exploratory factor analysis using the five factors.

4.2. Exploratory Factor Analysis

Analysis of the Independent Variables:

- KMO and Bartlett's Test for the Independent Variables:

| | | |
|---|--------------------|--------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.779 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1974.172 |
| | Df | 325 |
| | Sig. | 0.000 |

The KMO coefficient of 0.779 ($0.5 \leq \text{KMO} \leq 1$) and the statistical significance (Sig) of 0.000 (< 0.05) in the Bartlett test indicate that the exploratory factor analysis is appropriate for the independent variables.

According to the standard of Eigenvalues > 1 , four factors exhibit the best data characteristics compared to the others. The extracted variance value from the rotation matrix condenses and retains data variability. The total variance extracted is 63.760% ($> 50\%$), indicating that the four extracted factors reflect 63.760% of the data's variability, leading to a satisfactory interpretation of the factors.

- Analysis of the Rotation Matrix:

Table 4. Rotation Matrix

| Rotated Component Matrix ^a | | | | | | | |
|---------------------------------------|-----------|-------|-------|-------|-------|-------|-------|
| | Component | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| DD6 | 0,806 | | | | | | |
| DD3 | 0,798 | | | | | | |
| DD5 | 0,792 | | | | | | |
| DD2 | 0,734 | | | | | | |
| DD4 | 0,726 | | | | | | |
| DD1 | 0,679 | | | | | | |
| TN1 | | 0,727 | | | | | |
| TN2 | | 0,719 | | | | | |
| TN3 | | 0,701 | | | | | |
| TN5 | | 0,633 | | | | | |
| TN4 | | 0,606 | | | | | |
| GC2 | | | 0,828 | | | | |
| GC3 | | | 0,821 | | | | |
| GC1 | | | 0,797 | | | | |
| DV3 | | | | 0,793 | | | |
| DV1 | | | | 0,766 | | | |
| DV2 | | | | 0,726 | | | |
| TH1 | | | | | 0,864 | | |
| TH2 | | | | | 0,831 | | |
| TH3 | | | | | 0,753 | | |
| KD3 | | | | | | 0,844 | |
| KD2 | | | | | | 0,814 | |
| KD1 | | | | | | 0,720 | |
| TK2 | | | | | | | 0,785 |
| TK1 | | | | | | | 0,739 |
| TK3 | | | | | | | 0,696 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

^a. Rotation converged in 6 iterations.

The Loading Value factor values are all > 0.5, indicating that the observed variables are statistically significant.

4.3. Linear Regression Analysis

Correlation Analysis between Variables in the Model

The correlation coefficient is a statistical indicator that measures the strength and direction of the relationship between two variables. The Pearson correlation coefficient (symbol *r*) is a widely-used test statistic for measuring the statistical

relationship or association between dependent variables and independent variables.

The Pearson correlation coefficient is considered the best method for measuring the relationship between variables of interest because it is based on the method of covariance. It provides information about the magnitude and direction of the relationship. Additionally, examining the Pearson's correlation coefficient helps identify the occurrence of the linear multi-additive problem when independent variables are strongly correlated with each other.

The Pearson correlation coefficient (r) ranges from -1 to +1:

- $r = 0$: Indicates no linear correlation between the two variables.
- $r = 1$ or $r = -1$: Indicates a perfect positive or negative linear correlation, respectively.
- $r < 0$: Represents a negative correlation; as the value of variable x increases, the value of variable y decreases, and vice versa.
- $r > 0$: Represents a positive correlation; as the value of variable x increases, the value of variable y also increases, and vice versa.

Note: The Pearson correlation coefficient (r) is considered significant if the observed significance level ($sig.$) is less than the significance level $\alpha = 5\%$.

The results of the correlation analysis between the variables in the model are presented in the table below:

Table 5. Pearson Correlation Breakdown between Variables

| Correlations | | | | | | | | | |
|--------------|---------------------------------|--------|---------|--------|--------|---------|--------|--------|--------|
| | | DD | TN | KD | DV | TH | GC | TK | HV |
| DD | Pearson correlation coefficient | 1 | 0,011 | 0,047 | ,476** | -0,073 | ,284** | 0,069 | ,499** |
| | Sig value. | | 0,874 | 0,490 | 0,000 | 0,286 | 0,000 | 0,313 | 0,000 |
| | Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| TN | Pearson correlation coefficient | 0,011 | 1 | -0,080 | ,302** | -,219** | 0,126 | 0,042 | 0,060 |
| | Sig value. | 0,874 | | 0,244 | 0,000 | 0,001 | 0,066 | 0,542 | 0,383 |
| | Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| KD | Pearson correlation coefficient | 0,047 | -0,080 | 1 | 0,090 | ,207** | ,179** | 0,034 | 0,001 |
| | Sig value. | 0,490 | 0,244 | | 0,191 | 0,002 | 0,009 | 0,621 | 0,987 |
| | Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| DV | Pearson correlation coefficient | ,476** | ,302** | 0,090 | 1 | -0,086 | ,365** | 0,051 | ,476** |
| | Sig value. | 0,000 | 0,000 | 0,191 | | 0,211 | 0,000 | 0,459 | 0,000 |
| | Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| TH | Pearson correlation coefficient | -0,073 | -,219** | ,207** | -0,086 | 1 | -,168* | ,217** | ,173* |
| | Sig value. | 0,286 | 0,001 | 0,002 | 0,211 | | 0,014 | 0,001 | 0,011 |
| | Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| GC | Pearson correlation coefficient | ,284** | 0,126 | ,179** | ,365** | -,168* | 1 | -,174* | ,357** |
| | Sig value. | 0,000 | 0,066 | 0,009 | 0,000 | 0,014 | | 0,011 | 0,000 |
| | Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| TK | Pearson correlation coefficient | 0,069 | 0,042 | 0,034 | 0,051 | ,217** | -,174* | 1 | 0,041 |
| | Sig value. | 0,313 | 0,542 | 0,621 | 0,459 | 0,001 | 0,011 | | 0,552 |
| | Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| HV | Pearson correlation coefficient | ,499** | 0,060 | 0,001 | ,476** | ,173* | ,357** | 0,041 | 1 |
| | Sig value. | 0,000 | 0,383 | 0,987 | 0,000 | 0,011 | 0,000 | 0,552 | |
| | Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |

** . The correlation is significant at the 0.01 level (Sig. value).

* . Significant correlation at the 0.05 level (Sig. value).

From the table above, the authors draw the conclusion that there is a strong and positive correlation between the variables. All the correlation coefficients are greater than 0, indicating an intimate relationship. Variables with a Pearson correlation coefficient ranging from 0.3 to 1 are strongly correlated (***) and have a direct impact on each other. Variables with a (*) symbol have a weaker average correlation, and the influence of one variable on another may not be pronounced. Based on this, the authors confirmed the link between the independent variables and the dependent variable in the research paper.

However, TN, KD, and TK variables are excluded due to sig values greater than 0.05, indicating no significant correlation with the dependent variable.

Linear Regression Results

Model Validation:

- Testing the Interpretation Level of the Model:

Table 6. Table to Verify the Interpretation Level of the Model

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------|----------|-------------------|----------------------------|---------------|
| 1 | 0.655 | 0.428 | 0.409 | 0.62581 | 0.905 |

^a. Predictors: (Constant), TK, KD, DD, TN, TH, GC, DV

^b. Dependent Variable: HV

The corrected R² value is 0.409, indicating that 40.9% of the variation in purchasing intentions of Hanoi University of Industry students can be explained by the independent variables of the model.

Testing ANOVA gives a value of Sig = 0.000 (<0.01), indicating that the given model is consistent with the actual data. The independent variables are linearly correlated with the dependent variable with a 95% confidence level.

Testing Regression Coefficients:

After performing a regression analysis on SPSS, the results are presented in the following table:

Table 7. Results of Regression Analysis

| Coefficients ^a | | | | | | | | |
|---------------------------|------------|-----------------------------|------------|---------------------------|-------|-------|-------------------------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 0,009 | 0,481 | | 0,018 | 0,986 | | |
| | DD | 0,319 | 0,059 | 0,333 | 5,398 | 0,000 | 0,729 | 1,372 |
| | DV | 0,255 | 0,062 | 0,270 | 4,091 | 0,000 | 0,638 | 1,567 |
| | TH | 0,272 | 0,053 | 0,292 | 5,094 | 0,000 | 0,844 | 1,184 |
| | GC | 0,232 | 0,059 | 0,236 | 3,935 | 0,000 | 0,771 | 1,297 |

^a Dependent Variable: HV

The significance of the partial regression coefficients in the model was tested through t-testing with the hypothesis that H0 is the regression coefficient of independent variables equal to zero, meaning that independent variables and the dependent variable have no linear relation.

There are significant correlations (sig < 0.01) with DD, DV, TH, GC, indicating that these factors correlate strongly (**) with HV at a confidence level of 99% or higher. Therefore, the partial regression coefficients of the independent variables DD, DV, TH, GC are all significant in this regression analysis model.

The VIF values are all less than 10, indicating no multicollinearity issues requiring further investigation.

4.5. Determine the Importance of Variables in the Model

Based on the results of the regression analysis in Table 4.13, the research team summarized the results as follows:

| Content independent variables | Beta normalization factor | Sig value | Dependent variable content |
|-------------------------------|---------------------------|-----------|----------------------------|
| DD | 0,333 | 0,000 | Buying behavior |
| DV | 0,270 | 0,000 | |
| TH | 0,292 | 0,000 | |
| GC | 0,236 | 0,000 | |

According to the statistical results, further research and development should be conducted on technical characteristics, after-service factors, brands, and prices and payment conditions.

Based on the statistical results, the research team concludes that the specification factor with a beta value of 0.333 has the strongest impact on the buying behavior of students at the Faculty of Business Administration, Hanoi University of Industry. It is logical that when other factors remain constant, a one-unit change in the perception of technical

specifications leads to a 0.333-unit increase in the likelihood of student buying behavior.

Similarly, the other independent variables also show positive normalized beta factors, indicating that they all influence the dependent variable in the same direction.

The multiple linear regression equation between the four components and the subvariable Purchase Intent is as follows:

$$HV = 0.319DD + 0.255DV + 0.272TH + 0.232GC$$

5. Conclusion

Recommendations for Businesses

Through the survey results obtained, it was found that students of the Faculty of Business Management at Hanoi University of Industry have been using computers at a very high level. Specifically, 71.4% of respondents are using laptops, and up to 25.7% of respondents already own laptops. Based on the survey and the authors' perspective on society, it is evident that the demand for laptops among individual students is extremely high, serving their study, work, and even entertainment needs. Therefore, the authors have made the following recommendations based on the research paper of the group:

Solution for specification

Students are potential customers of laptop manufacturing businesses due to the trend of today's digital age; not having a laptop can lead to missing out on numerous opportunities. Thus, students make perfect consumers, but in order to attract them, certain qualities and impressions are necessary. The most effective way is to upgrade the computer with high-resolution laptop screens, good processors, etc.

Solutions for after-service services

Apart from the product, the core focus of any business model must be on Warranty Service. The quality and reputation of the business and the store owner are clearly shown through their warranty policies. Students, especially, often lack sufficient income to manage additional expenses, so their main concern is the cost of maintenance, repair, or replacing a new laptop model. This challenge also presents an opportunity for businesses and owners to attract customers.

Brand solutions

To enhance the current brand, businesses can use promotions and incentives to make students aware of the brand. They can distribute leaflets and regularly promote products at suitable places. Supporting promising projects and those that many people are interested in can also be beneficial. Collaborating with celebrities and reviewers to promote products is another effective strategy.

Solution for selling price and payment conditions

Businesses should keep the prices reasonable and suitable for students to attract them to use their products. Increasing brand awareness and driving student demand is essential. Offering great incentives to students can be effective. Furthermore, diversifying payment methods is also a trend since the extremely popular transfer payment method is widely used. Having more forms of transfer makes it convenient and less risky for customers. However, careful attention should be paid to avoid unnecessary responsibilities for the seller that may arise from not thoroughly checking these payment methods.

Limitations of the study

The survey process and research results of the authors' team still have some limitations, both objective and subjective. Firstly, there are limitations in the method of selecting research samples. Due to the study's limited time and space, the number of samples representing the target group is relatively small. Additionally, the use of convenient random sampling reduces the accuracy and reliability of the research statistics. Furthermore, variations in the number of samples in each course and department may also impact the final results. Another limitation is the scope of research. The study was based solely on factors such as purchase frequency, income, and duration of some randomly selected subjects. As a result, the objectivity of the topic is limited because each faculty's lockdown situation may lead to different tendencies in buying decisions. The questionnaire's length and some unreasonable aspects, as well as limited access to survey subjects during the research, further contribute to the limitations. Moreover, the study does not account for other factors that may influence buying decisions, and these omitted factors could have a varying impact on the accuracy of the research topic.

Further research directions

To address the difficulties faced during the research, the authors propose several directions for future studies. Firstly, the team will address the issue of random sample selection by switching to a non-probability sample method. This change is expected to enhance the reliability and practicality of the research. Additionally, the authors plan to develop a more appropriate and targeted questionnaire that aligns better with the characteristics of the surveyed subjects.

Furthermore, the team recognizes the importance of improving their awareness and knowledge of the environment and market. They aim to conduct the next research paper more comprehensively and with a deeper understanding of the relevant factors. The team will try to carry out the next research paper in its entirety.

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