EXPLORING STUDENTS SMARTPHONE BUYING INTENTIONS FOR ONLINE LEARNING

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ABSTRACT

This study investigates the key factors influencing students' intentions to purchase smartphones specifically for online learning purposes. With the shift towards digital and hybrid education models, smartphones have become essential tools for academic engagement. This research explores how factors such as brand perception, technical specifications, affordability, peer influence, and perceived utility affect purchasing behavior. A structured questionnaire was administered to a sample of 300 college students, and the collected data was analyzed using statistical tools such as regression analysis and factor analysis. The findings reveal that perceived utility and affordability are the strongest determinants of buying intention, followed by brand trust and peer recommendations. With the rise in digital education due to the COVID-19 pandemic and the increasing reliance on mobile technology, understanding the motivations behind smartphone purchases becomes essential for educators, policymakers, and manufacturers. The study uses a quantitative approach, gathering data from a diverse sample of university students through structured questionnaires. The analysis reveals that perceived usefulness, affordability, brand perception, and technological features significantly affect buying intentions. The study offers insights into the behavior of the digital-native generation and provides implications for educational institutions and smartphone manufacturers.

Keywords: Buying Intention, Online Learning, Student Behavior, Perceived Utility

1. INTRODUCTION

The global education landscape has transformed drastically with the advent of online learning, particularly accelerated by the COVID-19 pandemic. In this context, smartphones have emerged as indispensable learning tools. The portability, affordability, and multifunctionality of smartphones make them ideal for accessing learning platforms, video lectures, e-books, and communication tools.

This study aims to understand the factors influencing students' intentions to buy smartphones for educational purposes. While numerous studies have examined general smartphone usage among youth, limited research focuses on purchasing behavior linked to academic needs. Understanding these factors is vital for educators, policymakers, and technology firms striving to support digital education effectively.

The advent of online learning has redefined the educational landscape, making smartphones essential tools for students. Especially during the pandemic, smartphones emerged not just as communication devices but as crucial instruments for attending classes, accessing study materials, and completing assignments. This shift in educational delivery modes has led students to evaluate smartphones from a utility and performance standpoint rather than just from a social or entertainment perspective.

This research delves into the motivations and preferences that guide students in selecting smartphones suitable for online education. It also investigates the role of socioeconomic factors, technological awareness, and educational needs in shaping these purchasing decisions.

2. REVIEW OF LITERATURE

Technology Acceptance Model (TAM)

Davis (1989) proposed TAM, highlighting perceived usefulness and perceived ease of use as primary factors in technology adoption. For smartphones in education, perceived usefulness directly influences students' willingness to invest in the technology.

Smartphone Usage in Education

According to Gikas & Grant (2013), mobile learning enhances student engagement and flexibility. The convenience of accessing academic resources via smartphones encourages students to rely on them heavily.

Mobile Learning and Education

- Ally, M. (2009). Mobile learning: Transforming the delivery of education and training.
- Mobile devices, especially smartphones, are widely accepted as effective learning tools for flexibility and access.

Technology Acceptance Models

• Davis, F. D. (1989). Perceived usefulness and ease of use are primary factors in the adoption of new technology.

Smartphone Buying Behavior

• Kim, H., & Kim, Y. (2017). Consumer decision-making in smartphone purchases is affected by price, brand loyalty, features, and social influence.

Student Preferences and Economic Constraints

• Studies show that students are highly price-sensitive and often consider affordability and financing options.

Online Learning Requirements

• Online education requires smartphones with reliable internet access, adequate screen size, long battery life, and good camera quality for video communication.

2.1. FACTORS AFFECTING SMARTPHONE PURCHASE

Past studies (Kumar & Lim, 2020) suggest brand loyalty, price sensitivity, technical features, and social influence as key determinants. However, these studies often overlook educational usage as a decision-making factor.

Student Consumer Behavior

Students often balance utility with budget constraints (Ratchford, 2009). Peer opinions, online reviews, and product specifications play a significant role in the decision-making process.

2.2. OBJECTIVES OF THE STUDY

- 1) To identify the primary factors influencing students' smartphone buying intentions for online learning.
- 2) To analyze the relationship between perceived utility and buying intention.
- 3) To evaluate the impact of affordability, brand perception, and peer influence on smartphone selection.
- 4) To provide recommendations for educational stakeholders and smartphone manufacturers.

Hypotheses

- **H1:** Perceived utility significantly influences students' intention to buy smartphones for online learning.
- **H2:** Affordability has a positive effect on smartphone buying intention.
- **H3:** Brand perception significantly affects the buying decision.
- **H4:** Peer influence plays a role in shaping students' smartphone preferences.

3. RESEARCH METHODOLOGY

Research Design

Descriptive and exploratory research design was adopted.

Sampling Technique

Convenience sampling was used to select 300 undergraduate and postgraduate students from urban colleges.

Data Collection Method

Primary data was collected via structured questionnaires with Likert scale items. Secondary data was sourced from journals, articles, and online publications.

4. ANALYSIS AND INTERPRETATION

Demographic Profile

Here's the demographic profile of the 300 respondents presented in a clear table format:

Table: 1

| Demographic Variable | Category | Frequency (n) | Percentage (%) |
|--------------------------|----------------|---------------|----------------|
| Gender | Female | 156 | 52% |
| | Male | 144 | 48% |
| Age Group | 18-25 years | 270 | 90% |
| | Above 25 years | 30 | 10% |
| Educational Level | Undergraduate | 195 | 65% |
| | Postgraduate | 105 | 35% |
| Total | | 300 | 100% |

Source: Primary data

Let me know if you'd like this table in Word, Excel, or as an image!

Gender: 52% female, 48% maleAge: Majority between 18–25 years

• **Educational Level:** 65% undergraduates, 35% postgraduates

5. REGRESSION ANALYSIS RESULTS

Table: 2

Regression Analysis

| Predictor Variable | Standardized Beta (β) | Significance Level (p-value) | Interpretation |
|--------------------|-----------------------|------------------------------|--|
| Perceived Utility | 0.48 | < 0.01 | Strong positive influence on buying intention |
| Affordability | 0.39 | < 0.01 | Significant positive influence; second strongest predictor |

| Brand Perception | 0.26 | < 0.05 | Moderate positive influence on buying intention |
|------------------|------|--------|---|
| Peer Influence | 0.18 | < 0.05 | Weak but significant positive influence on buying intention |

Source: Primary data

Note:

- **Sample Size:** n = 300
- All predictors are statistically significant.
- **Perceived Utility** and **Affordability** are the strongest predictors of students' smartphone buying intentions for online learning.

Here is a table that summarizes the regression analysis results for your study on "Exploring Students' Smartphone Buying Intentions for Online Learning" based on responses from 300 participants:

- Perceived Utility ($\beta = 0.48$, p < 0.01)
- Affordability ($\beta = 0.39$, p < 0.01)
- Brand Perception ($\beta = 0.26$, p < 0.05)
- Peer Influence ($\beta = 0.18$, p < 0.05)

The results indicate that all four variables significantly influence buying intention, with perceived utility and affordability being the strongest predictors.

6. FACTOR ANALYSIS

Here's a clean and clear table format for presenting the factor analysis results of your study **"Exploring Students' Smartphone Buying Intentions for Online Learning"** with the three major components identified from 300 respondents:

Table 3

Factor Analysis – Key Components Influencing Smartphone Buying Intentions (N = 300)

| Component | Variables/Indicators | Description |
|-------------------|----------------------|--|
| 1. Functionality | Battery Life | Importance of long battery performance |
| | RAM | Preference for sufficient memory capacity |
| | Processor | Need for high-speed and efficient processors |
| 2. Economic Value | Price | Affordability of the smartphone |
| | EMI Options | Availability of installment payment plans |
| 3. Social Factors | Brand Image | Reputation and status associated with brand |
| | Peer Recommendations | Influence of friends and peer opinions |

Source: Primary data

Three major components emerged:

- 1) Functionality (battery life, RAM, processor)
- 2) Economic Value (price, EMI options)
- 3) **Social Factors** (brand image, peer recommendations)

7. FINDINGS

• Most students prioritize smartphones that offer value-for-money with optimal specifications for educational apps.

- Affordability is a crucial factor, especially among students without personal income.
- Brand perception influences those who associate certain brands with reliability.
- Peer influence is notable, with many students seeking opinions from classmates and online reviews before making a decision.

8. CONCLUSION

Smartphones are no longer luxury gadgets for students but essential tools for academic success. This study establishes that students' smartphone buying intentions are influenced by a mix of utilitarian and social factors. Educational institutions and smartphone manufacturers should consider these insights to design and promote student-friendly smartphone models with adequate learning features and competitive pricing. Encouraging student-centric technology policies can enhance digital inclusion and learning outcomes.

CONFLICT OF INTERESTS

None.

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