EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2025): 8.57 ISSN: 2348 – 814X
Volume: 12 | Issue:12 | December 2025 -Peer Reviewed Journal

PREDICTING CONSUMER BEHAVIOUR AND GAP ANALYSIS ON SMARTPHONE MARKET IN INDIA

Dr. Megharaja B
Assistant Professor, Department of Studies and Research in Commerce,
Vijayanagara Sri Krishnadevaraya University,Jnana Sagara Campus, Vinayaka Nagar, Cantonment, Ballari, Karnataka 583104

ABSTRACT
Smartphone is a mobile phone, it has an advanced mobile operating system designed to provide the user many characteristics of a handheld computer and advanced connectivity options (Anand Prakash et., al 2012). Technology economy placed crucial place in heartbeat of every economy in the world. The research has conducted consumer behaviour towards Smartphone on attributes captured through 5 point likert scale. The study captured 14 attributes of Smartphone was examined with importance and satisfaction in select brands with mean and t-value. The result derived statistically; there are highly significant important and satisfaction levels of consumers' behaviour in Smartphone market. Entrepreneurs of android mobile manufactures have to consider all attributes and make them navigate as per the consumer taste and priority.
KEYWORDS: *Attributes, Importance, Satisfaction and Gap analysis*

INTRODUCTION

Smartphone has become a fundamental part of our daily lives, which has led to the fast growth of the Smartphone market. The present global trends of smartphone market remain stable, retaining the existing customers has become a challenge for smartphone manufacturers. (Jina Kim and other-2021). A smart phone is a mobile phone that integrates a feature phone and a mobile computing platform and the models today even combine functions. Usually, smart phones also comprise web browsers and high-resolution touch screens so on, which provide people better browsing experience. Different consumers have different character in their existence that also influences the buying behaviour at same time. Social factors such as groups, roles, family and status along with personal factors such as age, occupation, lifestyle, personality and ideas are those features might influence the buyer behaviour pattern in making decision.

The present financial literacy and digital initiated in public especially after covid-19, it domestically changes happened in the financial system, from the below table was witness the growth of digital number and value of transaction from 2017 to 2022. Table indicates that total number of digital payment and the total value of digital payments transactions undertaken during the last five financial years and the current financial year are as above,

Table-1: Total no. and value of digital transactions

FY	Total number of digital transactions (Cr)	Total value of digital transactions (Cr)
2017-18	2,071	1,962
2018-19	3,134	2,482
2019-20	4,572	2,953
2020-21	5,554	3,000
2021-22	8,840	3,021
2022-23	9,192*	2,050*
*Data till 31st December2022Source: RBI, NPCI and Banks		

The attributes of smartphone examined by collecting data on survey regarding importance and satisfaction levels of various brands and analysed them with mean and t-value. The ending of the research suggests to producers of smartphone have to consider all attributes and maintain significant relation.

LITERATURE REVIEW

The study has derived title and design by examined the following research papers ideas and path for the complete research works as follows.

Anand Prakash, et al, (2023) discuss attributes of the Smartphone such as operating system, aesthetics, availability of apps and camera are found significantly important to buying behaviour. Holbrook, (1994) in his paper discuss

about the Consumer value is the cornerstone of a successful transaction, and it motivates consumers to purchase repeatedly. *Anderson & Srinivasan, (2003)* reviewed the expectation disconfirmation paradigm suggests that once consumers have satisfactory experience with a product, they have better value expectations and tend to repurchase the same product in the future instead of switching. *Jina kim (2021)* study indicates in deep learning that repurchase behaviour of consumer remain same brand Smartphone's. *S. Hanumantha Rao et al,* (2019) found in his research paper result that customers were influences different factors while buying of mobile phones, they were given significant difference in importance towards operating system and satisfaction. According to Alek Vladimirov Ivanov el at, (2018) research found that five-stage consumer decision making process proves to still be a highly significant and relevant framework that can be applied to society today i.e., need recognition, search information, evaluation of alternatives, purchase decision and post purchase behaviour. *Anderson and Sullivan*, (1993), in his research paper has explored the positive effects of customer satisfaction and their behavioural intention to repurchase specific services. *Hellier et al*., (2003) found that point out that due to the complexity of customer repurchase behaviour, the majority of scholastic and practical scholars have proposed comprehensive customer-oriented models, including potential factors that can be significantly related to customer behaviour.

RESEARCH QUESTION AND OBJECTIVES

The study intended to examine the consumer behaviours after uses the Smartphone with aids of its attributes.
Research question: What are the attributes consider important to buy select branded Smartphone in India?

RESEARCH METHODOLOGY AND HYPOTHESIS

The Smartphone becoming a more affordable, the manufactures have been founding their challenges and opportunities to explore the brand by conducting consumer survey either opinions or perceptions of the product attributes. The researcher was asked to share perception of the respondent in order base and how much consumer's behaviour is determined by the consumer's demographic characteristics and experience with the select 5 brands, Brand-1 Redmi, Brand-2 Vivo, Brand-3 Sumsong, Brand-4 Oppo and Brand-5 Others.

The manufactures once able to predict consumer behaviour related product, they can make appropriate decision for the launch and promotion of the product. The initial task of the endeavour was to determine attributes considered significantly important by the market and then to determine the satisfaction levels on these attributes for the select brand available in the market.

The study has used the descriptive research design to describe the consumer attitude to buy Smartphone on its attributes. The number of survey responses (Sample size) received was 106 through Google form on convenient in likert scale. Research has mailed 200 questionnaires to the respondents throughout Karnataka state and 150 respondents were filled and 46 were incomplete. The structured questionnaire was prepared demographical profile and 14 attributes of Smartphone.

Using these response tested reliability, it was found that attributes of Smartphone are reliable as per the Cronbach's Alpha 0.861 and validity of 14 each attributes Pearson correlation shows significant (p-value <0.05), it can acceptable for conducting research work. Validity of items in test "Degree to which a test or instrument measures what it purports to measure" (Thomas & Nelson 1996). The data was analysed with help of IBM SPSS Statistics version 25.

Attributes Captured

The survey captured the various attributes that a consumer values in a Smartphone. Those attribute finalised by the Anand Prakash & others in their title "predicting consumer behaviour and gap analysis in Smartphone market" were finally considered.

(a) Battery performance
(b) Operating system
(c) Speed
(d) Ease of navigation
(e) Memory
(f) Screen size
(g) Weight
(h) Sound quality
(i) Robustness
(j) Ergonomics
(k) Aesthetics
(1) Availability of apps (m) Camera quality

EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2025): 8.57 ISSN: 2348 – 814X
Volume: 12 | Issue:12 | December 2025 -Peer Reviewed Journal

(n) After sales support and availability of service centers

The study has formulated hypothesis to examine the significance of customers' importance and perception on attributes of Smartphone and tested suitable statistical tools.

Hypothesis: There is no significant importance of consumer perceptions towards the attribute Smartphone.

Experimental Data Analysis Results

The study was collected demographic data, 80 and 26 respondents are male and female respectively, with majority of respondents age between 15 to 25 yea and most of them graduate, few them self employed, business and students. Income level between Rs. 25,000 to Rs. 40,000. The study while selecting randomly respondents, 14 belonging to Brand-3, 9 Brand-4, 30 Brand-2, 21 Brand-1 and other 32. The respondents bought Smartphone on attributes of the brand.

In the study there were 14 attributes on which levels of importance were obtained on 5 point scale.

The mean levels of the above 14 attributes were obtained across 106 observations. The entire sample of 106 respondents was considered under the assumption that the customers' importance of Smartphone general would have similar needs and preference.

The mean and t-value were calculated with SPSS software,

Mean: H0=Mean value <=3

Ha=Mean value >3

The cut off level of 3 was taken because it was the median of scale.

T-value: the level of significance was taken as 5 percent so the critical region was >1.960 (two tail test)

Thus, whichever attribute had a t-value >1.645, was considered significantly important by the producer of smart phone.

Table 1 Average importance ratings on the attributes associated with Smartphone brands

	Importance Mean	t-Value
Battery	4.06604	15.516
Operating system	3.71698	9.346
Speed	3.54717	6.610
Memory	3.57547	6.879
Ease of navigation	3.76415	13.235
Robustness	3.75472	11.303
Availability of apps	3.83019	7.596
Aesthetics	3.23585	2.299
Screen size	3.89623	13.962
Weight	3.99057	12.582
Sound quality	4.07547	13.244
Camera quality	4.15094	13.785
Ergonomics	4.00943	16.633
After sales	3.78302	13.399

From the above table-1 depicted that each of above attributes were measured, next the significance of the attribute importance ratings are obtained. This kind of research more significant or very important part of predicting consumer analysis since the company needs to know which attributes are considered significantly important and which are not.

To measure importance, the same simple test of hypothesis used, as described above, the computed sample means were more than neural, hence it can concludes the importance levels as well as for satisfaction levels high. Their associated t-values were also determined. The attributes having the one sample t-values for the importance ratings computed values more than 1.960, they were considered significantly important. Similarly, for Brand 1, Brand 2, Brand 3, Brand 4 and Brand 5, the mean more than three and t-values t-value more than 1.960 (95% level of confidence) the associated attributes considered as significantly important

EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2025): 8.57 ISSN: 2348 – 814X
Volume: 12 | Issue:12 | December 2025 -Peer Reviewed Journal

In the computed mean values were more than the 3 as well as t-value also more than the 1.960 in the select all 14 attributes were considered significantly important by the consumer of Smartphone target market.

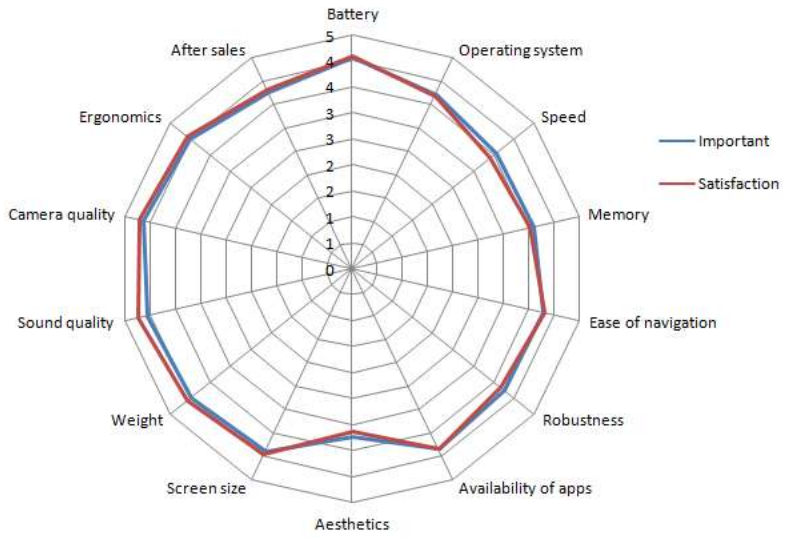
In case of satisfaction levels on the attributes a similar procedure was followed. The mean satisfaction ratings were obtained and their t value was also calculated. However, the satisfactions of Smartphone consumers' levels were obtained in study constraint.

Table 2 Average satisfaction ratings on the attributes associated with Smartphone brands

	Satisfaction Mean	t-Value
Battery	4.08491	22.346
Operating system	3.68868	9.323
Speed	3.40566	5.368
Memory	3.52830	7.055
Ease of navigation	3.81132	17.390
Robustness	3.67925	12.851
Availability of apps	3.84906	6.919
Aesthetics	3.14151	1.285
Screen size	3.96226	15.693
Weight	4.08491	15.263
Sound quality	4.24528	16.218
Camera quality	4.22642	16.102
Ergonomics	4.08491	22.346
After sales	3.81132	17.390

Since, like importance, satisfaction levels also obtained with same Smartphone attributes i.e., Brand 1, Brand 2, Brand 3, Brand 4 and Brand 5, the mean satisfaction levels were computed and their t-values were determined. The satisfaction mean values more than 3, it can inferences that respondents satisfied whereas one sample t value also more than the 1.960 (95% level of confidence) the associated attributes considered as significantly satisfactory except Aesthetics at two tail test.

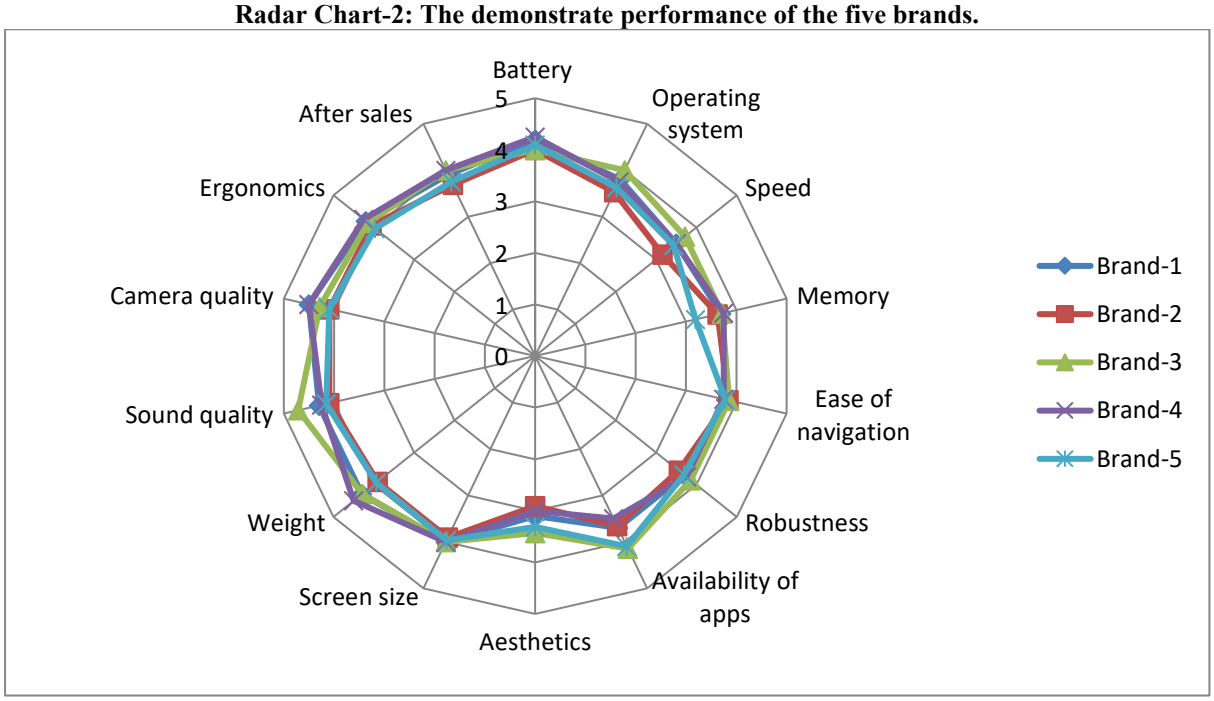
Radar Chart-1: Mean ratings of importance and satisfaction levels



EPRA International Journal of Environmental Economics, Commerce and Educational Management
Journal DOI: 10.36713/epra0414 |ISI I.F Value: 0.815|SJIF Impact Factor (2025): 8.57 ISSN: 2348 – 814X
Volume: 12 | Issue:12 | December 2025 -Peer Reviewed Journal

The mean rating on importance and satisfaction are presented radar chart-1. The chart shows the gaps between mean importance and satisfaction levels on the all 14 attributes. The result obtained that there is no significant difference on any attributes; it concludes that all are similar among importance and satisfaction levels.

Radar Chart-2: The demonstrate performance of the five brands.



The researcher observed radar char-2 depict that in the select all attributes of all brands were performing best. Thus, Brand-3 appears to be performing better than other brands players on all attributes except Speed and Memory, Brand 1 and 4 averages higher than other less than brand-1, both concentrate the Aesthetics, speed, Memory, availability of apps. Brand-2 statistically respondents shown less importance, it has focus on the apps, Aesthetics, Speed and operating system. Overview of the brands focus must be given to Aesthetics, Speed, Memory, Robustness and operating system.

DISCUSSION AND CONCLUSION

The research was based on primary sources on convenient sample through Google farm. It focus who actively using Smartphone either personally or professionally. Present situation inevitable to use Smartphone to claim rights as citizen of India due the digital India and green revolution. The research significantly tested of 14 attributes of Smartphone on their importance as well as satisfaction levels. But results derived that there is more significant importance of all attributes for purchasing of Smartphone. The manufactures of Smartphone significantly consider the all attributes in producing android mobile and often conduct survey and make correction as per the feedback of the customers without delay, otherwise some of the others brands may acquire customers or motive them or customer may switching the brands as per the offers and attributes in present era.

REFERENCE

1. *Kim, J., Ji, H., Oh, S., Hwang, S., Park, E., & del Pobil, A. P. (2021). A deep hybrid learning model for customer repurchase behavior. Journal of Retailing and Consumer Services, 59, 102381.*
2. *Liao, Y. J. (2012). Consumer behavior on Smartphone. Journal of marketing management, 23(9-10), 815-827.*
3. *Mohan, A. (2014). Consumer behaviour towards smartphone industry in Indian market [Doctoral dissertation, Dublin Business School].*
4. *http://scientificresearchjournal.com/wp-content/plugins/download-attachments/includes/download.php?id=4595*
5. *Viljoen, I. (2015). Analysing balanced funds vs flexible funds' performance: the impact of pension fund investing restrictions (Doctoral dissertation, North-West University (South Africa), Potchefstroom Campus).*
6. *Gupta, S. (2017). Preference of students toward smartphone in Chandigarh university. ZENITH International Journal of Multidisciplinary Research, 7(6), 41-60.*
7. *Radhika, M. An economic analysis of survival conditions of dwellers in metro shanty areas.*
8. *ABBS College MBA Report Submitted to Bangalore University by - 16YUCMD103*
9. *Shweta, M. Human Resource Management Practices A Study of Titan Industries Limited with Special Reference to Northern Region.*

10. *Megharaja, B., & CI, D. C. (2017). Performance evaluation of equity mutual fund in India with special reference to sector funds. International Journal of Commerce and Management Research, 3(2), 152-157.*
11. *http://erepository.mkuit.ac.rw/handle/123456789/5487*
12. *http://esdaindia.org/uploads/WES-2020-ABSTRACT-CUM-SOUVENIR.pdf*
13. *https://dx.doi.org/10.2307/33250*
14. *Baghel, R. Critical Evaluation of Infrastructure and Facilities of Sports in Affiliated Colleges of Devi Ahilya Vishwavidyalaya.*
15. *Sahu, A. bibliometric analysis of journals indexed in directory of open access journals doaj from 2010 2015 with reference to law discipline.*
16. *Rao, S. H., Sarma, A. U. K., & Kumar, K. V. (2019). Predicting the Dynamics of Influencing Smartphone Purchase Decisions. International Journal of Recent Technology and Engineering, 8(1), 2851-2856.*
17. *Ivanov, A. V., Akiba, E. A. G., & Konov, K. K. (2021). The Smartphone Consumer Decision-MakingProcess of University Students in Sweden: The Case of iPhone.*