INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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   INTRODUCTION

   REVIEW OF LITERATURE

   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

   REFERENCES

   APPENDIX/ANNEXURE

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● The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.

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BOOKS

● Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.

● Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

● Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

● Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

● Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

● Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, KurukshetraUniversity, Kurukshetra.

ONLINE RESOURCES

● Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

● Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

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MEASURING THE EFFECT OF CAPABILITY VERSUS USABILITY IN PURCHASE DECISION OF SMART PHONES

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ABSTRACT

In the market for consumer electronic products, manufacturers are integrating a growing number of features or capabilities to satisfy consumer's preference for high-feature products. These newer capabilities are used as a marketing element to promote value proposition of products. The additional features vary in their degree of familiarity to consumer. Some attributes being very familiar others completely novel to most consumers. Each additional feature provides reason for the consumer to purchase a product and add desired capabilities, but too many features can make products overwhelming for consumers thereby leading to dissatisfaction and "feature fatigue". Previous research suggests that consumers do not use all the features of the products they buy (Ammirati 2003), and even more significantly indicates that consumers may experience negative emotional reactions due to product complexity. The current study would help one understand the concept of feature fatigue in smart phones among respondents in Bangalore city. It is found that more the capabilities in a smart phone, more the feature fatigue and lower the usability of the product. Respondents who had paid for these capabilities are unable to use most of them due to product complexities. Hence we can conclude that before adding a new capability, product manufacturers should take into consideration the present need of the consumers and the impact of added capability on consumer's product experience.

KEYWORDS
capability, consumer electronic products, feature fatigue, product manufacturer, usability.

INTRODUCTION

The Indian electronics good industry forms a small part of the global electronics industry which has experienced rapid changes over the last few years. Higher disposable income, availability of finance, increase in digitization, affordability, establishment of retail chains have been the growth drivers of this industry. Due to the boom in the telecom industry, there has been an exponential growth in the mobile handset market. India is the second largest mobile handset market in the world after China and is poised to become an even larger market with unit shipment of INR 208.4 million in 2016 at a compound annual growth rate (CAGR) of 11.8 per cent from 2010 to 2016. The mature Indian mobile consumer's preference for high-end handsets and the younger consumer's desire to use mobile Web 2.0 technologies could result in the market revenues increasing from INR 255.91 billion in 2010 to INR 350.05 billion in 2016.

REVIEW OF LITERATURE

Gregory S. Carpenter, Kent Nakamoto & Rashi Glazer, (1994) in their paper titled "Meaningful brands from meaningless differentiation: The dependence on irrelevant attributes" have found from their research that an irrelevant attribute can be positively valued but that there are limits as to when and how much depending on price. **Kannan Srinivasan, Mayuram S. Krishnan & Sunder Kekre**, (1995) in their paper titled "drivers of customer satisfaction for software products: Implications for design and service support" investigated the key determinants of customer satisfaction with software products. The research was focused to measure the strength of capability and usability as the critical drivers of overall customer satisfaction. Findings from the research revealed that the capability and usability are the dominant factors in customers overall satisfaction followed closely by the performance factor. It was also found that the impact of the drivers varies across customers, product and product segment. **Itamar Simonson & Stephen M. Nowlis**, (1996) in their paper titled "The effect of new product features on brand choice" examined the factors that moderate the impact of a new feature on brand choice. The study was focused to understand and measure the effect of product characteristics on perceived uncertainty about a new feature performance. Findings revealed the contribution of new features to the basic features model and low quality brands is greater than it is to the top of the line models and high quality brands. **Ravi Dhar & Steven J. Sherman**, (1996) in their paper titled "The Effect of Common and Unique Features in Consumer Choice" have given value insights on consumer behavior. The study reveals that consumer choice often involves a comparison among the available alternatives. **Alex Chernev**, (1997) in his paper titled "The effect of common features on brand choice: Moderating role of attribute importance" investigated and measured the effect of common features on brand choice and the moderating role of the attributes.

Shu Li, (2001) in her paper titled "Equate-to-differentiate: The Role of Shared and Unique Features in the Judgment Process" developed a model for pairwise choice so that every alternative feature involves consequences to be measured on two conflicting dimensions. The findings from the research revealed that various judging task involves analyzing whether shared features and unique features are sub-features of a single main feature or not. **Martina Ziefle**, (2002) in her paper titled "The influence of user expertise and phone complexity on performance, ease of use and learnability of different mobile phones" investigated on usability, ease of use and learnability of three different mobile phones (Nokia 3210, Siemens C35i and Motorola P7389). The study was focused to measure the complexity and usability of the menu i.e. depth/breadth of the menu tree and navigation key i.e. number functionality. Results from the finding revealed the importance of the consumer expertise and its influence on consumer perception about the product usability. **Debora Viana Thompson, Rebecca W. Hamilton & Roland T. Rust**, (2005) in their paper titled "Defeating feature fatigue" provided insights on how additional features affect consumer's perceptions of a product and their purchase decision. The study also revealed that consumers do not use all the features of the product they buy. **Debora Viana Thompson, Rebecca W. Hamilton & Roland T. Rust**, (2005) in their paper titled "Feature fatigue: When product capabilities becomes too much of a good thing" examined how consumers balance their desires for capabilities and usabilities when they evaluate products and how these desires shifts over time. The researcher suggested that firms should consider having large number of more specialized products, each with a limited number of features, rather than loading all possible features into one product.

Elke den Ouden, Jeroen Keijzers & Yuan Lu, (2008) in their paper titled "The 'double-Edged Sword' of the High-Feature Products: An Explorative Study of the Business impact" investigated customer dissatisfaction and large no of problem triggered due to product complexities and lack of adherence to design guidelines. It was also found that promoting complex product as easy to use initially decreases complexity expectations at the moment of purchase but disconfirmation of this marketing promise during usage eventually results in negative emotions towards product and its brand. **Jin K. Han, Robert J. Meyer & Shenghui Zhao**, (2008) in their paper titled "Biases in valuation vs. usage of innovation product features" investigated biases in product valuation and usage decisions that arise when consumers consider a new generation of product that offers an expanded set of capabilities of uncertain value. It was also observed

that decision to pay extra for novel capabilities that are never used ultimately seen as regrettable mistake, despite whatever social boost the acquisition first conveyed. **Jing Lei & Tripat Gill**, (2008) in their paper titled "Convergence in a high technology consumer market: Not all brands gain equally from adding new functionalities to product" examined the effect of goal congruence of added functionalities on the relative gain to high versus lower brands of convergent products. Findings from the research revealed that the higher quality brand gains incremental value as compared to baseline condition i.e. no functionality added, while a lower quality one does not. **Matteo De Angelis**, (2008) in his thesis titled "The effect of adding features on product attractiveness: The role of product perceived congruity" have examined the effect of adding more features on consumer's evaluation of the product. It was also found that the probability of product evaluation increases as the number of features increases depending upon the degree of congruity of the features added with the product. **Ding Xihai, Liu Pan & Wang Liya**, (2010) in their paper titled "Modeling product feature usability through web mining" provided information about the product feature design resulting to customer satisfaction. The study proposed a novel product feature usability model to identify the critical features in the product development. Further the researchers also correlated consumer satisfaction to usability of product feature so as to evaluate the effective of the product feature usability.

Kaifu Zhang & V. Padmanabhan, (2011) in their paper titled "Feature overload" has provided detailed information about feature overload and reason behind its existence. They have defined feature overload as "The phenomenon wherein consumers purchase feature rich products but subsequently don't use all the features". **Mingxing Wu & Liya Wang**, (2011) in their paper titled "Feature fatigue analysis based on behavioral decision making" investigated the effect of decreasing consumer satisfaction and its relation with negative impact on manufacturer's long term profitability. Findings revealed that the inconsistent perceived value affects customers repurchase and purchase decision. Also it was found that customers tends to purchase high feature products but over a period of time the perceived value of product decreases when customers start working with these convergent products. **Caglar Irmak & Joseph K. Goodman**, (2012) in their paper titled "Having versus Consuming: Failure to estimate usage frequency makes consumers prefer multi-feature products" have investigated whether consumers systematically consider feature usage before making multifunctional product purchase decisions. It was found that consumers prefer multifunctional products to satisfy their need for cognition, to fulfill feature trivialness and due to materialistic behavior. It was also seen that those who estimated usage before choice experience tends to have greater product satisfaction and are more likely to recommend their chosen product.

NEED/IMPORTANCE OF THE STUDY

With the expanding consumer electronic market, manufacturers are adding innovative and unique features to their products. These features have new capabilities which are further used as a marketing element to promote the value proposition of the products. Consumers view these additional features as point of differentiation amongst different brands. However, over a period of time as consumers start using products with added capabilities, they build negative emotions due to the complex and irrelevant functionalities of the new add-ons. The very same capabilities that were seen as an advantage and point of difference from other brands become the reason for customer dissatisfaction after usage of the product. The current study would help one understand whether customers experience a gap between capability and usability of an electronic product in particular smart phones. The study will also help the manufacturer take into consideration the current need of the consumers and design the products.

STATEMENT OF THE PROBLEM

In today's business environment where technology is all pervading the easiest way to differentiate and enhance a product is by adding large number of features to it. Increasing the number of features adds desired capabilities to the product and thereby provides greater functionality to the consumers. The consumer perceives each added feature as useful and beneficial functionally and uses it as a parameter to differentiate the offering of different brands. But too many features make these products overwhelming for consumers as they are not able to use these features to the optimum. This leads to dissatisfaction and feature fatigue. The effect of such incongruent features in product innovation leads to negative impact on manufacturer's long-term profitability and customer relation.

CAPABILITY

Capability is defined as the ability to execute a specified course of action. It is the ability of a product to perform desirable set of actions.

USABILITY

Product usability is defined as a concept in product design. It is stated as the ease of use or user-friendliness of the product features. Further, it is related directly to the quality of the product and indirectly to the productivity of the work force. Ease of maintenance and usability both relate to product usability.

FEATURE FATIGUE

Mingxing Wu and Liya Wang have defined feature fatigue as "the phenomenon that customers prefer to choose high-feature products at the purchasing moment (before use) but once they start using the products (after use), they become overwhelmed by the complexity of these feature-rich products and annoyed by the features they realize they don't want or need".

OBJECTIVES OF THE STUDY

1. To study the effect of additional beneficial features on the pre purchase perception of product capabilities by consumers.
2. To determine the factors responsible for the cause of feature fatigue.
3. To examine the effect of feature fatigue on consumer's post purchase behavior.

HYPOTHESIS

1. Ho: Smart phone users are able to use most of the features of their phone.
    Ha: Smart phone users are unable to use most of the features of their phone.
2. Ho: More the features not necessarily higher will be the performance of the phone.
    Ha: More the features higher will be the performance of the phone.
3. Ho: More features in the phone do not imply value for money.
    Ha: More features in the phone justify the value for money.
4. Ho: Buying a high feature phone does not raise praises from friends.
    Ha: Buying a high feature phone raises praise from friends.
5. Ho: More features do not mean difficulty in learning and remembering them.
    Ha: More the features difficult it is to learn and remember them.
6. Ho: More the features do not mean difficulty in effectively using all the features.
    Ha: More the features difficult it is to effectively use all of them.

RESEARCH METHODOLOGY

The current study understands the pre-purchase and post-purchase perception of decision making of consumers of smart phone devices. The study was conducted across different age groups ranging from teenagers to professionals in mid forties across the city of Bangalore, the capital state of Karnataka. The study focuses on the current users of smart phones. The sample size consists of 155 respondents who were selected by simple random sampling method. Chi-

square test was conducted to understand the post purchase behavior pattern of the respondents. 16 factors were taken into consideration to understand the reason behind the pre-purchase behavior of smart phone consumers. Out of which only six factors play a major role in the decision making process.

RESULTS & DISCUSSION

CHART 1: RESPONDENTS GENDER DESCRIPTION
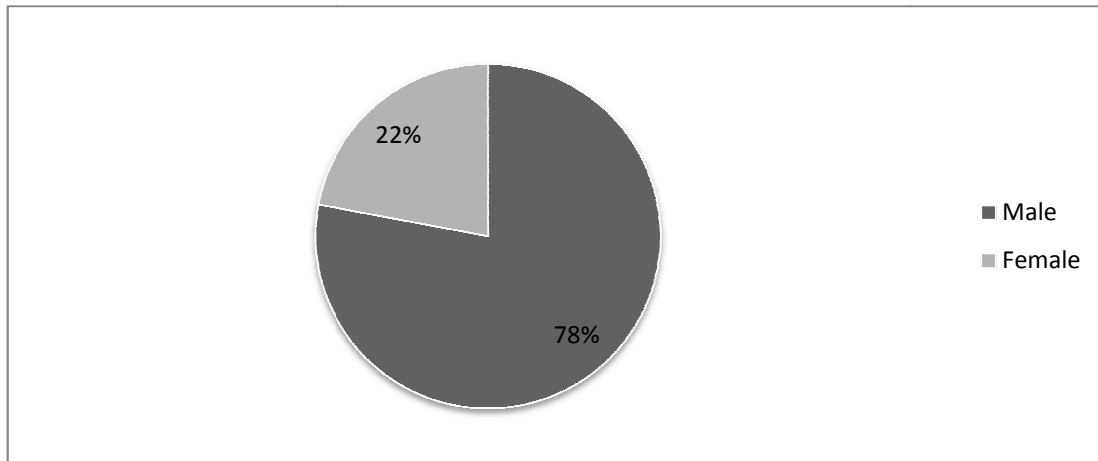
Source: Primary data

From Chart 1 we can infer that the sample is dominated by males with 78% share while female respondents were only 22%.

CHART 2: RELATIONSHIP BETWEEN AWARENESS, FORCED BUYING AND NON-USABILITY OF FEATURES
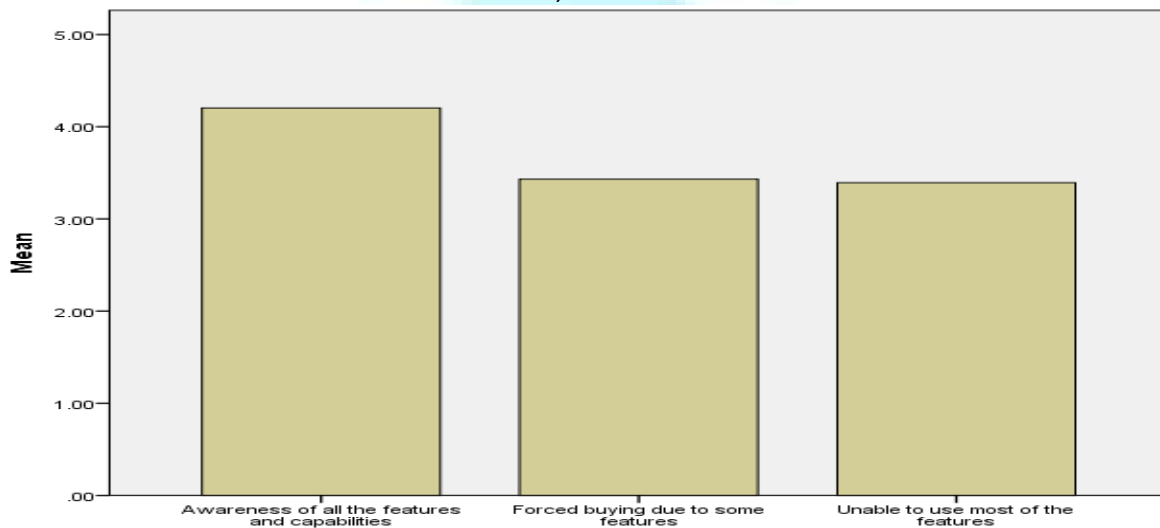
Note: (Y-axis: 1=Strongly Disagree, 2= Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

Source: Primary Data.

Comparing the mean of "consumer awareness" with means of "force buying" and "unable to use" factor revealed a significant consumer behavior. It was found that the respondents had very high level of awareness regarding the features and capabilities of their smart phone but still they were not able to utilize the full capabilities of their phones. Further, it was observed that the consumers were forced to purchase smart phones with many unwanted and unknown features. This can be inferred from Chart 2.

CHART 3: FACTORS RESPONSIBLE FOR FEATURE FATIGUE
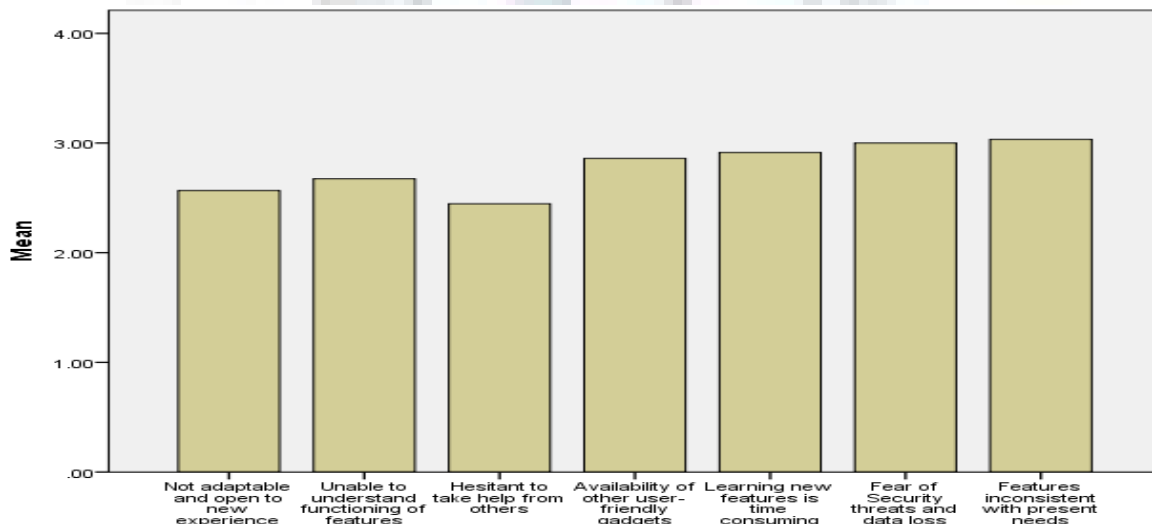
Note: (Y-axis: 1=Strongly Disagree, 2= Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

Source: Primary Data

After comparing the means of various factors responsible for feature fatigue and extracting the factors with high mean, it was found that respondents were unable to utilize the entire capability of their smart-phone because of the following four major reasons. This is displayed in Chart 3.

1. Most of the features in their smart phone were inconsistent with their present need.
2. It was also observed that fear of security threat and loss of data while using certain application was the major reason for not using most of the features.
3. It was found that learning new features required lot of time therefore people resisted using unknown features.
4. High percentage of smart phone users admitted that they possess other devices that can perform similar function. They also found that other devices were more comfortable to operate.

CHART 4: PURCHASE OF NEW ADVANCED SMART PHONE
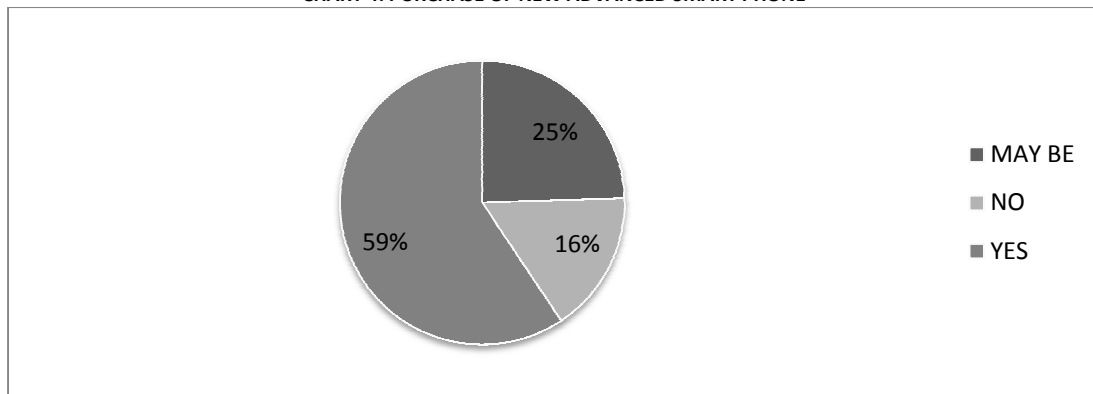
Source: Primary Data

It was observed that despite mismatch in consumer pre-purchase and post purchase perception of product usability, consumers tend to possess favorable and positive attitude towards smart phone usage. As depicted in Chart 4, it can be interpreted that 59% of respondents agreed that they would purchase a new advanced version of smart phone in future while only 16% showed their dissatisfaction towards complex smart phone capabilities.

Chi – square test was done to compare age group with awareness of all the features and capabilities. It was found that negative association exists between age group and awareness of all the features and capabilities.

CROSS TABULATION BETWEEN "AGE GROUP" AND "UNABLE TO USE MOST OF THE FEATURES"

		Unable to use most of the features					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Age group	55 and above	0	1	0	1	0	2
	37-55	1	3	7	4	6	21
	27-37	0	4	5	7	3	19
	17-27	9	23	21	38	21	112
Total		10	31	33	50	30	154

Source: Primary data

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.519[a]	12	.743
Likelihood Ratio	10.328	12	.587
Linear-by-Linear Association	.217	1	.642
N of Valid Cases	154		

Source: Primary data

**INTERPRETATION**

Chi-square is showing negative association between "age-group" and "unable to use most of the features" at 90% confidence level. Thus, it can be concluded that the ability of the consumer to utilize features of a smart phone does not depend on their age groups.

FACTOR ANALYSIS

Factor analysis was done to determine and extract the most important factors that influences and attracts people to purchase smart phone. Respondents were asked to rate 18 features of the smart phones on a 5-point likert scale based on their perception and importance of the feature. Results from factor analysis are as follows:

COMMUNALITIES

	Initial	Extraction
Attracted towards Smartphone-Touch screen interface	1.000	.629
Attracted towards Smartphone-Wider display screen	1.000	.675
Attracted towards Smartphone-Light weight and slim design	1.000	.594
Attracted towards Smartphone-Video calling	1.000	.639
Attracted towards Smartphone-Media player	1.000	.486
Attracted towards Smartphone-HD camera	1.000	.548
Attracted towards Smartphone-Video recording	1.000	.720
Attracted towards Smartphone-Games	1.000	.714
Attracted towards Smartphone-Mobile emailing	1.000	.630
Attracted towards Smartphone-Business Apps	1.000	.760
Attracted towards Smartphone-Internet Apps	1.000	.667
Attracted towards Smartphone-WiFi connectivity	1.000	.654
Attracted towards Smartphone-Bluetooth	1.000	.766
Attracted towards Smartphone-GPS	1.000	.511
Attracted towards Smartphone-Operating system	1.000	.643
Attracted towards Smartphone-High processing speed	1.000	.557
Attracted towards Smartphone-Storage capacity	1.000	.566
Attracted towards Smartphone-Price	1.000	.713

Note: Principal component analysis extraction method was applied.

Source: Primary data

INTERPRETATION FROM THE FACTOR ANALYSIS

The output of factor analysis is obtained by requesting principle component analysis and specifying a rotation. It can be interpreted that six factors account for 63.74% of total variance. Extracted data from factor analysis clearly shows that the respondents were attracted towards smart phone because of the few appealing features. This result interprets that even though a smart phone user requires few specialized features he is still bombarded with large number of additional capabilities in order to attract and influence his buying criteria. Research results show that factors which influence consumers to purchase smart phones are computation power consisting of wi-fi connectivity, operating system, high processing speed. Other factors are visual communication consisting of video calling, HD camera, touch screen and wider display, mobile emailing etc.

HYPOTHESIS TESTING

Hypothesis 1:

HYPOTHESIS 1 ONE-SAMPLE STATISTICS

	N	Mean	Std. Deviation	Std. Error Mean
Unable to use most of the features	155	3.3871	1.19189	.09574

Source: Primary data

HYPOTHESIS 1 ONE-SAMPLE TEST

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Unable to use most of the features	4.043	154	.000	.38710	.1980	.5762

Source: Primary data

INTERPRETATION

The output of the one sample Z-test shows that the 2-tailed significance of the test is .000. This is the p-value, and it is less than the level of .05 we had set. Therefore, we have to reject the null hypotheses at a significance level of .05 and conclude that smart phone users are unable to use most of the features of their phone.

Hypothesis 2:

HYPOTHESIS 2 ONE-SAMPLE STATISTICS

	N	Mean	Std. Deviation	Std. Error Mean
More features-High performance	154	3.7792	1.01779	.08202

Source: Primary data

HYPOTHESIS 2 ONE-SAMPLE TEST

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
More features-High performance	9.501	153	.000	.77922	.6172	.9413

Source: Primary data

INTERPRETATION

The output of the one sample Z-test shows that the 2-tailed significance of the test is .000. This is the p-value, and it is less than the level of .05 we had set. Therefore, we have to reject the null hypotheses at a significance level of .05 and conclude that prior to their purchase of smart phone the respondents believed that more the features higher will be the performance of the phone.

Hypothesis 3:

HYPOTHESIS 3 ONE-SAMPLE STATISTICS

	N	Mean	Std. Deviation	Std. Error Mean
More features-Value for money	154	3.9870	.93576	.07541

Source: Primary data

HYPOTHESIS 3 ONE-SAMPLE TEST

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
More features-Value for money	13.089	153	.000	.98701	.8380	1.1360

Source: Primary data

INTERPRETATION

The output of the one sample Z-test shows that the 2-tailed significance of the test is .000. This is the p-value, and it is less than the level of .05 we had set. Therefore, we have to reject the null hypotheses at a significance level of .05 and conclude that prior to their purchase of smart phone the respondents believed that more features in the phone justifies the value for money.

Hypothesis 4:

HYPOTHESIS 4 ONE-SAMPLE STATISTICS

	N	Mean	Std. Deviation	Std. Error Mean
Feature-rich phone-High social status	153	3.1046	1.26264	.10208

Source: Primary data

HYPOTHESIS 4 ONE-SAMPLE TEST

	Test Value = 3					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Feature-rich phone-High social status	1.024	152	.307	.10458	-.0971	.3063

Source: Primary data

INTERPRETATION

The output of the one sample Z-test shows that the 2-tailed significance of the test is .307. This is the p-value, and it is greater than the level of .05 we had set. Therefore, we have to accept the null hypotheses at a significance level of .05 and conclude that prior to their purchase of smart phone the respondents believed that buying a high feature phone does not raise praises from friends.

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Hypothesis 5:

HYPOTHESIS 5 ONE-SAMPLE STATISTICS

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
More features-Difficulty remembering and learning	152	2.7961	1.18679	.09626

Source: Primary data

HYPOTHESIS 5 ONE-SAMPLE TEST

One-Sample Test					
	Test Value = 2				
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
					Lower	Upper
More features-Difficulty remembering and learning	8.270	151	.000	.79605	.6059	.9862

Source: Primary data

INTERPRETATION

The output of the one sample Z-test shows that the 2-tailed significance of the test is .000. This is the p-value, and it is less than the level of .05 we had set. Therefore, we have to reject the null hypotheses at a significance level of .05 and conclude that the respondents post purchase experience with smart phone signifies that more the features difficult it is to learn and remember them all.

Hypothesis 6:

HYPOTHESIS 6 ONE-SAMPLE STATISTICS

	N	Mean	Std. Deviation	Std. Error Mean
More features-Difficulty effectively using them all	150	3.1200	1.17536	.09597

Source: Primary data

HYPOTHESIS 6 ONE-SAMPLE TEST

	Test Value = 2				
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
					Lower	Upper
More features-Difficulty effectively using them all	11.671	149	.000	1.12000	.9304	1.3096

Source: Primary data

INTERPRETATION

The output of the one sample Z-test shows that the 2-tailed significance of the test is .000. This is the p-value, and it is less than the level of .05 we had set. Therefore, we have to reject the null hypotheses at a significance level of .05 and conclude that the respondents post purchase experience with smart phone signifies that more the features difficult it is to effectively use all of them.

FINDINGS

1. Even though a smart phone user requires few specialized features he is still bombarded with large number of additional capabilities in order to modulate and influence his buying criteria. Out of the 18 odd capabilities in the smart phone only 12   capabilities were observed responsible for attracting and motivating people to purchase the smart phone. They are wi-fi connectivity, operating system, high processing speed, video calling, video recording, HD camera, touch screen, wider display, business apps, mobile emailing, blue tooth and availability of games.
2. Respondents were indirectly forced to purchase smart phone with many unwanted and unknown features just to fulfill their specific need for some important features.
3. Respondents had very high level of awareness regarding the features and capabilities of their smart phone but still they were not able to utilize the entire capabilities of their phones.
4. Respondents had significantly different perceived value before purchasing and after usage of the smart phone.
5. Pre-purchase perception of respondents about smart phone capabilities - Respondents believed that more the features higher would be the performance, utility, value for money of the phone.
6. Consumers post purchase experience of product usability - Consumers accepted that more the features difficult it is to learn, remember and effectively use all of them. They accepted that unknown and unwanted features required lot of mental effort and time and accepted that complex and unknown features led to inconvenience and unpleasant experience.
7. Respondents feel that most of the features in their smart phone were irrelevant to their present need. Fear of security threats and loss of data while using certain application was the major reason for not using most of the features. Learning new features require lot of time therefore people resist using unknown features.
8. The inconsistent perceived value had no significant effect on the consumer's purchase and repurchase decision. Moreover, consumers were willingly ready to spread positive word of mouth about smart phone beneficial capabilities along with recommendations to friends and family members for the purchase of smart phone.

SUGGESTIONS

1. To avoid the negative impacts of feature fatigue manufacturers should develop stripe down versions of feature rich smart phones.
2. Penetrating the market with wider assortment of personalized and simpler smart phones will provide competitive advantage against the complexly configured smart phones.
3. Manufacturers should follow the concept of "simplicity" and "ease of use" rather than "all in one" and "feature richness".
4. Manufacturers should provide interactive learning and training material like brochures and DVD's with the initial product offering.
5. Providing customer testimonials and product demonstrations to consumers would help manufacturers reduce consumer's perceived risk of security and product functionality.
6. Manufacturers should do intense research of the target market before developing and launching the product.

CONCLUSION

The difference in the consumer's perceived value before and after usage of the smart phone is a significant reason for feature fatigue. Prior to the purchase, the consumer sees capabilities of feature rich smart phones as benefits and value for money, but once the consumer starts using the phone the complexities of unknown irrelevant features leads to resistance and anxiety. Henceforth the perception of the consumer changes and the added capabilities are now viewed as wastage of money and time. From the findings of the research, it can also be inferred that if the magnitude of feature fatigue is very high, it leads to severe

dissatisfaction and thereby causing reduction in manufacturer's customer lifetime value. But if the manufacturer maintains an ecosystem of optimum level of capabilities (according to consumers needs and adaptability), it can provide both competitiveness and preference towards a specific brand of phone.

SCOPE FOR FURTHER RESEARCH

The level of feature fatigue varies across age groups. In addition, the factors responsible for feature fatigue might also be different across age groups. The research work was confined to smart phone market, thus it might not provided the exact scenario for other consumer electronics products. In addition, factors causing feature fatigue might also vary for different consumer electronic products. Data collected from a tech savvy population might not capture the exact scenario and target consumer behavior.

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