

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJRCM



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CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	INTERNATIONAL STUDENT COLLABORATION AND EXPERIENTIAL EXERCISE PROJECTS AS A PROFESSIONAL, INTER-PERSONAL AND INTER-INSTITUTIONAL NETWORKING PLATFORM <i>JOSE G. VARGAS-HERNANDEZ, DR. ADRIAN DE LEON-ARIAS, DR. ANDRES VALDES-ZEPEDA & DR. VICTOR MANUEL CASTILLO-GIRON</i>	1
2.	AN EMPIRICAL STUDY ON MARKETING OF GADWAL SARIS IN INDIA <i>DR. K.V. ACHALAPATHI, PREETI SHRIVASTAVA & SHAILAJA BANGARI</i>	10
3.	IDENTIFYING THE FACTORS EFFECTIVE ON ORGANIZATIONAL INNOVATION IN SERVICES <i>MOSTAFA ALIMIRI, MOHAMMAD HASSAN MOBARAKI & FATEMEH MOHEBBI FAR</i>	17
4.	THE EFFECT OF INDIVIDUALITY AND POWER DISTANCE ON INCOME SMOOTHING <i>SEYED HOSSEIN HOSSEINI & MOHAMADREZA ABDOLI</i>	22
5.	MANAGEMENT OF ELECTRICITY POWER SUPPLY IN DELTA AND EDO STATES OF NIGERIA: PROBLEMS AND PROSPECTS <i>ANTHONY A. IJEWERE</i>	26
6.	EMOTIONAL INTELLIGENCE AND ITS IMPACT ON TASK PERFORMANCE AND CONTEXTUAL PERFORMANCE <i>U.W.M.R. SAMPATH KAPPAGODA</i>	32
7.	THE RELATIONS BETWEEN CASH MANAGEMENT POLICIES AND PROFITABILITY OF SMEs IN KANO <i>DR. MUHAMMAD AMINU ISA</i>	37
8.	ACCELERATED LEARNING SOLUTIONS (ALS) – A MODEL FOR LEARNING ON THE JOB & PRODUCTIVITY ENHANCEMENT OF FRESH ENGINEERING GRADUATES THROUGH TITP (TELECOM INDUSTRY TRAINING AND PLACEMENT) <i>SREENIVASAN RAM, SUDHIR WARIER & LRK KRISHNAN</i>	40
9.	RURAL E-BANKING: A TECHNICAL FRAMEWORK USING MOBILE TERMINALS <i>DR. V. B. AGGARWAL, DEEPTI SHARMA & ARCHANA B. SAXENA</i>	47
10.	BIOMETRIC SECURITY IN MOBILE BANKING <i>S. T. BHOSALE & DR. B. S. SAWANT</i>	52
11.	SPIRITUAL INTELLIGENCE – A CHANGE MANAGEMENT STUDY <i>MADHUSUDAN.V & DR. NAGALINGAPPA.G</i>	56
12.	INTEGRATED RELIABILITY MODEL AND FAILURE MODES EFFECTS & CRITICALITY ANALYSIS FOR OPTIMUM RELIABILITY <i>K. S. LAKSHMINARAYANA & Y. VIJAYA KUMAR</i>	59
13.	FACTOR ANALYSIS OF DEFECTS IN SOFTWARE ENGINEERING <i>DR. SEETHARAM.K, LAXMI B RANANAVARE & CHANDRAKANTH G PUJARI</i>	65
14.	CONCERNS FOR SECURITY IN MIGRATING TO CLOUD COMPUTING <i>NITASHA HASTEER, DR. ABHAY BANSAL & TANYA SHARMA</i>	67
15.	PREDOMINANCE OF TRADITIONAL SECTOR IN UNORGANISED MANUFACTURING OF INDIA <i>DR. NEERU GARG</i>	70
16.	THE INSIGHT VIEW OF QUALITY OF WORK LIFE: A STUDY ON THE EMPLOYEES OF PUBLIC SECTOR AND PRIVATE SECTOR BANKS IN TIRUNELVELI DISTRICT <i>A. MADHU, T. RITA REBEKAH & DR. R. MOHAN KUMAR</i>	73
17.	DATA MINING FOR MOVING OBJECT DATA <i>VOORE SUBBA RAO & DR. VINAY CHAVAN</i>	78
18.	ECONOMIC TOURISM MANAGEMENT: AN APPLIED S.H.G. MODELING THROUGH CASE ANALYSIS OF ELLORA CAVES & DAULATABAD FORT – AN INDIAN APPROACH <i>DR. S. P. RATH, DR. BISWAJIT DAS, SATISH JAYARAM & MEENA SINHA</i>	81
19.	IMAGE RETRIEVAL USING CONTENT OF IMAGE <i>PREETI MISHRA & AVINASH DHOLE</i>	87
20.	FACTORS INFLUENCING COMPANY VALUATION: AN EMPIRICAL ASSESSMENT OF THE INDIAN CORPORATE SECTOR <i>DR. KAUSHIK CHAKRABORTY & NILANJAN RAY</i>	90
21.	CHRONOLOGICAL STUDY ON POSITIONING WITH EMPHASIS ON MALLS <i>SURESH SANNAPU & NRIPENDRA SINGH</i>	94
22.	CYBER ATTACK MODELING AND REPLICATION FOR NETWORK SECURITY <i>B.VENKATACHALAM & S. CHRISTY</i>	98
23.	WORKING CAPITAL MANAGEMENT OF HUL – A CASE STUDY <i>SOMNATH DAS</i>	102
24.	A STRATEGIC FRAMEWORK TOWARDS INDIAN RURAL RETAIL INDUSTRY IN THIS COMPETITIVE ERA <i>URVASHI GUPTA</i>	107
25.	EVALUATION OF THE PERFORMANCE OF TRAINING PROGRAM AT CARBORUNDUM UNIVESAL LIMITED, RANIPET <i>R. GEETHA & DR. A. DUNSTAN RAJKUMAR</i>	112
26.	QUALITY DATA REPRESENTATION IN WEB PORTAL – A CASE STUDY <i>S. CHRISTY, S. BRINTHA RAJAKUMARI & DR. M. SURYAKALA</i>	117
27.	PERFORMANCE ANALYSIS OF FIRE ALARM SYSTEM BASED ON WIRELESS SENSOR NETWORKS USING NS-2 <i>B. RAJESH, D. UPENDER & K. SRINIVAS</i>	120
28.	COMPARISON AND ANALYSIS OF WIRELESS NETWORKS FOR HEALTH CARE TELEMONITORING SYSTEM <i>KANTA JANGRA & KAVITA DUA</i>	125
29.	ECO-FRIENDLY MARKETING AND CONSUMER BUYING BEHAVIOR: AN EMPIRICAL STUDY <i>ADIL ZIA</i>	131
30.	A PROPOSED FRAMEWORK FOR AUTO REGULATED MIGRATING PARALLEL CRAWLER <i>VISHAL, SUBHASH CHANDER & NEELAM</i>	136
	REQUEST FOR FEEDBACK	140

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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

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ECO-FRIENDLY MARKETING AND CONSUMER BUYING BEHAVIOR: AN EMPIRICAL STUDY**ADIL ZIA****RESEARCH SCHOLAR****DEPARTMENT OF BUSINESS ADMINISTRATION****FACULTY OF MANAGEMENT STUDIES & RESEARCH****ALIGARH MUSLIM UNIVERSITY****ALIGARH****ABSTRACT**

Eco-friendly marketing and consumer buying behavior are two very important interrelated concepts of new age marketing. With the growing economy the demand and consumption of goods and services are also increasing, this lead to higher and higher environmental pollution. Consumer's education and awareness gave birth to eco-friendly attitude of the customers across the globe. There appears a constantly growing niche market all over the world waiting to consume these products. Conceptually speaking eco-friendly marketing is concerned with designing, developing and delivering products that are eco-friendly creating least harm to the environment and its stakeholders. The main objectives of this paper is to categorize the respondents on the basis of their level of eco friendliness and then to Develop a Model explaining Impact of 'Sustainable development strategies' based on Consumer buying behavior finally to offer suggestions based on the findings. The study based mainly on the primary data captured. For the purpose of measuring attitude 24 items explaining 'Search for Information' (SL), 'Personal apathy and loss of benefit' (PA), Financial cost (FC), Lack of Knowledge (LK) and Post purchase behavior (PPB) were obtained in Likert's five point scales. Reliability, validity and accuracy and authenticity of questionnaire are ensured. Regression analysis is done to develop a relationship amongst the variables. Further test and ANOVA is also used for the analysis. The study findings indicate that few respondents are 'Non users' and 'indifferent' of eco friendly products. On the other hand majority of them are aspirants.

KEYWORDS

Ecofriendly Marketing, Consumer Behavior.

INTRODUCTION

The thrust of eco-friendly marketing emerges from the ideological understanding of eco-friendly attitude of the customers across the globe. The deteriorating, rare and precious natural resources have extended enough signal to the marketers to come out with marketing mix which preserves the natural resources on the one hand and deliver value added products and services to the needy on the other hand. This aspect is felt more considering the global warming, ozone depletion, erosion of natural resources and hunt for safety and healthy consumables. In tune with the increasing awareness on eco-friendly marketing the multinational corporations have reengineered their agenda inserting eco-friendly elements in their product profile. There appears a constantly growing niche market all over the world waiting to consume these products. Conceptually speaking eco-friendly marketing is concerned with designing, developing and delivering products that are eco-friendly creating least harm to the environment and its stakeholders. This needs a strategic move of identifying and employing supply chain participants who care for the eco friendliness. From an another perspective eco-friendly marketing market means making effective utilization of green resources of a country in such a way that the utilization itself contributes to preservation and regeneration of resources meaning in no way the future generation of the country is deprived of the benefits enjoyed by the present generation in terms of natural resources. The prime concern behind this type of marketing is obviously effective utilization, in the mean time efficient preservation of the available natural resources for the benefit the present and future generation.

Eco-friendly marketing mix consists of product, price, place, promotion, process, physical distribution and people with utmost concern for eco- friendliness. As regards products, various attributes are identified, evaluated, procured, processed and preserved to provide healthy consumption and thereby prevent health hazard. For this purpose the price is fixed, taking into account of the value of service rendered or product produced. The promotion comprises of advertising, publicity, and other sales promotion measures which also take into account the eco friendly approach as regards utilization of material, manpower and other resources. The processing of the products needs special care in such a way that pollution generating elements are tackled. It becomes legal compulsion in many countries to come out with strategic measures to control pollution due to processing. As regards place and physical distribution, the activities involved in storage, warehousing, logistics etc should not result in ecological temperament. The people associated with eco-friendly marketing can be categorized as internal and external people. Internal people are employees who are involved in producing and delivering the product and services. On the other hand external people are the target market for whom the product and services are produced for. The internal and external people are expected to have a greater degree of concern over eco friendliness in each and every aspect of production and consumption so that the objective of eco-friendly marketing will be meaningfully fulfilled. Across the globe the challenge to eco friendliness arises from several platforms including that of technology. Technology contributes to hi-tech products which are quite often incompatible with the conceptual underpinning of eco-friendly marketing. Unfortunately consumers are easy prey to hi-tech products in view of the augmented benefits associated. There arise a need to strike a balance between eco friendliness and technology advancements. A perfect harmony of technology vis a vis eco friendliness will lead the marketers to ride the new horizons.

REVIEW OF LITERATURE

Intensive research studies pertaining to eco-friendly marketing in general and eco-friendly consumers in particular across the globe are in the budding stage. It is view of the environmental concern government and international agencies have encouraged research pertaining to eco-friendly marketing. Shamdassani et.al., (1993) in their study observe that the green movement has started to make its impact on the consumption decisions and behaviors of Singaporean consumers. Their exploratory study has examined the differences among ecologically concerned and non ecologically concerned consumers with respect to their personal and social characteristics and their perception of marketing of eco-friendly products. Significant differences in terms of attitude and personality traits among the green and non green consumers are reported. Additionally, it is observed that while there was a perceived lack of marketing effort for these products and services, green consumers were more aware of green alternatives and were willing to pay higher prices and spend more time and effort to adopt environmentally- friendly consumption behavior.

Minton and Rose (1997) investigated the main effect of environmentally concerned attitudes and norms on product choice, search for information, recycling, and the various behavioral intentions. His research supports the work of Schwartz (1977) and Hopper and Nielsen (1991) by showing that the personal norm has the primary influence on environmentally friendly behavior. His finding, that the attitude toward the environment had strongest effect of the three predictors on the behavioral intentions in very important contribution to the literature. However, the personal norm had the strongest effect of the three predictors on product choice, information search, and recycling. Thus, while attitude is a good predictor of intentions to act in environmentally concerned ways, a sense of personal moral obligation is more likely to lead to action in the form of environmentally friendly product choices search, and recycling.

Chen (2001) has developed a quality based model for analyzing the strategic and policy issues concerning the developments of green products with conflicting traditional and environmental attribute. The study has taken into consideration the interactions among the customers' preferences, the producer's product strategies and the environmental standards imposed by governments. The major findings of the study show that green product development and stricter

environmental standards might not necessarily benefit the environment. Ginsberg and Bloom (2004) propose that the companies handling the dilemmas associated with eco-friendly marketing should always keep in mind that the consumers are unlikely to compromise on traditional product attributes such as convenience, availability, price, quality and performance. The authors suggest the green marketing strategy matrix for different market and competitive conditions ranging from the relatively passive and silent "lean green" approach to the more aggressive and visible "extreme green" approach with "defensive green" and "shaded green" in between.

The literature reviewed above interestingly has some commonalities. The authors have probed eco-friendly marketing issues from three major perspectives

- (1) the eco-friendly consumers' behavior, perception, attitude and their profile
- (2) the eco-friendly marketing practices such as eco-friendly marketing mix, market segmentation etc
- (3) the policies and regulations issue of the government concerned and its impact on eco-friendly marketing practices in the respective countries.

The literature reveal that there is a positive inclination towards the acceptance of eco-friendly products, increased awareness across the globe on the availability of eco-friendly products and a welcoming trend towards acceptance of eco-friendly products. It is also to be reported here that the magnitude of acceptance, preference, and attitude are not uniform.

The current study reported here has also attempted to capture the awareness, preference level and perception about the eco friendly products.

THE RESEARCH OBJECTIVES

The concept of eco-friendly marketing is yet to gain recognition, popularity and acceptance to the full extent. In view of growing concern over the environmental issues across the world the marketers are attempting to address the eco-friendly issues by way of increased attention to products of all types. Though the shades of eco-friendly are different, the marketers are constantly addressing the concept. Successful marketing strategy needs to be customer centric and so also the eco-friendly marketing strategy. Among other things it is the positive perception, attitude, interest awareness and preference of consumers towards the eco-friendly products that ensure sustainable success. These pertinent aspects are yet to be explored with much vigor.

Against this background this study has been attempted with the following objectives:

- To categorize the respondents on the basis of their level of eco friendliness.
- To Develop a Model explaining Impact of 'Sustainable development strategies' based on Consumer buying behavior.
- To offer suggestions based on the findings.

RESEARCH HYPOTHESIS

- H₀₁ : There has been no significant variation in 'Search for Information' with age.
 H₀₂ : There has been no significant variation in 'Search for Information' with gender.
 H₀₃ : There has been no significant variation in 'Search for Information' with educational qualification.
 H₀₄ : There has been no significant variation in 'Personal apathy & loss of benefits' with age.
 H₀₅ : There has been no significant variation in 'Personal apathy & loss of benefits' with gender.
 H₀₆ : There has been no significant variation in 'Personal apathy & loss of benefits' with educational qualification.
 H₀₇ : There has been no significant variation in 'Financial cost' with age.
 H₀₈ : There has been no significant variation in 'Financial cost' with gender.
 H₀₉ : There has been no significant variation in 'Financial cost' with educational qualification.
 H₀₁₀ : There has been no significant variation in 'Lack of knowledge' with age.
 H₀₁₁ : There has been no significant variation in 'Lack of knowledge' with gender.
 H₀₁₂ : There has been no significant variation in 'Lack of knowledge' with educational qualification.
 H₀₁₃ : There has been no significant variation in 'Post purchase behavior' with age.
 H₀₁₄ : There has been no significant variation in 'Post purchase behavior' with gender.
 H₀₁₅ : There has been no significant variation in 'Post purchase behavior' with educational qualification.

METHODOLOGY

The study has characteristics of both exploratory and descriptive research. The study was based mainly on the primary data captured through a questionnaire. For the purpose of measuring attitude 24 items explaining 'Search for Information' (SL), 'Personal apathy and loss of benefit' (PA), Financial cost (FC), Lack of Knowledge (LK) and Post purchase behavior (PPB) were obtained in Likert's five point scales. This data is used to categorize respondents into different category of eco friendly consumers based on the questions asked. The Cronbach Alpha is applied to test reliability. Thus the reliability, validity and accuracy and authenticity of questionnaire are ensured. Regression analysis is done to develop a relationship amongst the variables. Further test and ANOVA is also used for the analysis. A sample of 60 respondents from Aligarh was taken for the study. SPSS package was used for analyzing the data.

FINDINGS AND ANALYSIS

CATEGORIZATION OF RESPONDENTS ON THE BASIS OF ECO FRIENDLINESS

The respondents were categorized on the basis of the perception towards eco friendly aspects. For this purpose a set of 24 statements were developed. On the basis of factor analysis performed by principal component method and Varimax rotation; these items were classified into four categories. On the basis of data collected through questionnaire respondents were classified into 4 groups viz., 'Aspirants', 'Loyal Users', 'Indifferent' and 'Non Users' Table 1. The responses to the statements were captured on the five point scale. A brief description of the categories of respondents is given below: Aspirants are aware of the ecological imbalance and its damaging effects. They wish to consume eco friendly products and feel that eco friendly products render value for price paid. Loyal Users have a very strong favorable attitude towards eco friendly products. They buy only eco friendly products, feel that the eco friendly products are good for health and are fully satisfied with the same. They always recommend eco friendly products and wait for the availability of the same instead of buying the alternatives. Indifferent users don't feel much difference between eco friendly products and non eco friendly products and are happy with any product that fulfills their needs. They are not very specific about the eco friendliness and go by product availability, price and quality. Non Users feel that ecological imbalance is bound to happen and as an individual they cannot contribute to avoid the same. They feel that eco friendly products are yet another marketing gimmick, they don't deliver what they promise and that they are costly. They also feel that eco friendliness does not enable to upgrade quality and the products do not have world class quality.

The classification of the respondents as per the findings is reported in Table 1.

RESPONDENT'S CATEGORY ON THE BASIS OF THEIR LEVEL OF ECO FRIENDLINESS

TABLE 1

1	Aspirants	58%
2	Loyal Uses	20%
3	Indifferent	15%
4	Non Users	7.00%

The above table shows that majority (58.3%) of the respondents are 'aspirants', 20 % are 'Loyal Users', 15% are 'Indifferent' and only 7% fall in the category of 'Non Users'.

REGRESSION ANALYSIS

This technique is used to develop a relationship between dependent variables and independent variables. In our study dependent variable is Post purchase behavior (PPB) where as the independent variables are 'Search for Information' (SL), 'Personal apathy and loss of benefit' (PA), Financial cost (FC) and Lack of Knowledge (LK).

The results of regression analysis are shown in table 2.

TABLE 2: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.941 ^a	.885	.866	.29122

a. Predictors: (Constant), LKAvg, SIAvg, PAAvg, FCAvg

Model Summary shows the value of R as 0.941, R^2 as 0.885 and adjusted R^2 as 0.866 which indicates that this regression model is capable to explain 88.5% of variation of dependent variable due to independent variables.

The regression equation is $PPB = ax_1 + bx_2 + cx_3 + dx_4 + C$

Where PPB = Post purchase behavior.

$a = 0.623$, $b = -0.466$, $c = -0.205$, $d = 0.336$, x_1 = 'Search for Information' (SL), x_2 = 'Personal apathy and loss of benefit' (PA), x_3 = Financial cost (FC), x_4 = Lack of Knowledge (LK), C = Constant.

TABLE 3: COEFFICIENTS^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.295	.685		3.350	.003
SIAvg	.453	.089	.632	5.108	.000
PAAvg	-.416	.107	-.466	-3.902	.001
FCAvg	-.250	.187	-.205	-1.334	.194
LKAvg	.369	.185	.336	1.996	.057

a. Dependent Variable: PPBAvg

The above table 3 explains the coefficients of each independent variable ie 'Search for Information' (SL), 'Personal apathy and loss of benefit' (PA), Financial cost (FC) and Lack of Knowledge (LK) as 0.632, -0.466, -0.205 and 0.336 respectively which indicates their respective impact of each independent variable on dependent variable.

From the above table 3 it can be seen that SL and LK has positive impact on PPB where as PA and FC is having negative impact. Further FC and LK has significant impact where as SL and PA is having insignificant impact.

HYPOTHESIS TESTING

The hypothesis is tested using t test and ANOVA wherever applicable. T test is used to test hypothesis related to gender H02, H05, H08, H011 and H014 (shown in table 5) and the ANOVA is applied for testing hypothesis related to age and educational qualifications ie H01, H03, H04, H06, H07, H09, H010, H012, H013 and H015 (shown in table 4)

Only H02, H08, H010 and H012 have insignificant values while others are showing significant values.

Hypothesis H02, H08, H010 and H012 were rejected, while H01, H03, H04, H06, H07, H09, H010, H012, H013 and H015 were failed to rejected. (As shown in table 4 and table 5)

FINDINGS

The study findings indicate that few respondents are 'Non users' and 'indifferent' of eco friendly products. On the other hand majority of them are aspirants. This conveys a positive signal to the marketers to further activate the attempts towards coming out with eco friendly marketing mix.

Further, customer segment specific strategic attempts are to be explored for conversion of 'non users' of eco friendly products into 'aspirants' and 'aspirants' into 'loyal uses'. There is a likelihood of more and more eco friendly product to pour into the market as the concern for eco friendly product is higher as compared to others. This has a greater implication on the product mix strategy of the concern. Government can come out with advertising and publicity campaign through television media as a medium in generating awareness about the eco friendly products.

Moreover, government should come out with policy measures to invest as much as possible to build awareness about eco friendly products and render incentives to the organizations committing themselves in the generation and distribution of eco friendly products. The society at large would be benefited by healthy eco friendly products as there would be competition among organizations in developing and sustaining competitive edge on account of capturing the niche segment pertaining to eco friendly products. From the academic perspective studies of this nature are at the budding stage further studies in active collaboration with agencies concerned with eco friendly marketing will yield much more meaningful results that would provide input for strategic decision making for the overall improvement in the corporate performance. The bottom line is preserving and making effective use of rare resources for the betterment of humane of the present generation and the future.

IMPLICATIONS

The following suggestions emanate from the study:

- It is encouraging to note that majority of the respondents fall in the category of 'aspirants'. This green signal shows a ripening market for eco friendly products which can be explored by marketers.
- Profile of the respondents belonging to various categories viz., 'aspirants', 'Loyal users', 'indifferent users' and 'non users' will enable to frame customer segment specific strategies to reach and engage the consumers.
- Majority of respondents are only 'partially' aware. Hence vigorous steps should be taken to increase the awareness.
- In case of eco friendly products and television is the major source of information further 'friends/ relatives/neighbor's' can be another source of spreading awareness. These sources can be further explored to a greater extent to create awareness and preference.
- In order to enhance the market opportunities marketers can concentrate on the demographic variables highlighted in the study so as to influence the awareness, preference and satisfaction.

- The study shows that the perception of respondents towards eco friendly products differs. Also the paper has highlighted the variables discriminating the category of respondents which enables to develop customized strategies to address specific category of respondents.
- The ecological imbalance is causing serious implication and the issue is gaining more attention in the global scenario. Among other constituents of the society, marketers have an indispensable role to play in safeguarding the environment by designing, developing, delivering socially responsible marketing mix. This paper mirrors the mindset of eco friendly consumers and thereby provides the knowledge base required to equip the marketers to face the task of creating a safe world for present and prospective consumers. The findings would enable the marketer to arrive at appropriate eco friendly marketing strategies and thereby scale new heights in the less explored terrain.

TABLE 4: COMPONENT MATRIX^a

	Component			
	1	2	3	4
SI1	-.900	.112	.275	-.083
SI2	-.482	.638	-.531	.175
SI3	-.373	.862	-.226	-.080
PA1	.937	.150	.014	-.217
PA2	.842	.076	-.372	-.091
PA3	.736	.463	.297	-.250
PA4	.726	.492	-.017	-.458
PA5	.554	.055	.003	.793
PA6	.486	.611	-.278	.410
PA7	.740	.578	-.279	-.161
FC1	.211	-.164	.748	.169
FC2	.808	.152	.405	.197
LK1	.681	.472	.394	.006
LK2	.859	.321	.272	.200
LK3	-.143	.793	.488	-.045
PPB1	.873	-.266	-.331	.049
PPB2	-.842	.344	.393	-.003
PPB3	-.841	.460	.003	.132
PPB4	-.743	.611	-.178	.117
PPB5	-.838	.163	.102	-.038

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

TABLE 5

ANOVA			
Hypothesis	F-Value	Sig.Value	Remarks
H01	22.629	0	Failed to reject
H03	27.191	0	Failed to reject
H04	5.249	0.003	Failed to reject
H06	5.11	0.013	Failed to reject
H07	6.02	0.002	Failed to reject
H09	4.163	0.027	Failed to reject
H010	2.159	0.103	Rejected
H012	1.328	0.282	Rejected
H013	32.396	0	Failed to reject
H015	12.764	0	Failed to reject

TABLE 6

Independent Sample t-Test			
Hypothesis	t-Value	Sig.Value	Remarks
H02	0.536	0.596	Rejected
H05	-3.474	0.002	Failed to Reject
H08	-1.626	0.115	Rejected
H011	-2.602	0.015	Failed to Reject
H014	2.13	0.042	Failed to Reject

Questionnaire to measure "Impact of Sustainable development strategies on Consumer buying Behavior: An Empirical Study"

Please tick the following options on the basis of your perceptions about a product on a five point scale. (5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2=Disagree, 1 = Strongly Disagree)

SEARCH FOR INFORMATION

1	I always compare package label information about the environmental safety of the product and/or package while I am in the grocery store?	5	4	3	2	1
2	notice advertisements about eco friendly products?	5	4	3	2	1
3	talk to my neighbors, friends, co workers & family members about various eco friendly products or activities?	5	4	3	2	1

Personal apathy and loss of benefits

1	I do not worry about buying eco friendly products.	5	4	3	2	1
2	I do not believe buying eco friendly products will help the environment.	5	4	3	2	1
3	I do not buy eco friendly products because they are not as convenient as regular products.	5	4	3	2	1
4	I just do not think about the environment when I buy products.	5	4	3	2	1
5	I am too busy to shop around for eco friendly product alternatives	5	4	3	2	1
6	I loose too many benefits when I buy eco friendly products	5	4	3	2	1
7	Eco friendly products are of inferior quality.	5	4	3	2	1

Financial Cost

1	Eco friendly products are expensive	5	4	3	2	1
2	Eco friendly products are less durable.	5	4	3	2	1

Lack of Knowledge

1	I do not know enough about environment friendly products	5	4	3	2	1
2	I am confused about environment friendly products	5	4	3	2	1
3	I need to know more about actions that I can take when buying products so that the environment is protected.	5	4	3	2	1

Post Purchase Behavior

1	I am satisfied with the product even if it is not eco friendly.	5	4	3	2	1
2	I would be willing to pay more taxes to support government implement eco friendly policies.	5	4	3	2	1
3	I would be willing to pay more each time I purchase if it is Eco friendly.	5	4	3	2	1
4	I would be willing to stop buying products from companies guilty of polluting the environment even though it might be inconvenient for me.	5	4	3	2	1
5	I would be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results may not seem significant.	5	4	3	2	1

Age: Less than 19 ☐ 20-25 ☐ 26-30 ☐ 31-40 ☐ Above 41 ☐ Gender: Male ☐ Female ☐
 Education: Less than graduate ☐ Graduate ☐ Post graduate ☐

6. Which of the following options best suits you as a consumer?

- I am aware of the ecological imbalance and its damaging effects. I wish to consume eco friendly products and feel that eco friendly products render value for price paid. (Aspirants)
- I have a very strong favorable attitude towards eco friendly products. I buy only eco friendly products, I feel that the eco friendly products are good for health and I am fully satisfied with the same attitude. Further I always recommend eco friendly products and wait for the availability of the same instead of buying the alternatives. (Loyal User)
- I don't feel much difference between eco friendly products and non eco friendly products and I am happy with any product that fulfills my need. I am not very specific about the eco friendliness and I go by product availability, price and quality. (Indifferent users)
- I feel that ecological imbalance is bound to happen and as an individual I cannot contribute to avoid the same. I feel that eco friendly products are yet another marketing gimmick, they don't deliver what they promise and that they are costly. I also feel that eco friendliness does not enable to upgrade quality and the products do not have world class quality. (Non Users)

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