

GREEN MARKETING FOR ECO-FRIENDLY BUSINESS GROWTH IN THE ICT ERA: THE CASE OF THE DIGITAL ECONOMY OF KERALA

Dr. Jacob Joju¹, Dr. Manoj P K^{*2}, Dr. Abdul Basheer Ahamad Baig³, Ms. Athira S Babu.⁴ and Dr. Thomas George K⁵

¹(Kerala Chief Minister's Nava Kerala Fellow), Associate Professor, LEAD College of Management, Dhoni PO, Olavakode, Palakkad, 678009

²Faculty & Research Co-Ordinator, Department of Applied Economics, Cochin University of Science and Technology (CUSAT), Kochi – 682 022.

²ORCID ID: 0000-0002-5710-108

³Associate Professor, LEAD College of Management, Dhoni, Palakkad- 678009, Kerala

⁴Joint Secretary- Entrepreneurship LOT, LEAD College of Management, Dhoni, Palakkad-678009, Kerala

⁵Professor & Director, LEAD College of Management, Dhoni, Palakkad- 678009, Kerala

¹mailerjoju@gmail.com, ²manoj_p_k2004@yahoo.co.in, ³dr.abdul@lead.ac.in, ⁴athirasbabu95@gmail.com and ⁵thomas@lead.ac.in

ABSTRACT

Objectives: To design the Green Marketing strategy for ICT-enabled and environment-friendly marketing for the MSMEs in Palakkad district, Kerala, India; with reference to investment amount, price sensitivity and level of awareness.

Methods: The feedback received from a final sample of 150 respondents representing MSMEs in Palakkad district (industrial area) of Kerala, the survey being done online starting from an initial sample of 200. The data collected were analyzed using statistical techniques like Simple Linear Regression Analysis (SLRA) and Multiple Linear Regression Analysis (MLRA). Thus, the three hypotheses relating to investment amount, price sensitivity and awareness level were tested for their statistical significance.

Findings: The relationship between size or quantum of investment and adoptability of modern ICT-enabled Green Marketing method for business promotion was sought to be studied and tested for its statistical significance. It was noted that quantum or amount of investment had statistically significant relation with adoptability of Green Marketing. So, size of investment (often high, initially) does have influence of Green Marketing adoption. The mathematical relation between the variables Green Marketing adoptability and investment (large) made was also formulated. Secondly, Green Marketing adoptability and price sensitivity of customers was also found to be statistically significant. So, the mathematical relation between Green Marketing adoption and price sensitivity of customers was also formulated. Thirdly, the relationship of low (poor level of) awareness regarding Green Marketing and Green Marketing adoption too was found to be statistically significant and accordingly, the mathematical relationship between Green Marketing adoption and the low awareness level was also established. It is noted that all the three relationships are vital in the design of Green Marketing strategy by MSMEs in Kerala.

Novelty: Using the three novel mathematical equations, with Green Marketing adoption as the dependent variable (all the three cases) in terms of three predictors (viz. investment, price sensitivity, and awareness) informed policy decisions are possible.

Keywords: ICT, Mobile penetration, Eco-friendliness, Green Marketing, Sustainability.

1. INTRODUCTION

Green marketing, according to the American Marketing Association (AMA) [20], is the promotion of items that are assumed to be ecologically friendly. As a result, green marketing encompasses a wide range of actions, including product modification, modifications to the manufacturing process, packaging improvements, and advertising adjustments. However, defining green marketing is a difficult process because numerous meanings overlap and contradict one another; one example is the existence of multiple social, environmental, and retail connotations for this phrase. Environmental marketing and ecological marketing are two more phrases that are used interchangeably. The process of selling products and/or services based on their environmental benefits is known as green marketing. Such a product or service may be ecologically friendly in its design or in the manner it is manufactured and/or packaged.

The obvious assumption in green marketing is that potential customers will see "greenness" as a benefit and base their purchasing decisions on it. Green marketing's not-so-obvious assumption is that consumers will pay more for green items than for a less-green comparable alternative product - an assumption that, in my opinion, has yet to be proven decisively.

While green marketing is becoming increasingly popular as more people are willing to back their environmental concerns with their dollars, it can be risky. The public is dubious of green claims to begin with, and if a green claim is revealed to be incorrect or contradicted by a company's other products or practices, it can substantially harm a company's brand and sales. Green washing is the practice of portraying a product or service as green when it is not. Showing potential clients that you adopt green business methods could result in greener environment and greater balance in bank account. Green marketing isn't just a buzzword; it's a marketing approach that can help you attract more customers and increase your profits. But only if you do everything correctly. Green marketing helps in better marketing of 'Green' products, like, Green Housing; Green Buildings and Green Affordable Homes being national priorities.(Manoj PK, 2013)[8].

To be effective at green marketing, you must be authentic, educate your clients, and provide them the opportunity to contribute. Being genuine means that a) you're doing what you say you're doing in your green marketing campaign, and b) the rest of your business practices are in line with whatever environmentally friendly activities you're undertaking. Both of these requirements must be accomplished in order for your company to build the kind of environmental credentials that will allow a green marketing strategy to be successful.

1.1. Analytical Significance

It's not only a matter of informing your customers that you're doing everything you can to safeguard the environment or to maintain it as 'Green'. Rather, it is also a matter of explaining why 'Green' really matters in every setting. Otherwise, a large chunk of your target market would think, "So what?" and your green marketing effort will fail. Giving your customers the chance to participate implies personalizing the advantages of your environmentally friendly initiatives, usually by allowing them to participate in positive environmental action. That is, special sort of consumer education regarding the inevitability of Green Marketing, as well as the use of Green products, like, Green Buildings, Green Affordable Homes etc.(Manoj PK, 2013)[8]. Consumers if educated especially as above will be ready to 'pay more' for such Green products.

The concept of Green marketing has evolved over time. According to Peattie (2001)[14], there are three stages in the evolution of green marketing. The first phase was dubbed "Ecological" green marketing, and all marketing operations during this time were focused on environmental issues and providing solutions. The second phase was "Environmental" green marketing, in which the emphasis turned to clean technology, which included the development of innovative new products that addressed pollution and waste challenges. The "Sustainable" green marketing phase was the third phase. In the late 1990s and early 2000s, it became popular. Because resources are few and human desires are limitless, it is critical for marketers to make optimal use of those resources while also achieving the organization's goals. As a result, green marketing is unavoidable. Consumers all throughout the world are becoming increasingly concerned about environmental protection. Evidence from around the world demonstrates that people are worried about the environment and are changing their habits. As a result, green marketing has evolved, referring to the rising market for environmentally friendly and socially responsible goods and services. Benefits of Green marketing can be realized from the fact that enterprises that produce new and improved products and services with environmental inputs in mind, gain access to new markets, increase profit sustainably, and gain a competitive edge over companies that are not environmentally conscious. For sustainability it is vital to consider customer preferences (Nasar & Manoj, 2015)[19] to use ICT competitively (Manoj, 2016)[17]. There are five main reasons why a marketer should employ green marketing. These are: (i) Chances or a competitive advantage, (ii) Social obligations of businesses, (iii) Government coercion, (iv) The threat of competition, and (v) Concerns about cost or profit.

1.2. Past Studies

According to Vasanthakumar N. Bhat (1993)[16], every company embarking on a green marketing program must begin with green design because inputs, manufacturing processes, distribution, use, and disposal techniques are all determined at the design stage. Presents waste-cutting source reduction and waste-management solutions, as well as a way for comparing green design alternatives that can help designers choose superior designs. Because a product must meet several criteria, it is recommended that it be developed concurrently rather than sequentially. Finally, top management is given advice on how to improve green design in their companies.

A study on green marketing undertaken by John Grant (2008) [15] has examined as to how businesses might develop a greener strategy and also as to what exactly the future of green marketing could hold. The author has examined as to how companies could obtain their greener strategies, the process of greening of corporate strategy regarding brands, setting of standards, green marketing, and networking of resources. The major findings were there would be a low carbon economy soon to which companies would have to adapt, sustainability being vital for businesses to grow. The paper gives meaningful suggestions for the effective adoption of green marketing by the corporate world in the future. Elham Rahbaret. al. (2011) [2] investigated the impact of green marketing techniques on actual consumer purchase behavior in Penang (Malaysia). A survey of 250 Chinese, Malay, Indian, and other races representative of the Penang community was conducted. To uncover characteristics that influence Penang consumers' real purchase behavior, factor analysis, Cronbach alpha, and multiple regression were utilized. Customers' trust in eco-labels and eco-brands, as well as their perceptions of eco-brands, have a

favorable and significant impact on their actual buying behavior, according to the findings. In his study, Manoj PK (2013)[8] “Prospects and Challenges of Green Buildings and Green Affordable Homes: A Study with Reference to Ernakulam, Kerala” in Global Research Analysis has sought to study in detail the utmost relevance of Green Buildings and Green Affordable Homes in India with special reference to Kerala State. The author has pointed the vital need for promotion of Green Housing in India as a means of provision of shelter to the masses at affordable rates while at the same time protecting the environment. This is because the materials and methods used in the construction of buildings and houses are environment-friendly and hence should be preferred for the sustainability of residential construction. Many studies suggested ICT adoption for sustainability, transparency, and competitiveness. (Manoj, 2012)[18].

2. METHODOLOGY

2.1. Objectives

- (i) To understand the concept of Green Marketing, and its relevance in modern business;
- (ii) To apprise the difficulties that businesses face while adopting Green Marketing, based on an empirical study on the adoptability of Green Marketing in the context of Kerala, India;
- (iii) To make suggestions for the effective adoption of Green marketing in today’s ICT era.

2.2. Research Questions

- (i) Does large investment have significant impact on the adoption of Green Marketing?
- (ii) Does consumers’ price sensitivity have significant impact on Green Marketing adoption?
- (iii) Does consumers’ low awareness have significant impact on Green Marketing adoption?

2.3. Hypotheses Formulated (Null Hypotheses)

- (i) **H1₀**: Large investment has no impact on green marketing adoptability.
- (ii) **H2₀**: Consumers’ price sensitivity has no impact on green marketing adoptability
- (iii) **H3₀**: Consumers’ low awareness has no impact on green marketing adoptability.

2.4. Sampling Design

The sample design of any study can reveal important information about a variety of elements, including the study's population, sample units or subjects, sampling framework, and sample size. It also goes through the sampling method.

The total number of respondents who meet the given set of criteria or the population of the study in this case comprises of entrepreneurs in the Palakkad district of Kerala State of India. Micro, small, and medium enterprises (MSMEs) in the Palakkad district of Kerala State in India have been chosen for this study. The sample of MEME owners (or principal officers) was chosen based on random sampling method, so that representation of diverse types of industries is ensured, both in services and manufacturing. Of 200 business owners contacted, 170 alone responded properly and agreed to participate in the Online feedback survey. After the survey, only 160 feedbacks were received and of these 150 alone were complete in all respects and usable for further analysis. Final analysis is based on this set of 150 feedbacks (questionnaires).

2.5. Data Sources and Data Collection

The study is limited to Palakkad district of Kerala. To fulfill the study goals, the researcher used both qualitative (exploratory) and quantitative (non-experimental survey) research approaches. The researcher conducted semi-structured online interviews with respondents from several units in and around Palakkad using a qualitative research approach. This strategy enables the researcher to pinpoint the exact factors impacting the challenges green marketing has when attempting to implement it. As a result, the researcher's attention was restricted to a few crucial components, and his study challenge was defined. During the second phase of the non-experimental survey, the researcher employed simple random sampling to collect data samples from green marketing businesses in Palakkad districts. 150 responders from a variety of industries, including manufacturing, infrastructure, service sector, food processing, packaging, chemicals, and information technology, provided the necessary information. The researchers used descriptive and inferential statistics for data analysis. Mean, standard deviation, and cross-tabulation analysis were employed in descriptive statistics, and single linear regression analysis (SLRA) was used to investigate the impact of independent factors on the dependent variable. Multiple linear regression analysis (MLRA) was used to study the direct influence of the independent factors on dependent variables as per the model studied.

2.5.1. Data Collection Procedure

The main purpose of this study was to look into the major issues that green marketing faces. According to the findings, asking questions and recording replies in a field survey is the most successful way for gathering information from a large

number of respondents (Blackwell et al., 2001, p.22). Despite considering a variety of data collection approaches, constraints such as the survey's complexity, time, and financial budget led to the adoption of convenience sampling to collect data from randomly selected green marketing.

2.5.2. Survey Instrument

The researchers devised a non-disguised questionnaire to collect data from the respondents. There were 53 questions in all on the questionnaire, which was separated into three pieces. The questionnaire's Part - A has five questions that define the respondent's demographic attributes, such as age, gender, industry, education, and experience. Part B of the survey consisted of 19 questions targeted at learning about the entrepreneurs' thoughts on the challenges of green marketing adoption. Part C has 29 questions about the four variables of the study. All of the items in section C of the questionnaire are based on previous research and are intended to reveal the study's significant components in a variety of situations. A five-point Likert scale is used to grade all of the items. There are a number of question types in this survey, including dichotomous, multiple choice, and five-point interval scales, as well as open-ended questions. The survey finishes with a thank you for participating in the study.

2.5.3. Methods of Analysis

Data analysis was done using the popular computerized software package called SPSS (Software Package for Social Sciences) using the methods like SLRA and MLRA as above. A case analysis is used to discover outliers, and regression assumptions tests are used to check for violations in the data. The full study was carried out using SPSS 21.0 (Statistical Package for Social Sciences). The study's major purpose was to look at the direct links between the independent factors and one dependent variable at a time, then look at all of them at once. To analyze the relationship between the concerned independent and dependent variables, a simple linear regression analysis is utilized (SLRA). Table I lists the assumptions in question and the method used to examine them.

Table I: Tests applied to test the proposed hypotheses of the study

Sl. No	Hypothesis/Hypotheses	Technique used for the analysis
1	H1 ₀	Simple Linear Regression Analysis (SLRA)
2	H2 ₀	Simple Linear Regression Analysis (SLRA)
3	H3 ₀	Simple Linear Regression Analysis (SLRA)

Source: Based on Research Design.

2.5.4. Reliability Analysis

Cronbach's Alpha was used to calculate the dependability coefficient. In terms of dependability coefficient values, 0.70 has been proposed as the minimum threshold for fundamental research. (Nunnally, 1978) If the correlations are low (less than 0.70), each item's contribution will be assessed, and the items with the least empirical and conceptual support will be removed from the scale. The following table, no. 1.2, suggests Cronbach's Alpha. (Table II gives the further information in this regard).

Table II: Reliability Analyses

Sl.No.	Variable	Cronbach's Alpha
1	Large Investment	0.951
2	Price sensitive consumers	0.874
3	Less awareness of consumers	0.913

Source: Based on Results of Reliability Test

2.6. Scope of the Study

The primary goal of this paper is to test if three factors (viz. large investment, price sensitivity of consumers and low awareness of consumers) significantly influence green marketing adoption. The variables used in this study as above were put to the test in terms of substantial investment, price-sensitive consumer, and consumer with low awareness. The scope of this research is limited to the feelings, thoughts, and pleasures evoked by the issues that green marketing entrepreneurs often face. The geographical area of study is limited to Palakkad district of Kerala.

3. RESULTS AND DISCUSSION

3.1. Adoption of Green Marketing – The Green Marketing Mix

Every business has its own preferred marketing mix. Some marketing mixes contain four Ps, while others have seven. The four Ps of green marketing are the same as in traditional marketing, but the challenge for marketers is to employ the four Ps (4 Ps) in new ways.

3.1.1. Product

The ecological goals in product development are to reduce resource consumption and pollution while increasing resource conservation. In the green marketing mix, price is a crucial and important aspect. Most customers will only pay more if they believe the product has more value. This added value could be in the form of better performance, function, design, aesthetic appeal, or taste. All these factors be considered when charging a premium for green marketing. The premium can be substantiated by specially educating the consumers regarding the utmost need for environmental protection by ‘Going Green’.

3.1.2. Promotion

Green advertising can be divided into three types, viz. (i) Commercials that discuss a product's or service's interaction with the biophysical environment, (ii) Those who showcase a product or service that promotes a green life style, (iii) Commercials that portray a corporate image of environmental stewardship. Eg. Marketing of Apartments (Nasar & Manoj, 2015)[19].

3.1.3. Place

Customers will be influenced significantly by the location and timing of a product's availability. Green products if available in the vicinity and at short notice will get an edge over others if consumers are duly educated of its benefits to environment.

3.1.4. Price

The amount of money customer has to pay to purchase a product. A customer who is duly educated about the ‘Green imperative’ that globe faces will be ready to pay a premium for a green product that is marketed as such. (Green Buildings and Green Houses are encouraged worldwide as they harm the environment the least and are cost-effective). (Manoj P K, 2013)[8].

3.2. Respondent’s Socio-Economic, Demographic and Geographic Characteristics

Table III shows the of respondents' demographic, socioeconomic, and geographic features.

Table III: Respondent’s Demographic Profiles

Demographic Description		Frequency	Percentage	Mean	SD
Gender	Male	102	68.8	-	-
	Female	48	31.2		
Age	25-35 Years	40	26.67	36.06	11.47
	35-45 Years	60	40		
	45-55 Years	36	24.13		
	Above 55 Years	14	9.3		
Sector	Service Sector	100	66.6	-	-
	Manufacturing Sector	45	30		
	Others	5	3.3		
Span of Experience	0-2 Years	50	33	-	-
	2-5 Years	61	40.67		
	5-10 Years	18	12		
	Above 10 Years	21	14		

Source: Field Survey

3.3. Testing of Hypotheses 3.3.

3.3.1. Hypothesis – 1

H1₀: Large Investment has no effect on Green Marketing Adoptability

Simple linear regression was used to investigate the hypothesis of a link between large investment and adoptability of green marketing. Table 1.4 shows that the predictor factors have a moderate impact on the green marketing adoptability (R²= 0.313), as evidenced by the regression findings. The regression models' ANOVA result (F =318.412, p=0.000) revealed that they were validated with green marketing adoptability.

Table IV: Regression Model Summary (Hypothesis -1) (Effect of Large Investment)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	ANOVA Results			
					F-Value	df1	df2	Sig.

1	0.561 ^a	0.314	0.313	0.50092	318.412	1	145	0.000
---	--------------------	-------	-------	---------	---------	---	-----	-------

a. Predictors: (Constant), Large investment

Source: SLRA Output from SPSS (Hypothesis-1)

The beta values of large investment ($\beta=0.603$, $t=17.844$, $p=0.000$) were a significant predictor of green marketing adoptability, according to the coefficient summary provided in Table V. The results implied that the predictor variable and the dependent variable were linked. Because their p-values were less than 0.05, the null hypothesis was refuted and the alternate hypothesis H_{1a} was accepted. The following simple linear regression model can be framed:

$$\text{Green marketing adoptability (Y)} = 1.545 - 0.603 (\text{Large investment}) X$$

Table V: Predictor effects and Beta Estimates (Unstandardized) (Hypothesis-1)

Model	Variable	Unstandardized Coefficients		Standardized Coefficients	t-Value	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.545	0.139	-	11.09	0.00
	Large investment	0.603	0.034	0.561	17.84	0.00

a. Dependent Variable: Green marketing adoptability

Source: SLRA Output from SPSS (Hypothesis-1)

3.3.2. Hypothesis – 2

H2₀: Consumers' Price sensitivity has no effect on Green Marketing Adoptability

Simple linear regression was used to investigate the hypothesis of a link between price sensitive consumers and green marketing adoptability. Table VI shows that the predictor variables have a substantial and modest impact on the green marketing adoptability ($R^2=0.159$). The validation using green marketing adoptability was demonstrated by the ANOVA value ($F=69.251$, $p=0.000$) for the regression models.

Table VI: Regression Model Summary (Hypothesis – 2) (Effect of Price Sensitivity)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	ANOVA Results			
					F-Value	df1	df2	Sig.
1	0.399 ^a	0.159	0.158	0.55456	69.251	1	145	0.000

a. Predictors: (Constant), Price Sensitivity of Consumers

Source: SLRA Output from SPSS (Hypothesis-2)

The beta values of Procedural Complications ($\beta=0.499$, $t=11.482$, $p=0.000$) were a significant predictor of green marketing adoptability, according to the coefficient summary provided in Table VII. The results implied that the predictor variable and the dependent variable were linked. Because their p-values were less than 0.05, the null hypothesis was refuted and the alternate hypothesis H_{2a} was accepted. The following simple linear regression model is framed:

$$\text{Green marketing (Y)} = 1.983 + 0.499 (\text{Price sensitive consumer}) X$$

Table VII: Predictor effects and Beta Estimates (Unstandardized) (Hypothesis-2)

Model	Variable	Unstandardized Coefficients		Standardized Coefficients	t-Value	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.983	0.178	-	11.158	0.00
	Price sensitive consumers	0.499	0.043	0.399	11.482	0.00

a. Dependent Variable: Green marketing adoptability

Source: SLRA Output from SPSS (Hypothesis-2)

3.3.2. Hypothesis – 3

H3₀: Consumers' Low Awareness has no effect on Green Marketing Adoptability

The hypothesis of a link between less awareness of consumers and green marketing adoptability was explored using simple linear regression. The regression results in Table VIII show that the predictor variables have a moderate impact on the green

marketing adoptability (R²= 0.165) and contribute considerably. The regression models' ANOVA value (F =137.152, p=0.000) revealed that they were validated using green marketing adoptability.

Table VIII:Regression Model Summary (Hypothesis – 3) (Effect of Low Awareness).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	ANOVA Results			
					F-Value	df1	df2	Sig.
1	0.406 ^a	0.165	0.164	0.55278	137.152	1	145	0.000

a. Predictors: (Constant), Low Awareness of Consumers

Source: SLRA Output from SPSS (Hypothesis-3)

The beta values of Less awareness of consumers (=0.506, t=10.773, p=0.000) were a significant predictor of green marketing adoptability, according to the coefficient summary provided. The results implied that the predictor variable and the dependent variable were linked. Because their p-values were less than 0.05, the null hypothesis was refuted and the alternate hypothesis (H_{3a}) was accepted. So, the following simple linear regression model is framed.

$$\text{Green marketing adoptability (Y)} = 1.828 + 0.522 (\text{Low Awareness of Consumers}) X$$

Model	Variable	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
		1	(Constant)	1.828		
	Less awareness of consumer	0.522	0.045	0.406	11.711	0.00

a. Dependent Variable: Green marketing adoptability

Source: SLRA Output from SPSS (Hypothesis-3)

4. CONCLUSION

4.1. Summary of Major Findings and Suggestions

- ✓ Large investments has a significant effect on the Green Marketing adoptability.
- ✓ Price sensitivity of Consumers has a significant effect on Green Marketing adoptability.
- ✓ Low Awareness of Consumers has a significant effect on Green Marketing Adoptability.

Based on the above findings it may be noted that any policy decision on the adoption of Green Marketing philosophy need to be taken after giving due regard to the effects of Large investment (for adoption of Green Marketing) on the financial position of the business firm. The effects of Consumers' Price Sensitivity and their Consumers' Low Awareness too are significant.

As adoption of Green marketing involves substantial investments, the same should be recouped by way of charging a premium (higher prices) for the products. This in turn is possible only if the consumers are properly educated regarding the utmost need for environmental protection for making a living in this planet, earth. Such a specialized education creates the requisite awareness level that prompts consumers to opt for the premium-priced products that are environment-friendly. The question of price sensitivity gets minimized as a consequence of the special education on the above lines and the resultant higher level of awareness. Accordingly, the approach towards Green Marketing needs to be thoroughly overhauled or redesigned, with high significance on specialized consumer awareness drives like Marketing Orientation Programmes. Here, it may be noted that maximum use of ICT (information and Communication Technology) is vital for delivery of business services qualitatively and cost-effectively. Maximum use of ICT and other ICT-enabled services should be ensured. ICT should be inbuilt in the business model. Obtaining the policy support from the Government (eg. ICT adoption) is equally vital. Based on the foregoing discussions, the following model is suggested by the authors. (Figure I).

Figure I:Special Consumer Education as part of Green Marketing – A Model



Source: Developed by the Authors

4.2. Concluding Remarks

The economic side of marketing should not be overlooked when it comes to green marketing. Marketers must be aware of the consequences of green marketing. Think again if you think people aren't worried about environmental issues or won't pay a premium for environmentally friendly products. Firms must find a way to improve the performance of their products, develop consumer loyalty, and fetch a higher price. Green Marketing adoption is in its infancy, and more research is needed to fully realize its potential. Given the excellent ICT infrastructure of Kerala and also high literacy and education levels as well as Technological Readiness (TR), ICT-based Green Marketing can be very meaningfully adopted and that too in an eco-friendly manner. This in turn results in better sustainability of industrial and business units, like, MSMEs in Kerala.

5. References

- [1] Alwitt LF, Pitts RE. Predicting purchase intentions for an environmentally sensitive product. *J Consum Psychol.*1996;5(1):49–64.
- [2] Rahbar E, Abdul Wahid N. Investigation of green marketing tools effect on consumers purchase behavior. *Bus Strateg Series.* 2011;12(2):73–83.
- [3] Suplico LT. Impact of green marketing on the students purchase decision. *J Int Bus Res.* 2009; 8(2):71–81.
- [4] Lee K. Opportunities for green marketing: Young consumers. *Market Intell Plann.* 2008; 26(6):573–586.
- [5] Suchard HT, Polonski MJ. A theory of environmental buyer behavior and its validity: the environmental action-behavior model. In: Gilly MC, ed. Chicago, IL: American Marketing Association, AMA Summer Educators' Conference Proceedings; 1991:187–201.
- [6] Granzin KL, Olsen JE. Characterizing participants in activities protecting the environment: A focus on donating, recycling, and conservation behaviors. *J Public Pol Mark.* 1991;10(2):1–27.
- [7] Pickett GM, Kangun N, Grove SJ. An Examination of the Conserving Consumer: Implications for Public Policy Formation in Promoting Conservation Behavior. The Harvard Press; 1994.

- [8] Manoj P K., Prospects and Challenges of Green Buildings and Green Affordable Homes: A Study with Reference to Ernakulam, Kerala. *Global Research Analysis*. 2013; 2 (12): 45-49
- [9] Manrai LA, Manrai AK, Lascu DN, Ryans JK. How green-claim strength and country disposition affect product evaluation and company image. *Psychol Mark*. 1997;14(5):511– 537.
- [10] Mendleson N. Environmental marketing business partnering at AFC-developing strategic alliances. *Environmental Marketing: Critical Success Strategies for Reaching the Green Consumer*, Proceedings of the 1994 Conference, Sydney. 1994:87–103.
- [11] Polonsky MJ. Transformative green marketing: Impediments and opportunities. *J Bus Res*. 2011;64(12):1311–1319.
- [12] Henion KE, Kinnear TC. *A Guide to Ecological Marketing*. Ecological Marketing. Columbus, OH: American Marketing Association; 1976.
- [13] Fathi A, Sheikhan AH, Doae K. Green marketing. *Tadbir Monthly Magazine*. 2007; 17:173. Delafrooz et al. *QScience Connect* 2014:5
- [14] Peattie K, Crane A. Green marketing: legend, myth, farce or prophecy? *Qual Market Res Int J*. 2005;8(4):357–370.
- [15] John Grant. *Green Marketing*. *Strategic Direction*. 2008; 24(6): 25-27.
DOI: 10.1108/02580540810868041
- [16] Vasanthakumar N Bhat. Green Marketing Begins with Green Design. *Journal of Business & Industrial Marketing*. 1993; 8(4): 26-31
- [17] Manoj, P K. Bank Marketing in India in the Current ICT Era: Strategies for Effective Promotion of Bank Products. *International Journal of Advance Research in Computer Science and Management Studies*. 2016; 4(3):103-113. (www.ijarcsms.com/March2016.htm).
[<http://www.ijarcsms.com/docs/paper/volume4/issue3/V4I3-0063.pdf>]
- [18] Manoj, P K. Information and Communication Technology (ICT) for Effective Implementation of MGNREGA in India: An Analysis. In. *Digital Economy in India: Security and Privacy*. First Edn. Serials Publications. 2012; 145-150.
- [19] Nasar, K K. & Manoj, P K., Purchase Decision for Apartments: A Closer Look into the Major Influencing Factors. *Impact: International Journal of Research in Applied Natural and Social Sciences*. 2015; 3(5):105-112. (www.impactjournals.us).
[file:///C:/Users/aoc/Downloads/2-14-1432554457-10.%20applied-%20PURCHASE%20DECISION%20FOR%20APARTMENTS-Dr.MANOJ%20P%20K%20(1).pdf]
- [20] Official website of American Marketing Association (AMA), www.ama.org.