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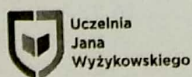
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4Ps OF GREEN MARKETING:
WAYS OF INFLUENCING POTENTIAL & LATENT GREENS

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Abstract

Acceptance of green products has been a matter of serious concern for green manufacturers. The concept of 'Green Marketing' which has witnessed three phases like 'Ecological', 'Environmental' and lately 'Sustainable' phase since 1975 has not made any noteworthy mark in terms of its penetration and sales. Research points out greenwash as a major factor influencing the acceptability of the green product followed by premium prices charged by them. Empirical evidence of the past suggests plenty strategies that need to be considered by the manufacturers while formulating strategies for green product with reference to marketing mix. This research is a serious effort to draw stands from the literature to understand the probable strategies that should be implemented to attract potential and latent greens (two potential segments of green consumers) towards green products. The study thereby seeks to address the questions such as - Which strategy can attract 'Potential and Latent Greens' towards purchase of green products? Can modification of marketing mix lead to change in attitude of 'Potential/Latent greens' towards green product? And lastly the research aims at identifying the differences in preferences among 'Potential and Latent Greens' with reference to marketing mix. To obtain answers of above mentioned questions primary data shall be collected from youngsters to find possible solutions for the gap that exist in the literature.

Keywords: Green Marketing, Latent green, Place, Potential green, Price, Product & Promotion

INTRODUCTION

A holistic approach which emphasizes that production, consumption as well as marketing should not be detrimental to environment is "Green Marketing". This concept incorporates a broad range of activities such as product modification, change in packaging, and transformation of promotional methods owing to which such products are priced higher than the traditional variant available in the market. Marketers are seen adopting the philosophy of 3P (Profit, People & Planet) while marketing green products so as to minimize the environmental impact associated with the consumption of a product/service (Villano, 2011). The efforts of marketer shall reap benefits of sustainable environmental only when such products are accepted by the masses. The fact being that adoption, purchase and consumption of green products have been very stumpy over the period of time. Various factors that has lead to low consumption of green products are less awareness/understanding about benefits of environment sustainability, higher price of green product, false claims made by manufacturers while promoting the green products and failure of green products in delivering the promised value. Environmentally green products are perceived as having inferior quality by the consumers because they think that the company must have diverted the resources away from product quality (The study, published in the Journal of Consumer Research). Lot of misperception is going around green product, which is influencing the adoption rate of green products. This is an alarming situation for the marketers as well as big challenge for them who want to work towards sustainable development of environment. Thus, it is a need of an hour to identify strategies so as to increase the penetration and adoption of green products among Indian's. Awful impact on environment can be negated by making necessary changes in the products manufactured by the companies (Kotler, 2011). These changes can be implemented by the organizations by adopting appropriate marketing strategy i.e. 4Ps. The traditional 4Ps should be necessarily modified by the marketers, but what modifications can attract customers to buy green products? This research seeks to enlighten information about this gap that exists in the literature.

LITERATURE EVIDENCES FOR GREEN MARKETING MIX; GREEN CONSUMERS & RESEARCH HYPOTHESIS:

Green Consumers: People who purchase those products that protect the natural environment and are environment friendly are labeled as 'green consumers'. Green consumers have been segmented into four categories based on 'Environmental Values' & 'Environmental Self Efficacy' (Oliver and Rosen (2010)) as represented in Table: 1. The less researched segments, Latent Greens and Potential Greens, are the segments that have the highest potential as they are still untapped (Tracy Tuten (2013). Considering this gap that prevails in the literature the study focus on the less researched segment – The potential greens and the Latent greens. The research focused on measuring the view of youngsters by classifying them into relevant segment of green consumers.

Table: 1
Segmentation of Green Consumers

	High Environmental Values	Low Environmental Values
High Environmental Self-Efficacy	**Active Greens:** Ready, willing and able to take environmental action because they care and think they are capable of making a change.	**Potential Greens:** Think they can make a difference, but don't feel it's important enough to make the sacrifice.
Low Environmental Self-Efficacy	**Latent Greens:** Value environment, but don't feel sacrifice on their part will actually make a difference.	**Non-Greens:** Don't think they can make a difference, and don't care if they can. May be influenced by other values.

Source: Oliver and Rosen (2010)

This study has categorized youngsters into two groups: Potential & Latent Greens and thereby aimed at understanding the differences in preferences that these categories have with reference to marketing mix elements.

Green Product: Products that aim at conserving the environment for future generation by reducing the negative impact of production process on environment is termed as Green products. In reality no products can be 100 percent green, but efforts can be made by manufacturers to reduce the negative impact of production process by using appropriate raw material, reducing the carbon footprint, altering the packaging methods and lastly providing recycling or appropriate disposal option *(Kotler, 2011)*. The very first step that can be taken by any manufacturer towards creation of a green product is adopting a 'Green design' *(First Carbon Solution (2016));* the product should be idealized as being an environment friendly product from the inception. Customers have a perception that green products have substandard quality, so to tackle this issue companies should begin by address the quality concerns. Besides quality concern customers have perception that green products cannot deliver promised performance as what can be done by traditional counterparts which leads to obstruction in acceptance of green products *(Tracy Tuten (2013))*. Hence, the major challenge that has to be encountered by the manufacturer is to differentiate their offerings and achieve competitive advantage, so as to prove that their products are 'Green', 'Qualitative' and 'perform better than tradition goods'. These objectives can be achieved by using environmentally friendly technologies, packing the products in environment friendly way and having credible green certification and labeling *(Ketchen and Slater (2011))*. Along with such initiatives the companies can try for co-creation where the manufacturers are taking information from suppliers of raw material, customers and other stakeholders while creating green products *(Kotler et al., 2010; Liu et al., 2012; Malhotra et al., 2012))*. Online media that have potential to create dialogues can be utilized to generate responses from the stakeholders *(Gupta & Kim, 2010; Rahbar & Wahid, 2011; Liu et al., 2012)*. Thus, the literature suggested various strategies that can be incorporated by manufacturers to attract customers to buy green product, buy are the perceptions of potential greens and latent greens similar for the product strategy incorporated by the company? To address this issue the following hypothesis has been created:

H1: There is a statistical difference in preference of product strategy between potential and latent greens

Green Price: Green products usually lack economies of scale as a result it becomes difficult for them to absorb the cost associated with fulfilling environment friendly constraints *(Vaibhav Ramesh Bhalerao et.al. (2015).* As a resultant, the prices of green products are higher compared to the traditional products which makes customer perceive that they are paying more for less with respect to green products and services *(Peattie, 2001).* The manufacturers should try to make a point that prices of green products should not demotivate the customers from buying them *(Vaibhav Ramesh Bhalerao et.al. (2015).* It has been pointed in the literature that if price and quality of green product is considered as equal by the customer then they will prefer choosing a green product over traditional product *(Kinnear, Taylor & Ahmed, 1974).* In order to emphases customers that they are not paying more for green products companies can offer information about total life-cycle cost of their products to non-adopters, which compares overall utility associated with the product with cost to purchase, use, and dispose of the product as well as the product's price. Contrary to the above findings there are researchers who have mentioned that ecologically conscious consumers are significantly proven to be willing to pay premium prices for environmental-friendly, i.e. green products. Furthermore, consumers are more willing to pay premium prices to companies which are known for engaging in more sustainable business processes *(Park & Kim, 2014).* This study aims at identifying the potential tactics that can be adopted by manufacturers to attract potential & latent greens. Strategies that can be adopted by the company would be generic in nature but are they perceived in a similar manner by two different categories of green consumers? This research question leads to development of our hypothesis as:

H₂: There is a statistical difference in preference of price strategy between potential and latent greens

Green place: Managing logistics in an efficient way to reduce transportation emissions, thereby reducing the carbon footprint is a sustainable tactic that can be undertaken by companies. Few companies are even seen having tie-ups with brick and mortar store retailers for showing that they are contributing to sustainable environment practices. Using local production and sustainable distribution channels are various ways of proving that the company is engaged in Green Place *(Kotler, 2011).* Various other initiatives include transportation with fuel-efficient loads, using alternative energy sources, and optimizing distribution routes and making the products available online can be adopted by green manufacturers. Among various strategies suggested in literature this study aims at finding whether the perception about green place remains same for these two different groups of green consumers? Leading to creation of the third hypothesis as:

H₃: There is a statistical difference in preference of place strategy between potential and latent greens

Green Promotion: Many companies with an objective of leveraging ecological consciousness of customers get engaging in 'Greenwashing' – falsely claim made by marketers about product as being environment friendly *(de Vries et al., 2015).* This contributes to misperceptions that people have towards green products thereby making people doubt any promotion that says that the product is green. In order to prove that the products are green products companies can utilizing less print materials *(Kotler, 2011),* give product trial (hands-on trials) and independent merchandising display *(Ashley, Oliver & Zemanek, 2012)* these initiatives can help company promote them self positively and lead to positive word of mouth about the product. The companies can even explore the potential that lies in social media communication as now a day's consumers are more informed that earlier. A horizontal form of communication can be used by companies where consumers engage in the creation of promotional activities, since consumers trust towards professional promotional activities is continuously decreasing *(Kotler et al., 2010; Achrol & Kotler, 2012; Liu et al., 2012; Kimmel, 2015; Susilo et al., 2015).* The objective of promotional message should be to educate the mass about the product thereby encouraging them to adopt green products rather than just selling them *(Iles, 2008; Luchs et al., 2010; Rahbar & Wahid, 2011; Ansar, 2013; McDonagh & Prothero, 2014).* The research here based on literature has identified various promotional tactics that can be adopted by green

manufacturers and tried to measure the if their lies any difference in the preferences of potential and latent greens, thus the fourth research hypothesis was:

H4: There is a statistical difference in preference of promotion strategy between potential and latent greens

RESEARCH QUESTIONS AND OBJECTIVES

The literature above highlights the fact that strategic changes from manufacturers perspective can lead to change in perception of consumers and thereby purchase intentions for Green Products. Thus, this study seeks to address the questions such as - Which strategy can attract 'Potential and Latent Greens' towards purchase of green products? Can modification of marketing mix lead to change in attitude of 'Potential/Latent greens' towards green product? And lastly the research aims at identifying the differences in preferences among 'Potential and Latent Greens' with reference to marketing mix. Based on these research questions the following objective has been made: *To identify if differences exist in preferences of marketing mix elements among potential and latent greens.*

METHODOLOGY OF RESEARCH

A research report by 'Green Purchasing Network of India' having a sample size of 2051 Indian consumers identified that 90% of the respondents were aware of the term 'green' or 'ecofriendly' product. Considering this as a base for calculation of sample size, the formulae of sample size based on proportion was administered. Statistical formula used to determine the quantitative sample size is given below:

$$n = \frac{Z^2 \, P \, (1-P)}{d^2}$$

Where,

n	=	Sample size
Z^2	=	Confidence Interval
P	=	Estimated proportion
d	=	Desired precision

In the research, confidence interval was taken as 95% and hence z = 1.96, P (Estimated proportion) has been assumed as 0.90, which means that (1- P) = (1-0.90) = 0.10. Desired precision has been taken as 0.50. Hence, the desired sample size as per the formulae was 139 respondents. Online questionnaire was created for the survey which was sent to youngsters in the age group of 18-30. A non-probability convenience sampling method was adopted to collect the data. The online survey forms were sent to nearly 250 youngsters of them 190 responses were received. After removing the questionnaires which had missing data, for the purpose of this study 171 responses were considered for final analysis.

DATA ANALYSIS

Reliability Analysis:

Reliability test can be used as a measure that signals the consistency and stability of the instruments used in the survey when repeated measurements are made Cavana et al. (2001), one of the popular approach to measure reliability test is to use Cronbach alpha. The value of Cronbach alpha with the range of greater than 0.70 is considered acceptable and good *(Cavana et al., 2001)*. Cronbach alpha for the variables under study were calculated in SPSS 21, all are above 0.70. Cronbach alpha for the construct ranged from lowest of 0.775 (Price Strategy), 0.840 (Place strategy), 0.901 (Promotion Strategy) and highest being 0.935 (Product Strategy). Thus, the outcomes conclude that the measurement scales of the constructs were stable and consistent in measuring the constructs.

Demographics:

The survey had respondents in the age group of 18-30, of them 53.6 % were male while 46.4% were female. 57.5% respondents of 171 were post graduates followed by 41.4% being graduates. 63.5% respondents were studying while only 29.3% were engaged in some job.

Hypothesis Testing Results:

To serve the objective of measuring if differences exist in preferences of marketing mix among potential and latent greens, Independent sample t- test was administered. Before doing the analysis all the assumptions of Independent sample t- test were checked. The detailed results of Independent sample t-test for elements of marketing mix for the two groups of green customers are elaborated in results session along with the test results in Table 2 & 3 respectively.

Table: 2
Descriptive Statistics Associated with marketing mix elements

Type of Green Customers	N	M	SD	Skew	Kurtosis
Product Strategy					
Potential Greens	96	1.78	0.602	0.123	0.141
Latent Greens	75	1.93	0.475	-0.114	0.530
Price Strategy					
Potential Greens	96	1.90	0.607	0.339	0.931
Latent Greens	75	2.03	0.677	0.236	0.029
Place Strategy					
Potential Greens	96	1.83	0.643	0.166	-0.604
Latent Greens	75	1.79	0.576	0.034	-0.268
Promotion Strategy					
Potential Greens	96	1.89	0.647	0.111	-0.589
Latent Greens	75	1.84	0.546	-0.093	0.143

Source: SPSS 21.0

Table: 3
Results of Independent Sample Test Associated with marketing mix elements

Independent Samples Test		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Product Strategy	Equal variances assumed	8.620	.051	-1.795	169	.074
	Equal variances not assumed			-1.848	168.980	.066
Price Strategy	Equal variances assumed	0.184	.669	-1.330	169	.185
	Equal variances not assumed			-1.312	149.942	.192
Place Strategy	Equal variances assumed	0.531	.467	.492	169	.623
	Equal variances not assumed			.499	165.809	.618
Promotion Strategy	Equal variances assumed	1.508	.221	.487	169	.627
	Equal variances not assumed			.497	167.941	.620

Source: SPSS 21.0

Results: 1
Product Strategy

The Potential Greens (N=96) was associated with a product strategy having M = 1.78 (SD = 0.602) and the Latent Green was associated with a numerically larger product strategy of M = 1.93 (SD =0.475).

Scanned by CamScanner

As mentioned above to test the hypothesis that the potential greens and latent greens were associated with statistically significantly different mean for product strategy preferences, an independent sample t-test was performed. As can be seen in Table 2, the potential green and latent green distributions were sufficiently normal for the purpose of conducting a t-test (i.e. Skew < |2.0| and Kurtosis < |9.0|; *Schmider Ziegler Danay Beyer & Buhner (2010).* Additionally, the assumption of homogeneity of variance was tested and satisfied via Levene's F test, $F (169) = 8.620, p=0.51$. The independent sample t-test was associated with value of, $t (169) = -1.795, p = 0.74$. **Thus the latent greens were associated with a statistically significantly larger means for product strategy than potential greens.**

<div align="center">

Results: 2

Price Strategy

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The Potential Greens (N = 96) was associated with a price strategy, M = 1.90 (SD = 0.607) and the Latent Green was associated with a numerically larger price strategy M = 2.03 (SD = 0.677). So as to test the hypothesis that the potential greens and latent greens were associated with statistically significantly different mean for price strategy preferences, an independent sample t-test was performed. As can be seen in Table 2, the potential green and latent green distribution was sufficiently normal for the purpose of conducting a t-test. The assumption of homogeneity of variance was tested and satisfied via Levene's F test, $F (169) = 0.184, p = 0.669$. The independent sample t-test showed a value of $t (169) = -1.330, p = 0.185$. **Thus the latent greens were associated with a statistically significantly larger means for price strategy than potential greens.**

<div align="center">

Results: 3

Place Strategy

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The Potential Greens (N = 96) was associated with a place strategy M = 1.83 (SD = 0.643) and the Latent Green was associated with a numerically smaller place strategy M = 1.79 (SD = 0.576). An independent sample t-test was performed to test the hypothesis that the potential greens and latent greens were associated with statistically significantly different mean for place strategy preferences. Descriptive statistics result can be seen in Table 2, which shows that the potential green and latent green distribution was sufficiently normal for the purpose of conducting a t-test. Additionally, the assumption of homogeneity of variance was tested and satisfied via Levene's F test, $F (169) = 0.531, p = 0.467$. The independent sample t-test was not associated with a statistically significant effect, $t (169) = 0.492, p = 0.623$. **Thus the potential greens were associated with a statistically significantly larger means for place strategy than latent greens.**

<div align="center">

Results: 4

Promotion Strategy

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The Potential Greens (N=96) was associated with a promotional strategy M = 1.89 (SD =0.647) and the Latent Green was associated with a numerically smaller promotional strategy with M = 1.84 (SD = 0.546). To test the hypothesis that the potential greens and latent greens were associated with statistically significantly different mean for promotional strategy preferences, an independent sample t-test was performed. Table 2 highlights the descriptive statistics which proves that the potential green and latent green distributions were sufficiently normal for the purpose of conducting a t-test. Additionally, the assumption of homogeneity of variance was tested and satisfied via Levene's F test, $F (169) = 1.508, p=0.221$. The independent sample t-test results were, $t (169) = 0.487, p=0.627$. **Thus the potential greens were associated with a statistically slightly larger means for promotion strategy than latent greens.**

MANAGERIAL IMPLICATION

Green manufacturers are facing difficulties is making their products acceptable to masses owing to various reasons stated in the literature above. This research aimed at identifying the basic that a manufacturer has to implement while selling the product to customers i.e. the marketing mix elements

(4Ps). After doing the careful analysis of the data that has been collected from the youngsters it was observed that their opinions for different elements of marketing mix were different. The analysis revealed that perceptions of potential greens are different from that of perceptions that are there in the mind of latent greens which means that while drafting the marketing mix strategies the companies should actually do proper segmentation of customers and necessary strategies should be devised, failing to which the acceptance of green products would be very low.

LIMITATION AND FUTURE RESEARCH

This research has taken its base from the model created by Oliver and Rosen (2010), which classifies green consumer into four categories and the researcher, has focused the study only on potential and latent greens, a further research focusing on the other two types can be considered for future. The research here focuses on the marketing mix elements *(4Ps)* only which can be further elaborated to service marketing mix for green services. The study here has focused on youngsters only people in other age brackets and other occupational background can be considered for future study. A further study considering each element in detail with reference to purchase behavior can be considered so as to give an elaborated idea about strategies that can be devised by green manufacturers.

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Dr Anupama Chirag Dave

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has participated and presented the research paper

" 4Ps of Green Marketing : Ways of Influencing Potential & Latent Greens "

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