

Developing Decision Making Models by Understanding Ethics in Digital Marketing through Multiple Linear Regression Analysis

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Abstract: In today's digital age, internet enterprises must comprehend ethics. While corporations are thrilled to use this data for marketing insights, many individuals are worried that their personal information may slip into the wrong hands and threaten their privacy. This research examines how ethical marketing methods used by digital marketing businesses effect business growth. This study used data from 514 customers who interacted with the study about product-related issues, deceptive advertising, misleading or unethical prices, customer care, deceptive packaging, environmental care, purchasing behaviour, digital marketing satisfaction, and honesty and integrity. Multiple linear regression analysis determines how ethical issues affect customer purchases. The study used regression equation models to identify consumer purchase moral dilemma variables. The main ethical factors impact consumer behaviour more. They offer environmentally approved products, real product presence, and true advertising claims. This study advises that firms analyze the repercussions of a few key ethical marketing strategies to develop long-term ethical practices. The study's major findings on businesses' morality may help establish strategies to sustain this industry.

Key Words: Digital Marketing, Marketing Ethics, Misleading Advertisements, Unethical Prices, Customer Care, Deceptive Packaging, Environment Care, Purchasing Behaviour, Honesty and Integrity

1. Introduction

Marketing directs goods and services from producer to consumer or user to satisfy and reach customers. strong goals. Humans use trading to satisfy needs and desires (McCarthy, 1978). The marketing area ensures customer satisfaction through open communication. Therefore, society closely investigates marketing (Murphy and Laczniak 1981). Marketing is a crucial company function that interacts with stakeholders, including clients. Marketing ethics is the study of moral principles, judgments, and rules for marketing decisions and situations (Taylor, 1975).

Marketers address corporate ethics—the norms and ideals that govern employee behaviour and the consequences of marketing decisions (Ferrell et al., 2005). In this context, ethical marketing is "practices that promote transparent, trustworthy, and responsible human and organisational marketing concepts and actions that reflect honesty and fairness to consumers and other stakeholders" (Murphy, Laczniak, Bowie, & Klein, 2005). Marketing ethics help marketers do "the right thing." These guidelines are essential for correct behaviour, internal control, and ethical and honest client relations. They also guarantee firms follow all laws.

According to Vassilikopoulou (2008), marketing has many detractors. It promotes these: 1. materialism, hedonism, and eudemonism; 2. consumer pressure to buy goods; 3. environmental pollution; 4. depletion of natural resources; 5. high production costs, which consumers pay; 6. misleading consumers by projecting imaginary or nonexistent quality differences on products; and 7. consumer seduction.

Thus, digital marketing ethics need the ability to distinguish right from wrong, with incorrect being unethical. Digital marketing involves site monitoring, privacy, sponsored advertising, and ethics. The Internet enables content information, photo transfers, video recordings, remote online mail, and video conferencing via phones and other devices with cameras and speakers.

Today, huge organisations, small businesses, and aspiring startups employ digital marketing to boost their chances. Brand, features, quality, value, pricing, and customer satisfaction affect consumers' purchases (Venugopal, 2016).

Digital marketing ethics strive to prevent organisations from selling client data to unaffiliated third parties or sharing it with affiliates. Waqar N. & Saifuddin A. found that consumer intention to co-create values precedes relationship quality components like trust, contentment, and commitment (2020). The study indicated that consumer ethical framework does not affect consumer intention to co-create values, but customer relationship did.

According to Singla et al. (2017), ethics affect how clients view digital marketing campaigns. Sandra J. and Katherine P. (2008) also valued ethics and tried to establish a code of conduct.

This study determines how important digital marketing is for businesses nowadays. Ethical perceptions include product issues, misleading commercials, unethical prices, customer care, deceptive packaging, environmental concerns, purchasing behaviour, digital marketing satisfaction, and honesty and integrity. This study investigates how ethical factors affect digital marketing purchases.

2. Literature Review

Marketing efforts aim to boost product sales and customer loyalty. The community wants accountability and morality toward stakeholders due to the market environment's increased rivalry. Marketing ethics discusses moral subjectivity. Businesses and organisations can use marketing ethics to evaluate new marketing methods.

Chen (2018) advises companies to showcase their real and responsible items in their marketing. Advertising is different from news and entertainment in digital marketing, and product promotion demands transparency. Avoid compromising consumer privacy to prevent data from being shared and misused by third parties. Fauzan and Ida say corporate ethics are based on fairness, honesty, and trust (2014).

According to Yong (2000), there are five dimensions:

- Service providers are reliable if they can complete duties correctly.
- Service providers' responsiveness shows their capacity to provide services quickly.
- Physical features like staff, communication materials, and equipment make a facility tangible.
- Empathy depends on service providers' personalised attention.
- Assurance based on front-line staff' client interactions to build trust.

Dave Chaffey (2002) defines digital marketing as using technology to improve consumer knowledge to increase profit and customer retention. Internet marketing, digital marketing, electronic marketing, and e-marketing refer to online marketing using websites, online ads, devices, and interactive television, according to Chaffey and Smith (2008). Technology has helped organisations improve their services, according to Khan and Mahapatra (2009).

Brinkmann (2002) says marketing ethics is often touted as a subfield of business ethics. His research showed that marketing ethics encompasses sales, public relations, advertising, and professional ethics. Four work organisation models focus on professional issues, responsibilities, codes, or atmosphere.

Ethics is the philosophy and study of morality and human behaviour. In marketing, "ethics in the workplace" refers to the principles (values) that govern employee conduct and marketing decisions (O.C. Ferrell, 2005). He then defined ethics as the study of morality—moral norms, judgments, and laws of behaviour.

Limbu et al. (2011) found that online marketing ethics include security, privacy, no fraud, and fulfilment. They defined "fulfilment" as accurate and timely online order fulfilment, accurate product representation, and proper website and application technology. Consumers value product safety, which affects their satisfaction, loyalty, and repurchase decisions.

Modern technologies' privacy violations are digital ethics' biggest challenge, according to Richards and King (2014). Personal business, financial, biometric, medical, or biographical data from business analytics is private. Thus, data analysis without consent violates privacy. Most companies collect customer data to improve assistance with more personalised solutions.

In another study, Assegaf (2016) examined internet banking customer happiness. Standard of online customer support, information transmission, and banking products and services will affect electronic-based service quality.

Day and Moorman (2016) identified four marketing organisation components in a 1990–2015 literature review on marketing ethics: According to Day and Moorman (2016), pp. 6–11, an organization's capabilities are its ability to gather market information and execute marketing initiatives and organisational changes in response; its culture is its internal beliefs and practises; its configuration is its measurement systems, metrics, and organisational structure; and its human capital is its workforce, which develops, integrates,

According to Strycharz & Smit, technology allows corporations to exploit customer data to set different prices, creating new ethical challenges for pricing (2019). Organizations are unsure whether price differentials cross the threshold into unethical or unlawful behaviour, even if illegal discrimination is forbidden. Flexible and dynamic pricing are popular in airlines and hotels, and online shops can use it to attract customers and increase income. But these methods are unethical. Remember that fair rates develop consumer trust and connections (Lee & Jin, 2019).

Murphy (2017) explored native advertising, which presents ads as editorial content in branded content and advertorials. The moral dilemma with native advertising is that viewers may not be able to distinguish editorial from promotional content. The digitalized corporate environment has made advertising more morally

demanding due to online behavioural targeting (OBT), which analyses consumers' online activity and creates unique profiles.

Another study by Nill & Aalberts (2014) indicated that marketers are using extensive consumer profiles based on website visits, search terms, purchase behaviour, demographics, and area to target customers. Even while OBT is more effective than traditional marketing, it poses control and privacy problems. It also provides consumers with relevant messaging.

Rita et al. (2019) generates new knowledge to understand how electronic service quality influences customer enjoyment, trust, and behaviour. They showed that website design, security or privacy, and product compatibility affect electronic service quality, but customer service does not.

O. C. Ferrell, J. Fraedrich, and L. Ferrell (2013) discussed ethical decision-making. They say it's important to distinguish ethical issues from ethical problems. An ethical dilemma is a situation, scenario, or opportunity that causes a person, group, or organization to choose between morally right and wrong actions. A situation, opportunity, or challenge when a person, group, or organization must choose between multiple immoral or unethical activities is an ethical dilemma.

3. Research Methodology

3.1. Sample Selection and Data Collection Procedure

This study examines internet consumers' ethical views on businesses. Respondents must understand digital businesses' ethical marketing strategies, including product-related concerns, deceptive packaging, misleading advertisements, misleading or unethical prices, customer care, misleading packaging, environmental protection, purchasing behaviour, digital marketing satisfaction, and honesty and integrity. After notifying students of these issues, a survey was assigned. A stratified sample of 514 questionnaires was collected. This study used digital business marketing data to choose its sample.

3.2. Limitations of the Study

Online consumers who understand business ethics and ethically correct or bad company practices are chosen as respondents. Thus, it does not reveal end-user interest in business ethics. The study's second flaw was ignoring demographic data. Demographic characteristics including gender, age, occupation, and income are ignored while making moral decisions.

3.3. Questionnaire Design

This study examines "Product Related Issues," "Misleading Advertisements," "Misleading / Unethical Prices," "Customer Care," "Deceptive Packaging," "Environment Care," "Purchasing Behavior," "Digital Marketing Satisfaction," and "Honesty and Integrity". A Likert scale is utilised in 32 questions. Each model construct was measured using a multiple-item scale. Each attribute was measured using five-point Likert scales from 1 (strongly disagree) to 5. (strongly agree). Product issues, dishonest marketing, unethical pricing, deceptive packaging, customer service, honesty, and integrity are the study's independent factors. These elements are hypothesised to drive customers' purchase intentions. The study's independent variables include consumers' ethical views. Waqar and Saifuddin (2020) find Purchase Behavior and Digital Marketing Satisfaction as dependent variables.

Table 1 lists the study's dimensions as well as the measuring tools utilised to determine these measurements.

Table 1: Dimension to Question Mapping

Name of the Dimension	Questions addressing Dimension
Product Related Issues	<ul style="list-style-type: none"> • Product Safety • Deceptive packaging • Arbitrary product elimination • Unethical Product Delivery
Misleading Advertisements	<ul style="list-style-type: none"> • True picture of advertisement • Ads with accurate product details • True claims of advertisement for products and services • Avoiding using exaggerated claims and pictures • Real presence of the products in advertisements • False advertising damages brand value. • Avoid morally depraved promotional ads.
Misleading / Unethical Prices	<ul style="list-style-type: none"> • Prices should match its curative value

	<ul style="list-style-type: none"> • Sales profit for the company • Stringent credit policies hurt customers.
Customer Care	<ul style="list-style-type: none"> • Caring of customers' complaints • Focusing on client satisfaction
Deceptive Packaging	<ul style="list-style-type: none"> • Correct packaging or label information • Label or product expiration date • Label or package must state fair price.
Environment Care	<ul style="list-style-type: none"> • environmental impact of items • Offering recyclable packaging • Offering ecologically friendly, less harmful products online
Purchasing Behaviour	<ul style="list-style-type: none"> • Buying socially responsible brands • Consider ethics while buying • Changing products for ethics • Happy to buy from via Digital Marketing
Satisfaction with the Digital Marketing	<ul style="list-style-type: none"> • Digital purchases were smart. • Highlights its offerings' advantages • Site tries to sell unnecessary products. • Being honest with customers boosts sales and repeat purchases.
Honesty and Integrity	<ul style="list-style-type: none"> • Customers buy when they see honesty and sincerity. • Fraud makes Digital Marketing customers switch.

3.4. Methods (Data Processing and Analysis)

This study analysed multiple linear regression using SPSS 23.0. The hypothesis was tested using regression analysis with the same software. This study used quantitative descriptive and survey methods. Digital marketing clients provided primary data for this study. Data was collected using researcher-style interview questionnaires.

All 514 survey participants were digital marketing clients. This study uses stratified sampling. This study collected data via questionnaires and documentation. Multiple linear regression approach predicts the dependent variable's change if the independent variable changes.

Multiple regression analysis is a statistical tool. It is a linear regression process that predicts a variable's value when it depends on another variable. Predictive variables are dependent because they depend on other variables. Several external variables affect the dependent variable in multiple regression. All multiple regression analysis does is evaluate regression-measured data.

The multiple regression formula is:

$$Y = b_0 + b_1X_1 + b_2X_2 + \dots + b_pX_p$$

This formula uses Y for predictive value or dependent variable.

The predicted values, or independent variables, that affect Y are (X1), (X2), etc. When all independent variables (X1–Xp) are zero, the Y-value is (b0). Y is the dependent or predictive variable.

The independent variables that modify Y are (X1), (X2), etc (Xp). The Y-value is (b0) when all independent variables (X1–Xp) are zero.

Variables (b1) through denote regression coefficients (bp). Regression analysis uses ϵ , a random error component, to indicate that independent variables may not accurately predict changes in dependent variables. With two exceptions: multiple regression requires more than one independent variable and non-collinearity between independent variables. Univariate linear regression and multiple linear regression employ the same logic.

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3.5. Research questions and objectives

This research examines how business and consumer environments have changed and how product-related concerns, deceptive packaging, misleading advertisements, misleading or unethical prices, customer care, satisfaction with digital marketing, and honesty and integrity affect consumers' digital marketing purchases.

The following survey questions examine consumers' digital marketing views:

- Q1. What ethical considerations affect digital marketing purchases?
- Q2. What factors influence consumer perception and purchase intention of products offered by chosen West Bengal ecommerce companies?
- Q3. How do digital marketing ethics affect customer purchases?

From these general questions, the following concrete objectives can be made.

1. To explore the various ethical issues and practices that needs to identify by digital marketing companies.
2. To explore and establish consumer relationship models that have significant impact on the consumer purchase intentions particularly among consumers of some select digital marketing companies in West Bengal.
3. To investigate the impact of the ethical factors, have on consumer relationship particularly among consumers of some select digital marketing companies in West Bengal.

3.6. Hypotheses of the Study

First Hypothesis (H0-1):The ethical concerns with “Real Presence of Products”, and “Fair Price on Package”, do not have any significant relationship with “Happy to Purchase through Digital Purchasing”.

Second hypothesis (H0-2): The ethical problems with “Deceptive Packaging”, “True Claims of Advt”, do not have any significant relationship with “Ethical Issues while purchasing”.

Third hypothesis (H0-3):The ethical problems with “Product Safety, “Offering Environmentally certified Products”, “Real Presence of Products” , do not have any significant relationship with “Choice to Purchase Digitally”.

Fourth hypothesis (H0-4):The ethical problems with “True Claims of Advt”, “Offering Environmentally certified Products”, and “Real Presence of Products”, do not have any significant relationship with “Choice to Purchase Digitally”.

4. Data Analysis and Findings:

4.1 Multiple Linear Regression Analysis

We perform a multiple linear regression analysis using SPSS 23 programme on the variables Real Presence of Products (X1), Working for Customer Satisfaction (X2), Proper Package Information (X3), Fair Price on Package (X4), and Happy To Purchase through Digital Purchasing (Y). Results are based on numerous model equations. This analysis followed Abdurrahman et al (2018).

Dependent Variable: Happy To Purchase through Digital Purchasing

Independent Variables: Offering environmentally certified Products, Fair Price on Package, Real Presence of Products, Proper Information on Package, Working for Customer Satisfaction

Table 2:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.570 ^a	.325	.248	.76279

a. Predictors: (Constant), Offering Environmentally Certified Products, Fair Price on Package, Real Presence of Products, Proper Information on Package, Working for Customer Satisfaction

The table shows R, R², corrected R², and estimate standard error. The multiple correlation coefficient R is in the "R" column. R is one measure of the quality of the dependent variable prediction, “Happy to Purchase through Digital Purchasing”. This sample shows good prediction at 0.570. The "R Square" column shows how much variance the independent variables explain in the dependent variable (technically, it is the proportion of variation accounted for by the regression model above and beyond the mean model). At 0.325, our independent factors explain 32.5% of the variability of Happy to Purchase through Digital Purchasing.

Table 3: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	12.319	5	2.464	4.234	.003 ^b
Residual	25.601	44	.582		
Total	37.920	49			

a. Dependent Variable: Happy To Purchase through Digital Purchasing

b. Predictors: (Constant), Offereing Environmentally certified Products , Fair Price on Package , Real Presence of Products , Proper Information on Package , Working for Customer Satisfaction

Interpretation: The F-ratio in the ANOVA table evaluates the regression model's data fit. The table reveals that independent variables predict the dependent variable, $F = 4.234$, $p = .003$. (i.e., the regression model is a good fit of the data).

Table 4: Model 1 Multiple Linear Regression Test Results (Coefficients)

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics			
					B	Std. Error	Beta	Tolerance
1	(Constant)	1.244	.963		1.291	.204		
	Real Presence of Products	.377	.162	.353	2.334	.024	.670	1.493
	Working for Customer Satisfaction	-.088	.181	-.087	-.487	.629	.483	2.069
	Proper Information on Package	-.109	.182	-.080	-.600	.552	.856	1.168
	Fair Price on Package	.334	.110	.387	3.027	.004	.940	1.064
	Offering Environmentally certified Products	.181	.183	.159	.989	.328	.592	1.689

Estimated model coefficients

The general form of the equation to predict Happy to Purchase through Digital Purchasing from Offering environmentally certified Products, Fair Price on Package, Real Presence of Products, Proper Information on Package, Working for Customer Satisfaction, is:

Predicted Happy to Purchase through Digital Purchasing = $1.224 + (0.377 \times \text{Real Presence of Products}) - (0.088 \times \text{Working for Customer Satisfaction}) - (0.109 \times \text{Proper Information on Package}) + (0.334 \times \text{Fair Price on Package}) + (0.181 \times \text{Offering environmentally certified Products})$

The significance values of Real Presence of Products and Fair Price on Package are 0.024 and 0.004 respectively, which indicate that the Real Presence of Products and Fair Price on Package have positive and significant effects on the Happy to Purchase through Digital Purchasing. The significance values of Working for Customer Satisfaction, Proper Information on Package are 0.629, 0.552 and 0.328. They are all greater than 0.05 which means that they do not have any significant effect on Happy to Purchase through Digital Purchasing.

Multicollinearity test:

The VIF values for each of the predictor variables are as follows:

- Real Presence of Products: 1.493
- Working for Customer Satisfaction: 2.069
- Proper Information on Package: 1.168
- Fair Price on Package : 1.064
- Offering Environmentally certified Products : 1.689

Rule of thumb for VIF interpretation:

- A value of 1 means a predictor variable is uncorrelated with any other model predictors.
- A number between 1 and 5 suggests substantial correlation between a predictor variable and other model predictor variables, but this is rarely significant.

4.2 Multiple Linear Regression Analysis

We perform the multiple linear regression analysis between Unethical Product Delivery (X1), Untruthful Advertisement (X2), Deceptive Packaging (X3), True Claims of Advt (X4) and Ethical Issues while Purchasing (Y) with the help of SPSS 23 software in the analysis .

Dependent Variable: Ethical Issues while Purchasing

Independent Variables: True Claims of Advt., Unethical Product Delivery, Untruthful Advertisement, Deceptive Packaging

Table 5:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452 ^a	.204	.132	.88254

a. Predictors: (Constant), True Claims of Advt, Unethical Product Delivery, Untruthful Advertisement, Deceptive Packaging

The table shows R, R², corrected R², and estimate standard error. The multiple correlation coefficient R is in the "R" column. R is one measure of the quality of the dependent variable prediction, "Ethical Issues while Purchasing". The "R Square" column shows the coefficient of determination (R²), which is the proportion of dependent variable variance explained by independent factors (technically, it is the proportion of variation accounted for by the regression model above and beyond the mean model). Our independent variables explain 20.4% of the variability of our dependent variable, Ethical Issues while Purchasing, at 0.204.

Table 6: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	8.791	4	2.198	2.822	.036 ^b
Residual	34.270	44	.779		
Total	43.061	48			

a. Dependent Variable: Ethical Issues while Purchasing

b. Predictors: (Constant), True Claims of Advt, Unethical Product Delivery, Untruthful Advertisement, Deceptive Packaging

Interpretation: The ANOVA table F-ratio evaluates the regression model's data fit. The table reveals that the independent variables predict the dependent variable, F = 2.822, p = .036. (i.e., the regression model is a good fit of the data).

Table 7: Model 2 Multiple Linear Regression Test Results (Coefficients)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
2	(Constant)	.561	.980		.573	.570		
	Unethical Product Delivery	.128	.103	.168	1.240	.221	.982	1.018
	Untruthful Advertisement	-.030	.125	-.035	-.239	.812	.829	1.206
	Deceptive Packaging	.286	.138	.312	2.074	.044	.801	1.249
	True Claims of Advt	.424	.169	.362	2.509	.016	.869	1.150

Estimated model coefficients

The general form of the equation to predict Ethical Issues while Purchasing from True Claims of Advt., Unethical Product Delivery, Untruthful Advertisement, Deceptive Packaging, is:

$$\text{Predicted Ethical Issues while Purchasing} = 0.561 + (0.128 \times \text{Unethical Product Delivery}) - (0.030 \times \text{Untruthful Advertisement}) + (0.286 \times \text{Deceptive Packaging}) + (0.424 \times \text{True Claims of Advt})$$

The significance values of Deceptive Packaging and True Claims of Advt are 0.044 and 0.016 respectively, which indicate that the Deceptive Packaging and True Claims of Advt have positive and significant

effects on the Ethical Issues while Purchasing. The significance values of Unethical Product Delivery, Untruthful Advertisement are 0.221 and 0.812. They are all greater than 0.05 which means that they do not have any significant effect on Ethical Issues while Purchasing

Multicollinearity test:

Multicollinearity can be determined by generating VIF values for each predictor variable. The VIF values for each predictor variable are:

- a) Unethical Product Delivery: 1.018
- b) Untruthful Advertisement: 1.206
- c) Deceptive Packaging: 1.249
- d) True Claims of Advt: 1.150

VIF starts at 1 and has a maximum of 1. This is a general VIF interpretation guide:

- o A predictor variable with a value of 1 has no association with other predictor variables in the model.
- o Moderate correlation between predictor variables in the model is represented by a value between 1 and 5.

4.3 Multiple Linear Regression Analysis

We perform the multiple linear regression analysis between Caring of Customers' Complaints (X1), Fair Price on Package (X2) , Product Safety (X3) , Offering environmentally certified Products (X4), Real Presence of Products (X5) and Choice to Purchase Digitally(Y) with the help of SPSS 23 software in the analysis .

Table 8:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.719 ^a	.517	.462	.66319

a. Predictors: (Constant), Real Presence of Products, Fair Price on Package, Caring of Customers' Complaints, Offering Environmentally certified Products, Product Safety

Interpretation: The table shows estimate R, R2, corrected R2, and standard error. The multiple correlation coefficient R is in the "R" column. R measures how well the dependent variable, "Choice to Purchase Digitally", was predicted. This prediction score of 0.719 is good. The "R Square" column shows the coefficient of determination (R2), which is the proportion of dependent variable variance explained by independent factors. From the value of 0.517 that our independent variables explain 51.7% of the variability of our dependent variable, Choice to Purchase Digitally.

Table 9: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	20.728	5	4.146	9.426	.000 ^b
Residual	19.352	44	.440		
Total	40.080	49			

a. Dependent Variable: Choice to Purchase Digitally

b. Predictors: (Constant), Real Presence of Products, Fair Price on Package, Caring of Customers' Complaints, Offering Environmentally certified Products , Product Safety

Interpretation: The ANOVA table F-ratio evaluates the regression model's data fit. The table reveals that the independent variables predict the dependent variable, F = 9.426, p =.000. (i.e., the regression model is a good fit of the data).

Table 10: Model 3 Multiple Linear Regression Test Results (Coefficients)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
3	(Constant)	-.120	.712		-.169	.867		
	Caring of Customers' Complaints	.053	.141	.050	.373	.711	.622	1.607

Fair Price on Package	.198	.099	.223	1.998	.052	.879	1.138
Product Safety	-.283	.120	-.324	-2.352	.023	.579	1.726
Offering Environmentally certified Products	.325	.141	.278	2.297	.026	.752	1.331
Real Presence of Products	.640	.132	.583	4.859	.000	.762	1.313

Estimated model coefficients

The general form of the equation to predict Choice to Purchase Digitally from Real Presence of Products, Fair Price on Package, Caring of Customers' Complaints, Offering Environmentally certified Products, Product Safety, is:

$$\text{Predicted Choice to Purchase Digitally} = -.120 + (0.053 \times \text{Caring of Customers' Complaints}) + (0.198 \times \text{Fair Price on Package}) - (0.283 \times \text{Product Safety}) + (0.325 \times \text{Offering environmentally certified Products}) + (0.640 \times \text{Real Presence of Products}).$$

The significance values of Product Safety, Offering Environmentally certified Products and Real Presence of Products are 0.023, 0.026 and 0.000 respectively, which indicate that the Product Safety, Offering Environmentally certified Products and Real Presence of Products have positive and significant effects on the Choice to Purchase Digitally. The significance values of Caring of Customers' Complaints and Fair Price on Package are 0.711 and 0.052. They are all greater than 0.05 which means that they do not have any significant effect on Choice to Purchase Digitally.

Multicollinearity test:

To test multicollinearity, VIF values for each predictor variable can be calculated.

Here are the VIF values for each predictor variable:

- a) Caring of Customers' Complaints: 1.607
- b) Fair Price on Package: 1.138
- c) Product Safety: 1.726
- d) Offering Environmentally certified Products : 1.331
- e) Real Presence of Products : 1.313

VIF starts at 1 and has a maximum of 1. This is a general VIF interpretation guide:

- o A predictor variable with a value of 1 has no association with other predictor variables in the model.
- o Moderate correlation between predictor variables in the model is represented by a value between 1 and 5.

4.4 Multiple Linear Regression Analysis

We perform the multiple linear regression analysis between Correct Information (X1), True Claims of Advt (X2), Offering Environmentally certified Products (X3), Real Presence of Products (X4), Proper Information on Package (X5) and Highlighting benefits of Offerings (Y) with the help of SPSS 23 software in the analysis.

Table 11:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.706 ^a	.499	.442	.54319

a. Predictors: (Constant), Proper Information on Package, Correct Information, True Claims of Advt, and Offering Environmentally certified Products, Real Presence of Products

The table shows R, R², corrected R², and estimate standard error. The multiple correlation coefficient R is in the "R" column. R measures how well the dependent variable, "Highlighting benefits of Offerings", was predicted. This prediction score of 0.706 is good. The "R Square" column shows the coefficient of determination (R²), which is the proportion of dependent variable variance explained by independent factors. Based on 0.499, our independent variables explain 49.9% of the variability of our dependent variable, 'Highlighting benefits of Offerings'.

Table 12: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	12.937	5	2.587	8.769	.000 ^b
Residual	12.983	44	.295		
Total	25.920	49			

a. Dependent Variable: Highlighting benefits of Offerings

b. Predictors: (Constant), Proper Information on Package, Correct Information, True Claims of Advt, Offering Environmentally certified Products, Real Presence of Products

The F-ratio in the ANOVA table evaluates the regression model's data fit. The table reveals that the independent variables predict the dependent variable, $F = 8.769$, $p = .000$. (i.e., the regression model is a good fit of the data).

Table 13: Model 4 Multiple Linear Regression Test Results (Coefficients)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
4	(Constant)	.067	.759		.088	.930	
	Correct Information	-.053	.118	-.053	-.450	.655	.804
	True Claims of Advt	.232	.112	.256	2.077	.044	.749
	Offering Environmentally certified Products	.335	.113	.356	2.950	.005	.783
	Real Presence of Products	.258	.119	.292	2.173	.035	.629
	Proper Information on Package	.170	.133	.151	1.274	.209	.812

Estimated model coefficients

The general form of the equation to predict Highlighting benefits of Offerings from Proper Information on Package, Correct Information, True Claims of Advt, Offering Environmentally certified Products, Real Presence of Products, is:

Predicted Highlighting benefits of Offerings = $.067 - (0.053 \times \text{Correct Information}) + (0.232 \times \text{True Claims of Advt}) + (0.335 \times \text{Offering Environmentally certified Products}) + (0.258 \times \text{Real Presence of Products}) + (0.170 \times \text{Proper Information on Package})$.

The significance values of True Claims of Advt, Offering Environmentally certified Products and Real Presence of Products are 0.044, 0.005 and 0.035 respectively, which indicate that the True Claims of Advt, Offering Environmentally certified Products and Real Presence of Products have positive and significant effects on the Highlighting benefits of Offerings. The significance values of Correct Information and Proper Information on Package are 0.655 and 0.209. They are all greater than 0.05 which means that they do not have any significant effect on Highlighting benefits of Offerings.

Multicollinearity test:

For each predictor variable, VIF values can determine multicollinearity. The VIF values for each predictor variable are:

- Correct Information: 1.243
- True Claims of Advt: 1.335
- Offering Environmentally certified Products: 1.277
- Real Presence of Products: 1.589
- Proper Information on Package: 1.231

VIF starts at 1 and has a maximum of 1. This is a general VIF interpretation guide:

- A predictor variable with a value of 1 has no association with other predictor variables in the model.
- Moderate correlation between predictor variables in the model is represented by a value between 1 and 5.

4.5. Hypothesis Testing and Implications

First Hypothesis (H0-1): The ethical concerns with "Real Presence of Products", and "Fair Price on Package", do not have any significant relationship	The significant values (P Value) of "Real Presence of Products" and "Fair Price on Package", are 0.024 and 0.004 respectively, which indicate that the Real Presence of
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with “Happy to Purchase through Digital Purchasing”.	Products and Fair Price on Package have positive and significant effects on the Happy to Purchase through Digital Purchasing
Second hypothesis (H0-2): The ethical problems with “Deceptive Packaging”, “True Claims of Advt”, do not have any significant relationship with “Ethical Issues while purchasing”.	The significant values (P Value) of “Deceptive Packaging”, and “True Claims of Advt” are 0.044 and 0.016 respectively($p \leq 0.05$, which indicate that the Deceptive Packaging and True Claims of Advt have positive and significant effects on the Ethical Issues while Purchasing
Third hypothesis (H0-3): The ethical problems with “Product Safety, “Offering Environmentally certified Products” , “Real Presence of Products” , do not have any significant relationship with “Choice to Purchase Digitally	The significant values (P Value) of “Product Safety” , “Offering Environmentally certified Products”, and “Real Presence of Products” are 0.023, 0.026 and 0.000 respectively, which indicate that the Product Safety , Offering Environmentally certified Products and Real Presence of Products have positive and significant effects on the “Choice to Purchase Digitally”.
Fourth hypothesis (H0-4): The ethical problems with “True Claims of Advt”, “Offering Environmentally certified Products”, and “Real Presence of Products”, do not have any significant relationship with “Choice to Purchase Digitally”.	The significance values (P Value) of “True Claims of Advt,”, “Offering Environmentally certified Products”, and “Real Presence of Products”, are 0.044, 0.005 and 0.035 respectively, which indicate that the “True Claims of Advt,”, “Offering Environmentally certified Products” and “Real Presence of Products” have positive and significant effects on the “Highlighting benefits of Offerings”.

5. Suggestions & Conclusion

This research and data analysis show that the mathematical model of ‘Happy to Purchase through Digital Purchasing’ is $1.224 + (0.377 \times \text{Real Presence of Products}) - (0.088 \times \text{Working for Customer Satisfaction}) - (0.109 \times \text{Proper Information on Package}) + (0.334 \times \text{Fair Price on Package}) + (0.181 \times \text{Offering environmentally certified Products})$, with the highest regression coefficient associated with it. This reveals that ‘Real Presence of Products’ influences “Happy to Purchase through Digital Purchasing” more.

Another mathematical model, Ethical Issues while Purchasing, is $0.561 + (0.128 \times \text{Unethical Product Delivery}) - (0.030 \times \text{Untruthful Advertisement}) + (0.286 \times \text{Deceptive Packaging}) + (0.424 \times \text{True Claims of Advt})$ “True Claims of Advt” has the greatest regression coefficient in the mathematical model, 0.424. This suggests that “True Claims of Advt” affect “Ethical Issues while Purchasing” more.

In the third mathematical model, ‘Choice to Purchase Digitally’ = $-0.120 + (0.053 \times \text{Customer Complaints}) + (0.198 \times \text{Fair Package Price}) - (0.283 \times \text{Product Safety}) + (0.325 \times \text{Offering environmentally approved Products}) + (0.640 \times \text{Real Presence of Products})$ The “Real Presence of Products” has the highest regression coefficient in the mathematical model, 0.640. This reveals that “Real Presence of Products” influences “Choice to Purchase Digitally” more.

The fourth mathematical model, ‘Highlighting Benefits of Offerings’, takes into account $(0.053 \times \text{Correct Information}) + (0.232 \times \text{True Claims of Ad}) + (0.335 \times \text{Environmentally Certified Products}) + (0.258 \times \text{Real Presence of Products}) + (0.170 \times \text{Proper Information on Package})$ The greatest regression coefficient in the mathematical model is 0.335 for “Offering Environmentally certified Products”. “Offering ecologically certified Products” influences “Highlighting benefits of Offerings” more.

Creating study variables and using SEM (structural equation modelling) analysis can help the next researcher get more detailed data. Besides theoretical contributions, this work will aid enterprises and future research. Customers' opinions of businesses' operations are sensitive and affect behaviour. Companies should spend more time debating ethics. They should recognise moral consumer behaviour. Companies need a future-focused approach.

Companies must declare ethical policies. They should inform customers of ethical issues. They should emphasise that ethics apply to product, packaging, price, and promotion as well as the environment. When making ethical purchases, consumers value advertising, packaging, and environmental procedures more than companies' attempts to meet their requirements, such as answering complaints and ensuring satisfaction. Businesses should focus on packaging and labelling because they affect moral decision-making.

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