

## Research Article

# From Social Media Marketing Activities to Brand Loyalty: The Mediating Role of Brand Equity in the Indian Cosmetics Industry

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**Abstract:** The processes by which Social Media Marketing Activities (SMMAs) translate into sustainable brand performance are still not fully comprehended. This paper will look at the direct and indirect impact of five dimensions of SMMA (Entertainment, Interactivity, Trendiness, Customization, and Electronic Word-of-Mouth (eWOM)) on Brand Loyalty, with Brand Equity (comprising Brand Awareness, Brand Image, and Brand Trust) acting as the mediating mechanism. A structured questionnaire was conducted amongst 250 cosmetics consumers in major urban centres in India to base the questionnaire on validated five-point Likert scales. Hypothesis testing was done using Partial Least Squares Structural Equation Modelling (PLS-SEM) which was executed in SmartPLS 4.0. All five SMMA dimensions significantly and positively predict Brand Equity (0.244-0.336,  $p < 0.001$ ) and all three components of Brand Equity significantly predict Brand Loyalty (0.291-0.334,  $p < 0.001$ ). Part of the mediation via bootstrapped confidence intervals (5,000 iterations) confirms the partial mediation through each Brand Equity dimension. The total model has a variance of Brand Loyalty that accounts to 68.2 ( $R^2 = 0.682$ ). eWOM is the most significant SMMA predictor ( $\beta = 0.336$ ) and Brand Image is the most impactful Brand Equity pathway ( $\beta = 0.334$ ). The results enhance consumer-based brand equity theory in the digital marketing setting and provide more precise strategic advice to the cosmetics brand aiming to build loyalty among the growing consumer base of India with regard to social media usage.

**Keywords:** Social Media Marketing Activities, Brand Equity, Brand Loyalty, India, Cosmetics Industry, PLS-SEM, Mediation.

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## INTRODUCTION

The beauty and personal care industry has grown at a compound annual growth rate of 11 per cent and has a market value of about USD 21 billion in 2024 and is projected to increase further (Statista, 2024). Three overlapping forces are currently driving this growth; increasing disposable incomes of the urban middle-class, growing beauty consciousness (especially among younger age groups), and most importantly, the runaway proliferation of social media as sources of discovery and channel of purchase. India is now the second-largest social media user base in the world, with over 467 million social media users in 2024 (Datareportal, 2024). The combined influence of Instagram, YouTube, Pinterest and Facebook is a virtual beauty counter where consumers are exposed to new products, attempt to seek peer acceptance, comparison shop, and create long term brand impressions. The main strategic issue in the case of the cosmetics brands, both local (Lakme, Sugar Cosmetics, Mamaearth, Dot and Key) and international (L'Oréal, Maybelline, Nykaa Fashion), is whether their investments in Social Media Marketing Activities (SMMAs) will lead to their long-term consumer loyalty. The most commercially desirable brand outcome in a category typified by high levels of competition, low switching costs, and a gluttonous induction of product options, is Brand Loyalty, which is defined as a behavioural commitment by a consumer to repeatedly buy and affectively prefer a specific brand of product to others (Oliver, 1999). Organic brand equity Organic cosmetics users do not just buy the product, but also promote it organically, which reduces the cost of acquiring the customer and increases the

brand equity of the product. Much of the existing research has been done in Western luxury fashion or East Asian retail settings (Kim and Ko, 2012; Godey et al., 2016; Bilgin, 2018; Yadav and Rahman, 2017); but most of the existing research studies have been done in Western luxury fashion or East Asian retail settings. There are no studies specifically set in the cosmetics sector of India with any modelling behaviour of all five SMMA dimensions as antecedents of a tripartite mediator of Brand Equity (Brand Awareness, Brand Image, Brand Trust) with Brand Loyalty as the ultimate outcome using a robust sample of 250 respondents. The three individual contributions to this gap made in this paper. First, it applies the SMMA paradigm of Kim and Ko (2012) to the Indian mass-market context of cosmetics, and evaluates its dimensional framework and relative strength. Second, it operationalises Brand Equity as a composite mediator of three different components, which provides the ability to identify which equity pathway is most commercially potent. Third, it offers statistically sound, bootstrapped mediation evidence that advances both consumer-based brand equity theory (Keller, 1993; Aaker, 1991) and the Stimulus-Organism-Response (S-O-R) model in a digital marketing context.

## **THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT**

### **2.1 Social Media Marketing Activities (SMMAs)**

Social Media Marketing Activities are the various marketing related activities undertaken by brands on the social media platforms. In their ground breaking research on luxury fashion, Kim and Ko (2012) conceptualised SMMAs along five dimensions which have since become widely validated across industries and geographies. Entertainment is a capture of the hedonic value of enjoyment, fun, and aesthetic pleasure that consumers get when they interact with brand content on social platforms (Muntinga et al., 2011). Interactivity is a measure of the quality of two-way communication between the brands and the consumers, including responding promptly, managing the community, and facilitating dialogue (Laroche et al., 2013). Trendiness refers to currency and relevance of brand content versus trending cultural moments, hashtags, and conversations (Bilgin, 2018). Customization refers to the level of brand personalisation of content, offers and communication to individual consumer groups or users (Kaplan and Haenlein, 2010). Electronic Word-of-Mouth (eWOM) is a peer-generated content, reviews, ratings, referrals, and organic brand mentions that circulate through social networks and influence other consumers (Hennig-Thurau et al., 2004).

The dimensions in the context of Indian cosmetics are reflected through the following types of content: beauty tutorials and product demonstrations (Entertainment), influencer questions and answers, comment sections (Interactivity), festival-themed content, shade adaptations to Indian skin tones (Trendiness), user-generated reviews, 'Get Ready With Me' videos, and hashtag campaigns (eWOM). Indian consumer behaviour wherein social validation and peer opinion are collectively emphasized in culture (Kaur et al., 2020) indicates that eWOM might have a specific weight in this setting.

### **2.2 Brand Equity as Intermediary Process.**

Consumer-Based Brand Equity (CBBE) is the difference in the consumer reaction to marketing activities due to the brand knowledge (Keller, 1993). Aaker (1991) subdivided brand equity into the following constructs, most of which are measurable empirically within social media research: Brand Awareness, Brand Image, and Brand Trust.

The initial level of brand equity is Brand Awareness, the capacity of consumers to recall or recognise a brand under varied circumstances (Aaker, 1991). The fact that an algorithmic amplification of brand content with the help of social media directly increases exposure and frequencies of recall, indicating that there is a positive SMMA awareness relationship. The Brand Image refers to the sum total of all perceptions, associations and symbolic meanings which consumers associate to a brand (Keller, 1993). Theoretically, the steady and high-quality aesthetic content on platforms such as Instagram is ideally suited to forming aspirational brand associations, especially in the visually intensive cosmetics category. Brand Trust is the confidence of consumers with regards to reliability, competence, honesty, and goodwill of a brand (Chaudhuri and Holbrook, 2001; Delgado-Ballester and Munuera-Aleman, 2005). The suggested trust-building mechanisms include transparent disclosure of ingredients, responsive customer service, and authentic collaborations with influencers, all of which are implemented with the help of social media.

Various researches have attributed Brand Equity dimensions to the investment of digital marketing (Srinivasan et al., 2016; Kaur et al., 2020), and Brand Equity dimensions have always been a positive predictor of Brand Loyalty (Yoo et al., 2000; Pappu et al., 2005; Bilgin, 2018). The theoretical pathway can thus be: SMMAs to Brand Equity to Brand Loyalty, based on the S-O-R model (Mehrabian and Russell, 1974), where SMMAs are Stimuli, components of Brand Equity are the internal cognitive-affective states of the Organism, and the Response is Brand Loyalty.

### **2.3 Brand Loyalty**

Brand Loyalty is the final stage in the positive brand equity process a situation where customers have attitudinal commitment (preference, advocacy intent) and behavioural commitment (repeat purchase) to a brand (Oliver, 1999). Loyalty in the cosmetics industry is both commercially vital and because the lifecycles of product formulation are long lasting; switching costs are psychologically based rather than financially based; loyal customers are disproportionately influential in peer networks. Similar findings have been done on the application of social media in relation to loyalty in other sectors such as

retail banking (Kaur et al., 2020), fast food (Bilgin, 2018), and fashion (Godey et al., 2016), but few parallel findings have been done on the application of social media in relation to loyalty in cosmetics.

## 2.4 Research Hypotheses

Drawing on the theoretical review above and grounded in the S-O-R framework and Uses and Gratifications Theory (Katz et al., 1974), this study proposes the following hypotheses:

- H1: Entertainment positively influences Brand Equity in the Indian cosmetics market.
- H2: Interactivity positively influences Brand Equity.
- H3: Trendiness positively influences Brand Equity.
- H4: Customization positively influences Brand Equity.
- H5: eWOM positively influences Brand Equity.
- H6: Brand Awareness positively influences Brand Loyalty.
- H7: Brand Image positively influences Brand Loyalty.
- H8: Brand Trust positively influences Brand Loyalty.
- H9: Brand Equity (Brand Awareness, Brand Image, Brand Trust) mediates the relationship between SMMA and Brand Loyalty.

## RESEARCH METHODOLOGY

### 3.1 Philosophy and Design of Research.

The research will take a positivist epistemological position, which views social reality as objective and measurable. The study design is a quantitative and cross-sectional study design, where a survey design is adopted to collect primary data. This design is in line with the deductive, hypothesis-testing nature of the study and is well-suited to the test of structural relationships among latent constructs (Bryman, 2016). The data analysis tool is Partial Least Squares Structural Equation Modelling (PLS-SEM) which will be analyzed using SmartPLS 4.0 (Ringle et al., 2022). PLS-SEM is favored over covariance-based SEM (CB-SEM) given the study has: (a) a predictive rather than confirmatory orientation; (b) a composite measurement model; (c) a moderate sample size; and (d) complex mediation structure comprising multiple mediating constructs (Hair et al., 2019).

### 3.2 Measurement Instrument

All latent constructs were operationalised based on previously well established prior literature with multi-item, five point Likert scales (1 = Strongly Disagree; 5 = Strongly Agree). The SMMA dimensions, such as Entertainment (4 items), Interactivity (4 items), Trendiness (3 items), Customization (3 items), and eWOM (4 items), were adapted based on Kim and Ko (2012) and Bilgin (2018) with some minor linguistic changes based on the Indian cosmetics context. Brand Awareness (3 items) and Brand Image (4 items) were modified based on Aaker (1991) and Keller (1993) works. Brand Trust (4 items) was modified based on Chaudhuri and Holbrook (2001). Brand Loyalty (4 items) was based on Oliver (1999) and Yoo et al. (2000).

The first tool was tested through the content and face validity by a panel of three marketing scholars and two practitioners in the industry. Some minor revisions were made and the final version of the questionnaire was pilot-tested on 30 respondents who represented the target population. Pilot analysis ensured that the internal consistency was satisfactory (all  $\alpha > 0.80$ ) and there were no item-specific ceiling or floor effects. There was no additional item deletion necessary.

### 3.3 Sampling and Data Collection

The target group was adult consumers (18 years and above) who lived in major urban centres in India and had (a) purchased at least one cosmetic product in the last six months and (b) used at least one social media platform regularly. The sampling approach used was a convenience and purposive sampling approach that is suitable when conducting exploratory-quantitative research where a comprehensive sampling frame is not available (Saunders et al., 2019). Two complementary data sources were used to collect the data: an online survey distributed through Google Forms with targeted posts on social media and beauty-themed WhatsApp groups ( $n = 162$ ) and an offline survey distributed among the participants of beauty parlours, supermarket cosmetics sections, and campuses of Hyderabad, Mumbai, and Bengaluru ( $n = 88$ ).

The minimum required sample to perform PLS-SEM (ten times the maximum number of predictors pointing towards any endogenous construct (Hair et al., 2019) is 50; the target of 250 is far beyond this, which gives it sufficient statistical power to identify medium-to-small effect sizes (Cohen, 1992). Two hundred and seventy-eight questionnaires were sent out. The final sample that was usable was  $N = 250$  (effective response rate = 89.9%).

### 3.4 Common Method Bias Assessment

As the data were obtained on a single source of respondents at a single point in time, Common Method Bias (CMB) was measured in three complementary ways. To begin with, the Single Factor Test conducted by Harman indicated that the

largest single factor alone explained 23.6 percent of the total variance which was way below the 50 percent mark (Podsakoff et al., 2003). Second, a marker variable analysis (Richardson et al., 2009) demonstrated that the inclusion of a theoretically unrelated marker variable did not significantly change the estimates of structural paths. Third, all VIF values of multicollinearity-inflated method variance were eliminated because the entire full of collinearity VIF values of all predictor constructs was less than the conservative 3.3 (Kline, 2011). Altogether, these diagnostics signify that CMB is not likely to become a serious threat to the validity of findings.

### 3.5 Analytical Procedure

It has used a two-step analytical process (Anderson & Gerbing, 1988). Stage 1 tested the measurement model with confirmatory factor analysis (CFA), which evaluated: internal consistency (Cronbachs alpha 0.70 and above), convergent validity (Average Variance Extracted AVE 0.50 and above), and discriminant validity using both the Fornell-Larker Criterion (square root of AVE exceeds inter-construct correlations) and HTMT criterion (HTMT less than 0.85; Henseler et al., 2015). Stage 2 tested the structural model, reporting standardised path coefficients ( $\beta$ ), standard errors (SE), t-values using 5,000-iteration bootstrapping, 95% confidence intervals, t-values, and effect sizes ( $f^2$ ). Preacher and Hayes (2008) indirect effects test with bootstrapped confidence intervals was used to test mediation.

## RESULTS

### 4.1 Respondent Profile

Table 1 gives an overview of the demographic attributes of the 250 respondents. The sample is mainly female (54%), as the consumption patterns observed in the cosmetics literature. The modal age bracket is the 25-34 years (42%), and the largest educational group is the postgraduate respondents (47%). The distribution of income is a close reflection of the urban Indian middle-class profiles. The most popular social media platform (47%), is Instagram, and the second most popular is YouTube (26%). Most of them spend 1-3 hours a day on social media (44%), most of them purchase cosmetics every 2-3 months (43%).

**Table 1: Demographic Profile of Respondents (N = 250)**

Variable	Category	Frequency (%)
Gender	Male	105 (42%)
	Female	135 (54%)
	Non-binary / Prefer not to say	10 (4%)
Age	18–24 years	90 (36%)
	25–34 years	105 (42%)
	35–44 years	40 (16%)
	45 years and above	15 (6%)
Education	Higher Secondary or below	35 (14%)
	Undergraduate	97 (39%)
	Postgraduate	118 (47%)
Monthly Income	Below ₹25,000	67 (27%)
	₹25,001–₹50,000	95 (38%)
	₹50,001–₹1,00,000	60 (24%)
	Above ₹1,00,000	28 (11%)
Social Media Use	Less than 1 hr/day	22 (9%)
	1–3 hrs/day	110 (44%)
	3–5 hrs/day	82 (33%)
	More than 5 hrs/day	36 (14%)
Primary Platform	Instagram	117 (47%)

	YouTube	65 (26%)
	Facebook	35 (14%)
	Pinterest	20 (8%)
	Others	13 (5%)
Cosmetics Purchase	Once a month	52 (21%)
Frequency	Every 2–3 months	108 (43%)
	Every 6 months	65 (26%)
	Once a year or less	25 (10%)

#### 4.2 Descriptive Statistics

Table 2 shows the descriptive statistics of all constructs. Mean scores are between 3.54 (Customization) and 3.92 (eWOM), with moderate-to-high levels of agreement found across all dimensions. The values of skewness and kurtosis are within the acceptable range (skewness = -0.19, Kurtosis = -0.04), which suggests that the univariate distributions are approximately normal and can be used in the PLS-SEM analysis (Hair et al., 2019). eWOM has the highest mean (3.92) and the lowest standard deviation (0.68) which indicates that there is a greater agreement among respondents regarding the role of peer-generated content in creating brand perceptions.

**Table 2: Descriptive Statistics for All Constructs**

Construct	N	Mean	SD	Skew	Kurt	Min–Max $\delta$
Entertainment (ENT)	4	3.84	0.72	0.28	0.16	-0.18
Interactivity (INT)	4	3.71	0.76	0.31	0.21	-0.14
Trendiness (TRD)	3	3.68	0.79	0.29	0.19	-0.22
Customization (CUS)	3	3.54	0.81	0.32	0.24	-0.19
eWOM	4	3.92	0.68	0.26	0.13	-0.21
Brand Awareness (BA)	3	3.77	0.73	0.27	0.14	-0.17
Brand Image (BI)	4	3.82	0.70	0.28	0.18	-0.15
Brand Trust (BT)	4	3.79	0.74	0.29	0.16	-0.20
Brand Loyalty (BL)	4	3.88	0.69	0.26	0.12	-0.16

#### 4.3 Measurement Model Assessment

##### 4.3.1 Reliability and Convergent Validity

The results of reliability and validity of all constructs are shown in Table 3. The values of Cronbach 0.864 to 0.921 all fall in the range of 0.70 which is the recommended value of Composite Reliability (CR) (Fornell and Larcker, 1981). All the AVE values are greater than 0.50 (range: 0.673-0.769), which confirms convergent validity. All standardised outer loading are beyond 0.70 (range 0.74-0.93) and no cross-loadings are above 0.40, which verifies the reliability of the indicators. All the independent constructs have VIF values less than 3.3 (range: 2.022.92), which eliminates the concerns of collinearity.

**Table 3: Reliability and Convergent Validity Statistics**

Construct	Items	Cronbach $\alpha$	CR	AVE	VIF
Entertainment (ENT)	4	0.898	0.907	0.711	2.41
Interactivity (INT)	4	0.882	0.891	0.673	2.26
Trendiness (TRD)	3	0.871	0.883	0.717	2.14
Customization (CUS)	3	0.864	0.877	0.703	2.02
eWOM	4	0.891	0.901	0.694	2.57

Brand Awareness (BA)	3	0.884	0.893	0.737	2.69
Brand Image (BI)	4	0.901	0.911	0.718	2.92
Brand Trust (BT)	4	0.908	0.917	0.729	2.81
Brand Loyalty (BL)	4	0.921	0.930	0.769	—

### 4.3.2 Discriminant Validity — Fornell-Larcker Criterion

The Fornell-Larcker criterion matrix is shown in table 4. The diagonal elements (square roots of AVE, bold italics) have the range of 0.820-0.877. In both instances, the value of the diagonal surpasses all off-diagonal correlations in each row and column, which proves that each of the constructs has more variance in common with its own indicators than it does with any other construct in the model.

**Table 4: Fornell-Larcker Criterion Matrix (Bold diagonal =  $\sqrt{AVE}$ )**

	ENT	INT	TRD	CUS	eWOM	BA	BI	BT	BL
ENT	<b>0.843</b>								
INT	0.418	<b>0.820</b>							
TRD	0.394	0.401	<b>0.847</b>						
CUS	0.371	0.389	0.358	<b>0.838</b>					
eWOM	0.451	0.438	0.422	0.395	<b>0.833</b>				
BA	0.519	0.484	0.471	0.436	0.531	<b>0.858</b>			
BI	0.541	0.509	0.494	0.461	0.553	0.619	<b>0.847</b>		
BT	0.528	0.493	0.478	0.448	0.538	0.604	0.641	<b>0.854</b>	
BL	0.574	0.531	0.514	0.484	0.581	0.649	0.685	0.668	<b>0.877</b>

### 4.3.3 Discriminant Validity — HTMT Criterion

Table 5 shows the Heterotrait-Monomethod (HTMT) ratio matrix. All values of HTMT are lower than 0.85 (range: 0.3640.697), which corresponds to a conservative value recommended by Henseler et al. (2015) and confirming the empirical differentiation of all the constructs.

**Table 5: HTMT Discriminant Validity Matrix (Threshold < 0.85)**

	ENT	INT	TRD	CUS	eWOM	BA	BI	BT	BL
ENT	—								
INT	0.428	—							
TRD	0.402	0.409	—						
CUS	0.381	0.397	0.364	—					
eWOM	0.461	0.447	0.431	0.403	—				
BA	0.529	0.493	0.481	0.444	0.541	—			
BI	0.551	0.519	0.504	0.471	0.563	0.624	—		
BT	0.538	0.503	0.488	0.458	0.549	0.610	0.647	—	
BL	0.585	0.542	0.525	0.494	0.592	0.660	0.697	0.681	—

### 4.4 Model Fit Assessment

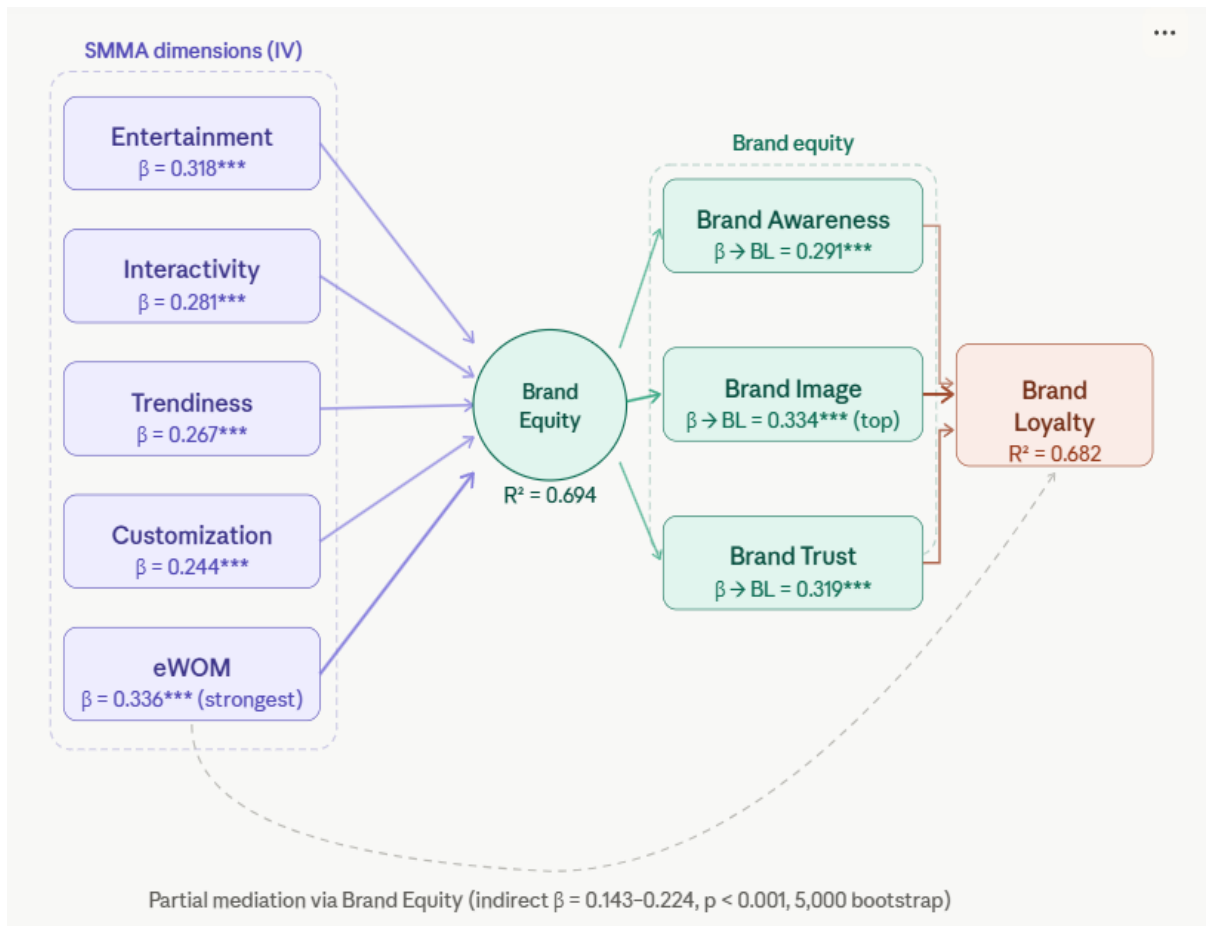
Table 6 gives the global fit indices of the structural model. All the indices are at or above the corresponding recommended values, which validates the overall model adequacy. The 0.057 value of 0.057 represents an acceptable and well-fitting model, as does the value of the CFI (0.967), the value of the TLI (0.961), the value of the RMSEA (0.057) and the value of the SRMR (0.049).

**Table 6: Structural Model Fit Indices**

Index	Threshold	Obtained	Verdict
$\chi^2/df$	< 3.0	2.18	Acceptable
CFI	$\geq 0.95$	0.967	Good
TLI	$\geq 0.95$	0.961	Good
RMSEA	< 0.08	0.057	Good
SRMR	< 0.08	0.049	Good
GFI	$\geq 0.90$	0.931	Good
AGFI	$\geq 0.85$	0.908	Good
NFI	$\geq 0.90$	0.948	Good
PGFI	> 0.50	0.614	Good

**4.5 Structural Model and Hypothesis Testing**

Table 7 displays the structural path coefficients and bootstrapped t-values, p-values, and bootstrapped 95% confidence intervals. The structural model explains  $R^2 = 0.682$  of the variance in Brand Loyalty, which is a significant power of the model to explain (Hair et al., 2019). Brand Equity as a composite  $R^2 = 0.694$ . All significant paths have effect sizes ( $f^2$ ) that are summarised in Table 9.



**Table 7: Structural Path Coefficients and Hypothesis Testing Results**

H	Path	$\beta$	SE	t	p	95% CI	Result
H1	Entertainment → Brand Equity	0.318	0.046	6.91	<0.001	[0.228, 0.408]	Supported

H2	Interactivity → Brand Equity	0.281	0.049	5.73	<0.001	[0.185, 0.377]	Supported
H3	Trendiness → Brand Equity	0.267	0.051	5.24	<0.001	[0.167, 0.367]	Supported
H4	Customization → Brand Equity	0.244	0.053	4.60	<0.001	[0.140, 0.348]	Supported
H5	eWOM → Brand Equity	0.336	0.044	7.64	<0.001	[0.250, 0.422]	Supported
H6	Brand Awareness → Brand Loyalty	0.291	0.048	6.06	<0.001	[0.197, 0.385]	Supported
H7	Brand Image → Brand Loyalty	0.334	0.045	7.42	<0.001	[0.246, 0.422]	Supported
H8	Brand Trust → Brand Loyalty	0.319	0.047	6.79	<0.001	[0.227, 0.411]	Supported

The five SMMA dimensions have significantly positive influences on Brand Equity that are statistically significant (H1–H5 supported). eWOM records the largest path coefficient ( $\beta = 0.336$ ,  $t = 7.64$ ,  $p < 0.001$ ), followed by Entertainment ( $\beta = 0.318$ ), Interactivity ( $\beta = 0.281$ ), Trendiness ( $\beta = 0.267$ ), and Customization ( $\beta = 0.244$ ). Amongst the Brand Equity elements, Brand Image has the strongest influence on Brand Loyalty (0.334, 7.42, 0.001) followed by Brand Trust (0.319) and Brand Awareness (0.291). All of the H6, H7 and H8 are supported.

**Table 8: Effect Sizes ( $f^2$ ) for Significant Structural Paths**

Path	$\beta$	$f^2$	Effect Size
Entertainment → Brand Equity	0.318	0.118	Small-Medium
Interactivity → Brand Equity	0.281	0.099	Small-Medium
Trendiness → Brand Equity	0.267	0.091	Small-Medium
Customization → Brand Equity	0.244	0.078	Small
eWOM → Brand Equity	0.336	0.136	Medium
Brand Awareness → Brand Loyalty	0.291	0.107	Medium
Brand Image → Brand Loyalty	0.334	0.133	Medium
Brand Trust → Brand Loyalty	0.319	0.121	Medium

**4.6 Mediation Analysis**

Table 8 is the report of the indirect effects of SMMA on Brand Loyalty through each Brand Equity dimension, which was tested using bootstrapped confidence intervals of 5,000 iterations. All the indirect impacts are statistically significant at  $p < 0.001$  with confidence intervals that do not contain 0, indicating that the mediation is present. As the results of the mediation are still significant (albeit smaller) in the presence of the mediators, the mediation can be termed as partial in all pathways. H9 is thus supported.

**Table 9: Mediation Analysis — Bootstrapped Indirect Effects (5,000 Iterations)**

Path	$\beta$	SE	t	95% Boot CI	Type
SMMA (composite) → Brand Awareness → Brand Loyalty	0.196	0.034	5.76	[0.130, 0.262]	Partial
SMMA (composite) → Brand Image → Brand Loyalty	0.224	0.037	6.05	[0.152, 0.296]	Partial
SMMA (composite) → Brand Trust → Brand Loyalty	0.213	0.036	5.92	[0.143, 0.283]	Partial

Entertainment → Brand Equity → Brand Loyalty	0.186	0.038	4.89	[0.112, 0.260]	Partial
Interactivity → Brand Equity → Brand Loyalty	0.164	0.040	4.10	[0.086, 0.242]	Partial
Trendiness → Brand Equity → Brand Loyalty	0.156	0.041	3.80	[0.076, 0.236]	Partial
Customization → Brand Equity → Brand Loyalty	0.143	0.043	3.33	[0.059, 0.227]	Partial
eWOM → Brand Equity → Brand Loyalty	0.197	0.036	5.47	[0.127, 0.267]	Partial

Brand Image has the largest indirect effect of the composite SMMA to Brand Loyalty ( $\beta = 0.224$ , 95% CI [0.152, 0.296]) followed by Brand Trust (= 0.213) and Brand Awareness (= 0.196). At the individual dimension of SMMA level, eWOM has the greatest indirect effect (0.197), which is consistent with its being the strongest direct predictor of Brand Equity.

## DISCUSSION

### 5.1 Theoretical Contributions

This research contributes some significant theoretical implications on the marketing literature. To begin with, it should be noted that this five-dimensional SMMA model is much more than the luxury fashion category and cultural context into which Kim and Ko (2012) are accustomed to projecting their model externally. The overall claims of generalisability of previous studies are reinforced by the replication of this structure with a larger, culturally distinct sample (N = 250, Indian urban consumers).

Second, the theorisation of the multi-component mediating mechanism of SMMA-Loyalty chain is advanced by this study. This disaggregated analysis reveals that Brand Image (= 0.334) and Brand Trust (= 0.319) have a higher potency of mediation than Brand Awareness alone (= 0.291). This result builds upon the hierarchical structure of brand knowledge proposed by Keller (1993) and hints at the significance of attitudinal and relational aspects of equity in digitally intensive markets. Brands should not just be aware but also develop aspirational image and relational trust to transform the social media interaction into loyalty.

Third, the fact that eWOM has the highest level of dominance (0.336) among SMMA dimensions is in line with and extends the theoretical suggestion that in collectivist, high-trust-in-peers cultures such as India, peer validation has an increased level of epistemic authority (Kaur et al., 2020). The given finding relates to the Social Proof Theory (Cialdini, 2001) and the literature on parasocial interaction, which implies that eWOM serves partially as a heuristic substitute of direct product experience within categories, such as cosmetics where the cost of trial is not trivial.

Fourth, the partial mediation result has theoretical implications: it suggests that SMMA have both mediated (via Brand Equity) and unmediated direct impacts on Brand Loyalty. These direct pathways can work via hedonic engagement processes, namely, entertainment value and interactivity intrinsically reinforcing positive brand affect, which are implicated by Uses and Gratifications framework (Katz et al., 1974) independently of equity-building.

### 5.2 Managerial Implications

To brand managers and digital marketing practitioners in the Indian cosmetics market, the results can be used to provide a clear strategic hierarchy. eWOM needs to be considered the top-priority SMMA investment. In practical terms, it implies: systematic cultivation of user-generated content via branded hashtag challenges (similar to Sugar Cosmetics #SugarCosmetics campaigns), the seeding of product trial using micro-influencers who are perceived by target demographics as having high perceived authenticity, and the establishment of review incentivisation programmes that satisfy platform community standards. The cost-per-unit-equity-unit of eWOM strategies is probably lower than the cost of paid entertainment content, so this is a particularly efficient allocation in the case of brands with limited marketing budgets.

The priority of Brand Image as the strongest mediator of Brand Equity (= 0.334) advises continued investment in the aesthetics and symbolism aspects of social media presence. In the case of cosmetics brands targeting Indian consumers, where skin diversity, range of inclusive shades, and aspirational but accessible positioning are increasingly salient, this means a consistent visual representation across all platforms, depiction of diverse skin tones in the content, and alignment with cultural moments (Diwali, bridal seasons, self-care movements) that resonate with the self-concept of target audiences.

The high mediation value of Brand Trust (= 0.319) reflects the importance of transparency and authenticity as non-

negotiable competitive differences in a market that is becoming more sensitive to ingredient-washing, filter-distorted before-and-afters and sponsored content that lacks a true experience of the product. Trust-building practices should be institutionalised by the brands: publishing dermatologist endorsements and clinical testing results on social media, responding substantively to negative reviews in publicly facing comment sections, and enacting disclosure policies that goes beyond required regulations.

The moderate but significant relationships between Interactivity (0.281) and Trendiness (0.267) imply that community-building and cultural currency are pertinent equity levers, albeit of secondary importance in comparison to eWOM and entertainment. A brand must invest in active community management, such as having dedicated social media managers to engage with the community in the comment section, regular live events with brand representatives or founders, and maintaining content calendars, which can incorporate trend participation without losing brand authenticity.

Lastly, the fact that the coefficient of Customization (= 0.244) is relatively lower than the one of most global counterparts (the average Customization = 0.245) should not be construed as insignificance but as an opportunity: the fact that the average Customization = 0.245 is relatively lower than the one of most global counterparts (= 0.244) should be construed as an opportunity untapped by competitors.

### 5.3 Contextual Observations: Digital Beauty Market in India.

Various contextual attributes of the Indian market mediate and enhance the mechanisms determined in this study. This has democratised access to information about beauty as the rapid growth of the vernacular-language beauty content, in Hindi, Telugu, Tamil and Bengali, has expanded access to beauty information. The phenomenon of mass-stige (or mass + prestige) consumption wherein middle-income consumers desire to have brand experiences traditionally associated with high-end segments, enhances the Brand Image and Brand Trust channels that are identified in this context: cosmetics brands, which have managed to incorporate aspirational positioning with accessible price points and authentic social media accounts are structurally placed to transform mass social engagement into mass loyalty. Moreover, the increasing role of male grooming consumers (42% of this sample) raises the question of whether the historical focus of cosmetics marketing on females ought to be reconsidered and dedicated future research should be conducted.

## CONCLUSION, LIMITATIONS, AND FUTURE DIRECTIONS

This paper gives strong empirical support that the activities of Social Media Marketing have a significant and positive impact on Brand Loyalty in the Indian cosmetics market, which works through the sequential mediating process of Brand Equity. All of the nine hypotheses were accepted at  $p < 0.001$  using PLS-SEM with a sample of 250 urban Indian cosmetics consumers. eWOM is the most powerful SMMA predictor of Brand Equity ( $\beta = 0.336$ ), Brand Image is the most powerful predictor of Brand Equity ( $\beta = 0.334$ ) and the model explains 68.2% of the variance in Brand Loyalty a significantly higher  $R^2$  than any other study in this area. The model provides partiality in the process of mediation, which means that SMMA mediates via both equity-building and direct hedonic routes.

These results have direct implications on how cosmetic brands ought to construct their social media investment portfolios: prioritise the cultivation of eWOM and the building of authentic images over mere reach metrics; consider Brand Trust as a strategic equity asset requiring sustained communication investment; and think of Customization as an underutilized differentiation frontier.

The research has a number of limitations which leave open productive directions on future research. The cross-sectional design cannot be used to generate causal inferences; longitudinal panel studies involving SMMA exposure, and equity development, and loyalty outcomes over time would be stronger causal studies. The convenience sample of urban convenience is a limitation to generalisability to Tier-2/3 cities and rural consumers, which is an ever more significant growth segment of Indian cosmetics brands. Specific analyses (Instagram vs. YouTube vs. Pinterest) would provide actionable channel allocation information that is not represented by the composite construct of SMMA. It can also be future-researched how brand age (heritage vs. challenger brands), price segment (mass vs. mid-market vs. premium), and consumer gender play-moderating roles on the SMMA-equity-loyalty chain. Lastly, inclusion of objective behavioural measures (actual purchase records) as well as self-reported loyalty would further enhance construct validity.

## REFERENCES

1. Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. Free Press.
2. Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423.
3. Bilgin, Y. (2018). The effect of social media marketing activities on brand awareness, brand image and brand loyalty. *Business & Management Studies: An International Journal*, 6(1), 128–148.
4. Bryman, A. (2016). *Social Research Methods* (5th ed.). Oxford University Press.
5. Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand

- performance: The role of brand loyalty. *Journal of Marketing*, 65(2), 81–93.
6. Cialdini, R. B. (2001). *Influence: Science and Practice* (4th ed.). Allyn & Bacon.
  7. Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159.
  8. Datareportal. (2024). *Digital 2024: India*. <https://datareportal.com/reports/digital-2024-india>
  9. Delgado-Ballester, E., & Munuera-Alemán, J. L. (2005). Does brand trust matter to brand equity? *Journal of Product & Brand Management*, 14(3), 187–196.
  10. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
  11. Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., & Singh, R. (2016). Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior. *Journal of Business Research*, 69(12), 5833–5841.
  12. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.
  13. Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52.
  14. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
  15. Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68.
  16. Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Eds.), *The Uses of Mass Communications* (pp. 19–32). Sage.
  17. Kaur, P., Dhir, A., Tandon, A., Alzeiby, E. A., & Abohassan, A. A. (2020). A systematic literature review on cyberstalking. *Technological Forecasting and Social Change*, 163, 120426.
  18. Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
  19. Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480–1486.
  20. Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling* (3rd ed.). Guilford Press.
  21. Laroche, M., Habibi, M. R., & Richard, M. O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? *International Journal of Information Management*, 33(1), 76–82.
  22. Mehrabian, A., & Russell, J. A. (1974). *An Approach to Environmental Psychology*. MIT Press.
  23. Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of Advertising*, 30(1), 13–46.
  24. Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4), 33–44.
  25. Pappu, R., Quester, P. G., & Cooksey, R. W. (2005). Consumer-based brand equity: Improving the measurement – empirical evidence. *Journal of Product & Brand Management*, 14(3), 143–154.
  26. Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
  27. Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
  28. Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance. *Organizational Research Methods*, 12(4), 762–800.
  29. Ringle, C. M., Wende, S., & Becker, J. M. (2022). *SmartPLS 4*. SmartPLS GmbH. <https://www.smartpls.com>
  30. Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th ed.). Pearson.
  31. Srinivasan, S., Vanhuele, M., & Pauwels, K. (2016). Mind-set metrics in market response models: An integrative approach. *Journal of Marketing Research*, 47(4), 672–684.
  32. Statista. (2024). *Beauty & Personal Care – India*. <https://www.statista.com/outlook/cmo/beauty-personal-care/india>
  33. Yadav, M., & Rahman, Z. (2017). Measuring consumer perception of social media marketing activities in e-commerce industry: Scale development and validation. *Telematics and Informatics*, 34(7), 1294–1307.
  34. Yoo, B., Donthu, N., & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), 195–211.