Impact of Social Media Marketing Activities on Purchase Intentions via Customer Equity Drivers: An Empirical Case Study on Smartphone Brands

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ABSTRACT

In the light of growing interest and usage of social networking sites, smartphones, and internet availability, this study aims to analyze the impact of social media marketing activities on the purchase intentions of the customer via customer equity drivers—relationship equity, value equity, and brand equity—in the context of the smartphone industry. An online survey was conducted with a total of 343 respondents who were active users of social media. The collected data were analyzed using structural equation modeling. The findings of the study revealed that interactivity was the most important dimension of social media marketing activities (SMMAs) and personalization with e-WOM being second. SMMAs were found to have a significant impact on customer equity drivers, and value equity and brand equity were positively related to the purchase intentions of the customers. The findings of the study will help managers to develop SMMA strategies and boosting future sales by influencing the purchase intentions of the customers through perceived SMMA.

KEYWORDS
Brand Equity, Customer Equity Drivers, Purchase Intention, Relationship Equity, Social Media Marketing Activities, Social Networking Sites, Value Equity

INTRODUCTION

The usage of Social Networking Sites (SNSs) e.g., Facebook, Twitter, Instagram, etc. has been growing enormously over the past few years. Facebook is the most popular network in the world, with over 2.6 billion monthly active users as of the first quarter of 2020. (Clement, 2020). In 2020, there were above 3.6 billion social media users worldwide which is expected to increase to 4.41 billion by 2025 (Tankovska, 2021). On average social networking usage of internet users worldwide amounted to 144 minutes per day as of 2019 (Clement, 2020). The digital population of India is increasing rapidly with more than 680 million users active on the internet. It is forecasted that with the growing ease of internet access available to the population of India, there will be almost 423 million social network users in India from a little over 326 million users in 2018 (Keelery, 2020). This clearly demonstrates that with the increase in internet penetration, the digital population of India is growing fast and people are becoming accustomed to using the internet. This rapid increase in digital convergence
has also given rise to the digital advertising industry. Companies have started recognizing the need of incorporating social media into their businesses and therefore, today, India’s digital advertising industry is worth over 160 billion Indian rupees, and it is estimated to reach 560 billion rupees by 2023 (Keelery, 2020).

Social media marketing (SMM) refers to the promotional activities of the companies to promote their products and services on SNSs to reach a huge customer base online. Social media allows the exchange of various types of content in digital networks. Users create profiles on social media platforms or in a smartphone application designed and maintained by social media companies. User profiles can connect with other users’ profiles and brands and create networks (Obar & Wildman, 2015). Using social media, brands can interact and communicate better with their consumers and intensify their association with them, can improve customer services, maintain customer relationships, inform about new products, offers, etc. Facebook, Instagram, Youtube, and Twitter are the most popular SNSs that are widely used by companies and celebrities in promoting themselves and their brands. Social media marketing is also more genuine in its interactions with people, attempting to reveal rather than manipulate the brand’s profile (Karamian et al., 2015). Many businesses are turning to social media for marketing, customer service, external promotions, and internal employee communications as it becomes more convenient and relevant (Seo & Park, 2018). Even though social media marketing has not completely replaced traditional marketing, it is definitely an alternative tactic. Companies are increasingly using social media as a more cost-effective and efficient alternative marketing practice that directly communicates with customers, rather than traditional advertisement channels (Castronovo & Huang, 2012). The major difference between traditional media and social media is customer engagement. On average, users spend almost two to three hours on social media sites. Television ads nowadays do not play a much effective role in attracting customers due to easy channel swapping. This makes social media an effective and attractive platform for brands to promote their product and attract current and future prospective customers, build strong customer relationships, and ultimately build customer equity.

The ways of shopping and information generation of Indian consumers are changing rapidly and there has been a gradual shift from offline shopping to online modes of shopping. This has led to the emergent use of Social Media Marketing in India which provides a developing vision and strong association with online customers making it necessary for the companies to analyze its actual impact on the purchase intentions of the customers. If the brands in India want to grow in both the online and offline domains, the latest factors they should be concerned about are the effects of their social media presence on customers, how much value and brand loyalty they are able to create through their Social Media Marketing Activities (SMMAs) and the relationship they are able to build with the customers. These factors would help companies in building up their digital marketing strategies to not only retain existing customers but also increase their customer base by turning potential customers into active ones.

Many smartphone brands, in order to be competitive and with a perspective to reaching their current and future prospective customers directly and in a cost-effective manner have increased their presence on SNSs by creating their Twitter account, Facebook pages, YouTube channels, Instagram accounts, etc. On analyzing social media marketing activities of top smartphone brands it was analyzed that Apple having millions of followers on social media sites, has created a popular hashtag #shotoniphone campaign where it interacts with its customers by asking them to upload their pictures clicked with iPhone using this hashtag and the selected pictures and videos are posted on the official Instagram account of Apple creating a sense of belongingness in the customers and also taking continuous feedback and promoting its camera quality. Apple Music tweets daily about the latest collections and the Apple support page continuously guides its customers about data protection measures and the new features added.

Samsung, on the other hand having 161 million followers on Facebook, regularly post audio-video and written content on their social media accounts about the new products launched with the
information on new features added, continuously updating its customers about promotional offers (cashback, EMI, discounts). It also provides a direct link to purchase below these contents. It entertains and entices its customers to buy its smartphone by uploading amusing pictures shot by different models of Samsung smartphones. Samsung also posts creative ads on its Instagram account giving social messages and showing a brilliant example of building brand and relationship equity.

Likewise, another popular brand OnePlus also has the #shotononeplus campaign which helps them in promoting their excellent camera quality and editing features available. It gives updated and newest information about new product launches. OnePlus has aired the world’s first-ever augmented reality (AR) launch of its new smartphone, OnePlus Nord, in July 2020 which it identifies as “in your house, on your palm!” The AR invites were sold to the fans at the price of 99 INR which gave its fans a privilege to experience the launch even before the official launch. Fans purchasing AR invites also had a chance to participate in the Launch Day Lottery with assured gifts.

Oppo, another leading brand in the smartphone industry attracts a huge customer base and engages its customers on its social media accounts by offering a chance to win an Oppo smartphone by sharing their experience with previous Oppo smartphones. It has the #QuizAlert and #SaleAlert campaign where customers are being enticed to make purchases at sale value or win an Oppo mobile by participating in its quiz. The strategy helps Oppo not only to attract customers’ attention but also facilitate e-word-of-mouth about its different models of smartphones.

Social media marketing has been a prominent research topic for the past decade. This research contributes substantially to the extant literature in the field of social media marketing. There are a lot of researches that focus on a firm’s perception of the effects of SMM; the outcomes of SMMAs by way of comments, likes, tags, etc. on sales value but very few research studies focus on the customer’s perception about SMMAs of their favorite brands and the impact of the same on their purchase intentions. Also, those few kinds of research focusing on customer’s perspectives are done mainly in the context of luxury fashion brands (Kim & Ko, 2012), the airline’s industry (Seo & Park, 2018), banking (Chahal & Bala, 2017), and supermarket, and e-commerce industry (Yadav & Rahman, 2018), with very few or no study focusing on electronic gadgets or smartphones. There has been a paucity of attention given towards investigating the impact of SMMAs on various types of consumer responses in the extant literature (Yadav & Rahman, 2018; Kim et al., 2010). Though, the previous literature confirms the impact of SMMAs on customer loyalty via customer equity drivers (Yadav & Rahman, 2018); impact of SMMAs on customer responses via brand equity alone (Seo & Park, 2018; Godey et al., 2016); impact of the benefits of social media marketing on SNSs and brand trust on consumer behaviors (Kananukul et al., 2015); impact of SMMAs on customer equity via customer equity drivers (Kim & Ko, 2012); impact of customer equity drivers on future sales (Vogel et al., 2008), but the impact of SMMAs on purchase intention via customer equity drivers is not well analyzed in the recent literature of social media marketing. This research aims to bridge this gap by investigating the impact of SMMAs on purchase intention via customer equity drivers. According to the theory of planned behavior and reasoned action, it is very important to predict purchase intention as it is highly correlated with actual purchase behavior (Ajzen, 1991). Also, the literature has revealed that very few studies have been conducted on the concept of customer equity drivers in the Indian context (Chahal & Bala, 2017; Yadav & Rahman, 2017).

This study makes a substantial contribution to the existing body of knowledge of SMM by adapting the S-O-R model which links social media marketing activities to the purchase intention of the customers via customer equity drivers. The S-O-R model helps to understand the reason behind how people behave given environmental stimuli. In the current study, SMMAs act as external environmental stimuli which trigger the emotional and cognitive state of consumers (here, customer equity drivers) which ultimately brings out certain responses, here, purchase intention of the customers (Yadav & Rahman, 2018).

The value of one customer is not limited to what he or she initially spends but is worth a lot more than that. Thus, it becomes necessary for businesses and brands to measure the true value of
customers and the influence of social media marketing activities on them (Kim & Ko, 2012). Also, the validity of the perceived SMMAs scale needs to be confirmed in diverse industry contexts (Yadav & Rahman, 2018). Thus, this research aims to study the impact of social media marketing activities on customer equity drivers (value equity, brand equity, and relationship equity) and purchase intentions of Indian customers in the context of the smartphone industry.

BACKGROUND

The S-O-R Model

The S-O-R model was developed by Mehrabian and Russell, (1974) by studying consumer behavior and further developed by Jacoby, (2002). The current study adapts the S-O-R model which links social media marketing activities to the purchase intention of the customers via customer equity drivers. Here, SMMAs act as external environmental stimuli which prompt the emotional and cognitive state of consumers (here, customer equity drivers) which ultimately brings out certain responses (here, purchase intention of the customers) (Yadav & Rahman, 2018). Prior studies applied the S-O-R model majorly in the e-commerce industry where characteristics of e-commerce environment were studied as stimuli (Yadav & Rahman, 2018); the inner emotional and cognitive states of the customers which encompass their experiences and insights (Jiang et al., 2011) were taken as organism and the responses were studied by predicting consumer behavior in terms of their purchase behavior, customer loyalty, and e-WOM in the e-commerce (Sautter et al., 2004). We justify the application of the S-O-R model in the present study with the help of various prior studies. Yadav & Rahman, (2017) found the impact of perceived social media marketing activities on customer loyalty via customer equity drivers using the S-O-R model in the e-commerce industry. Zhang et al., (2014) adapted the S-O-R model to investigate the impact of technological social commerce characteristics on the customers’ virtual experience and social commerce intention. The findings of the prior studies reveal the significance of the S-O-R model in predicting the responses of the customers in terms of their purchase behavior, customer loyalty, and behavioral intentions.

Social Media Marketing Activities as Environmental Stimuli (S)

According to (Kaplan & Haenlein, 2010) “Social Media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.” They take numerous forms like weblogs, social blogs, micro-blogging, wikis, podcasts, videos, photos, ranking, and social bookmarking. Social media has revolutionized the way brands create their content, communicate with their customers and has shifted the power from marketers to consumers to build brand image (Tsai & Men, 2013). Brands and businesses are actively using social media for marketing and advertising purposes. Social Media Marketing (SMM) is defined as a process through which companies develop, communicate and furnish online marketing offerings through social networking platforms to develop and retain stakeholder’s relationships that enhance the value of stakeholders by encouraging engagement, sharing knowledge, providing personalized buying recommendations and creating word of mouth among stakeholders about current and trending offerings (Yadav & Rahman, 2018). Businesses may use SMM to establish relationships with loyal customers, influencing their perception of the product, publishing their information, and even learning about and from their customers (Karamian et al., 2015). The different components of SMMAs have been identified and used by various researchers in their studies in different settings. Initially, (Kim & Ko, 2012) identified five components of perceived SMMAs in their study and applied them to luxury fashion brands. Ural & Yuksel, (2015) adopted the same components of perceived SMMAs and tested them on the Skoda brand. Algharabat, (2017) in their research investigated the link between the same five perceived SMMAs and brand love. Yadav & Rahman, (2018) in their research paper focused on the same five perceived SMMAs concerning
the e-commerce industry. Godey et al., (2016) applied the same components of SMMAs to test their relation with brand equity and customer response. Seo & Park, (2018) in their research paper modified the SMMAs developed by Kim & Ko, (2012) to entertainment, interaction, trendiness, customization, and perceived risk and investigated their effects on customer response and brand equity in the airline industry. Further, prior studies like Yadav and Rahman, (2018) and Zhang and Benyoucef (2016), have also perceived SMMAs to be an environmental stimulus in the S–O–R model. This paper will focus on the six dimensions of social media marketing activities- Entertainment, Trendiness, Informativeness, Interaction, e-Word of mouth, and Personalization as developed by Kim & Ko, (2012) and validated by many other researchers.

**Entertainment:** The literature reveals that the hedonistic value of advertising like perceived entertainment plays a vital role in predicting consumers’ responses to advertising (Shin & Lin, 2016). Entertainment refers to the fun that the advertising media provides to the users (Xu et al., 2009). It is considered to be the crucial component of social media that generates user engagement, positive emotion, and usage intentions of the users (Kang, 2005).

**Trendiness:** Trendiness refers to the dissemination of trendy and latest information (Godey et al., 2016). It is the perception of the customers about the extent to which social media provides the latest content (Yadav & Rahman, 2018). Trendiness is one of the important components of social media that provides the customers with the latest and trendy content about the products and brands.

**Informativeness:** Informativeness refers to the informational enrichment created by advertising content which increases the understanding of the products and services being offered (Ducoffe, 1996). It is the perception of the customers regarding the information provided on social media being accurate, useful, and comprehensive. Customers make informed decisions regarding the purchase by considering the information present on the internet and social media sites in the form of comments, reviews, ratings, and features (Yadav & Rahman, 2018).

**Interaction:** Godey et al., (2016) defines interaction as the exchange of information and opinion with one another. Brands are no longer the sole source of brand communications with customers, rather, social media provides customers with the platform to talk to other users of the products (Yazdanparast et al., 2016). According to Muntinga et al., (2011), social interaction refers to individuals who engage in brand-related social media platforms to meet like-minded people, connect with them, and discuss specific products/brands.

**e-Word of mouth:** Any positive or negative brand-related information made by consumers or passed on among other consumers via the Internet is referred to as e-WOM (Chu & Sung, 2015). In social media usage, e-WOM refers to consumer-to-consumer communications about brands (Muntinga et al., 2011). Social media is an ideal platform for customers to produce and share brand-related information with their friends, peers, and other contacts without any restrictions (Godey et al., 2016).

**Personalization:** Personalization refers to providing tailored information to customers based on their demographics, preferences, and geographic details which are being tracked automatically by the system (Lee et al., 2015; Xu, 2006). Yadav & Rahman, (2018) define personalization as the perception of the customers about the degree to which social media provides tailored services to satisfy customers’ needs and preferences.

### Social Media Marketing Activities of Smartphone Brands

According to research conducted by Socially Powerful in 2018, almost all smartphone brands have an active presence on social media mainly Instagram, YouTube, and Facebook, and also have a scope for enhancement. The top smartphone brands demonstrated the best quality of interaction with customers through Instagram stories, innovative content sharing, polls, creative use of hashtags, etc. The brands that do not focus on their social media marketing like not posting regularly, no hashtags, and interactions lose their followers on SNSs. The top brands also collaborate with YouTube tech influencers MKBHD and Unbox Therapy during launch phases to maximize their engagement across all platforms.
Customer Equity and its Drivers as Customers’ Internal States

Inner states refer to the emotional and cognitive feelings of customers which encompass their experiences and insights (Jiang et al., 2011). The cognitive states relate to the mental process concerning retention, acquisition, processing, and retrieval of information whereas the emotional states refer to the sentiments like pleasure and arousal (Eroglu et al., 2001) which consumers attain from environmental stimuli. Rust et al., (2004) define customer equity as, “the total of the discounted lifetime values summed over all of the firm’s current and potential customer”. They also claimed that customers and customer equity have more weightage to many firms than the brands and brand equity and there has been a visible shift from product-centered thinking to customer-centered thinking. The worth of the customer to a firm is not just the revenue from each transaction but the cumulative gain that the customer will provide to the firm for the span of his relationship with the firm (Kumar & George, 2007). Customer equity amounts to both financial and non-financial benefits to a company being invested by a customer during the span of an exchange relationship (Chae & Ko, 2016). Customer equity is a behavioral variable (Kim & Ko, 2012)

Customer equity has been classified into three key drivers- brand equity, relationship equity, and value equity (Lemon et al., 2001). These drivers have been recognized in several studies as the RLZ approach i.e., Rust, Lemon, and Zeithaml approach. The RLZ approach proposed that “to maximize customer equity, customer-level evaluations of a company and/or its product(s) can be categorized into three dimensions: the value of the product or service, brand issues of the product, and relational aspects of the product” (Kumar & George, 2007). The RLZ approach has been used by Lemon et al., (2001) in the airline industry. The same approach has been used by various authors for luxury brands in the fashion industry in the context of SMM (Godey et al., 2016; Kim & Ko, 2012; Kim et al., 2010). Further, the individual drivers of customer equity have also been investigated by various authors in the context of SMM-brand equity in the e-commerce industry (Yadav & Rahman, 2018) brand equity, and customer response in the airlines industry (Seo & Park, 2018). The RLZ approach has also been used by Vogel et al., (2008) to study the effects of the three equity drivers on consumers’ loyalty intentions and their future purchase behavior.

Value equity (VE) is described as the objective evaluation of the brand’s worth by the customer which relies on their perception of what is given up and what is being received (Lemon et al., 2001). It is based on the customer’s benefit-cost assessment (Vogel et al., 2008). Cost involves efforts, time, and the money spent to acquire benefits like quality, convenience, satisfaction, and worth.

Brand equity (BE) is described as an intangible, subjective, and emotional assessment of the brand that reaches beyond its objectively perceived worth (Lemon et al., 2001; Vogel et al., 2008). Brand equity is the most vital element of customer equity and has been studied by various researchers individually and with other drivers as well. A strong level of brand equity offers high-quality services to customers (Mokha, 2021) and thereby contributes to building stronger customer equity. According to Aaker (1996), “brand equity consists of five dimensions namely perceived quality, brand loyalty, brand awareness, brand association, and other propriety assets”. All these dimensions considerably reflect the strength and value of the brand and contribute to customer equity.

Relationship equity (RE) or retention equity is described as the propensity of customers to remain in a relationship with the brand which is beyond the subjective and objective evaluation of the brand (Vogel et al., 2008). It includes key elements such as special recognition, loyalty programs, community and knowledge-building programs (Lemon et al., 2001). It becomes necessary to build powerful customer relationship equity as the brand might grow weaker than before because of the availability of alternatives (Kim & Ko, 2012). However, as the marketing approach shifts from transactional to relationship-based marketing, having a strong BE and achieving VE is no longer enough to retain customers. The current situation requires the building of a strong foundation of relationships among customers and businesses, and this foundation is RE (Yadav & Rahman, 2018).
Purchase Intentions as Customers’ Response (R)

The response component of the S-O-R model exhibits the consequences of environmental stimuli via internal states in the form of consumer behavior. Here, the outcome of environmental stimuli is taken as the purchase intentions of the customers. Purchase intentions refer to the combination of consumer’s interest, engagement, and the likelihood of buying a product (Kim et al, 2010). It is based on the consumer’s perception and attitude towards the brand assuming to be the customer’s future behavior based on their attitude (Kim & Ko, 2012). Purchase intention is an attitudinal variable that accounts for future purchases whereas customer equity is a behavioral variable that accounts for actual purchasing records (Kim & Ko, 2012). According to the theory of planned behavior, which postulates that consumers’ intentions are a very strong predictor of their actual behavior and there exists a strong connection between the consumer’s attitude to their actual behavior. Thus, purchase intentions can be used to estimate the future purchase behavior of the customers.

HYPOTHESES DEVELOPMENT

Impact of SMMA on Customer Equity Drivers

As of today, communication with the customers and promotion of the products and services by the brands has been shifted from traditional marketing to social media advertising. The presence of brands on social media attracts consumers’ attention towards the brands and tends to increase sales and profits of the brands. Entertainment, Interaction, Trendiness, Word of mouth, and Personalization are the key elements of SMMA which are expected to have a significant positive impact on customer equity drivers (value equity, relationship equity, and brand equity) as supported by the literature. Yadav & Rahman, (2018) in their study found the significant and positive impact of perceived SMMAs of the e-commerce industry on all the drivers of customer equity. Kim & Ko, (2012) examined the impact of SMMAs of luxury fashion brands and found their significant positive impact on customer equity drivers and purchase intention. Ural & Yuksel, (2015) found the mediating roles of customer equity drivers between social media marketing efforts and purchase intention.

The majority of customers are value-conscious and demand products that are available at a reasonable price, with minimum effort, and without compromising quality and features. They frequently visit SNSs and other social commerce platforms in search of goods delivering high adequate customer value (Yadav & Rahman, 2018). Social media communications strongly enhance brand equity (Godey et al., 2016). Seo and Park, (2018) found the significant positive impact of SMMAs of the airline industry on two types of brand equity: brand awareness and brand image. Karamian et al., (2015) established the effects of SMMAs on brand equity formation from the customer’s perspective. A company can enjoy powerful brand and value by exceeding customer expectations, thereby, retaining present customers and attracting future prospective customers (Yadav & Rahman, 2018). Businesses are using social media marketing to build relationships with customers and influence their perceptions of the product (Karamian et al., 2015). Previous researchers also studied the impact of SMMA on customer equity and found a significant impact of SMMA on value equity, relationship equity, and brand equity in the case of luxury fashion brands (Kim & Ko, 2012). Godey et al., (2016) established the significant positive impact of SMM efforts on customer equity drivers.

Therefore, we hypothesize:

H1: Perceived social media marketing activities have a significant positive effect on value equity.
H2: Perceived social media marketing activities have a significant positive effect on relationship equity.
H3: Perceived social media marketing activities have a significant positive effect on brand equity.
Impact of Customer Equity Drivers on Purchase Intention

Further, it is necessary to evaluate the purchase intentions of the customers to predict future sales and it has already been proved in the literature that intentions are a strong predictor of customers’ actual behavior. Also, it has already been established in the theory of planned behavior that attitude precedes behavior and here customer equity drivers are attitudinal variables whereas purchase intention is a behavioral variable. Kim and Ko (2012) reveal that SMMA is positively related to future purchase behavior via customer equity drivers. Yadav and Rahman, (2018) also found the impact of SMMAs on consumer loyalty via customer equity drivers. Ural and Yuksel, (2015) established the relationship between social media marketing efforts and purchase intention via customer equity drivers. Therefrom the literature, the following hypotheses have been drawn.

H4: Value equity relates positively to purchase intentions.  
H5: Relationship equity relates positively to purchase intentions.  
H6: Brand equity relates positively to purchase intentions.

METHODOLOGY

Data Collection

To test the hypotheses of this research study, the population of the study comprised of active social media users from India who were following the smartphone brands on different SNSs. Since, this research study focused on smartphone brands, respondents were restricted to those having a smartphone of value above Rs. 10,000 to eliminate cheap smartphone brands. The data was collected by way of an online survey which was floated on SNSs like Facebook and LinkedIn and was also sent personally to the followers of different smartphone brand’s on SNSs. The sampling technique used was simple random sampling. Data was collected on an online survey questionnaire from 11th October 2020 till December 2020. The sample size for the study is determined using the measure suggested by Bentler and Chou (1987) i.e., 5 observations for every item is considered to be an adequate sample size in the case of Structural Equation Modelling. There are 37 items in this study making a requirement of a minimum of 185 respondents. 343 valid responses were finally received which is more than a sufficient sample size as suggested by Bentler and Chou (1987) with 182 male respondents and 161 female respondents with no missing value.

Measures

For the purpose of this research study, the questionnaire items were developed based on a literature review and were modified by expert opinion and pilot testing. The questionnaire surveyed smartphone brand’s SMMAs with six elements- Entertainment, Personalization, Informativeness, Interaction, Trendiness, and Word of mouth covered by 21 items (3-4 each) as developed by Kim and Ko, (2012). Customer equity drivers- value equity (4 items), relationship equity (4 items), and brand equity (5 items) were used from the scale developed by Rust et al., (2004); Vogel et al., (2008) and Kim and Ko, (2012). A 3-item purchase intentions scale was adopted from Maxham et al. (2001). All these items were measured using a 5-point Likert scale which ranged the responses from 5 (“strongly agree”) to 1 (“strongly disagree”).

Pre-testing and Pilot testing were also performed before proceeding to the final data collection. Pre-testing was done on 20 participants to get their opinion on the questionnaire’s design, sequence, language, and content. The respondents proposed a few improvements to the questionnaire’s layout, which the researchers have implemented. Thereafter, pilot study was undertaken on 30 respondents to check the internal consistency of items using Cronbach’s alpha. The value of Cronbach’s alpha was more than the suggested value of 0.70 meaning thereby, the items were reliable and further research could be carried out. To reduce non-response bias, the questionnaire designed was made in
the English language; short but comprehensive and with a description of the purpose of the research
to stimulate respondents to fill the questionnaire.

DATA ANALYSIS

SPSS 23.0 and AMOS 23.0 statistics package programs were used to analyze the collected primary
data and to test the hypotheses. With SPSS 23.0, descriptive analysis was performed to analyze the
results of the preliminary test and to analyze the demographic characteristics of the sample. The
reliability of the instrument was tested using Cronbach’s alpha. Using AMOS 23.0, confirmatory
factor analysis was conducted to test the validity of each construct, while the structural model was
developed to test hypotheses framed in the research study.

Demographic Analysis

Based on the results of frequency analysis, among the total of 343 respondents, the sample consists
of 182 males (53.1 percent) and 161 females (46.9 percent). The total percentage of respondents
belonging to the age group of up to 25 years was 54.8 percent, whereas 42 percent belonged to the
age group of 25 to 40 years and only 3.2 percent of the respondents were above 45 years of age.
This shows that the results of this study can be generalized to age groups of 18 to 40 years of age.
Concerning the educational qualifications of the respondents, 56.6 percent were postgraduates and
40.8 percent were graduates. Regarding average household income levels, 32.9 percent of incomes
were 10 lakhs INR and above; 30 percent were between 5 lakhs INR to 10 lakhs INR; 21.6 percent
of the incomes were between 3 lakhs INR to 5 lakhs INR and the remaining 15.5 percent of incomes
were up to 3 lakhs INR. The employment status of the respondents shows that 50.1 percent of the
respondents were working professionals and 48.4 percent of them were students and the remaining
1.5 percent of them were homemakers.

Reliability Test

Internal consistency is determined using the Cronbach alpha measurement to assess the reliability
of the different items included in the survey (Streiner, 2003). Cronbach alpha is a measure that is
derived from a pairwise correlation between the items selected. The value of Cronbach’s alpha varies
between 0 and 1 and a construct should have a Cronbach’s alpha score of at least 0.6 to 0.7 to have a
satisfactory degree of reliability and more than 0.7 to have a good degree of reliability (Taber, 2018).
The reliability of an instrument is required to estimate scale validity and also to access the quality of
the research instrument. All the constructs represented in the measurement model qualify the reliability
test and have internal consistency with the decent level of Cronbach’s alpha values as shown in Table 1
with 0.926 for “SMMA”; 0.895 for “Brand Equity”; 0.832 for “Relationship Equity”; 0.895 for “Value
equity” and 0.951 for “Purchase Intentions”. All the Cronbach’s alpha values for different constructs
are more than 0.8 and 0.9 implying a very good and extraordinary degree of internal consistency.

Confirmatory Factor Analysis

The proposed measurement model was evaluated by examining convergent and discriminant validity
with the help of CFA using AMOS 23. Before examining the inter-relationships of the constructs
in the structural model, the aim of evaluating the measurement model is to confirm the existence of
the required degree of constructs’ reliability and validity (Fornell & Larcker, 1981). The finalized
measurement model comprised of six dimensions of SMMA namely Entertainment with 3 items;
Personalization with 4 items; Informativeness with 4 items; Interaction with 4 items; Trendiness with
3 items and e-Word of mouth with 3 items. The other constructs are the drivers of customer equity-
Brand equity, Relationship equity, Value equity, and finally, the purchase intentions of the customers.

Composite reliability (CR) offers a more reflective method of estimating the overall reliability
of the instrument and also ascertaining convergent validity (Hair et al., 2010). For a scale to be
sufficiently reliable, the value of CR should be more than 0.7 (Nunnally & Bernstein, 1994; Fornell & Larcker, 1981). The CR values as shown in Table 1 indicate CR of “SMMA” is 0.849; “Brand equity” is 0.898; “Relationship equity” is 0.835; “Value Equity” is 0.898 and “Purchase intentions” is 0.952. This implies that the constructs in the measurement model are considerably reliable as the CR values of all the constructs have more than satisfactory CR values.

The convergent validity is used to determine the degree to which the items of the construct that are theoretically related are actually related. The convergent validity can be estimated through standardized construct loadings and average variance extracted (AVE). The recommended values for convergent validity are more than 0.50 for standardized construct loadings to their observed variables as well as for AVE and more than 0.70 for CR of all the constructs (Hair et al., 2010). Table 1 shows that the loadings of the observed variables are within the range of 0.7 to 0.95 except for four items. However, the average of standardized construct loadings for each item came out to be more than 0.7. Thus, all the loadings are considered to be within the range. AVEs, as shown in Table 1 for each construct, are more than 0.5 and the CR values of all the constructs are more than 0.7. Therefore, the presence of significant convergent validity can be assured.

The discriminant validity of a construct is measured by how distinct it is from other constructs (Hair et al., 2010). The scale can be said to have adequate discriminant validity if the square root of the AVE for each construct is greater than the correlation between the constructs and all the values of AVE should be greater than maximum shared variance (MSV). Table 1 shows that all the values of AVE for each construct are more than the values of MSV for each construct. Further, Table 2 shows that the square roots of AVE marked in bold are higher for diagonal constructs as compared to non-diagonal constructs. These findings suggest that each construct is highly interrelated with its items as compared to other constructs in the measurement model. Therefore, the discriminant validity of the scale can be assured.

Finally, the overall validity of the model was ascertained through model fit indices such as goodness of fit index (GFI); normed fit index (NFI); comparative fit index (CFI) and Tucker-Lewis Index (TLI), and root mean square of error approximation (RMSEA) (Hair et al., 2010). The test statistics revealed a satisfactory fit with the data. The model fit indices were $\chi^2/df=1.709$; CFI=0.95; GFI=0.86; TLI=0.946 NFI= 0.89 and RMSEA= 0.046. The acceptable values for goodness-of-fit indices are $\chi^2/df<3$; CFI, GFI, TLI, NFI > 0.9 and RMSEA < 0.08 CMIN/DF < 5 (Gefen et al., 2000; Gefen and Keil, 1998). All the values are within the acceptable range except GFI and NFI. The value of NFI is below the threshold value but it is very close to the threshold value, so it still represents a satisfactory model fitness. Also, GFI is below the threshold value (0.9), but it still meets the requirement suggested by Baumgartner and Homburg (1995): the value is acceptable if above 0.8. Therefore, Table 3 represents that the measurement model is a good fit.

**Common Method Bias**

To address the concern of survey-based research, common method biasness test was applied following the work of Serrano et al., (2018). The researchers employed the common latent factor (CLF) method to extract the common variance from all of the individual items of the model by connecting them to a common latent factor. If the difference between the standardized regression weights of the CFA model without the CLF method and the standardized regression weights of the CFA model with the CLF method is less than 0.20, then it represents that the data is free from common method biases. The result of this study revealed that the difference between the two was less than 0.20. thus, it can be said that the data is not contaminated with common method biasness.

**Structural Model**

To test the hypotheses of the study, the structural model was developed and tested according to Anderson and Gerbing (1988). The model was tested by standardized coefficients and other fit statistics. The model fit was satisfactory with the results shown in Table 3. The Chi-square statistics
<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Standard Factor Loading</th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability (CR)</th>
<th>Average Variance Extracted (AVE)</th>
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<tr>
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<td>PER4</td>
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<tr>
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<td>VE4</td>
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<td>0.89</td>
<td></td>
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</table>
(χ²= 1084.6 and df= 617) was at a significant level (p=.000) and the other fit indices were within or very close to acceptable standards (χ²/df= 1.758; CFI=0.947; GFI=0.885; TLI=0.942 NFI= 0.89 and RMSEA= 0.047) as per the ranges suggested by Hair et al. (2014). After achieving satisfactory model fitness, hypotheses were tested using SEM. Out of the six hypotheses, five were significant at p<0.01 as shown in Table 4. All the paths between SMMA and customer equity drivers were significant at p<0.01. Table 4 shows that SMMA of smartphone brands have significant positive effects on Brand Equity (β= .231, p< .01); Relationship Equity (β= 0.306,, p< .01) and Value Equity (β= 0.422,, p< .01). In other words, SMMA like Entertainment, Trendiness, Informativeness, Interaction, Word of mouth, and Personalization positively influence the customer equity drivers. Concerning the relationship between customer equity drivers and purchase intentions, brand equity shows significant positive effects on purchase intentions with β= 0.214 and p< .01; value equity shows significant positive effects on purchase intentions with β= 0.501 and p< .01. However, we found no significant relationship between relationship equity and purchase intentions of the customers.

<table>
<thead>
<tr>
<th>Table 2. Discriminant Validity</th>
</tr>
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<tbody>
<tr>
<td>Value Equity</td>
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<tr>
<td>-----------------</td>
</tr>
<tr>
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<tr>
<td>Social media marketing activities</td>
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<td>Relationship Equity</td>
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<td>Purchase intentions</td>
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<table>
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<tr>
<th>Table 3 Summary of goodness-of-fit indices</th>
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<td>Model Fit Index</td>
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<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Measurement Model</td>
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<td>Structural Model</td>
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CONCLUSIONS AND IMPLICATIONS

The study here aims to analyze the effects of social media marketing activities (entertainment, trendiness, informativeness, interaction, word of mouth, and personalization) on customer equity drivers (brand equity, relationship equity, and value equity) and the purchase intentions of the customers in case of smartphone brands. The findings of the study contribute to prior literature by providing a holistic framework that demonstrates how SMMAs influence customer equity drivers and finally purchase intentions of the customers. Firstly, the relationship between SMMAs and customer equity drivers was examined and the findings of the study revealed that SMMAs positively influence all the customer equity drivers (brand equity, relationship equity, and value equity). Even though the previous
study proposed by Ural & Yuksel, (2015) revealed that there is no significant impact of SMMAs on brand equity, this study revealed a significant impact of SMMAs on brand equity, relationship equity, and value equity which was found to be consistent with the previous literature (Godey et al., 2016; A. J. Kim & Ko, 2012; Yadav & Rahman, 2018). SMMAs provide customers with unique and distinctive value equity that is not being delivered by traditional advertising mediums. The customers enjoy personalized, trendy, and reliable information at minimum cost, time, and effort. SMMAs constantly interact with their customers by binding them with new trends, entertaining advertisements provide their loyal customers with huge discounts and offers. SMM provides customers with a huge virtual space where they can communicate within themselves and with the brand. The authentic reviews about the products are readily available on the social media pages of the brands by way of comments, posts, forums, etc. This clearly shows that SMMA influences value equity, relationship equity, and brand equity. Thus, hypotheses (H1, H2, and H3) were accepted.

Secondly, SMMA of smartphone brands comprises of six elements namely entertainment, trendiness, informativeness, interaction, word of mouth, and personalization. However, in the previous study proposed by Kim and Ko, (2012) and Godey et al., (2016) SMMAs comprised of five dimensions namely entertainment, interaction, customization, trendiness, and word of mouth. In another study by Yadav and Rahman, (2018) SMMAs comprised another five dimensions namely interactivity, informativeness, word of mouth, personalization, and trendiness. In this study, all the six elements studied are found to have a wholesome impact on customers’ purchase intentions as they provide superior value to the customers by providing them with the latest, trendy, and authentic information about new product launches, discounts, and offers; entertainment by launching innovative advertisements; interactivity by providing them with a huge platform where customers can directly communicate with the brand; benefits of personalization and also facilitates e-WOM by allowing customers to read and write reviews and recommendations of each other on social media platforms. The study also revealed that interactivity was the most important element of social media marketing activities and personalization and e-WOM were the second most important elements.

Finally, out of the three customer equity drivers, only two were found to have a significant positive relationship with purchase intentions. There exists a significant positive association between value equity and purchase intentions of the customer as the reduced cost, time, and efforts facilitated by SMM help to boost the purchase intentions of the customers. Thus, hypothesis (H4) was accepted. Also, brand equity significantly influences the purchase intentions of the customers. Constant and innovative interaction of the brands with their customers by way of social media platforms plays a huge role in influencing brand equity and finally purchase intentions of the customers. Even though the previous study proposed by Ural & Yuksel, (2015) revealed that there is no significant impact of brand equity on the purchase intention of the customers, this study revealed significant impact of brand equity on the purchase intention of the customers which is consistent with the results of previous literature (Kim & Ko, 2012). Thus, hypothesis (H6) was also accepted. Surprisingly, the study found no significant positive relationship between the purchase intention of the customers and relationship equity which is different from the results of Ural and Yuksel, (2015) but confirms the results of Kim and Ko, (2012). Therefore, hypothesis (H5) could not be accepted.

The study has several implications for practitioners. SMMA has a significant impact on customer equity drivers as well as purchase intentions. The cost of losing one customer is way more than the cost of attracting one new customer. Thus, managers should focus on retaining the existing customer base as well by increasing the activities that enhance customer equity drivers. Our research demonstrates the impact of social media marketing activities on customer equity drivers. SMMA creates value for the customers by updating them with timely information at a low cost and with minimum time and effort. It builds a strong relationship with the customers by constantly interacting with them through social media pages about new launches, offers, discounts, exchange offers, etc. SMMA builds a great amount of brand equity as well by boosting brand awareness and recognition. All these equity drivers increase the purchase intentions of the customers. Thus, managers should keenly take the opportunity
of these social media websites and ensure their presence on them. They should post good content on their pages and keep reminding customers about their brand. Managers should entice customers by creating interesting conversations about their brand. Managers should make efforts to make the customer follow their brand on social media sites. The posts and contents created by the brands should have a link below to facilitate an easy purchase mechanism which will also boost the sales of the product. Managers should use trendy measures like hashtags (#) and ad campaigns to gain popularity and create traffic. Managers can start building conversations with their customers to know their opinions and expectations about the brand. All these entertaining and interesting SMMA would help the managers create brand equity, value equity, relationship equity, and purchase intentions on the minds of their customers about their product which would help them to boost their sales.

LIMITATIONS AND FUTURE RESEARCH

The limitations and future research directions are as follows. First, this research focuses on the smartphone industry only and hence cannot be generalized to other industries. Future research should validate the present study in another industrial context. Second, this study cannot be generalized as it considers only Indian customers. India is still a developing country where internet availability and smartphone users are increasing at a high pace. However, still, a majority of the Indian population does not own a smartphone or the internet. Also, Indian customers are more privacy-sensitive. Future research should validate the results of this research in other countries as well. Third, the present study focused on the impact of SMMA on the purchase intentions of the customers. Future studies should examine the impact of SMMA on actual sales and actual customer equity value.

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REFERENCES


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