

Investigating Smartphone Brand Loyalty for Millennials and Gen Z: A Customer Value Perspective

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ABSTRACT

The purpose of this paper is to examine smartphone users' brand loyalty decisions across and within generation cohorts, Gen Z and Millennials, based on customer value theory. The study discovers value perceptions for the cohorts, utilizes these for identifying distinct consumer segments within the cohorts, and finally, investigates the impact of these value perceptions, on loyalty, for each of the sub-segments. A four-stage analysis involving exploratory factor analysis, cluster analysis, ANOVA, and MANOVA was undertaken. Three distinctive clusters were obtained within both Gen Z and the Millennials, and for each of these sub-segments, the influence of the identified value perceptions, when investigated on attitudinal and behavioral components of loyalty, threw striking differences. The paper extends the current understanding of smartphone brand management, particularly from the perspective of identifying value perception-based consumer segments, within the cohorts and mapping the influence of these identified perceptions on both attitudinal and behavioral components of loyalty.

KEYWORDS

Brand Loyalty, Cluster Analysis, Customer Value, Gen Z, MANOVA, Millennials

INTRODUCTION

A smartphone is an advanced mobile phone that integrates the functions of multiple devices such as a personal computer (e.g. operating systems), a video/photo camera, a global positioning system (GPS), a music player, and some others. In 2017, more than 32 percent of the global population was found to be using a smartphone. India's smartphone user base overtook the US in 2019 to become the world's second largest smartphone market with more than 502.2 million smartphone users as of December 2019 (techARC report, 2020). The market witnessed a 15 percent annual growth in 2018, making it the fastest growing market globally, attracting a large number of players, ranging from Samsung, Apple, Oneplus to Chinese brands like Oppo, Vivo and Xiaomi fighting it out with Indian brands such as Micromax.

The severity of competition among these players calls for introspection by managers, for whom nurturing customers' loyal behaviour is becoming a top priority. Brand loyalty is a critical brand

DOI: 10.4018/IJTHI.302664

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performance metric for all firms (Keller, 1993) especially in the emerging devices market like smartphones. With ever-increasing competition, this metric can largely affect firm profitability (Yi and Jeon, 2003) as it drives increased repurchase volume and better acquisition rates through positive word-of-mouth communication. Enhancing brand loyalty has been a challenge for marketers of emerging devices (Lam and Shankar, 2014) like smartphones. This gains greater emphasis in the wake of advancements in technology, with trends like Artificial Intelligence (AI), proliferation of 5G and Internet of Things (IoT) encapsulating the market, bringing about paradigm shifts in the way we connect, communicate, exchange information and conduct our day-to-day lives. All these shifts necessitate a realistic appraisal of value perceptions that differ from consumer-to-consumer with respect to the device, the product level and the brand level; so that robust strategies towards building loyalty could be framed.

Despite the exponential growth of smartphone technology and its rapid adoption by vast numbers of consumers, there is a paucity of in-depth research on the factors that influence brand loyalty of smartphones (Koo et al., 2016). This study attempts to gauge the smartphone user's value perceptions, since marketing literature suggests that customer value is a significant predictor of consumer continuance and loyalty behavior. Value perceptions often help predict the preferences of consumers of different products and brands in the market. Extant literature maintains that brand value is a multi-dimensional concept (e.g. Chaudhuri and Holbrook, 2001). Many studies divide brand value into 'cognitive/utilitarian' and the 'affective/hedonic' categories (Babin et al., 1994; Chaudhuri and Holbrook, 2001). Sheth et al. (1991) proposed that value has social, emotional, functional, conditional, and epistemic dimensions. Since the value perceptions vary across consumers, it is imperative that the context relevant dimensions of value be delivered to the customers.

Previous studies indicate the variations in loyalty across different generation cohorts. Few studies maintain that Gen Y are disloyal to brands, and it is difficult to secure continued repeat purchases from them (Wood, 2004). This is unlike generation X consumers who are very loyal and committed to brands (Ritchie, 1995). Many marketing researchers use generational differences (Bolton et al., 2013) to understand customers' attitudes and behaviors, because generational cohorts often exhibit similar behavioral characteristics, courtesy their similar formative experiences, technologies, and adaptation to cultural and environmental changes. We investigate brand loyalty on a cross-sectional dataset spanning two generation cohorts, gen Z and the Millennials: the motivation being that Gen Z and Millennials are primarily responsible for this surge of smartphone sales. Though the Millennials were considered the first "global" generation with the development of the internet, the Gen Z are being considered the next big 'disruptors' (Marcie Merriman, 2015).

Few earlier studies (Yeh et al., 2016) indicate the influence of consumption values on brand loyalty and switching behavior (Wong et al., 2019) in the context of smartphones. Our study builds on these and delves into segmenting the hugely heterogeneous consumer base; prior to assessing the impact of various these value perceptions on brand loyalty. Thus, we first explore the customer value perceptions about their current smartphone brands, then utilize them for defining various heterogeneous segments and subsequently, link them to smartphone brand loyalty for each of the sub-segments, backed by the theory of consumption values (Sheth et al., 1991).

Our research reveals the effects of identified consumer value perceptions on loyalty, brings out the differences across and within the generation cohorts, and sheds new light on smartphone marketing and development. The study has important implications for smartphone managers, marketers, and R&D professionals as it offers valuable insights into the production and marketing of smartphone brands to Indian consumers, and also on building brand loyalty. The next section presents the literature review, followed by the methodology for the study. A presentation and analysis of the empirical results follow. The study concludes with a discussion of the findings, implications for theory and managerial practices and recommendations for future research.

LITERATURE REVIEW

Market Segmentation

There are numerous techniques for segmenting markets. In literature, the potential market segmentation criterion are demographics, psychographics, benefits, usage, attitude, loyalty, image, situation etc. This study posits that segmenting the consumers based on their value perceptions may present a better idea of what these sub-groups perceive about the value derived.

In general, young adults more readily adopt technology (Charny, 2002). This segment is more involved with mobile phones (Rainie and Keeter, 2006) than any other segment. Previous studies reflect that even in the youth market, the needs and thereby the decision-making processes are heterogeneous (Jakob, 2015) and using age as the sole basis for market segmentation is not enough. We propose appreciation of the ‘Generation Cohorts’ theory in this context. Generational cohorts differ from age groups in that they are characterized and shaped by similar experiences, critical life events and shared socio-economic trends and these may help shape consumer behavior more holistically. A particular cohort exhibits unique values that will persist over the lifetime; therefore, it possesses distinctive traits that can hardly be replicated by another generation (Gardiner et al., 2013). Ramified into widely studied concepts such as Generation (Gen) X, (Gen) Y and (Gen) Z, generational distinctions are exploited, mostly in the western context, to understand values, attitudes and behaviors of different cohorts. It is imperative to investigate the value perceptions across Gen Z and Millennials as they are more readily adapting to the device and are primarily responsible for the surge in smartphone sales. Further one cannot overemphasise the importance of mapping and profiling the heterogeneity within these two large segments to enable customization of the offerings, in alignment with the unique perceptions of the users in these respective micro-segments.

Theory of Consumption Values

Customer perceived value is defined as “the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given” (Zeithaml, 1988). The theory of consumption values argues that consumers make choices based on the summation of perceived consumption values, which may vary in contribution under different conditions (Zeithaml, 1988). Moreover, perceived value is defined as a second-order construct with different value dimensions depending on the context of a study (Turel et al., 2010). Sheth et al. (1991) proposed that perceived value has five dimensions including functional, conditional, social, emotional, and epistemic values. Parasuraman and Grewal (2000) argued that perceived value has four types including acquisition, transaction, redemption, and in-use values. When investigating these value dimensions in the context of this study on smartphones, we adapted the framework proposed by (Kim et al., 2011).

Functional value is the perceived utility of a product or brand based on its capacity for functional, utilitarian or physical performance. To understand the complete trade-off between the get-give idea of perceived value, we must include its economic value separately. Emotional value is the perceived utility of a product or brand based on its capacity to arouse feelings or affective states. The more pleasure a consumer receives from a product, the higher will be its perceived value (Petrick, 2002) and when consumers receive “joys” from the consumption of a product, these joys add hedonic value to the total package value of the product (Chiu et al., 2014). Aesthetics was added as a separate value to capture the importance attached to looks and design of the smartphone brand. Finally, social value is the extent to which a product/brand enhances consumers’ social well-being and inter-personal relationships, and it is rooted in the symbolic meanings of the product/brand (Rintamäki et al., 2006). The motives for continuously using certain products/brands depend on the manner in which a customer views oneself or wishes to be perceived by others. Smartphones have a symbolic consumption value as they can help enhance one’s self image among others. The type of smartphone one utilizes also defines the user’s social circle. Thus, both self-image expression and social relationship support were utilised in this study, for mapping social value. This research has utilised consumption/perceived

value dimensions for segmentation purposes, as done in the previous studies (Seegebarth et al., 2016). Post segmentation, we map the impact of these values on brand loyalty dimensions for each of the sub-segments.

Brand Loyalty

The concept of loyalty continues to be a relevant subject in business research, since it enables firms to gain market advantage (Bloemer and Kasper, 1995). From a branding perspective, loyalty has been described as the attachment a customer has towards a brand, and this is often demonstrated by the intention to buy the brand as a primary choice (Oliver, 1999). For firms, the performance benefits of gaining and sustaining loyal customers are wide and varied, such as increased revenues, lower costs and increased profitability, among others (Lam et al., 2004). Various loyalty models espouse several types and categories of this construct. Oliver (1999) classifies loyalty into four types: cognitive, affective, conative and action. Over the years, two broad brand loyalty dimensions have developed – attitudinal loyalty (measuring consumers' purchase intention and overall feelings about brands) and behavioral loyalty (often considered synonymous with repeat purchase behavior). These appear to capture most categorizations of the construct (Dawes et al., 2015).

Past research has found that perceived value is an antecedent of various behaviors and behavioral intentions (Turel et al., 2007), including loyalty intentions. Previous studies in smartphones do capture influence of dimensions like functional, emotional, social value (Yeh et al., 2016) on brand loyalty. We added a novel value dimension to these in this study. Further, existing studies indicate the variations in loyalty across different age groups (Ritchie, 1995) and the generation cohorts. Building on these, we identified the distinct sub-segments with varying value perceptions, across Gen Y and Gen Z cohorts. Finally, post identification of sub-segments, we mapped the impact of these value perceptions on brand loyalty for each of the sub-segments.

RESEARCH METHODOLOGY

Survey Instrument and Data Collection

The research design used for this study is cross-sectional descriptive, with a close-ended questionnaire as the survey instrument. The questionnaire consists of three sections. In the first section, 24 question-statements mapped on a five-point Likert scale were used to solicit customers' perception about the importance of various benefits of their current smartphone brand. In the second section, four question-statements were used to explore the customers' loyalty towards their current smartphone brands. The third section consists of demographic information about the respondents. The perceptions of value dimensions and the statements meant for measuring the customers' brand loyalty have been derived through elaborate exploratory research design consisting of in-depth literature review, five depth interviews with smartphone retailers and company executives, and two focus group interviews with the smartphone consumers. A pre-test of the questionnaire was conducted with a sample of 30 respondents. Market intercept sampling was employed to collect the data. The respondents were chosen from different cities of India, like Delhi NCR, Ahmedabad, Hyderabad, Lucknow and Bangalore. The choice of these cities was driven by the consideration that metros and tier 1 cities have largely contributed to the smartphone penetration in India (Business Line: Info Tech, 2018). A total of 1140 responses was regarded as valid. The demographic characteristics of the respondents are listed in Table 1.

ANALYSIS AND RESULTS

The findings are presented in four sections. In the first section, in order to identify the values perceived by the users in both the cohorts, Exploratory Factor Analysis was performed on the 24 benefits for

Table 1. Demographic profiles of respondents

Item	Category	Overall	Age Gr: 13-23	Age Gr: 24-38
		Number (%)	Number (%)	Number (%)
Zone	North	512(44.8)	240(45.1)	272(44.7)
	East	192(16.9)	84(15.8)	108(17.8)
	West	248(21.9)	126(23.7)	122(20.1)
	South	188(16.4)	82(15.4)	106(17.4)
Age	13-23	532(46.7)	532(100.0)	0(0.0)
	24-38	608(53.3)	0(0.0)	608(100.0)
Gender	Male	776(68.2)	352(66.2)	424(69.7)
	Female	364(31.8)	180(33.8)	184(30.3)
Education	Up to 12th	72(6.3)	66(12.4)	6(1.0)
	Graduation	572(50.2)	354(66.5)	218(35.9)
	Post-Graduation	496(43.5)	112(21.1)	384(63.2)
Occupation	Student	532(46.7)	406(76.3)	126(20.7)
	Service	268(23.5)	76(14.3)	192(31.6)
	Professional	340(29.9)	50(9.4)	290(47.7)
Annual income	<2 lakhs	340(29.9)	158(29.7)	182(29.9)
	2-6 lakhs	216(18.8)	96(18.0)	120(19.7)
	6-10 lakhs	288(25.4)	162(30.5)	126(20.7)
	10-20 lakhs	200(17.4)	82(15.4)	118(19.4)
	>20 lakhs	96(8.5)	34(6.4)	62(10.2)
Place of Residence	Metros	348(30.53)	172(32.33)	88(28.95)
	Mini-Metros	382(33.51)	176(33.08)	176(33.88)
	Lower-Cities	410(35.96)	184(34.59)	226(37.17)
Total		1140 (100.0)	532 (100.0)	608 (100.0)

both the cohorts. Next, Cluster analysis was used to classify users, based on distinct preference for these benefits for both the cohorts. In the third section, a multi-item scale measuring loyalty is factor analysed for both the cohorts. In the last section, canonical correlation analysis (using MANOVA commands) has been used to examine the association amongst two constructs; one set (loyalty towards smart-phones) comprising of two dependent dimensions and the other set comprising six independent dimensions of value perceptions (as obtained from Exploratory Factor Analysis). Canonical correlation analysis has been performed for all micro-segments, for both the cohorts. The objective was to examine the unique differences in the levels of impact of independent constructs on the dependent loyalty construct for different customer-segments.

Part 1: Factor Analysis

Cohort: Gen Z

For Gen Z, a six-factor solution is obtained which explains 60.48 percent of the total variance in 24 variables (Table 2). High values of Cronbach's Alfa substantiate the explored factor solution. 22 items were grouped meaningfully into factors with high loadings.

Table 2. Factors for importance of smartphone values: 13-23

Factor Name	Variance explained	Eigen value	Variable name	Item loadings	Cronbach's Alfa
Functional Value	13.921	3.341	Smartphones of acceptable standard of quality	0.702	0.767
			Smartphones reliable in performance	0.814	
			Smartphones possess satisfactory quality	0.938	
			Smartphones consistent in performance	0.644	
Social relationship support	12.483	2.996	Using smartphones helps maintaining my social-relationship	0.851	0.8
			Using smartphones helps making new friends	0.687	
			Using smartphones better enables forming inter-personal bonds with others	0.782	
			Using smartphones helps enhancing social-relationship	0.654	
Economic Value	10.504	2.521	Smartphones offers value for money	0.814	0.637
			Smartphones ensure good resale price	0.793	
			Smartphones are reasonably priced	-0.63	
			Smartphones are economical in terms of price	0.711	
Social self- image expression	9.350	2.244	Using smartphones enhances self-image	0.812	0.696
			People perceive me better because of my smartphones	0.737	
			Using smartphones improves self-expression	0.635	
			Using smartphones makes a good impression on people	0.644	
Emotional Value	7.792	1.87	Smartphone keeps me absorbed	0.685	0.741
			Using smartphones is interesting	0.722	
			Using smartphones gives fun	0.7	
Aesthetics	6.425	1.542	Smartphones are lovely	0.708	0.728
			Smartphones reflect beauty	0.628	
			Smartphones aesthetically appealing	0.649	

The factor “Functional value” of the smartphone explains most of the variance, bringing out utility of the device for varied technological and connectivity needs, for this cohort and reflects that customers will not settle for anything less than consistent performance and high quality. The next factor is “Social relationship support”, reflecting consumer’s expectations of help from smartphones, in forming, maintaining and enhancing inter-personal relationships. “Economic value”, comprising of dimensions like reasonable prices, re-sale value of the phone and proving overall as value for money, is the next factor. The fourth factor is termed as “Social self- image expression”, as it comprises of

dimensions like the device contributing to enhancing the user's self-image and in improving user's self-expression with others. The fifth factor "Emotional value" relates to the dimensions like fun and pleasant feelings, experienced by the consumers, through association with the brand. Finally, the last factor is termed "Aesthetics" and it comprises of dimensions like beauty and aesthetically appealing looks of the smartphone.

Cohort: Gen Y or Millennials

For Gen Y, a six-factor solution is obtained which explains 62.079 percent of the total variance in 24 variables (Table 3). Here also, high values of Cronbach's Alfa substantiate the explored factor solution. 21 items were grouped meaningfully into factors with high loadings.

Table 3. Factors for importance of smartphone values: 24-38

Factor Name	Variance explained	Eigen value	Variable name	Item loadings	Cronbach's Alfa
Functional Value	15.262	3.663	Smartphones of acceptable standard of quality	0.782	0.872
			Smartphones reliable in performance	0.889	
			Smartphones possess satisfactory quality	0.622	
			Smartphones consistent in performance	0.754	
Emotional Value	13.783	3.308	Smartphone keeps me absorbed	0.749	0.856
			Using smartphones is interesting	0.702	
			Using smartphones gives fun	0.915	
			X Smartphone stimulates my curiosity	0.641	
Social self- image expression	11.654	2.797	Using smartphones enhances self-image	0.832	0.753
			People perceive me better because of my smartphones	0.761	
			Using smartphones improves self-expression	0.672	
			Using smartphones makes a good impression on people	0.629	
Social relationship support	7.958	1.91	Using smartphones helps maintaining my social-relationship	0.744	0.64
			Using smartphones helps enhancing social-relationship	0.631	
			Using smartphones better enables forming inter-personal bonds with others	0.717	
Economic Value	7.4625	1.791	Smartphones offers value for money	0.766	0.715
			Smartphones are reasonably priced	0.702	
			Smartphones are economical in terms of price	0.641	
Aesthetics	5.958	1.43	Smartphones are lovely	0.62	0.712
			Smartphones reflect beauty	0.676	
			Smartphones aesthetically appealing	0.602	

Here too, the first factor is “Functional value”, which reflects the prime importance of reliable and consistent performance and of quality standards for varied technological and connectivity needs. “Emotional value” comprising of hedonic dimensions like fun and pleasant feelings experienced by the consumers, through association with the brand, comes next. Further, the third factor is “Social self-image expression”, as it comprises of dimensions like brands contributing to enhancing the user’s self-image and in improving the user’s self-expression with others. The fourth factor “Social relationship support”, reflects the consumer’s expectation of help from brands, in forming, maintaining and enhancing inter-personal relationships. The next factor “Economic value” re-iterates the relevance of dimensions like reasonable prices, re-sale value of the phone and overall value for money. The final factor here as well is “Aesthetics” as it comprises of dimensions like beauty and aesthetically appealing looks.

Part 2: Cluster Analysis of Smartphone Users

Cohort: Gen Z

The sample of these 532 respondents is further clustered using these six value factors as clustering variables. Hierarchical Clustering method was employed and it suggested the presence of three clusters as per the ‘squared euclidean criterion’. K-means clustering was employed to segment and profile clusters. The final cluster centres are represented in Table 4.

As per the ‘cluster-centre values’ (Table 4), the three segments can be profiled as:

Cluster 1 - Pragmatic Utilitarians: This consumer group gives high preference to the “social self-image expression” dimension, indicating the contribution of smartphone brands in improving the user’s self-expression and enhancing user’s self-image, as well as enabling a user in making a good impression on others. This sub segment of the Gen Z cohort is also seeking “functional value”, vying for reliable performance and an acceptable standard of quality in terms of overall performance. Next comes the importance of “social relationship support”, emphasising the importance of the device’s contribution in making new friends, forming inter-personal bonds with them, basically in maintaining and enhancing the user’s social-relationship with others. Overall, these consumers are more concerned about the functional value and are focussed on self-image enhancement. They are not very price sensitive.

Cluster 2 - Poignant Minimalists: These are the most price sensitive consumer group in this cohort and they give much importance to “economic value”, as they look for value for money and also for resale prices, while giving greatest importance to fun and pleasant feelings experienced through association with the brands, and thus to “emotional value”. They are lovers of beauty

Table 4. Clusters Descriptive (13 - 23)

	F-Value	Cluster Centres		
		Pragmatic Utilitarians	Poignant Minimalists	Formidable Bargainers
Functional Value	181.142	4.722	1.494	2.448
Social relationship support	207.671	4.416	2.486	3.327
Economic Value	164.500	1.893	3.180	3.937
Social self- image expression	154.496	4.784	1.572	3.089
Emotional Value	121.366	2.887	4.094	1.788
Aesthetics	146.449	2.068	4.165	3.143
Respondents		168(31.58%)	218(40.98%)	146(27.44)

and expect the marketer to keep re-inventing their products and coming up with aesthetically appealing designs, hence the importance to “aesthetics”. This group appears to be not very particular about technical superiority and settles for basic functionalities.

Cluster 3 - Formidable Bargainers: This consumer group displays a “want-it-all” attitude, despite being sensitive to prices and to “economic value”. It accords high importance to majority of the attributes like “social relationship support”, emphasising the high importance attributed to the smartphone brands contribution in making new friends, forming inter-personal bonds, as also to “social self- image expression”. They also expect the marketer to keep re-inventing their products and coming up with aesthetically appealing designs, thereby attaching importance to “aesthetics”. Thus, this group unapologetically bargains for a complete package in a smartphone with the best price, and wants the foremost deal.

Cohort: Gen Y or Millennials

Cluster Analysis was re-employed to segment customers (608 in number) in this cohort. Hierarchical Clustering suggests a three-clustered solution. The final cluster centers are represented in Table 5.

The three segments can be profiled as the following:

Cluster 1 - Fervent Functionalists: These consumers have moderate preferences for most parameters. They accord high positive importance to the “emotional value”, reflecting an inclination towards deriving fun and pleasant feelings, through association with the brands, and to “functional value”, representing the importance of acceptable standards of quality in terms of overall performance. Further, this sub-segment is sensitive towards “social self-image expression” dimension, indicating the significance of smartphone brands’ contribution in improving the user’s self-expression and self-image, and also in creating a good impression on others. These customers are not price sensitive.

Cluster 2 - Value Conscious Rationalists: These consumers give preference to price attractiveness and thus to “economic value”. They also give great importance to the “social self-image expression” dimension, emphasizing on the brands’ contribution in improving the user’s self-expression. “Functional value” representing the importance of acceptable standards of quality in terms of performance continues to be relevant here as well. This group displays less importance to “emotional value” associated with the brand.

Cluster 3 - Astute Charismatics: Demanding on most parameters and constantly seeking quality in terms of performance, this group attaches high importance to “functional value”. Extremely conscious of their self-image, they regard the brand as a helpful tool in bettering their social

Table 5. Clusters Descriptive (24-38)

	F-Value	Cluster Centres		
		Fervent Functionalists	Value Conscious Rationalists	Astute Charismatics
Functional Value	137.394	3.770	3.882	4.625
Emotional Value	131.374	4.646	1.689	3.584
Social self- image expression	102.891	3.157	3.964	4.088
Economic Value	109.885	2.858	4.409	1.542
Social relationship support	42.204	3.053	1.724	3.971
Aesthetics	99.262	3.114	2.033	4.048
Respondents		164(26.97%)	244(40.13%)	200(32.89%)

relationship with others, hence the high importance to “social self-image expression”. They emphasize on “social relationship support”, highlighting the importance of the brand’s contribution in improving the user’s self-expression, and in forming inter-personal bonds. Being greatly conscious about innovative designs that stand apart and set market trends, they give high importance to “aesthetics”. Overall, this group aggressively looks for “emotional value”, reflecting the inclination towards deriving fun and pleasant feelings, through association with the brands.

Part 3: Factor Analysis of Loyalty Scale

The dimensionality of loyalty inclinations towards ‘currently used smartphone brands’ was examined by considering the four-items loyalty scale, adapted from the study by Chaudhuri and Holbrook (2001). Factor Analysis was run for both the cohorts.

Cohort: Gen Z

A two-factor solution is obtained (Table 6), explaining 77.78 percent of the total variance. All the Cronbach’s Alfa coefficients are substantially high.

The first factor is named “Attitudinal Loyalty”. It refers to the customers’ commitment to the brand and their willingness to pay a higher price for the current brand over other brands, even in presence of better offers. The second factor named “Behavioral loyalty” comprises of dimensions like re-purchase intention, depicting resistance to switch to other brands.

Cohort: Gen Y or Millennials

On applying Factor Analysis to this cohort (Table 7), a two-factor solution is obtained, which explains 78.3 percent of the total variance. All the Cronbach’s Alfa coefficients are substantially high.

The two dimensions obtained here also are named as “Attitudinal Loyalty” and “Behavioral loyalty”.

Table 6. Factor analysis of loyalty scale (13 - 23)

Factor Name	Variance explained	Eigen value	Variable name	Item loadings	Cronbach’s Alfa
Attitudinal Loyalty	40.425	1.617	Committed to smartphones	0.722	0.884
			Willing to pay higher for X smartphones over other brands	0.801	
Behavioral loyalty	37.350	1.494	Will buy X brand the next time too	0.789	0.803
			Intend to keep on purchasing this brand	0.713	

Table 7. Factor analysis of loyalty scale (24-38)

Factor Name	Variance explained	Eigen value	Variable name	Item loadings	Cronbach’s Alfa
Attitudinal Loyalty	43.55	1.742	Committed to smartphones	0.726	0.759
			Willing to pay higher for X smartphones over other brands	0.781	
Behavioral loyalty	34.725	1.389	Will buy X brand the next time too	0.733	0.781
			Intend to keep on purchasing this brand	0.742	

Part 4: Canonical Correlation Analysis

Canonical correlation analysis (using MANOVA commands) was employed to examine the association among “loyalty towards smart-phones” and the six “value dimensions” (Table 8).

Cohort: Gen Z

The Pragmatic Utilitarians: The canonical correlation model was found to be significant as per the three multivariate tests of significance [Pillais (sig = 0.000), Hotellings (sig = 0.000), Wilks (sig = 0.000)], indicating a significant relationship between the value dimensions and loyalty. The Eigen value (0.82513) and squared canonical correlation (0.71602) indicate a strong relationship. Both “attitudinal loyalty” (sig.=0.000) and “ behavioral loyalty” (sig.=0.000) were found to be significantly related to the independent value constructs. The higher standardized canonical loading for attitudinal loyalty (0.72183) as compared to that of behavioral loyalty (0.53797) shows that the attitudinal aspect has stronger positive impact on the overall loyalty. Standardized canonical loadings for independent constructs suggest that social self-image expression (0.74546) has the highest coefficient, then comes functional value (0.66982), followed by social relationship

Table 8. Canonical correlation analysis – comparative study (13-23)

			Pragmatic Utilitarians	Poignant Minimalists	Formidable Bargainers
Multivariate Tests of Significance	Pillais	F-Statistics (sig.)	14.43251(0.000)	8.15261(0.000)	1.342060(.000)
	Hotellings	F-Statistics (sig.)	14.36541(0.000)	8.13873(0.000)	1.26049(0.292)
	Wilks	F-Statistics (sig.)	14.49921(0.000)	9.27376(0.000)	1.30457(0.261)
Strength Measures	Root 1	Eigen value	0.82513	0.60087	
		Sq. Canon Cor.	0.71602	0.47215	
Dependent Variables	Attitudinal Loyalty	F-Statistics (sig.)	5.64959(0.000)	3.89047(0.000)	
		St Canon Coeff	0.72183	0.52186	
	Behavioral Loyalty	F-Statistics (sig.)	4.48732(0.000)	1.80540(0.241)	
		St Canon Coeff	0.53797	0.13802	
Independent Variables		Var (St Canon Coeff)	Social self- image expression (0.74546) Functional Value (0.66982) Social relationship support (0.62896) Emotional Value (0.49347)	Aesthetics (0.50775) Emotional Value (0.41847) Economic Value (0.39664)	
Dependence Relationship	Attitudinal Loyalty		Social self- image expression (beta= 0.85829, sig.=0.000) Functional (beta= 0.57308, sig.=0.000) Social relationship support (beta = 0.36422, sig.=0.002)	Aesthetics (beta= 0.63802, sig.=0.000) Emotional Value (beta = 0.46681, sig.=0.000) Economic Value (beta = 0.34703, sig.=0.010)	
	Behavioral Loyalty		Social self- image expression (beta= 0.58095, sig.=0.000) Functional Value (beta = 0.39926, sig.=0.008)		

support (0.62896) and emotional value (0.49347). Thus these attributes have higher impact in defining the uni-dimensionality of the construct. On examining the cross-connectivity among the constituents of the two sets of constructs, and looking at the values of coefficient under 'dependence relationship', we find that social self-image expression ($\beta = 0.85829$, sig. = 0.000) shows the highest impact on attitudinal loyalty, followed by functional value ($\beta = 0.57308$, sig. = 0.000) and social relationship support ($\beta = 0.36422$, sig. = 0.002). For behavioral loyalty, the significant predictors were social self-image expression ($\beta = 0.58095$, sig. = 0.000) followed by functional value ($\beta = 0.39926$, sig. = 0.008).

The Poignant Minimalists: Here, the canonical correlation model was significant as per the multivariate tests [Pillais (0.000), Hotellings (0.000), Wilks (0.000)]. Eigen value (0.60087) and squared canonical correlation (0.68713) indicate a strong relationship, though less in degree as compared to that in the Pragmatic utilitarian cluster. Here, only the Attitudinal loyalty (sig. = 0.000) was found to be significantly related to the independent constructs and standardized canonical loading (0.52186) indicates that Attitudinal loyalty has moderate positive impact on overall loyalty. While observing the standardized canonical loadings, we found that the hierarchy for the independent construct is: aesthetics (0.50775), followed by emotional value (0.41847) and economic value (0.39664). On examining the cross-connectivity among the constituents of the two constructs (attitudinal loyalty with value dimensions), the predictor aesthetics ($\beta = 0.63802$, sig. = 0.000) has the highest impact on attitudinal loyalty, then comes emotional value ($\beta = 0.46681$, sig. = 0.000) and last comes economic value ($\beta = 0.34703$, sig. = 0.010).

The Formidable Bargainers: Here, all three multivariate tests of significance [Pillais (sig = 0.236), Hotellings (sig = 0.292), Wilks (sig = 0.261)] indicate that there is insignificant relationship between the two constructs.

Cohort: Gen Y or Millennials

Canonical correlation analysis was applied again to all three clusters of this cohort (Table 9).

The Fervent Functionalist Segment: The Canonical correlation model was found to be significant [Pillais (0.000), Hotellings (0.000), Wilks (0.000)]. The value of Eigen (0.71576) and squared canonical correlation (0.51231) indicate moderate relationship. Only attitudinal loyalty (0.000) was found to be significantly related to the value constructs. Further, standardized canonical loadings (0.70838) indicate that this loyalty dimension positively affects the overall loyalty. Emotional value (0.66319) followed by functional value (0.60048) have the highest coefficients. Cross-connection signifies that emotional value ($\beta = 0.3984$, sig. = 0.010) and functional value ($\beta = 0.2502$, sig. = 0.038) are significant value dimensions affecting the attitudinal loyalty.

The Astute Charismatic Segment: The Canonical correlation model was found to be significant [Pillais (0.000), Hotellings (0.000), Wilks (0.000)]. Eigen value (0.66224) and squared canonical correlation (0.600005) show strong relationship. Here, both attitudinal loyalty (sig. = 0.000) and behavioral loyalty (sig. = 0.033) were found to be significantly related to the independent value constructs. Further, standardized canonical loadings for attitudinal loyalty (0.64897) and behavioral loyalty (0.57335) indicate that both affect loyalty to approximately the same positive degree. Functional value (0.65120), followed by social self-image expression (0.46101), aesthetics (0.37916) and social relationship support (0.37445) are relatively strongly relevant. Considering the cross-connectivity, functional value ($\beta = 0.4664$, sig. = 0.000), social self-image expression ($\beta = 0.3514$, sig. = 0.024), aesthetics ($\beta = 0.2632$, sig. = 0.030) and social relationship support ($\beta = 0.2428$, sig. = 0.024) were significantly related to the attitudinal loyalty in decreasing order of importance. Functional value ($\beta = 0.3898$, sig. = 0.002), social self-image expression ($\beta = 0.3355$, sig. = 0.010), and lastly aesthetics ($\beta = 0.2659$, sig. = 0.026) were significantly related to the behavioral loyalty in decreasing order of hierarchy.

Table 9. Canonical correlation analysis – comparative study (24-38)

			Fervent Functionalists	Astute Charismatic	Value Conscious Rationalists
Multivariate Tests of Significance	Pillais	F-Statistics (sig.)	9.54282(0.000)	10.35110(0.000)	1.431(0.236)
	Hotellings	F-Statistics (sig.)	9.47059(0.000)	10.42210(0.000)	1.382(0.242)
	Wilks	F-Statistics (sig.)	9.79982(0.000)	11.03692(0.000)	1.480(0.231)
Strength Measures		Eigen value	0.64394	0.66224	
		Sq. Canon Cor.	0.51231	0.60005	
Dependent Variables	Attitudinal Loyalty	F-Statistics (sig.)	6.16286(0.000)	5.83085(0.000)	
		St Canon Coeff	0.70838	0.64897	
	Behavioral Loyalty	F-Statistics (sig.)	1.74372(0.188)	3.26128 (0.003)	
		St Canon Coeff	0.42437	0.57335	
Independent Variables		Var (St Canon Coeff)	Emotional Value (0.66319) Functional Value (0.60048)	Functional Value (0.65120) Social self- image expression (0.46101) Aesthetics (0.37916) Social relationship support (0.37445)	
Dependence Relationship	Attitudinal Loyalty		Emotional Value (beta= 0.3984, sig. = 0.010) Functional Value (beta= 0.2502, sig. = 0.038)	Functional Value (beta= 0.4664, sig. = 0.000) Social self- image expression (beta= 0.3514, sig. = 0.024) Aesthetics (beta=0.2632, sig. =0.030) Social relationship support (beta= 0.2428, sig. = 0.034)	
	Behavioral Loyalty			Functional Value (beta =0.3898, sig. = 0.002) Social self- image expression (beta= 0.3355, sig. =0.010) Aesthetics (beta= 0.2659, sig. = 0.026)	

The Value Conscious Rationalists Segment: Here, all three multivariate tests [Pillais (0.236), Hotellings (0.242), Wilks (0.231)] indicate that the Canonical correlation model was insignificant.

DISCUSSION AND IMPLICATIONS

This study builds on the existing understanding of the roles of distinct consumer value dimensions, in determining brand loyalty of smartphone users. It investigates the heterogeneity in the values perceived and preferred, across sub-segments in two major generation cohorts, crucial to smartphone marketers— Millennials and Gen Z.

The factor analysis performed on the 24 variables, for investigating the perceptions about various benefits smartphones offer, produced a meaningful output which converged around six decision making criteria, for both the cohorts. Beyond the traditionally crucial criterion, like “functional value”, “emotional value”, “social relationship support” and “economic value”, new attributes like “aesthetics” and “social self-image expression” have become increasingly important, demonstrating the smartphone’s conversion into a multi-functional communication and info-tainment device, with a personal meaning. The findings about “aesthetics” is in alignment with few recent studies (Wiecek et al., 2019 and Toufani et al., 2017) that have indicated the ‘aesthetic fidelity’ effect in context of smartphones, and have shown that consumers are less likely to switch away from products with

appealing designs. For “social self- image expression” also, there is some support in few recent studies, wherein smartphones have been shown to be entwined with users’ lives as they form an ‘extension of the self’ (Harkin and Kuss, 2020) and use of these technologies have been shown to facilitate identity expression.

Looking at the relative importance of these factors for both the cohorts, striking differences emerge. For Gen Z cohort, “functional value”, “social relationship support” and “economic value” emerge as the most important criterion. For the Millennial cohort, “functional value”, “emotional value” and “social self- image expression” hold much more importance.

Functional value remains crucial across the cohorts indicating that high quality and high functionality with stable performance are the pre-requisites for users across generational cohorts, as it facilitates loyalty. It however contradicts the findings in previous smartphone related studies (Wong et al, 2019) that indicated no effect of functional value on smartphone brand commitment, as there are not many differences in the features of different brands. The current study’s results suggest consumers have started paying more attention to the special functions or features of various models and these findings provide inputs to the marketers. For instance, the content managers may focus more on highlighting functionality features to strengthen the consumers’ impression of the smartphone’s functions and help them stay loyal in future.

For the Gen Z cohort, “Social relationship support” emerges as the most important criterion while “economic value” emerges as the next most important dimension. This is again in alignment with previous findings (Choi, 2018) that suggest the role of advanced media capabilities of smartphone-based SNS (Social networking service) in enabling users develop bridging and bonding social capital. Moreover, these resonate with earlier findings (Hawk et al, 2019) that use of these technologies can facilitate both relationship formation and maintenance. Marketers must touch upon parameters like social relationships as well as price attractiveness elements in the campaigns.

For Gen Y/Millennials, “emotional value” holds more importance. This finding is again in concordance with the previous findings (Khan and Mohsin, 2017), that suggest that the “Emotional value” of consumers is positively associated with their brand commitment. Also for this cohort, the novel value dimension of social self-image expression is important. This finding agrees with previous findings (Park and Kaye, 2018) that smartphone has become an indispensable part of the users’ self and thus influences their identity and sense of being. In other words, smartphones have been shown to be entwined with users’ lives as they formed an ‘extension of the self’ (Harkin and Kuss, 2020). Alternately, use of these technologies can facilitate identity expression. Marketers must emphasize on elements that help users express themselves and improve their self-image.

The other important set of findings was the clustering of smartphone consumers into distinct sub-segments, for each of the cohorts. There were some common threads running through all the micro-segments, within each of the cohorts. For the Millennial subgroups, “functional value” and “social self- image expression” remained important while for Gen Z subgroups, “social relationship support” and “aesthetics” stood out as consistently relevant.

However, there were striking differences in the priorities attached to different criterion, by the three behavioral segments within each of the subgroups. For Millennial subgroups, the ‘Astute Charismatics’ group attaches high level of importance to majority of the criteria and is ready to pay higher prices for a superior product, as against the ‘Value Conscious Rationalists’ group which places the highest importance to ‘economic value’ despite expecting delivery on most of the value related criterion. The marketers may consider providing a broad product line, upselling the more sophisticated versions for the ‘Astute Charismatics’ group and stretching price downwards, to address the needs of ‘Value Conscious Rationalists’ group. Interestingly, the ‘Fervent Functionalist’ group is partial to “emotional Value”, calling upon brands to integrate elements that evoke fun and pleasant feelings. The creative content team for promotion may also select the appeals in alignment with these varied needs of the different sub-groups.

For Gen Z subgroups, the 'Pragmatic utilitarian' group is a segment that is focussed on the "social self-image expression" and "functional value" as also on "social relationship support" while being least sensitive about "economic value". Managers can thus ensure that the branding activities for this sub-segment is focussed on enhancing engagement through advertising and crowd-sourcing activities directed at friends and family members. On the other extreme, 'Poignant Minimalists' group is rather indifferent about factors crucial to the 'Pragmatic utilitarian' group. They are most demanding on "aesthetics", "emotional value" and "economic value". The marketers may consider stretching price downwards, to address the needs of 'Poignant Minimalists' group and may weave fun elements in the promotional plan. The 'Formidable Bargainer' sub-group displays a unique "want-it-all" attitude, giving high importance to majority of dimensions like enhancement of inter-personal bonds as well as of self-image through association with the brand, and most importantly to price attractiveness (economic value). The marketers thus have to consider providing a broad product line, upselling more versions of the product in a broader range of prices, at the same time ensuring that the promotional content is in alignment with the varied needs.

Finally, the loyalty profiles of each of the three micro-segments in the two generation cohorts reveals that there are significant differences between these groups, not only in their perceptions, but also in their tendency to remain loyal.

For the Millennial subgroups, the 'Astute Charismatics' group displayed significant relationship between value dimensions and both the loyalty dimensions. Functional value, social self- image expression, aesthetics and social relationship support were significantly related to the attitudinal loyalty, whereas, functional value, social self-image expression, aesthetics were significantly related to the behavioral loyalty. The 'Fervent Functionalist' group displayed significant relationship between value dimensions and attitudinal loyalty. Emotional value and functional value are significant dimensions affecting the attitudinal loyalty. The 'Value Conscious Rationalists' group did not display any significant relationship between value dimensions and both the dimensions of the dependent construct.

For Gen Z subgroups, the 'Pragmatic Utilitarians' group displayed significant relationship between value dimensions and both the loyalty dimensions. Social self-image expression, functional value, social relationship support, and emotional value have impact on attitudinal loyalty, while social self- image expression and functional value are the significant predictors for behavioral loyalty. The 'Poignant Minimalists' group displayed significant relationship between value dimensions and attitudinal loyalty. Here, the predictor aesthetics, emotional value and economic value have the highest impact on attitudinal loyalty. The 'Formidable Bargainer' group predictably did not display any significant relationship between value dimensions and the loyalty dimensions.

In the context of smartphones, the studies exploring segments with distinct profiles, by utilising the customer value dimensions, are under-represented. Theoretically, the current study contributed by responding to the call for future studies that would cover (Wong et al., 2019) and compare value perceptions of consumers in different age brackets, since these are wide-ranging. Further, this study identified and compared the existing distinct subgroups within and across the two most lucrative generation cohorts, in the smartphone context. Further, the importance attached to newer consumption value factors relevant to a smartphone loyalty, like "aesthetics" and "social self- image expression" are identified in this study. Managerially, the study contributes by highlighting the distinct influences of each of the value dimension identified, on the two dimensions of loyalty, for all the sub-groups across the cohorts. These findings could be crucial for smartphone marketers in targeting their segments and in aligning their marketing strategies with the respective sub-segment's preferences, thus helping them build long term relationships with consumers.

LIMITATIONS AND FUTURE RESEARCH

The current study has certain limitations. First, it was conducted using survey-based data from five cities in India. Second, our constructs may not have been sufficiently holistic to explain each dimension

of customer value. Finally, while extending the study to other geographies, there may be cultural and customization issues, since cohorts across countries have evolved with distinct value orientations. In fact cross-cultural studies would be an interesting next step.

The approach used in this study should be extended to other geographies and to other lucrative cohorts as well. Since mobile communications technology advances at a great pace and smartphone consumption values themselves keep evolving, the study should be replicated for verifying longitudinal validity of results.

CONCLUSION

The severity of competition has made it imperative for smartphone firms to nurture customers' loyal behavior. This study attempts to gauge the perceptions smartphone users have of various values derived, since marketing literature suggests that customer value is a significant predictor of consumer continuance and loyalty behavior. The current study explores and compares the value perceptions crucial to smartphone customers for two generation cohorts that are crucial for smartphone marketers - Gen Z and the Millennials, in an emerging market context. Interestingly, this study identifies the importance attached to newer consumption value factors relevant to a smartphone, like "aesthetics" and "social self- image expression". By integrating these with the other widely documented factors of "functional value", "social relationship support", "economic value" and "emotional value", we are able to provide a richer explanation of consumer behavior in the context of smartphone consumption values. Three distinctive clusters are obtained within both the Gen Z and the Millennials; and for each of these sub-segments, the influence of these value criterion has been investigated on both attitudinal and behavioral components of loyalty, for all sub-segments. The findings throw striking differences, calling for unique alignment of marketing strategies with each of the chosen segment. Marketers in the smartphone industry may utilise these findings towards building and sustaining long term relationships with consumers.

FUNDING AGENCY

The publisher has waived the Open Access Processing fee for this article.

REFERENCES

- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *The Journal of Consumer Research*, 20(4), 644–656. doi:10.1086/209376
- Bloemer, J. M., & Kasper, H. D. (1995). The complex relationship between consumer satisfaction and brand loyalty. *Journal of Economic Psychology*, 16(2), 311–329. doi:10.1016/0167-4870(95)00007-B
- Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Komarova Loureiro, Y., & Solnet, D. (2013). Understanding Generation Y and their use of social media: A review and research agenda. *Journal of Service Management*, 24(3), 245–267. doi:10.1108/09564231311326987
- Business Line. Info Tech. (2018). *Top 30 cities make up 51% of smartphone market*. Retrieved September 18, 2019, from <https://www.thehindubusinessline.com/info-tech/top-30-cities-make-up-51-of-smartphone-market-delhi-tops-tally/article8309061.ece>
- Cakarnis, J., & D'Alessandro, S. P. (2015). Does knowing overcome wanting? The impact of consumer knowledge and materialism upon credit card selection with young consumers. *Young Consumers*, 16(1), 50–70. doi:10.1108/YC-01-2014-00418
- Charny, B. (2002). *Virgin, sprint create teen venture*. Retrieved March 22, 2019, from <http://news.com.com/2100-1033-937859.html>
- 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. doi:10.1509/jmkg.65.2.81.18255
- Chiu, C. M., Wang, E. T., Fang, Y. H., & Huang, H. Y. (2014). Understanding customers' repeat purchase intentions in B2C e-commerce: The roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, 24(1), 85–114. doi:10.1111/j.1365-2575.2012.00407.x
- Choi, S. (2019). The roles of media capabilities of smartphone-based SNS in developing social capital. *Behaviour & Information Technology*, 38(6), 609–620. doi:10.1080/0144929X.2018.1546903
- Dawes, J., Meyer-Waarden, L., & Driesener, C. (2015). Has brand loyalty declined? A longitudinal analysis of repeat purchase behavior in the UK and the USA. *Journal of Business Research*, 68(2), 425–432. doi:10.1016/j.jbusres.2014.06.006
- Gardiner, S., King, C., & Grace, D. (2013). Travel decision making: An empirical examination of generational values, attitudes, and intentions. *Journal of Travel Research*, 52(3), 310–324. doi:10.1177/0047287512467699
- Harkin, L. J., & Kuss, D. (2020). My smartphone is an extension of myself: A holistic qualitative exploration of the impact of using a smartphone. *Psychology of Popular Media*. Advance online publication. 10.1037/ppm0000278
- Hawk, S. T., van den Eijnden, R. J., van Lissa, C. J., & ter Bogt, T. F. (2019). Narcissistic adolescents' attention-seeking following social rejection: Links with social media disclosure, problematic social media use, and smartphone stress. *Computers in Human Behavior*, 92, 65–75. doi:10.1016/j.chb.2018.10.032
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22. doi:10.1177/002224299305700101
- Kim, H. W., Gupta, S., & Koh, J. (2011). Investigating the intention to purchase digital items in social networking communities: A customer value perspective. *Information & Management*, 48(6), 228–234. doi:10.1016/j.im.2011.05.004
- Kim, M. K., Wong, S. F., Chang, Y., & Park, J. H. (2016). Determinants of customer loyalty in the Korean smartphone market: Moderating effects of usage characteristics. *Telematics and Informatics*, 33(4), 936–949. doi:10.1016/j.tele.2016.02.006
- Kimiloğlu, H., Nasır, V. A., & Nasır, S. (2010). Discovering behavioral segments in the mobile phone market. *Journal of Consumer Marketing*, 27(5), 401–413. doi:10.1108/07363761011063303
- Kuikka, A., & Laukkanen, T. (2012). Brand loyalty and the role of hedonic value. *Journal of Product and Brand Management*, 21(7), 529–537. doi:10.1108/10610421211276277
- Lam, S. Y., & Shankar, V. (2014). Asymmetries in the effects of drivers of brand loyalty between early and late adopters and across technology generations. *Journal of Interactive Marketing*, 28(1), 26–42. doi:10.1016/j.intmar.2013.06.004

Lam, S. Y., Shankar, V., Erramilli, M. K., & Murthy, B. (2004). Customer value, satisfaction, loyalty, and switching costs: An illustration from a business-to-business service context. *Journal of the Academy of Marketing Science*, 32(3), 293–311. doi:10.1177/0092070304263330

Marcie Merriman. (2015). *What if the next big disruptor isn't a what but a who?* Retrieved January 17, 2019, from <http://www.ey.com>

News 18 Tech. (2020). *Smartphone users in India crossed 500 million in 2019*. Retrieved May 17, 2020, from <https://www.news18.com>

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4, suppl), 33–44. doi:10.1177/00222429990634s105

Parasuraman, A., & Grewal, D. (2000). The impact of technology on the quality-value-loyalty chain: A research agenda. *Journal of the Academy of Marketing Science*, 28(1), 168–174. doi:10.1177/0092070300281015

Park, C. S., & Kaye, B. K. (2019). Smartphone and self-extension: Functionally, anthropomorphically, and ontologically extending self via the smartphone. *Mobile Media & Communication*, 7(2), 215–231. doi:10.1177/2050157918808327

Petrack, J. F. (2002). Development of a multi-dimensional scale for measuring the perceived value of a service. *Journal of Leisure Research*, 34(2), 119–134. doi:10.1080/00222216.2002.11949965

Rainie, L., & Keeter, S. (2006). *Americans and their cell phones*. Pew Internet & American Life Project. Retrieved September 9, 2019, from www.pewInternet.org/PPF/r/179/report_display.asp

Rintamäki, T., Kanto, A., Kuusela, H., & Spence, M. T. (2006). Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions. *International Journal of Retail & Distribution Management*, 34(1), 6–24. doi:10.1108/09590550610642792

Ritchie, K. (1995). *Marketing to Generation X*. Lexington Books.

Seegebarth, B., Behrens, S. H., Klarmann, C., Hennigs, N., & Scribner, L. L. (2016). Customer value perception of organic food: Cultural differences and cross-national segments. *British Food Journal*, 118(2), 396–411. doi:10.1108/BFJ-07-2015-0235

Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159–170. doi:10.1016/0148-2963(91)90050-8

Toufani, S., Stanton, J. P., & Chikweche, T. (2017). The importance of aesthetics on customers' intentions to purchase smartphones. *Marketing Intelligence & Planning*, 35(3), 316–338. doi:10.1108/MIP-12-2015-0230

Turel, O., Serenko, A., & Bontis, N. (2010). User acceptance of hedonic digital artifacts: A theory of consumption values perspective. *Information & Management*, 47(1), 53–59. doi:10.1016/j.im.2009.10.002

Wiecek, A., Wentzel, D., & Landwehr, J. R. (2019). The aesthetic fidelity effect. *International Journal of Research in Marketing*, 36(4), 542–557. doi:10.1016/j.ijresmar.2019.03.002

Wong, K. H., Chang, H. H., & Yeh, C. H. (2019). The effects of consumption values and relational benefits on smartphone brand switching behavior. *Information Technology & People*, 32(1), 217–243. doi:10.1108/ITP-02-2018-0064

Wood, L. (2004). Dimensions of brand purchasing behaviour: Consumers in the 18–24 age group. *Journal of Consumer Behaviour: An International Research Review*, 4(1), 9–24. doi:10.1002/cb.154

Yeh, C. H., Wang, Y. S., & Yieh, K. (2016). Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives. *International Journal of Information Management*, 36(3), 245–257. doi:10.1016/j.ijinfomgt.2015.11.013

Yi, Y., & Jeon, H. (2003). Effects of loyalty programs on value perception, program loyalty, and brand loyalty. *Journal of the Academy of Marketing Science*, 31(3), 229–240. doi:10.1177/0092070303031003002

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22. doi:10.1177/002224298805200302

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