

# Impact of Different Variables on Developing Brand Equity of Detergent Brands in India

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**Abstract:** Every brand wants to position its name on consumer's mind. Based on the position of some detergent brands of India in consumers mind a study has been conducted over 500 respondents. The objective of the study is to find out the impact of the considered variables i.e. Advertisement, Price, Self-image, Word of Mouth, Quality, Packaging & Labeling, Overall Performance, Product line (variety) on perceived ranks of the said detergent brands given by the consumers. This study is based on primary data which is collected through one to one survey or interview method. The data set of 500 respondents has been gone through the reliability test and then intercorrelation between perceived values of the detergent brands and the respective variables have been studied. Here we have identified a linear model to measure overall impact of considered variables to predict higher or lower brand equity of a detergent brand.

**Keywords:** Perceived Rank, Reliability, Impactful Predictors, and Brand Equity.

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## I. INTRODUCTION

Brand management is complex in nature and brand equity is associated with brand management, it can be said that brand equity is a reflector of a brand's position in consumer's mind. FMCG products are most frequently used consumable products. In 1991 first liberalization reform took place in India since then Indian market is ever growing. In case of FMCG market before 1991 there was only two major players; one is Nirma and another is Cavinkare. After 1991 there are so many big players entered in Indian FMCG market like HUL, ITC, P&G, Patanjali etc. moreover now consumers have the choice to select from wide range of products offering same benefit. In this highly competitive situation gaining and maintaining brand equity is very much important for every player in Indian FMCG market. Proper brand equity management is only possible if the brand equity of a particular brand can be measured. Since 1991 special emphasis has been given to brand equity concept by the marketers and by the academicians till date. In 1991 David A. Aaker developed a model which is associated with 'Brand Equity Ten' where he mentioned ten sets of measures which is further grouped into five categories (Aaker, 1991). In real life it is hard to get accurate response from consumers to incorporate this model. In 1993 Keller introduced Consumermer Based Brand Equity (CBBE) model in which he mentioned direct and indirect approaches to measure brand equity. This model can be incorporated by well educated marketers or by well aware academicians through controlled experiments and Keller has provided six guidelines to measure customer based brand equity (Keller, 1993). Multidimensional Scalling technique to measure brand equity was first introduced by Yoo and Donthu in 2001. They examined 12 brands from three product categories (athletic shoes, film cameras, colour television sets) and developed a multidimensional scale to measure brand equity based on American, Korean American and Korean respondents. In their study they clearly mentioned that when different respondents from different culture and different product category will be considered result will be different (Yoo and Donthu, 2001). Most widely used brand equity measurement tool is Brand Asset Valuator model by Y & R, this consulting firm gives service related to brand equity measurement to its clients (Y & R, 2016) but it is highly expensive for a new entrepreneur to avail this service from Y & R.

Under the above mentioned context this study has determined weighted average linear equation model to measure brand equity of FMCG products with special reference to Detergent brands in Indian market. In the next section we have done literature review mainly based on origin of variables and their definition. In this study literature also been reviewed to

identify the research gap of previous studies done in the area of brand equity measurement. Literature review is followed by section 3. data and methodology, section 4. Analysis and result of the analysis and the last section is 5. Conclusions.

## II. LITERATURE REVIEW

This literature review starts from 1991. Benchmarking can not only be done in profit related issues but it can also be done in brand building. Objective of each firm is to develop credible measures of brand equity that supplement financial measures with brand asset measures. Brand equity measures should be responsive one a small change in brand equity can be identified by that measure. In this context we can talk about the “Brand Equity Ten”, ten sets of measures grouped into five categories. The first four categories represent customer perceptions of the brand along the four dimensions of brand equity—loyalty, perceived quality, associations, and awareness. The fifth includes two sets of market behavior measures that represent information obtained from market based information rather than directly from customers (Aaker, 1991). CBBE can be measured using both direct and indirect approaches. Two basic approaches to measuring customer-based brand equity are outlined. The indirect approach measures brand knowledge to assess the potential sources of brand equity. The direct approach measures the effects of the brand knowledge on consumer response to elements of the marketing mix. Examples of both types of approaches are provided. Finally, six guidelines for the management of customer-based brand equity are discussed. These guidelines emphasize the importance of taking a broad and long term view of marketing a brand; specifying the de-sired consumer knowledge structures and core benefits for a brand; considering a wide range of traditional and nontraditional advertising, promotion, and other marketing options; coordinating the marketing options that are chosen; conducting tracking studies and controlled experiments; and evaluating potential extension candidates (Keller K. L., 1993). Brand equity is a multidimensional concept and it is a complex phenomenon separated it into two components: Brand Awareness (BAW) and Brand Association (BAS). Strong and positive brand equity means the customers will have high brand-name awareness; they will maintain a favorable brand image and perceive the brand as of high quality, and they will be loyal to the brand Keller(2001). In most of the cases it has been seen that brand-equity measures are based on proprietary data from Y&R. Y&R’s brand-equity measure BAVTM is widely recognized as one of the major brand-equity measures (Keller K. L., 2006). The BAVTM measures are relative measures; that is, all brands are ranked relative to each other, across all industries. Keller has developed the Customer-Based Brand Equity Pyramid to show how you can build a strong brand. The pyramid consists of four different stages. According to (Keller K. L., 2008) the first stage relates to brand identity, and it uses brand salience as a measurement for awareness. In the second stage called brand meaning, it is imperative to establish brand image in the customer’s mind. The third stage refers to eliciting the proper consumer response in relation to brand identity and brand meaning. Finally, the aim is to transform brand response into a loyal relationship between the customers and the brand (Keller, 2001). Another approach of measuring brand equity (Pushpendar Nath, 2012) is construction and validation of a multi item scale to measure brand equity of services. Multidimensional Scalling technique to measure brand equity was first introduced by Yoo and Donthu in 2001. They examined 12 brands from three product categories (athletic shoes, film cameras, colour television sets) and developed a multidimensional scale to measure brand equity based on American, Korean American and Korean respondents. In their study they clearly mentioned that when different respondents from different culture and diferent product caegory will be considered result will be different (Yoo and Donthu, 2001).

Our study has find out that no uniform measure has been developed to measure brand equity till date so there is ample scope of research in this area of study. Specifically no model has been developed to measure brand equity of FMCG products available in Indian market because Yoo and Donthu in 2001 have mentioned that brand equity can differ based on cultural and categorical diversity. Brand equity measurement models offerd by consulting firms are not accesseble for all and the service Y&R offers to measure brand equity by using BAV model is comperetively expensive in nature. Moreover it can be said that techniques which are used to measure brand equity is very much complex in nature and some of the techniques are proprietary. FMCG product is different from FMCD products and from services that is why special attention is needed to measure brand equity of FMCG product’s brand. A generalized approach for all types of products and for services also may show a faulty picture.

After reviewing important literatures associated to brand equity measurement and pilot study we have considered following variables for our study of brand equity analysis of Detergent brands:

Brand Loyalty (BL), Consumer’s Willingness to Pay(CWP), Brand Promotion (BP), Brand Availability (BA), Price (P), Word of Mouth (WOM), Product Line (PL), Brand Switching (BS), Quality of the Product (QP), Self-Image (SI).

**A. Objectives of the Study:**

The objectives behind this study are:

- Main objective of this study is to find out the relationship among brand equity and other variables for FMCG brands.
- Analysis of customers’ response to know their attitude towards a particular brand of FMCG products based on Detergent brands.
- Formulation of linear relationship between brand equity and other predictor variables.

**III. DATA AND RESEARCH METHODOLOGY**

Simple random sampling method is followed in this research study. We have gone to each and every above mentioned spot during the time period of 2014 to 2016. In Kolkata every major location has a “More” which means the junction or most important landmark of a said location. We stood on the footpath of some ‘mores’ and approached most of the people passing by from 10am to 12pm indifferent days of the above said time period. So many people were passing by among them a very few were ready to respond and filling up the questionnaire. It is evident from the data collection procedure that selection of respondents was completely random and unbiased. Each and every resident of the sample area had equal chance to be selected as a respondent.

**B. Determination of sample size:** Kolkata is a major city of India which is characterized by high volume of population. It is difficult for an individual to cover the entire population of Kolkata for the purpose of collection of data to overcome this problem we have decided to follow sampling procedure. We have used a statistical model to find out what should be our required size of sample to reflect the population characteristics (Bill Godden, 2004). If the sample size is more than 50,000 (infinite population) then the formula for determining adequate sample size is:

$$SS = (Z^2 \times (p) \times (1 - p)) / C^2$$

We have taken 500 respondents for our study which is satisfying these criteria quite clearly.

**C. Sample Adequacy Test:**

**Table 1: KMO Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.943
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KMO test result shows that the sample size is taken for this study is adequate with a significant value of 0.943. If the value of KMO test is more than 0.70 then it is considered to be adequate sample size for a study.

**D. Data Collection:** In our study primary data is collected through one to one interview method. In this respect we have taken help of some predesigned questionnaire which reflect the attitude of consumers towards their preferred brands.

**E. Brand Equity Analysis of Select Detergent Brands:** Detergent comes under the category of personal care fast moving customer goods. In this study few Detergent brands are selected to get consumers’ responses based on certain predetermined questions. Surf excel, Ariel, Sunlight, Tide, Nirma these five brands among all other detergent brands in India are taken into consideration for the study because these brands are identified as most preferred detergent brands by the respondents. 500 respondents’ responses are considered for this part of study. Every respondent had given points to their preferred brands from 1 to 10 against some predetermined questions for every variable. The data generated from 500 hundred respondents on 5 detergent brands.

**F. Reliability of the Data to Reflect a Reliable Result:**

**Table 2: Case Processing Summary**

		N	%
Cases	Valid	2500	100.0
	Excluded <sup>a</sup>	0	.0
	Total	2500	100.0
a. Listwise deletion based on all variables in the procedure.			
Reliability Statistics			

Reliability statistics shows that all the cases are taken into consideration for the analysis and 100 % of the data set is valid.

**Table 3: Reliability Statistics: Detergent Data**

Cronbach's Alpha	N of Items
0.982	10

Value of Cronbach Alpha is 0.982 which is quite higher and it can be said that the data is reliable and the result which will be found out by using this data would be reliable.

**G. Brand Equity and Loyalty:** Empirical study shows that there is a functional relationship between Brand Equity (BE) and Brand Loyalty (BRAND LOYALTY).

**BE = f(BRAND LOYALTY)**

It can be said that brand loyalty is a variable which reflects brand equity from consumers' point of view. We have collected response from 500 sellers on brand equity and from 500 consumers on brand loyalty. Relationship between brand equity and brand loyalty is determined through simple linear regression. In table 4 it is seen that the value of adjusted R<sup>2</sup> is 0.854 which means the predictor variable brand loyalty is explaining 85% of the dependent variable.

**Table 4: Showing Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.991	.981	.981	.225

a. Predictors: (Constant), BrandLoyalty

In table 5 it is seen that both the variables are significant for this analysis because the p values are .000 for both the variables (p > 0.000). From here we can construct the first equation.

**Table 5: Showing Coefficients<sup>a</sup> of Simple Regression for Detergent Brands in Terms of Brand Loyalty and Brand Equity**

Model		Unstandardized Coefficients		T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error			Lower Bound	Upper Bound
1	(Constant)	.219	.057	3.856	.000	.108	.331
	BrandLoyalty	.908	.008	120.995	.000	.894	.923

**Brand Equity = 0.219+ 0.908 Brand Loyalty.....equation I**

**H. Brand Loyalty and Consumers' Willingness to Pay:** In this part of research we have taken two hypotheses for our research. These are as follows:

- H<sub>0</sub>: There is no relationship between Brand Loyalty and Consumer's Willingness to Pay
- H<sub>1</sub>: There is a relationship between Brand Loyalty and Consumer's Willingness to Pay

**Table 6: Correlation Matrix between BLS and Consumers' Willingness To Pay**

		Brand Loyalty	Consumers' Willingness to Pay
Brand Loyalty	Pearson Correlation	1	.971**
	Sig. (2-tailed)		.000
	N	2500	2500
Consumers' Willingness to Pay	Pearson Correlation	.971**	1
	Sig. (2-tailed)	.000	
	N	2500	2500

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Pearson Correlation Coefficient test shows that there is a significant (p= 0.000) relationship between Brand Loyalty Score and Consumer's Willingness to Pay. The two variables are positively correlated with a high value of correlation coefficient i.e. 0.971. This leads us to the rejection of null hypotheses and acceptance of the alternative hypothesis.

- H<sub>0</sub>: Brand Loyalty does not depend on Consumer's Willingness to Pay
- H<sub>1</sub>: Brand Loyalty depends on Consumer's Willingness to Pay

Table 5 shows model summary where these two variables are involved

**Table 7: Showing Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.971 <sup>a</sup>	.943	.943	.63673
a. Predictors: (Constant), CONSUMERS' WILLINGNESS TO PAY				
b. Dependent Variable: BRAND LOYALTY				

It is evident from the above table (Table 7) that the predictor variable Consumers' Willingness to Pay is explaining 94% of the dependent variable Brand Loyalty because the value of adjusted R<sup>2</sup> is 0.943.

From this table 8 we can construct our second linear equation because both the variables are significant for drawing the conclusion, p = 0.000 which is less than p value > 0.005.

**Table 8: Showing Coefficients<sup>a</sup> of Simple Regression for Detergent Brands in Terms of Brand Loyalty and Consumers Willingness to Pay**

Model		Unstandardized Coefficients		T	Sig.
		B	Std. Error		
1	(Constant)	.574	.035	16.635	.000
	CONSUMERS' WILLINGNESS TO PAY	.992	.005	203.241	.000

**BRAND LOYALTY = 0.574 + 0.992CWP.....equation II**

**I. Factors Influencing Consumers' Purchase Decision of Detergent Brands:** Factor analysis is a variable reduction technique. Factor analysis gives the platform for optimization of independent variables to predict the dependent variable in a specific manner. In this study some variables are selected as predictor variables now it is time to check whether all the predictors are important for this study or some variables may be dropped in this case of Detergent related data. To determine appropriateness of the data set was used for factor analysis KMO (Kaiser-Meyer-Olkin) and Bartlett's test of sphericity measures were applied. In case of KMO test if the value lies between 0.5 to 1 then it indicates that factor analysis is appropriate and if Bartlett's test of sphericity is significant (p value is less than 0.005) then the data set is appropriate for factor analysis.

**Table 9: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.943	
Bartlett's Test of Sphericity	Approx. Chi-Square	27180.506
	Df	28
	Sig.	.000

In this study KMO value is 0.943 which is close to 1 and in Bartlett's Test of Sphericity p value is 0.000 which indicates the data set is significant for this test. Nine statements were formed in the form of questionnaire and respondents were asked to give points according to their perceptions.

**Table 10: Statements Related to the Reasons for More Willingness to Pay for a Particular Detergent Brand:**

Label	Statements
Brand Promotion	Interesting advertisements and offers make me change my buying habit of Detergent
Hike in Price	I always compare the price of my brand with other brands and based on that I take purchase decision
Word of Mouth	Before buying a product I always take opinion about the brand from others
Self Image	I choose the brand which reflects my personal or social image
Quality of Product	My brand should be the best in terms of quality
Brand Switch	I always use a particular brand of Detergent and I never switch the brand
Product Line	Variety of products under a brand attract me
Brand Availability	My brand should be available everywhere (online, local stores, shopping malls etc)

### Correlation Matrix:

The correlation matrix was formed based on primary data. The correlation matrix shows strong positive correlation between the statement responses which is one of the prerequisites for factor analysis.

**Anti-image Correlation Matrix:**

Anti-image correlation matrix shows partial correlation among statement responses is significantly low. All most all the off diagonal elements are small these are the indicators of real factors presence in the data. Table 12 is displaying the Anti-image correlation matrix for Detergent related responses.

The data are tabulated in Microsoft excel and IBM SPSS software (version 18) is used for factor analysis of that data. The results generated in factor analysis are as bellow.

**Table 11: Correlation Matrix for Detergent Data**

		BrandPromotion	Self Image	Word of Mouth	Hike in Price	Product Quality	Brand Availability	Product Line	Brand Switch
Correlation	Brand Promotion	1.000	.896	.864	.736	.910	.895	.910	.889
	Self Image	.896	1.000	.866	.763	.917	.840	.917	.917
	Word of Mouth	.864	.866	1.000	.781	.909	.868	.909	.914
	Hike in Price	.736	.763	.781	1.000	.863	.773	.863	.798
	Product Quality	.910	.917	.909	.863	1.000	.897	1.000	.931
	Brand Availability	.895	.840	.868	.773	.897	1.000	.897	.870
	Product Line	.910	.917	.909	.863	1.000	.897	1.000	.931
	Brand Switch	.889	.917	.914	.798	.931	.870	.931	1.000

**Table 12: Anti-image Matrices for Detergent Data**

		BrandPromotion	Self Image	Word of Mouth	Hike in Price	Product Quality	Brand Availability	Product Line	Brand Switch
Anti-image Correlation	BrandPromotion	.164	.000	-.013	.000	.000	-.047	-.001	-.046
	Self Image	.000	.002	-.001	.000	.000	.001	-.002	.000
	Word of Mouth	-.013	-.001	.156	.000	.000	-.031	.000	-.045
	Hike in Price	.000	.000	.000	.000	.000	.000	.000	.000
	Product Quality	.000	.000	.000	.000	.000	.000	.000	.000
	Brand Availability	-.047	.001	-.031	.000	.000	.484	-.001	-.007
	Product Line	-.001	-.002	.000	.000	.000	-.001	.002	-.001
	Brand Switch	-.046	.000	-.045	.000	.000	-.007	-.001	.075

a. Measures of Sampling Adequacy(MSA)

**Table 13: Component Score Covariance Matrix for Detergent Data**

Component	1
1	1.000
Extraction Method: Principal Component Analysis.	
Rotation Method: Varimax with Kaiser Normalization.	

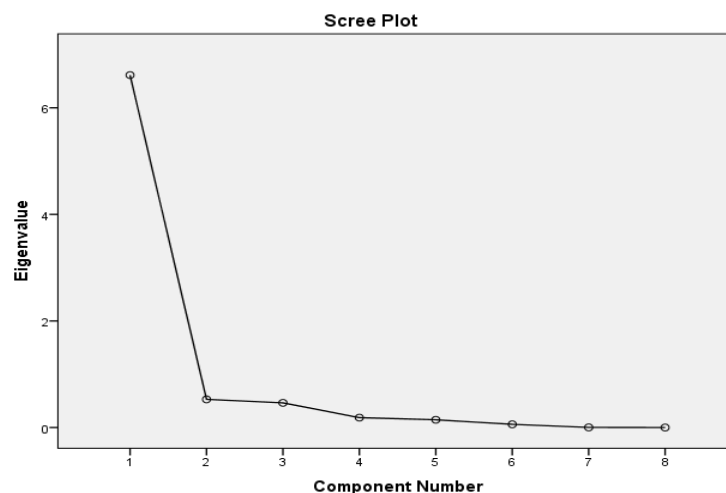
All the variables contributing in that one factor significantly. This can be seen from the component score matrix in Table 14

**Table 14: Component Matrix<sup>a</sup> Component Matrix<sup>a</sup>: Detergent data**

	Component
	1
BrandPromotion	.941
HikeinPrice	.943
WordOfMouth	.942
SelfImage	.868
BrandSwitch	.984
BrandAvailability	.932
ProductLine	.984
Quality of Product	.960
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

**Scree Plot :**

We are retaining only one factor based on eigen value greater than 1. Scree plot is also indication that only one factor is greater than eigen value 1.



**Total Variance Explained:**

Here it is seen that among all the variables quality of product is contributing maximum in the construction of the component. In this factor analysis only one factor is extracted and that single factor is explaining 89.253 cumulative percent of total variance. This indicates this is a pretty good solution.

**Table 15: Total Variance Explained for Detergent Data**

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	7.140	89.253	89.253
Extraction Method: Principal Component Analysis.			

**Table 16: Communalities**

	Extraction
BrandPromotion	.885
HikeinPrice	.888
WordOfMouth	.887
SelfImage	.754

QualityofProduct	.968
BrandSwitch	.869
ProductLine	.968
BrandAvailability	.922
Extraction Method: Principal Component Analysis.	

Communalities of the variable are ranging from 0.968 to 0.754. All these explain variables are inter correlated.

**Rotation:** Here Varimax procedure is used for rotation but as only one factor is extracted rotation could not take place.

**Table 17: Rotated Component Matrix<sup>a</sup> for Detergent Data**

a. Only one component was extracted. The solution cannot be rotated.
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#### Naming the Factor:

In this research only one factor is extracted based on eigen value greater than 1 but all the variables contributing in that one factor more over 89% variability is explained by this only one factor so the factor is named as **willingness to pay mix for detergent brands**. In the next section this factor analysis is validated by multiple regression analysis.

#### A. Validation of Exploratory Factor Analysis through Regression Analysis for Detergent Brands:

Exploratory factor analysis can be validated through multiple regression analysis but in that case regression factor score is assumed to be dependent variable.

#### Willingness to Pay Mix for Detergent Brands (Factor 1):

The multiple correlation coefficients between dependent variable Willingness to Pay and independent variables Brand Promotion, Hike in Price, Word of Mouth, Self Image, Quality of Product, Brand Switch, Product Line, Brand Availability is 0.991. This is an indication of significant influence of independent variables on dependent variable Factor1. In this context it can be said that coefficient of determination ( $R^2$ ) is explaining 98% of variation in factor score 1 by joint variation in independent variables.

**Table 18: Model Summary of Multiple Regression for Detergent Brands**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.991	.981	.981	.225

**Table 19: Coefficients<sup>a</sup> of Multiple Regression for Detergent Brands**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.174	.023		7.669	.000
	BrandPromotion	.098	.008	.098	12.115	.000
	HikeinPrice	-.089	.009	-.084	-10.494	.000
	QualityofProduct	.173	.007	.180	23.954	.000
	SelfImage	.191	.007	-.161	-28.594	.000
	BrandSwitch	-.024	.008	-.025	-2.983	.003
	WordOfMouth	.224	.008	.212	29.748	.000
	ProductLine	.611	.014	.612	44.423	.000
	BrandAvailability	.165	.009	.165	17.952	.000

a. Dependent Variable: Willingness to Pay

Here a regression equation is formed by using constant and unstandardized  $\beta$  coefficients.

**Willingness to Pay = 0.174+ 0.098 Brand Promotion – 0.089 Hike in Price – 0.024 Brand Switch +0.191 Self Image + 0.173 Quality of Product + 0.224 Word of Mouth + 0.611Product Line + 0.165 Brand Availability.....Equation III**



Now from equation II and equation III we can form equation IV by substituting the value of Consumer's Willingness to Pay (CONSUMERS' WILLINGNESS TO PAY) in both the equations we have:

**Brand Loyalty = 0.574 + 0.992(0.174+ 0.098 Brand Promotion – 0.089 Hike in Price – 0.024 Brand Switch +0.191 Self Image + 0.173 Quality of Product + 0.224 Word of Mouth + 0.611Product Line + 0.165 Brand Availability)**

**= 0.746+0.097 Brand Promotion – 0.088 Hike in Price – 0.023 Brand Switch +0.189 Self Image + 0.171 Quality of Product + 0.222 Word of Mouth + 0.606 Product Line + 0.163 Brand Availability ...Equation IV**

Where,

Availability of the brand in retail stores, online stores and shopping malls (BA), Brand Switch (BS), Product Line (PL), Price hike (P), Word of Mouth (WOM), Brand Promotion (BP), Quality of the product (QP)

Now from equation I and from equation IV we are constructing our main equation

**Brand Equity = 0.219+ 0.908 (0.746+0.097 Brand Promotion – 0.088 Hike in Price – 0.023 Brand Switch +0.189 Self Image + 0.171 Quality of Product + 0.222 Word of Mouth + 0.606 Product Line + 0.163 Brand Availability)**

**Brand Equity = 0.896 + 0.088 Brand Promotion – 0.079 Hike in Price – 0.020 Brand Switch +0.171 Self Image + 0.155 Quality of Product + 0.201 Word of Mouth + 0.550 Product Line + 0.148 Brand Availability .....Equation V**

Here is the explanation for the guiding equation and for the predictor variables and their uses to determine the value of Brand Equity. In equation V Availability of the brand in retail stores, online stores, departmental stores and shopping malls (BA) has a positive coefficient because when availability of a brand increases it is placed in visible position in different shops as a result consumers are bound to see these brands which in terns works as stimulator for consumers buying decision. If a brand is always available whenever it is demanded it has a positive effect on consumers' mind which generates brand equity for the brand. At the time of one to one interview we come to know that Brand Switch (BS) has a negative effect on brand equity. When consumer wants to switch a brand then his loyalty towards that brand is reducing so the chance of repeated purchase of that brand is also reducing at the same time. Our data analysis also reflects the same outcome. Price hike (P) is another predictor variable which also has negative impact on brand equity. It is worldwide known fact that if price increases then demand decreases if other variables remain constant. Consumers' willingness to pay for a brand is also face a negative impact if price of a particular brand increases. Word of Mouth (WOM) has a positive and significant impact on brand loyalty, consumers' willingness to pay and in brand equity. If Brand Promotion (BP) is rightly done it also has a positive impact on brand equity. Quality of the product (QP) is very important to gain and maintain brand equity which also evident from our data analysis. Product Line (PL) is very important to gain brand equity because now consumers' are demanding variety from their brand of choice.

Hence we can get the absolute value of Brand Equity when we are subtracting absolute values of Brand Switch (BS) and Price hike (P) from total absolute value of Brand Availability(BA), Product Line (PL), Word of Mouth (WOM), Self Image (SI) Brand Promotion (BP), Quality of the product (QP) taking together with the use of equation V.

#### IV. CONCLUSIONS

Here we have developed a linear equation model to find out Brand Equity of a FMCG brand based on Consumers' Willingness to Pay, Brand Loyalty, Brand Switch (BS), Price hike (P), Brand Availability(BA), Product Line (PL), Word of Mouth (WOM), Brand Promotion (BP), Quality of the product (QP).

- First assumption of this model is its linearity; here we have assumed that consumers' responses are linear in nature (a polynomial with a degree of 1) not quadratic or cubic.
- Second assumption is that all other variable which may influence brand equity are not considered here.
- The model is very simple and any one can find out brand equity of a Detergent brands by using this formula.
- This study is limited to FMCG products.
- More variables can be included to predict Brand Equity of Detergent brands.

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