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ABSTRACT - Brand is an extrinsic cue of a product and stands for its meaning like quality, technology etc. From consumers' point of view brand is value addition. But, for an organization, brand building is an asset creation. The critical management factors such as Brand heuristics, Brand knowledge, Secondary brand knowledge, Brand trust, Brand loyalty, Brand association, Brand extension, Brand delight and Brand equity were studied with respect to toothpaste. The respondents differed with respect to the brand variables such as brand heuristics, brand trust, brand equity and brand delight.

Keywords - Critical Issue, Brand Management, Toothpaste, concsumer.

I. INTRODUCTION

Brand is increasingly becoming the key source of differentiations that guides customer purchase decisions, as the market is characterized by intense competitiveness, driving the companies to differentiate their products through building brands. Today, all kinds of organizations like car manufacturers, insurance companies, banks, industrial product producers, universities, restaurants, and even individuals build their brands. And now, it has happened that even an average person on the streets is talking about brands.

Kotler, Wong, Saunders and Armstrong (2005), define brand as a "Name, term, sign, symbol or design, or a combination of these intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of their competitors.

OBJECTIVE

To identify the factors that captures the critical issues in brand management with reference to brand delight in FMCG sector.

CONCEPTUAL FRAME WORK

The conceptual framework examines brand delight as a dependent variable with brand characteristics, global brand attitude and brand heuristics as independent variables. The variables involved are Brand Characteristics, Global Brand Attitude, Brand Heuristics, Brand Knowledge, Brand Loyalty, Brand Extension, Brand Delight and Purchase Intention. Brand Knowledge is an intervening variable between Brand Characteristics, Global Brand Attitude, Brand Heuristics and Purchase Intention and Brand Delight. Brand Loyalty is an intervening variable between Brand Knowledge and Brand Delight, Brand Knowledge and Purchase Intention, Brand Knowledge. Brand Extension is an intervening variable between Brand Knowledge and Purchase Intention, Brand Loyalty and Purchase Intention, Brand Loyalty and Brand Delight, Brand Knowledge and Brand Delight. Purchase Intention is an intervening variable between Brand Characteristics and Brand Delight, Global Brand Attitude and Brand Delight, Brand Heuristics and Brand Delight, Brand Knowledge and Brand Delight, Brand Extension and Brand Delight, Brand Loyalty and Brand Delight. The conceptual framework consists of a set of independent variables and intervening variables predicting the dependent variable brand delight

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II. RESEARCH METHODLOGY

Keeping these reviews and it was focussed to study on these variables and exclusively focussing on brand heurinstics and secondary brand knowledge as well.

The primary objective of this study is to the influence of demographic factors on critical brand factors such as Brand Heuristics, Brand Knowledge, Secondary Brand Knowledge, Brand Trust, Brand Loyalty, Perceived Quality, Brand Associations, Purchase Intention, Brand Extension, Brand Delight and Overall Brand Equity.

The research design is descriptive and cross-sectorial because at a particular point of time respondents of various sectors are compared with respect to the study variables. Questionnaire was used to collect the data. Two pretests were executed to identify the which category of FMCG product and then it ended up in toothpaste.

Tools used for the Study

S.No.	Variable	Author			
1	Brand Heuristics	(Jacoby and Chestnet,			
		1978).			
2	Brand Knowledge	Chen and He (2003)			
3	SecondaryBrand	Keller (2006			
	Knowledge				



4	Brand Trust	Delgado-Ballester (2003
5	Brand Loyalty	Yoo and Donthu (2001)
6	Perceived Quality	Yoo and Donthu (2001)
7	Brand Association	Yoo and Donthu (2001)
8	Purchase Intension	Chen and He (2003)
9	Brand Delight	Karthikeyan. (2009)
10	Brand Equity	Yoo and Donthu (2001)

Pilot Study was carried out to ensure validity and reliability of the tool. By considering seven experts' opinion and by using CV ratio the validity was ensured as greater than 0.07. The Chorn bach value was found to be in the range of 0.79 to 0.97.

Sample size

To determine the sample size the following formula was applied.

$$N = \frac{\left[z_1 - \frac{\alpha}{2}\right]^2 (1 - P)}{\varepsilon^2 \times P}$$

where 'P' is the brand equity level.

$$\left(Z_1 - \frac{\alpha}{2}\right)^2$$
 = table value

 ε^2 is the precision level.

Based on the pilot study the high brand equity level was found to be 21 percent. Assuming type I error at 5% level, the table value is 1.96. Fixing precision level as 15 per cent N has been calculated as 497. Assuming 5% of redundancy, 520 was fixed as sample size. Hence, 520 questionnaire were distributed to respondents.

The sampling technique was purposive because it was intented to compare between rural and urban respondents. These respondents were selected based on their willingness to take part in the study to minimize the error.

Conceptual framework that captures critical issues in brand management with reference to Toothpaste

Based on the theoretical support, the following hypothesis that investigates the framework was developed.

- H1a: There is significant positive relationship between brand characteristics and brand knowledge of toothpaste;
- H1b: There is significant positive relationship between brand characteristics and purchase intention of toothpaste;
- H1c: There is significant positive relationship between brand characteristics and brand delight of toothpaste;

- H1d: There is significant positive relationship between global brand attitude and brand knowledge of toothpaste;
- H1e: There is significant positive relationship between global brand attitude and purchase intention of toothpaste;
- H1f: There is significant positive relationship between global brand attitude and brand delight of toothpaste;
- H1g: There is significant positive relationship between brand heuristics and brand knowledge of toothpaste;
- H1h: There is significant positive relationship between brand heuristics and purchase intention of toothpaste;
- H1i: There is significant positive relationship between brand heuristics and brand delight of toothpaste;
- H1j: There is significant positive relationship between brand knowledge and brand loyalty of toothpaste;
- H1k: There is significant positive relationship between brand knowledge and brand extension of toothpaste;
- H11: There is significant positive relationship between brand knowledge and purchase intention of toothpaste;
- H1m: There is significant positive relationship between brand knowledge and brand delight of toothpaste;
- H1n: There is significant positive relationship between brand loyalty and brand extension of toothpaste;
- H10: There is significant positive relationship between brand loyalty and purchase intention of toothpaste;
- H1p: There is significant positive relationship between brand loyalty and brand delight of toothpaste;
- H1q: There is significant positive relationship between brand extension and purchase intention;
- H1r: There is significant positive relationship between brand extension and brand delight of toothpaste;
- H1s: There is significant positive relationship between purchase intention and brand delight.

Structural Equation Modelling is used to test the conceptual framework developed by the researcher. The relationship between the exogenous variables and endogenous variables in the hypothesized conceptual framework portrayed in the Figure II predicting brand delight are described in the subsequent sections. The hypothesized conceptual framework developed by the researcher is a recursive conceptual framework and was tested with maximum likelihood method in AMOS 5.0



statistical software. The covariance matrix of the variables are used as input to get appropriate associated statistics.

Structural equation modelling technique was run on the conceptual framework developed by the researcher. It was found that the conceptual framework was just-identified both structurally and empirically with a single unique solution obtained for the parameter estimates. There are a number of rules available for assessing identification, however, the researcher was convinced of identification because AMOS did not provide any reasonable warning on under identification or over identification. Given the complex nature of the conceptual framework identification was avoided. Moreover none of the rules are perfect indicators of conceptual framework identification.

III. TESTING FOR MODEL FITNESS

Before interpreting the results for parameter estimation, the researcher has assessed the fitness of the model using a combination of indices to assess the goodness-of-fit of the model.

The first fit measure is the Minimum Fit Function Chi-Square. The Chi-Square statistic for the researcher's model is 12.05 with 9 degrees of freedom yielding a significant level of 0.21. Chi-square is a good measure of model's fitness that causes acceptance of the null hypothesis that the researcher's model fits the population data perfectly. The researcher firmly rooted his decision on model fitness on chi-square statistics as this is a traditional measure for evaluating model fitness in covariance structure models that provides a 'test of perfect fit in which the null hypothesis is that the model fits the population data perfectly'.

The degree of fitness of the researcher's model is examined by the Non-Centrality Parameter (NCP). The parameter is found to be 3.05 which is very low. This indicated the small size of the estimated discrepancy between model based covariance matrix and the implied covariance matrix. AMOS provides a 90% confidence interval with low value 0.000 and high value 16.29. Thus, the parameter obtained for the researcher's model is a good fit.

The researcher has further used Root Mean Square Error of Approximation (RMSEA). The RMSEA value at 90% confidence level is 0.026. The lower value is 0.000 and the higher value is 0.060. The values are indicative of a good fit. The value along with NCP indicated the small size of the estimated discrepancy between model based covariance matrix and the implied covariance matrix.

The above mentioned measures are well informative to conclude that the model is fit. However, they focus only on error due to approximation. Hence, the researcher examined the overall error given by the Expected Cross Validation Index (ECVI). ECVI for the researcher's model is 0.165. Since there is no single appropriate range for the ECVI coefficient to be compared, the researcher is convinced that ECVI indicates overall fitness of the model because it is the lowest as compared to other models (for example 0.177 for the saturated model).

The researcher further examined the issue of model parsimony using information criteria measures. The Akaike's information criteria (AIC) is used as it adjusts for sample size effect. The AIC for the researcher's model is 82.05. When compared with other models (for example, 88.000 for saturated model) AIC for the researcher's model is the lowest. The researcher is convinced that the overall model examined by AIC is fit.

The researcher has examined model fitness based on the information provided by the residual matrix. The fitted residual measure, the Root Mean Square Residual (RMSR) is 0.028, which is well below the threshold value. This is calculated as the square root of the mean of the squared residuals: an average of the residuals between individual observed and estimated covariance and variance terms. It is indicative of acceptable fit. Since the size of RMSR varies with the unit of measurement, standardized residuals are considered. A fitted residual measure measured as a difference between sample covariance and a fitted covariance is given by the Standardized Root Mean Squared Residual (Standardised RMR). In the researcher's model, Standardised RMR=0.0252 indicates good fit of the model as the value is above the acceptable range.

The absolute fit indices that assess how well the covariances predicted from the parameter estimates reproduce the sample covariances are estimated. The Goodness - Of - Fit Index (GFI) which is an indicator of the relevant amount of variances and covariances is 0.994. This is a higher value that indicated better fit. The Adjusted Goodness - Of- Fit index (AGFI) which is GFI adjusted for the degrees of freedom in the model and the Parsimony Goodness - Of - Fit Index (PGFI) that makes a different type of adjustment taking into account the model complexity are 0.975 and 0.248 respectively. The GFI and AGFI reflect acceptable fits as they are well above the acceptable threshold. The AGFI values are typically lower than GFI value in proportion to model complexity. The PGFI is also an acceptable fit as it is typically lower at 0.248.

The next set of measures are the relative fit indices that show how much better the model fits compared to any baseline model. The researcher felt that Comparative Fit Index (CFI) ought to be relied upon fit assessment and it was found that CFI = 0.997 is close to 1, thus representing good fit. This is a significant index as it has desirable properties including relative, though not complete, but



insensitive to model complexity. Further, other relative fit indices such as Normed Fit Index (=0.988), Relative Fit Index (=0.962) and the Tucker-Lewis Index (= 0.990) are close to 1 indicating perfect fitness value. Therefore, it is proved that the model is fit.



The researcher has the ultimate goal of using these fit indices to discriminate between acceptable and unacceptable models specified. The cut-off value for indices such as the TFI, CFI, NFI or GFI is cited with reasonable support from previous publications. Chi-square value is clear and convincing with evidence that the model is adequate indicating no significant difference between the observed sample and the structural equation modeling covariance matrices. The significant value suggests that the researcher's model capably reproduced the observed variables' covariance matrix-good model fit. The RMSEA value provides an advantage with the model containing reasonably more variables. The above indices provide strong evidence for a good fit model with an insignificant chi-square value with a CFI value = 0.997 and RMSEA (=0.026).

From the above discussion, it is understood that different fit indices assess fit in different ways and the researcher relied on almost all indices to reach a judgment concerning the overall fit of the model. The results of all the indices used in conjunction indicate a good overall model fit and paint a fit model.

IV. PARAMETER ESTIMATION

The parameter estimation is done to generate unique values for the free parameters in the model developed. There are seven methods available to estimate the parameters, though; the researcher used Maximum Likelihood (ML) method. The researcher decided to use ML because of its iterative nature and robustness under the assumption of multivariate normality in providing more statistically efficient estimates. Moreover, it is a full-information technique and less sensitive to moderate departures.

The table 4.33 shows the variables expressed as a linear function of its underlying variable along with its estimate, standard error, the relevant critical ratio and the significant value. The interpretation of the unstandardised parameter estimates are as follows. The magnitude shows the resulting change in a depending variable from a unit change in an independent variable with all other independent variables being held constant. The direction of the change is captured by the sign of the relevant parameter. These estimates describe the effect the variables have in the absolute sense. The standard error is



relatively small except for the variables not affecting the dependent variables. This indicates how the value of the parameter has been estimated precisely. The critical ratio is used to determine the significant difference of a particular variable from zero in the population. Going by the critical ratios, it has been found that the following paths are significantly different from zero at 0.05 level of significance.

Bi-Variate paths		Estimate	S.E.	C.R.	Р	
Brand Knowledge	←	Global Brand Attitude	-0.096	0.019	-5.15	***
Brand Knowledge	←	Brand Heuristics	0.199	0.037	5.34	***
Brand Knowledge	←	Brand Characteristics	0.306	0.243	1.26	0.207
Brand Loyalty	←	Brand Knowledge	0.639	0.038	16.90	***
Brand Extension	←	Brand Knowledge	0.060	0.076	0.80	0.426
Brand Extension	←	Brand Loyalty	0.641	0.072	8.91	***
Purchase Intention	←	Global Brand Attitude	0.012	0.019	0.62	0.538
Purchase Intention	←	Brand Knowledge	0.275	0.055	5.02	***
Purchase Intention	←	Brand Characteristics	-0.141	0.240	-0.59	0.555
Purchase Intention	←	Brand Heuristics	0.019	0.038	0.50	0.618
Purchase Intention	←	Brand Extension	0.129	0.031	4.17	***
Purchase Intention	←	Brand Loyalty	0.418	0.053	7.84	***
Brand Delight	←	Brand Heuristics	-0.041	0.037	-1.12	0.266
Brand Delight	←	Brand Characteristics	0.249	0.232	1.07	0.284
Brand Delight	←	Brand Knowledge	0.361	0.055	6.63	***
Brand Delight	←	Global Brand Attitude	-0.024	0.018	-1.30	0.194
Brand Delight	←	Brand Extension	0.197	0.031	6.43	***
Brand Delight	←	Brand Loyalty	0.271	0.055	4.94	***
Brand Delight	←	Purchase Intention	0.118	0.044	2.70	***

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1 able 4.31	Unstandardised	parameter	esumates

The hypotheses were tested by examining the maximum likelihood estimates, their standard errors and the associated critical ratio values. It is hypothesized that as buyers' perceptions of quality increases, their perceptions of benefits would also increase. Going by the critical ratios, it has been found that the following paths are significantly different from zero at 0.05 level of significance. Hence hypothesis H1d: There is significant positive relationship between global brand attitude and brand knowledge (estimate = -.096; S.E = 0.019; CR = -5.15), H1g: There is significant positive relationship between brand heuristics and brand knowledge (estimate = .199; S.E = 0.037; CR = 5.34), H1j: There is significant positive relationship between brand knowledge and brand loyalty (estimate = 639; S.E = 0.038; CR = 16.90), H1k: There is significant positive relationship between brand knowledge and purchase intention (estimate=0.275; S.E=0.055; CR = 5.02), H1m: There is significant positive relationship between brand knowledge and brand delight (estimate = 0.361; S.E = 0.055; CR = 6.63), H1n: There is significant positive relationship between brand loyalty and brand extension (estimate =0.641; S.E = 0.072; CR= 8.91), H10: There is significant positive relationship between brand loyalty and purchase intention (estimate=0.418;S.E = 0.053; CR = 7.84), H1q: There is significant positive relationship between brand extension and purchase

intention (estimate = 0.129; S.E = 0.031; CR = 4.17), H1r: There is significant positive relationship between brand extension and brand delight (estimate = 0.197; S.E = 0.031; CR = 6.43) and H1p: There is significant positive relationship between brand loyalty and brand delight (estimate = 0.271;S.E= 0.055; CR = 4.94) are supported by the estimates and hypothesis H1a, H1b, H1c, H1e, H1h, H1i, H1l, H1p are not supported. The strengths of the paths that are statistically supported are arranged in descending order.

Brand Extension	\leftarrow	Brand loyalty (=0.641)
Brand loyalty	\leftarrow	Brand Knowledge (=0.639)
Purchase intention	\leftarrow	Brand Loyalty (=0.418)
Brand Delight	\leftarrow	Brand Knowledge (=0.361)
Purchase intention	\leftarrow	Brand Knowledge (=0.275)
Brand delight	\leftarrow	Brand loyalty $(= 0.271)$
Brand Knowledge	\leftarrow	Brand heuristics (=0.199)
Brand delight	\leftarrow	Brand extension (=0.197)
Purchase intention	\leftarrow	Brand extension (=0.129)
Brand Knowledge	\leftarrow	Global brand attitude (-0.096)

Each estimate represents the amount of change in its dependent variable for each one unit change in the variable predicting it. The relative contributions of each predictor



variable to each dependent variable is given by the standardized estimates in table 4.33.

Table 4.33. Standardized Regression Weights

Paths			Estimate
Brand Knowledge	←	Global Brand Attitude	-0.220*
Brand Knowledge	←	Brand Heuristics	0.228*
Brand Knowledge	4	Brand Characteristics	0.054
Brand Loyalty	\leftarrow	Brand Knowledge	0.602*
Brand Extension	\leftarrow	Brand Knowledge	0.039
Brand Extension	\leftarrow	Brand Loyalty	0.443*
Purchase Intention	÷	Global Brand Attitude`	0.022
Purchase Intention	←	Brand Knowledge	0.229*
Purchase Intention		Brand Characteristics	-0.021
Purchase Intention	\leftarrow	Brand Heuristics	0.018
Purchase Intention	←	Brand Extension	0.165*
Purchase Intention	←	Brand Loyalty	0.369*
Brand Delight	←	Brand Heuristics	-0.038
Brand Delight	4	Brand Characteristics	0.035
Brand Delight	\leftarrow	Brand Knowledge	0.289*
Brand Delight	d Delight ← Global Brand Attitude		-0.044
Brand Delight	←	Brand Extension	0.242*
Brand Delight	←	Brand Loyalty	0.230*
Brand Delight	\leftarrow	Purchase Intention	0.113

The R^2 is displayed in table 4.34 for each equation. This value explained the amount of variance accounted for by the independent variables in the equation in the dependent variable. It was observed that the predictor variables

account for 0.475 of the amount of variance in brand delight. Similarly, 0.397 for purchase intention, 0.363 for brand loyalty, 0.219 for brand extension, and 0.104 for brand knowledge.

Table 4.34. R² of the dependent variables

Variables	R ²
Brand Heuristics	0.126
Global Brand Attitude	0.108
Brand Characteristics	0.089
Brand Knowledge	0.104
Brand Loyalty	0.363
Brand Extension	0.219
Purchase Intention	0.397
Brand Delight	0.475

The error variances are shown in table 4.35. These error terms reflect errors in measurement for the measurement part of the model and residual terms for the structural part of the model.

Table 4.35. Error variances

Error terms	Estimate	S.E.	C.R.	Р
e1	0.595	0.038	15.748	***
e2	0.014	0.001	15.748	***
e3	2.370	0.150	15.748	***
e4	0.405	0.026	15.748	***
e8	0.324	0.021	15.748	***
e5	0.831	0.053	15.748	***
e6	0.393	0.025	15.748	***
e7	0.370	0.023	15.748	***

The total standardized effects on each variable is given in the table below:

	Global brand attitude	Brand Characteristics	Brand Heuristics	Brand Knowledge	Brand Loyalty	Brand Extension	Purchase Intention
Brand Knowledge	-0.220	0.054	0.228	0.000	0.000	0.000	0.000
Brand Loyalty	-0.133	0.032	0.138	0.602	0.000	0.000	0.000
Brand Extension	-0.067	0.016	0.070	0.306	0.443	0.000	0.000
Purchase Intention	-0.088	0.006	0.133	0.502	0.442	0.165	0.000
Brand Delight	-0.164	0.063	0.092	0.559	0.387	0.260	0.113

V. FINDINGS AND DISCUSSION

The table 4.36 revealed the total effect at each variable of the path diagram. The total effect includes the effect on the variable from all paths - the direct and the indirect path. The interpretations of the total effects are as follows. It shows that the total effect at brand knowledge from brand heuristics is 0.228; global brand attitude -0.220; brand characteristics 0.054. The total effect at brand loyalty from brand heuristics is 0.138; global brand attitude -0.133; brand characteristics 0.032; brand knowledge 0.602. The total effect at brand extension from brand heuristics is 0.070; global brand attitude -0.067; brand characteristics -0.016; brand knowledge .306; brand loyalty 0.443. The total effect at purchase intention from global brand attitude is -.088; brand characteristics 0.006; brand heuristics 0.133; brand knowledge 0.502; brand



loyalty 0.442; brand extension 0.165. The total effect at brand delight from global brand attitude is -0.164; brand characteristics 0.063; brand heuristics 0.092; brand knowledge 0.559; brand loyalty 0.387; brand extension .260 and purchase intension is 0.113.

The indirect effects of the predictor variables on the dependent through the moderating/intervening variables

are shown in table 4.37. In our conceptualization of the model, brand loyalty has 3 indirect paths, brand extension 6 paths, brand extension 6 paths, purchase intention has 12 indirect paths and brand delight has 24 paths. The standardized path coefficients are given in table 4.33.

	GBA	BC	BH	BK	BL	BE	PI
BK	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BL	-0.133	0.035	0.137	0.000	0.000	0.000	0.000
BE	-0.067	0.018	0.070	0.267	0.000	0.000	0.000
PI	-0.111	0.029	0.114	0.273	0.073	0.000	0.000
BD	-0.120	0.031	0.129	0.269	0.157	0.019	0.000

Table 4.37. The Indirect Effects of the variables

The table 4.37 shows that the indirect effect at brand loyalty from brand heuristics is 0.137; global brand attitude -0.133; brand characteristics 0.035. The indirect effect at brand extension from brand heuristics is 0.070; global brand attitude -0.067; brand characteristics 0.018; brand knowledge 0.267. The indirect effect at purchase intention from brand heuristics is 0.114; global brand attitude -0.111; brand characteristics 0.029; brand knowledge 0.273; brand loyalty 0.073. The indirect effect at brand delight from brand heuristics is 0.129; global brand attitude is -0.120; brand characteristics is 0.031; brand knowledge 0.269; brand loyalty 0.157; brand extension 0.019.

Model modification is not considered as the model is already a well-fitting model and modifications to a wellfitting model can be very unstable. On examination of the above results for theoretical inconsistent estimates, it was found that there was no instance of offending estimates. This was indicated by positive error variances, standardized coefficients not exceeding 1.0 and reasonable standard errors.

VI. CONCLUSION

First, the fact that AMOS output did not encounter any warning indicated a positive sign that the researcher will be able to estimate the model developed. Second, the researcher found that all the estimates of model fitness showing a good fit of the model. Third, an examination of the parameter estimates revealed the absence of unreasonable estimates as none of the error variances are negative. Third, the vast majority of the parameter estimates o and all the error variance are significantly different from zero. Fourth, the signs of the parameter estimates are consistent with the hypothesized relationships among the variables.

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