

## A study on various factors affecting the marketing strategy of healthcare products in India

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### Abstract

Economic liberalization has changed the way of marketing. Rise of the multinational brands are giving tough competition to the national brands. During the last four decades, markets have witnessed tremendous changes. Marketing strategy consists of some valuable tactics that incorporate an organization's marketing goals. The Proper combination of marketing goals, company's objective, and action makes the marketing strategies effective. The main aim of marketing strategy is to increase the sales and profits of any organization or company. The development of marketing strategy is fundamental to the success of any business. There are many factors that impact on the decision in the development of marketing strategy. This research examined the marketing strategy practices of healthcare companies and the various factors affecting the marketing strategy.

**Keywords:** marketing strategy, healthcare product, factors affecting marketing strategy, strategy development process and factors, marketing

### 1. Introduction

American Marketing Association (AMA) defines marketing as, the activity set of institutions, and processes for creating, communicating, delivering, and exchanging goods and services for satisfying the need and want of customer. According to Kotler and Keller (2009) <sup>[4]</sup>, marketing strategies should comprise integrated marketing which means mixing and matching marketing actions to maximize their individual and collective efforts.

Jung and Sung (2008) <sup>[3]</sup> analyzed that marketing strategy is very important that helps in facing competition in the market. The success of marketing strategy depend upon various factors but the main factors that influences marketing strategy are: competitors; company core competency; size of business; financial strength; and government factors. The marketing strategy helps to communicate with customers. While designing marketing strategy if these factors are considered so it will improve customer awareness of products and ultimately to encourage them to buy.

Huang, L. *et al.* (2013) <sup>[2]</sup> studied the impact of the factors influencing the formulation of an effective marketing strategy of Chinese Businesses operating in Jordan. The paper discussed the effects of Broad Environmental Factors (BEF), Task Environmental Factors (TEF) on Marketing Mix (MM) and Marketing Performance (MP). It concluded that there is positive effect of BEF and TEF on MM. There is no significant effect of TEF on MP. Also, there is negative effect of MM on MP. Using path analysis, the research evaluated direct, indirect and total effects of BEF, TEF and MM on MP.

### Objective of study

To study the various factors affecting the marketing strategy of healthcare products in India.

### Research Methodology

The study is an exploratory cum descriptive research design.

The Marketing Professionals of Healthcare firms operating in our country are the population for the study. Cross-sectional, non-experimental and survey method using personal interaction is used. Personal interaction is limited to administration of questionnaires to collect required data. The current study used multi-item measure to evaluate all the variables and the responses were evaluated on a Likert type scale of 1 to 5; where 1 indicated minimum agreement and 5 indicated maximum agreement. Primary data is collected by questionnaire

### Sampling Design

The study used population of Indore region for drawing sample. The study considered individual members of population as sampling elements. Non-probability purposive sampling method was used to draw the required sample. The study had a sample size of 54 respondents (Marketing Managers).

### Tools used for data analysis

The Factor Analysis was applied for the identification of the core factors affecting the marketing strategy of Healthcare products. This technique was considered appropriate as it requires no pre-existing of functional relationships and is a well-known for data reduction. It is used to reduce large number of variables into a few numbers of core factors.

### Data analysis and interpretation

#### Factor Analysis

54 questionnaire (For Manager) forms received by way of primary data collection were loaded to the SPSS 21 software for the Initial analysis. Overall, there were 30 variables, which were having an impact on the marketing strategy of Healthcare products. However, to come out with a Discriminant Analysis output with the entire 30 variables would lead to a very lengthy model. To counter the same, the Factor Analysis was used for

the data reduction. For the data reduction the feedback was taken from Marketing Manager of Healthcare Company.

**Factor Analysis Results**

**Test Adequacy of Sample**

The Kaiser-Meyer-Olkin is the measure of sampling adequacy, which varies between 0 and 1. The values closer to 1 are better and the value of 0.6 is the suggested minimum. The Bartlett's Test of Sphericity is the test for null hypothesis that the correlation matrix has an identity matrix. Taking this into consideration, these tests provide the minimum standard to proceed for Factor Analysis.

**Test hypothesis regarding interrelationship between the variables.**

**Null Hypothesis H<sub>0</sub>:** There is no statistically significant interrelationship between variables affecting the marketing strategy of Healthcare products.

**Alternate Hypothesis H<sub>1</sub>:** There may be a statistically significant interrelationship between variables affecting the marketing strategy of Healthcare products.

**Table 1:** KMO and Bartlett's Test

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>		<b>.590</b>
Bartlett's Test of Sphericity	Approx. Chi-Square	1234.973
	df	435
	Sig.	.000

This table shows two tests that indicate the suitability of your data for structure detection.

Normally,  $0 < KMO < 1$

If  $KMO > 0.5$ , the sample is adequate.

Here,  $KMO = 0.590$  which indicates that the sample is adequate and we may proceed with the Factor Analysis.

**Bartlett's Test of Sphericity**

**Table 2:** Eigen Values – Total Variance Explained

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.722	19.075	19.075	5.722	19.075	19.075	4.795	15.983	15.983
2	3.988	13.293	32.368	3.988	13.293	32.368	3.152	10.506	26.488
3	3.121	10.403	42.770	3.121	10.403	42.770	2.862	9.541	36.029
4	2.525	8.416	51.186	2.525	8.416	51.186	2.607	8.690	44.719
5	2.008	6.692	57.878	2.008	6.692	57.878	2.056	6.854	51.572
6	1.830	6.101	63.979	1.830	6.101	63.979	2.002	6.674	58.247
7	1.510	5.034	69.013	1.510	5.034	69.013	1.980	6.601	64.848
8	1.280	4.265	73.278	1.280	4.265	73.278	1.863	6.210	71.058
9	1.188	3.959	77.237	1.188	3.959	77.237	1.523	5.078	76.137
10	1.032	3.442	80.679	1.032	3.442	80.679	1.363	4.542	80.679
11	.867	2.891	83.570						
12	.785	2.616	86.186						
13	.607	2.023	88.209						
14	.556	1.853	90.062						
15	.494	1.646	91.709						
16	.460	1.534	93.242						
17	.363	1.212	94.454						
18	.283	.944	95.398						
19	.244	.813	96.211						
20	.219	.731	96.943						
21	.198	.660	97.603						
22	.189	.630	98.233						

Taking a 95% level of Significance,  $\alpha = 0.05$

The p-value (Sig.) of  $.000 < 0.05$ , therefore the Factor Analysis is valid

As  $p < \alpha$ , we therefore reject the null hypothesis  $H_0$  (1) and accept the alternate hypothesis  $H_1$  (1) that there may be statistically significant interrelationship between variable.

The Kaiser-Meyer Olkin (KMO) and Bartlett's Test measure of sampling adequacy was used to examine the appropriateness of Factor Analysis. The approximate of Chi-square is 1234.973 with 435 degrees of freedom, which is significant at 0.05 Level of significance. The KMO statistic of 0.590 is also large (greater than 0.50). Hence Factor Analysis is considered as an appropriate technique for further analysis of the data.

**Eigen values (Select those components with Eigen Values  $\geq 1$ )**

The initial components are the numbers of the variables used in the Factor Analysis. However, not all the 30 variables will be retained. In the present research only the 10 factors will be extracted by combining the relevant variables. The Eigen values are the variances of the factors. The total column contains the Eigen value. The first factor will always account for the most variance and hence have the highest Eigen values. The next factor will account for as much of the left over variance as it can and the same will continue till the last factor. The percentage of variance represents the percent of total variance accounted by each factor and the cumulative percentage gives the cumulative percentage of variance account by the present and the preceding factors. In the present research the first 10 factors explain 80.67% of variance.

The rotation sums of the squared loading represent the distribution of the variance after the varimax rotation with Kaiser Normalization. The varimax rotation tries to maximize the variance of each of the factor.

23	.169	.565	98.797						
24	.104	.346	99.144						
25	.091	.304	99.448						
26	.064	.213	99.661						
27	.050	.168	99.829						
28	.033	.109	99.938						
29	.014	.046	99.984						
30	.005	.016	100.000						

Extraction Method: Principal Component Analysis

On the basis of Varimax Rotation with Kaiser Normalisation, 10 factors have been extracted. Each factor is constituted of all those variables that have factor loadings greater than 0.5. 30 variables were clubbed into 10 factors. 10 factors were extracted from the 30 variables used in the study. These 10 extracted factors explained 80.67% of the variability.

**Screen Plot**

The screen plot graphs the Eigen value against the each factor. It can be seen from the graph that after factor 10 there is a sharp change in the curvature of the screen plot. This shows that after factor 10 the total variance accounts for smaller and smaller amounts.

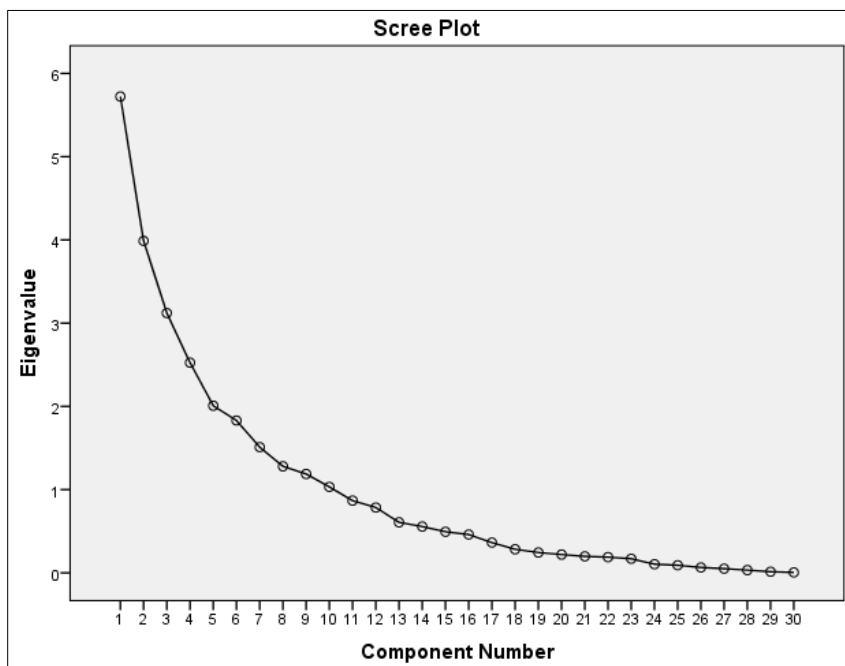


Fig 1

**Identification of the Core Factors**

The Rotated Factor Matrix represents the rotated factor loadings, which are the correlations between the variables and the factors. The factor column represents the rotated factors that have been extracted out of the total factor. These are the

core factors, which have been used as the final factor after data reduction. According to the grouping of the factors, each group of factors is named which will represent the grouped factor and represent the factors.

Table 3: Rotated Component Matrix<sup>a</sup>

	Component									
	1	2	3	4	5	6	7	8	9	10
VAR00001	.183	.816	-.167	-.119	.171		.105			
VAR00002			-.111		.101	-.803	-.106			-.233
VAR00003	.131	.102	.112		.850	.143	.105			-.122
VAR00004	.160	.147	-.133		.202	.100	.863	.122		
VAR00005	.140	-.238	-.550	-.111	.232	.305	.449	-.203	.231	.119
VAR00006	.215		-.740		-.323	-.282	.254		-.205	
VAR00007	.521	.225	-.723			.233				
VAR00008	-.193	.829	-.142			.153			.132	
VAR00009		.151		.265	.728	-.136		.153	-.166	.258
VAR00010	.245	.714	.373	.313					-.245	
VAR00011		.404	.163	.205	.163	-.208	.172	.423		.569
VAR00012	.844	-.243	-.176			-.155	-.130	-.116	-.147	

VAR00013	.207	.124			-.581		.638	-.141		
VAR00014		.289		-.215	.126	.738		.108		
VAR00015	.731	.117	-.266	.107			.175			
VAR00016	-.304		.151	.740			.162	-.289		
VAR00017	.231	.137	.313	.790			.149	.113		
VAR00018	.248	-.116	.691	.222		.428			-.102	
VAR00019	.686		.228	-.102	-.163		.386	.294	-.232	
VAR00020	.477	-.174	.186	.522	.119	.346	.192			.187
VAR00021	.884							.230	-.126	.100
VAR00022	.562	.195	.275				.216	.542	-.331	
VAR00023	.204	-.379		.172	-.206	-.254		.337	.538	
VAR00024		.404	.262	-.606			.231	-.280	.104	.128
VAR00025	.165				.163			.768		
VAR00026	.450			-.529			.271	-.438		
VAR00027	.140	.555	.520		.188				.265	.265
VAR00028	.790	.105		-.230					.225	-.203
VAR00029			.117	.113		-.218			.108	-.807
VAR00030	-.234	.224						-.139	.806	-.107

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization  
 a. Rotation converged in 25 iterations

The above matrix gives the correlation of the variables with each of the extracted factors. Usually, each of the variables is highly loaded in one factor and less loaded towards the other factors. To identify the variables, included in each factor, the variable with the value maximum in each row is selected to be part of the respective factor. The values have been highlighted in each of the rows to group the 30 variables into 10 core factors. Thus, after rotation, Factor 1 accounts for 15.983% of

the variance; Factor 2 accounts for 10.506% of the variance; Factor 3 accounts for 9.541% of the variance; Factor 4 accounts for 8.690% of the variance; Factor 5 accounts for 6.854% of the variance; Factor 6 accounts for 6.674% of the variance; Factor 7 accounts for 6.601% of the variance; Factor 8 accounts for 6.210% of the variance; Factor 9 accounts for 5.078% of the variance; Factor 10 accounts for 4.542% of the variance. All the 10 factors together explain for 80.67% of the variance.

Table 4: Factor Analyses

S. No.	1. Product related factor	Factor loading	Eigen value	% of variation explained
1	Product design is important for making marketing strategy	.521	5.722	15.983
2	Company focus on Research and development	.844		
3	Company focus on Advertising	.731		
4	Standard of living is very important in deciding strategy	.686		
5	Product standard and specification maintained by company	.884		
6	Company has a good Brand image	.562		
7	Company believes in continuous Product Improvement	.790		
	<b>2. Customer related factor</b>			
1	The need, wants & behavior of the targeted customers is understood by the company	.816	3.988	10.506
2	Company focus on celebrity endorsement	.829		
3	Company Focus on Customer satisfaction	.714		
4	Market share development is important in designing marketing strategy	.555		
	<b>3. Research related factor</b>			
1	Marketing cost and revenue systematically analyzed	.550	3.121	9.541
2	Company conduct market research time to time	.740		
3	Company design the product as per Demographic changes	.691		
	<b>4. Promotion related factor</b>			
1	Company is highly involve in Sales promotions	.740	2.525	8.690
2	Company work for Product differentiation	.790		
3	Competition affect framing marketing strategy	.522		
4	Distribution cost is important in designing marketing strategy	.606		
5	New Development in healthcare field affects marketing strategy	.529		
	<b>5. Value chain related factor</b>			
1	There is a strong link between the marketing function and the development of new products	.850	2.008	6.854
2	Company Focus on Value chain satisfaction	.728		
	<b>6. Distribution related factor</b>			
1	Marketing is seen as being more important by managers than other function and orientation	.803	1.830	6.674

2	Distribution network is intensive and effective	.738		
<b>7. Marketing personal related factor</b>				
1	The company marketing people are using marketing information system	.863	1.510	6.601
2	Marketing personal pool affect designing strategy	.638		
<b>8. Return on investment related factor</b>				
1	Return on investment affects marketing strategy	.768	1.280	6.210
<b>9. Features and benefits related factor</b>				
1	Wide range of Features and benefits impacts marketing strategies	.538	1.188	5.078
<b>10. Feedback and PLC related factor</b>				
1	Strategy is made by taking customer feedback	.569	1.032	4.542
2	PLC is important in designing marketing strategy	.807		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 25 iterations.

**Table 5:** Descriptive Statistics

Descriptive Statistics			
S. No.	variables	Mean	Std. Deviation
<b>1. Product related factor</b>			
1	Product design is important for making marketing strategy	3.8704	1.02876
2	Company focus on Research and development	3.6111	1.2196
3	Company focus on Advertising	3.5185	1.37004
4	Standard of living is very important in deciding strategy	3.4444	1.11027
5	Product standard and specification maintained by company	4.2037	1.08818
6	Company has a good Brand image	3.8148	1.01077
7	Company believes in continuous Product Improvement	3.9074	1.24792
<b>2. Customer related factor</b>			
1	The need, wants & behavior of the targeted customers is understood by the company	3.7963	1.4325
2	Company focus on celebrity endorsement	3.4259	1.38185
3	Company Focus on Customer satisfaction	3.1111	1.29828
4	Market share development is important in designing marketing strategy	4.0556	1.18825
<b>3. Research related factor</b>			
1	Marketing cost and revenue systematically analyzed	3.7593	1.00818
2	Company conduct market research time to time	3.537	1.19295
3	Company design the product as per Demographic changes	3.0741	1.14681
<b>4. Promotion related factor</b>			
1	Company is highly involve in Sales promotions	3.2407	1.18058
2	Company work for Product differentiation	3.1852	1.59094
3	Competition affect framing marketing strategy	4.037	1.34533
4	Distribution cost is important in designing marketing strategy	3.5185	1.3138
5	New Development in healthcare field affects marketing strategy	3.8148	1.4152
<b>5. Value chain related factor</b>			
1	There is a strong link between the marketing function and the development of new products	3.8333	1.37017
2	Company Focus on Value chain satisfaction	3.6111	1.2196
<b>6. Distribution related factor</b>			
1	Marketing is seen as being more important by managers than other function and orientation	3.7037	1.35465
2	Distribution network is intensive and effective	3.3148	1.28598
<b>7. Marketing personal related factor</b>			
1	The company marketing people are using marketing information system	3.6667	1.04611
2	Marketing personal pool affect designing strategy	3.5926	1.29613
<b>8. Return on investment related factor</b>			
1	Return on investment affects marketing strategy	4.2778	1.23497
<b>9. Features and benefits related factor</b>			
1	Wide range of Features and benefits impacts marketing strategies	3.6852	1.48989
<b>10. Feedback and PLC related factor</b>			
1	Strategy is made by taking customer feedback	3.5556	1.26888
2	PLC is important in designing marketing strategy	2.3889	1.50993

**Findings**

The Factor Analysis has thus identified 10 core factors that affect the Marketing strategy of Healthcare product. They can be categorized as under

1. Product related factor
2. Customer related factor
3. Research related factor
4. Promotion related factor
5. Value chain related factor
6. Distribution related factor
7. Marketing personal related factor
8. Return on investment related factor

9. Features and benefits related factor

10. Feedback and PLC related factor

The above factors have been discussed in detail as under: -

**Factor 1 –Product related factor**

Factor 1 account for 15.983% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Product related factor consist 7 variables namely product design, R&D, Standard of living, product slandered and specification, Brand image, product improvement and advertising. Thus the marketing managers have to obviously take care of the Product related factor.

**Factor 2 –Customer related factor**

Factor 2 account for 10.506% of the variance this is the second core factor, which affect the marketing strategy of Healthcare product. Customer related factor consist 4 variables namely need, wants & behavior of the targeted customers, celebrity endorsement, Customer satisfaction and Market share development. Thus the marketing managers have to obviously take care of the Customer related factor.

**Factor 3 –Research related factor**

Factor 3 account for 9.541% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Research related factor consist 3 variables namely Marketing cost and revenue, market research and Demographic changes. Thus the marketing managers have to obviously take care of the Research related factor.

**Factor 4 –Promotion related factor**

Factor 4 account for 8.690% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Promotion related factor consist 5 variables namely Sales promotions, Product differentiation, Competition, Distribution cost and New Development in healthcare field. Thus the marketing managers have to obviously take care of the Promotion related factor.

**Factor 5 –Value chain related factor**

Factor 5 account for 6.854% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Value chain related factor consist 2variables namely link between the marketing function and the development of new products and Value chain satisfaction. Thus the marketing managers have to obviously take care of the Value chain related factor.

**Factor 6 –Distribution related factor**

Factor 6 account for 6.674% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Distribution related factor consist 2variables namely Marketing is seen as being more important and Distribution network. Thus the marketing managers have to obviously take care of the Distribution related factor.

**Factor 7 –Marketing personal related factor**

Factor 7 account for 6.601% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Marketing personal related factor consist 2 variables namely marketing information system and Marketing personal pool. Thus the marketing managers have to obviously take care

of the Marketing personal related factor.

**Factor 8 –Return on investment related factor**

Factor 8 account for 6.210% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Return on investment related factor consist 1 variable namely Return on investment. Thus the marketing managers have to obviously take care of the Return on investment related factor.

**Factor 9 – Features and benefits related factor**

Factor 9 account for 5.078% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Features and benefits related factor consist 1 variable namely Features and benefits. Thus the marketing managers have to obviously take care of the Features and benefits related factor.

**Factor 10 –Feedback and PLC related factor**

Factor 10 account for 4.542% of the variance this is the core factor, which affect the marketing strategy of Healthcare product. Feedback and PLC related factor consist 2 variables namely customer feedback and PLC. Thus the marketing managers have to obviously take care of the Feedback and PLC related factor.

**Suggestion**

From the results it is evident that product related factors affect marketing strategy on a greater extent. While designing marketing strategy marketing managers should focus on product related factors like product innovation, research & development, product design, product standard and specification, product brand image and continuous product improvement so that they can make and implement the successful marketing strategy.

**Conclusion**

The researcher drew conclusions based on the study’s research objective. The most specific research objective was to determine the factors influencing the marketing strategies adopted by health care product companies. Findings indicated that Product related factor, Customer related factor, Research related factor, Promotion related factor, Value chain related factor, Distribution related factor, Marketing personal related factor, Return on investment related factor, Features and benefits related factor, Feedback and PLC related factor influenced the marketing strategies adopted by health care product companies. It can therefore be concluded that the marketing strategies adopted by health care product companies are influenced by both internal and external factors.

**References**

1. Akroush, Mamoun. An empirical model of marketing strategy and shareholder value: A value-based marketing perspective, *Competitiveness Review: An International Business Journal incorporating Journal of Global Competitiveness*. 2012; 22(1):48-89.
2. Huang L. *et al.* Factors Influencing the Formulation of Effective Marketing Strategies of Chinese Businesses Operating in Jordan, *International Journal of Business and Social Science*. 2013; 4(2):156-169.
3. Jung J, Sung EY. Consumer-based brand equity;

- Comparisons among Americans and South Koreans in the USA and South Koreans in Korea, *Journal of Fashion Marketing and Management*. 2008; 12(1):24-36.
4. Kotler P, Keller KL. *Marketing management*, 13th Ed, Prentice Hall, Pearson. International Edition. 2009, 59-60.
  5. Marmullaku B. factors affecting marketing strategies: pricing, Channel structure and advertising strategies, *International Journal of Economics, Commerce and Management*. 2015; 3(6):499-509.
  6. Pourdehghan A. The impact of marketing mix elements on brand loyalty: A case study of mobile phone industry, *marketing and branding research*. 2015; 2:44-63.