



# FACTORS DETERMINING THE MARKETING MANAGERIAL EFFICIENCY (WITH REFERENCE TO THE EDIBLE OIL ENTREPRENEURS IN KARNATAKA)

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## Introduction

In India, in the recent decades there has been the emergence of modernised form of edible oil industry and suitable marketing strategies have been designed with an eye to earn enormous foreign exchange. However the current levels of productivity and quality of edible oils and the by-products are not adequate for meeting national requirement and do not match with international standards. Among several reasons for this state of affairs in the industry, one of the most striking lacuna is, inefficient marketing management of the enterprises. In this study, an effort is made to identify the factors that comprise marketing managerial efficiency and specific recommendations are made to improving the marketing managerial efficiency. Managerial efficiency with special emphasis on marketing can be operationally defined as the "degree to which the entrepreneur is able to adopt the practice the effectiveness factors for the purpose of achieving maximum profitability in the enterprise and high degree of consumer satisfaction."

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# Research Methodology

## Objectives of the study:

- To identify the factors that comprise marketing managerial efficiency.
- To develop a device for quantifying marketing managerial efficiency.
- To relate the selected factors to marketing managerial efficiency.
- To offer conclusions on the above study.

## Assumptions of the study:

The following assumptions are made before attempting to make a study about marketing managerial efficiency of the edible oil entrepreneurs.

- Marketing managerial efficiency of edible oil entrepreneurs can be measured in quantitative terms.
- Fifteen identified components directly influenced the marketing managerial efficiency.

## Hypotheses of the Study:

Based on the objectives and assumptions made in the study, the following hypotheses were formulated for testing the Marketing managerial efficiency.

- H1. There is a significant relationship between selected fifteen factors of edible oil entrepreneur with their marketing managerial efficiency.
- H2. Selected fifteen components of edible oil entrepreneurs do cause variation in their marketing managerial efficiency.
- H3. These selected fifteen factors of all helpful in discriminating entrepreneurs on the basis of their marketing managerial efficiency.

## Selection of respondents

The population of the study consists of 150 edible oil entrepreneurs having expeller, solvent extraction and refineries in Karnataka. A convenient sampling technique is adopted for selecting the entrepreneurs from different locations in the Karnataka state.

### Identification of components:

To devise a formula to measure the marketing managerial efficiency level of an edible oil entrepreneur, it is first necessary to identify the components, constituting marketing managerial efficiency. The research interviewed several marketing experts, edible oil entrepreneurs, edible oil dealers/agents, marketing advisory institutional experts and academic professionals, components accepted by them with 75 and more percent of weightage are selected. Accordingly it has been found that the following fifteen components are relevant to decide the marketing managerial efficiency.

They are:

- A. Planning the marketing activities.
- B. Market information seeking ability.
- C. Rational decision making.
- D. Ability to provide product diversification.
- E. Ability to determine the profitable price.
- F. Ability to adopt the effective distribution strategy.
- G. Ability to undertake sales promotional activities.
- H. Ability to use resources efficiently.
- I. Knowledge of forecast the future sales.
- J. Ability to analyse the consumer requirements.
- K. Ability to analyse and combat competition
- L. Ability to provide customer satisfaction.
- M. Ability to cope up with the changing market scenario.
- N. Ability to minimise the marketing costs.
- O. Ability to increase the financial strength.

## Analyses of the Data

The following measures are computed with respect to marketing managerial efficiency scores of 150 edible oil entrepreneurs. The central tendency are computed to show that the data fits a normal distribution. Mean = 80.99, Median = 80.87 and Mode = 81.07. The measures of variations are, highest range score is 98.39 and the lowest score is 58.24. The range of 40.15 indicates that the distribution is widely covered and there is no concentration at the center of the class interval. The quartile deviations are Q1 (25<sup>th</sup> percentile) is 73.90 and Q3 (75<sup>th</sup> percentile) is 88.08. The value of Q.D. was found to be 7.09 which is fairly significant. Therefore it can be concluded that the distribution is not packed at the middle. The value of standard deviation was found to be 8.65. To further establish whether the distribution is normal or not, two tests of divergency - skewness and Kurtosis, were carried out. The value of skewness was found to be -0.0319. Since it is very small negative, it means that the distribution is negatively skewed. The value of kurtosis ' $\beta'$ ' was 3.13 and it was slightly higher than 3 and so the curve is observed to peak more than normal curve and it is leptokurtic. Thus the values of skewness and kurtosis point out that the distribution is almost normal. Chi-square of K - e is  $8 - 3 = 5$  value could be 6.61 and 5 d.f. since the table value of Chi-square at 0.05 level of probability is 11.070, the distribution is supposed to be normal.

## Results

The outcome of extensive statistical analysis of the massive data collected from the 150 edible oil entrepreneurs with respect to marketing managerial efficiency are:

### **Relationship of 15 variables with marketing managerial efficiency:**

For finding out the nature of relationship between marketing managerial efficiency and selected fifteen factors, the zero order correlation coefficients were computed. Table 3.1 reveals ' $r$ ' values with respect to 150 respondents are significant and positive in their relationship at 1 percent level.

### **Relative importance of selected factors in explaining marketing managerial efficiency:**

Table 3.2 presents the results of the stepwise regression analysis which depicts all the significant steps included in the process of explaining marketing managerial efficiency of edible oil entrepreneurs. From the table it is clear that at the first step the variable ' $H$ ' (Efficient use of available resources) is helpful in explaining 58.65%

Table 3.1

Coefficient correlation between each variable with marketing managerial efficiency of edible oil entrepreneurs

n = 150

Variables	r' values
A. Planning the marketing activities	0.4634
B. Market information seeking ability	0.6381
C. Rational decision making	0.3237
D. Ability to provide product diversification	0.2863
E. Ability to determine the profitable price	0.3492
F. Ability to adopt the distribution strategy	0.6369
G. Ability to undertake promotional activities	0.7612
H. Efficient use of available resources	0.7651
I. Knowledge of forecasting the future sales	0.5918
J. Ability to analyse the consumer requirements	0.7113
K. Ability to analyse and combat the competition	0.5412
L. Ability to provide customer satisfaction	0.5186
M. Ability to cope with the changing market scenario	0.7078
N. Minimising the marketing costs	0.5034
O. Ability to increases the financial strength	0.7026

All values are significant at 1% level

Table 3.2

Stepwise regression analysis showing the significant steps include in marketing managerial efficiency of edible oil entrepreneurs.

n = 150

Step No.	Variables entering regression	df	% of variation explained by regression
1.	H	1	58.65
2.	H+F	2	70.15
3.	H+F+B	3	79.93
4.	H+F+B+I	4	84.42
5.	H+F+B+I+D	5	88.25
6.	H+F+B+I+D+A	6	91.19
7.	H+F+B+I+D+A+M	7	93.31
8.	H+F+B+I+D+A+M+N	8	94.46
9.	H+F+B+I+D+A+M+N+C	9	95.22
10.	H+F+B+I+D+A+M+N+C+G	10	96.07
11.	H+F+B+I+D+A+M+N+C+G+E	11	96.78
12.	H+F+B+I+D+A+M+N+C+G+E+O	12	97.42
13.	H+F+B+I+D+A+M+N+C+G+E+O+K	13	97.65
14.	H+F+B+I+D+A+M+N+C+G+E+O+K+L	14	97.79
15.	H+F+B+I+D+A+M+N+C+G+E+O+K+L+J	15	97.95

of variation in marketing managerial efficiency. The predictive power increased with the inclusion of each significant variable in the successive steps. The process was continued till such a step which gave the highest variation. In the subsequent steps the variation seems to be very less. Therefore the further steps were not considered the twelve variables accounted to more than 97 percent variations in the marketing managerial efficiency.

**Classification of edible oil entrepreneurs basing on marketing managerial efficiency:**

The mean score of marketing managerial efficiency is 80.99 and the standard deviation is 8.65 with respect to 150 entrepreneurs. The entrepreneurs have been classified as highly efficient, less efficient and least efficient basing on the following methods.

Efficiency	Scoring	Total scoring
Highly efficient	Greater than (Mean + 1 SD)	(More than 89.64 scoring)
Less efficient	Between (+ 1 SD)	(Between 72.34 & 89.64)
Least efficient	Lower than (Mean - 1 SD)	(Less than 72.34 scoring)

Based on the above scoring levels of marketing managerial efficiency of 150 entrepreneurs could be classified as: 23 respondents are highly efficient, 101 were less efficient and 26 were least efficient.

**Factors which discriminate between highly efficient and least efficient entrepreneurs:**

With the help of the discriminate function analysis, it was possible to identify which factors could discriminate between highly efficient and least efficient entrepreneurs and find out percentage contribution of the selected individual factors to the total distance measured. It can be seen from the Table 3.3 ranking of percentage of distance measured by the important factors. The first five ranks comprising of ability to undertake promotional activities, ability to cope up with the changing market scenario, ability to analyse and combat competition, ability to provide customer satisfaction and market inform seeking ability are very conspicuous in their contribution to the total and in discriminating the entrepreneurs basing on marketing managerial efficiency.

**Table 3.3**

**Discriminant function coefficients of the factors and their relative importance in discriminating the edible oil entrepreneurs as highly efficient and least efficient**

Sl No.	Name of the variable	Mean diff (di)	Discriminant function coefficient standard Canonical (li)	di×li	Percentage to total
1.	Ability to undertake X7	7.82	1.04732	8.19	40.60
2.	Ability to cope with the changing market scenario X13	9.43	0.34929	3.29	16.32
3.	Knowledge of forecasting the future sales X9	2.33	0.68634	1.59	7.92
4.	Ability to provide customer satisfaction X12	3.24	0.67919	2.20	10.92
5.	Ability to analyse and combat the competition. X11	5.76	0.49043	2.82	13.99
6.	Planning the marketing activities X2	4.82	0.42951	2.07	10.25

$D2 = 117.29;$

$F(6, 42) = 213.19.*$

\* Significant at one percent level.



## Discussion and Conclusions:

1. All the selected fifteen factors bear a significant and positive relationship with marketing managerial efficiency at 0.01 percent level of probability. The hypothesis ( $H_1$ ) is that there is significant relationship between selected fifteen factors of edible oil entrepreneurs with their marketing managerial efficiency is accepted.
2. Stepwise regression analysis reveal that out of fifteen factors, five factors were left out due to the variation in marketing managerial efficiency seem to be very less and only ten factors were selected which together explain 96.07% variation in marketing managerial efficiency. Hence the hypothesis ( $H_2$ ) that selected fifteen factors of edible oil entrepreneurs do cause variation in their marketing managerial efficiency is accepted.
3. The discriminant function analysis carried out on two groups of edible oil entrepreneurs classified as highly efficient and least efficient revealed that there is significant distance between the two groups and six factors out of fifteen factors are useful to discriminate the two groups of entrepreneurs. Thus the hypothesis ( $H_3$ ) that the selected fifteen factors are helpful to discriminate between highly efficient and least efficient entrepreneurs.
4. Importance should be given for all the selected fifteen factors while attempting to increase the marketing managerial efficiency of the edible oil entrepreneurs.
5. The instrument developed for measuring the marketing managerial efficiency of edible oil entrepreneurs has been tested, retested and empirically validated. Therefore, this could be used as a tool by bankers, institutional financiers, federation chambers of commerce and other organisations to quantify the marketing managerial efficiency.

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