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### Supply chain management in advance tech energy edibles india.

### MR. D. KRISHNAMOORTHY<sup>1</sup>, MISS JAYSHREE KORAH

<sup>1</sup>Assistant professor, Saveetha School of Management, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, India

<sup>2</sup>MBA Student, Saveetha School of Management, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, India

Email ID: jaysh.xve@gmail.com

**Abstract:** This article is all about Supply Chain Management in "Advance Tech Energy Edibles India Ltd." is the research work that deals with different processes and techniques adopted by various FMCG retail Organizations, specifically and to find gaps that needed to be filled for improvement in FMCG retail. Supply chain management for retail companies strives to control product quality, inventory levels, timing and expenses. A clear supply chain strategy with differentiated service offerings and delivery terms is essential to optimizing the balance of cost and required customer service. An integrated approach considering supply, production, transportation, operations and service is crucial to design the most competitive retail logistics concept for the company. We collected primary data and secondary data about oil manufacturing and how they make logistics on it. To study the influence of demographic variables on customer perspective. To know the relationship between profession and delivery. The article was basically based on the customer's view on the logistics system in the edible oil industry but it consisted of so many things which I learnt, like how to manage people, how to get maximum output from the people and how to make a balance in sales. If a company's product is good then it does not have to worry about things and competitors.

Keywords: Logistics, supply chain, transportation, oil, networking, innovation, customer expectation.

#### **INTRODUCTION**

Supply Chain Management in Advance Tech Energy Edibles India Ltd." is the research work that deals with different processes and techniques adopted by various FMCG retail Organizations, specifically and to find gaps that needed to be filled for improvement in FMCG retail.

Supply chain management for retail companies strives to control product quality, inventory levels, timing and expenses. A clear supply chain strategy with differentiated service offerings and delivery terms is essential to optimizing the balance of cost and required customer service. An integrated approach considering supply, production, transportation, operations and service is crucial to design the most competitive retail logistics concept for the company. Miebach Consulting Group has extensive experience designing and implementing innovative solutions for the largest fast moving consumer goods and retail companies worldwide.

Supply chain management process which has planning, implementing and controlling the operations of the supply chain as efficiently as possible. Supply Chain Management which spans all the movement and storage of raw materials, work-in-process inventory and semi-finished/finished goods from point-of-origin to point-of-consumption. But in the global meltdown like this we are faced with the challenge of reducing inventory and associated costs across the supply chain. To study the factors which affect customers' view on effectiveness of logistics service in the edible oil industry. To study the influence of demographic variables on customer perspective. To know the relationship between profession and delivery.

Our research idea is based on the rich knowledge acquired by our peer teams across the university. (A.C.Gomathi, S.R.Xavier Rajarathinam, A.Mohammed Sadiqc, Rajeshkumar, 2020; Danda et al., 2009; Danda and Ravi, 2011; Dua et al., 2019; Ezhilarasan et al., 2019; Krishnan and Chary, 2015; Manivannan, I., Ranganathan, S., Gopalakannan, S. et al., 2018; Narayanan et al., 2012, 2009; Neelakantan et al., 2013, 2011; Neelakantan and Sharma, 2015; Panchal et al., 2019; Prasanna et al., 2011; Priya S et al., 2009; Rajeshkumar et al., 2019; Ramadurai et al., 2019; Ramakrishnan et al., 2019; Ramesh et al., 2016; Venugopalan et al., 2014) Currently we are working on "Supply Chain Management in Advance Tech Energy Edibles India".

#### **REVIEW OF LITERATURE:**

(Tumpa et al., 2019)The Grocery Stores Food Retailing Consolidation: implications for Supply Chain Management Practices SCM consolidating firms to reap cost saving in store operations procurement of retail

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goods, marketing activities and product distribution. This study considered SCM and consolidation of inbound and outbound logistics improves the financial performance. Study determined the adoption of SCM suppliers contracts in the edible oil industry in Kenya and include other variables like working capital, primary activities, support activities and inventory management as other independent variables. (Baugh et al., 2007)

US Managers of small firm's an empirical analysis of the financial impact of supply chain management on small firms: large firms use SCM initiatives significantly more than small firms and SCM leads to significant improvements in asset utilization, revenue generation. The study explained the effect of SCM on small and large organization structure and ignored other strategies. Current study considered working capital, primary and support strategies as independent variables.

#### (Seth et al., 2008)

This paper is to identify and address various wastes in the supply chain of the edible cottonseed oil industry (specifically the processing side) using a value stream mapping (VSM) approach to improve productivity and capacity utilization in an Indian context. Critical observations and interviewing techniques were used with openended questions to understand the processes involved in the value chain of the cottonseed oil industry. Different chain links/members were investigated through personal visits and discussions. VSM is applied as an approach to the industry to identify and remove non-value-adding (NVA) activities.

#### (Man et al., 2009)

This paper aims to investigate the utilization of Internet technologies in the Malaysian Palm Oil Industry (MPOI) and explore how the technologies have been exploited by the palm oil industry participants to manage their logistics activities. The respondents of the study were the MPOI participants involved in Internet-based activities. The findings revealed that Internet applications were still new and at an early stage. Many participants did not realise the potential of advanced Internet technologies in managing their business activities. Lack of understanding of advanced Internet technologies explains the low level of utilization of these technologies among the MPOI participants. Most of the participants were comfortable with conventional ways of managing their logistics activities.

#### (Prajogo and Olhager, 2012)

Supply chain strategy includes: "Two or more firms in a supply chain entering into a long-term agreement; the development of trust and commitment to the relationship; the integration of logistics activities involving the sharing of demand and sales data, the potential for a shift in the locus of control of the logistics process." (Baker et al., 2012)

The main idea behind this study is to introduce a fuzzy grey relational methodology (FGRM) to determine the importance of customer attributes (CAs) for edible oil, particularly for defining the opportunity of competitiveness which has recently become one of an important concern of manufacturing companies. It was also aimed to seek high quality level of product and process characteristics for meeting the desirability of attributes and for health care.

#### (Wedel and Kamakura, 2012)

Manufacturing firms in the USA, the UK, Germany, Austria, Switzerland and France. The Link between Supply Chain Fit and Financial Performance of the Firm Although the positive relationship between SCM and a company's performance seems to be logical and straightforward SCM was the focus of the study but did not provide sufficient information on what else would be useful to explain value chain financing as a determinants of firm financial performance. The study considered other independent variables which affects the financial performance of edible oil companies in Kenya.

#### (Rajiv and Jagongo, 2014)

Tanzania's Sunflower Farmers Small-Scale Sunflower Farmers: Upgrading the Value Chain Offers a step-by-step practical guide to intervention design for achieving competitiveness that benefits the poor First industries are selected with potential for competitiveness and achieve an equitable distribution of benefits and an action plan is devised to achieve this strategy. It was not clear to what level this occurred, in fact the effects of financial performance was hidden in productivity. Study therefore exposed the effects of support activities on financial performance of edible oil companies in Kenya.

#### (Oksanen et al., 2013)

The objective of managing the supply chain is to synchronize the requirements of the customer with the flow of materials from suppliers in order to affect balance between what are often seen as conflicting goals of high customer service, low inventory management and low unit cost.

### (Cooper et al., 2013)

Supply chain management is "An integrative philosophy to manage the total flow of a distribution channel from supplier to the ultimate user."

The sampling size of a proportion of performances or deliveries in order to reach a decision about acceptance of the total. The sampling size would involve testing one in two of every performance or delivery. Attaining high response rates in survey based supply chain management research is becoming increasingly difficult, but small

samples can limit the reliability and validity of empirical research findings. The purpose of this sampling size is to analyze the status and provide a discussion of methodological issues related to the use of small samples in supply chain management research.

The recommendations provided in this sample size can greatly benefit researchers in the field of supply chain management. By following these proposals, the reliability and validity of research findings will be increased, researchers will be better equipped to investigate interesting questions where small samples are the norm rather than the exception e.g. the study of dyadic supply chain relationships and important and valid contributions to the theory and practice of supply chain management will be generated.

#### **RESEARCH METHODOLOGY**

In this study a quantitative research approach is implemented since the purpose of this study is to gain knowledge about an entire population. This could also be achieved with a qualitative research approach. However, findings of qualitative character cannot be analysed statistically and presented in numbers since the problem at hand are investigated deeply with a smaller number of respondents. This result in that qualitative research cannot achieve generalizability to the same extent as a quantitative research approach where the results are supported statistically. Further, this study strives not to gain deeper knowledge about the studied variables but no assess the relationship between the variables to support or reject the hypothesis in this study. There are two different type of sources of information that are commonly used in research. These types of data sources include secondary and primary data. Secondary data is information collected with another purpose than to help answer the specific problem at hand. This type of data can further be divided into internal and external secondary data. Internal secondary data derives from inside an organization and is internal information such as strategy documents and annual reports.

#### DATA ANALYSIS AND INTERPRETATION

The sample profile of the study is represented through the following charts.



Fig.1: the pie chart shows the analysis of gender. From the table it is clear that majority of the respondents are male (55.6%) and female respondents are less in number (44.4%).



Fig.2: the pie chart shows the analysis of age. It is clear from the table that majority of the respondents are those whose age is below 25 (40.7%) followed by the age which lies between 25-35 (49.1%) and 35-45 (7.4%). It is inferred from the table that majority of respondents age is below 25.



Fig.3: the pie chart shows the Analysis of profession. It is clear from the table that the majority of the respondents are students (57.4%) followed by employees (36.1%) followed by entrepreneurs (2.8%). It is inferred from the table that the majority of respondents are students.



Fig.4: the pie chart shows the Analysis of Education level. From the table it is clear that the majority of the respondents are Postgraduate students (67.6%) followed by Undergraduate students (26.9%) followed by High School students (3.7%) followed by P.H.D (1.9%). It is inferred from the table that the majority of respondents are Postgraduate Students.

S. NO.	Item	Mean	Rank
1.	How many parcels do your company receives every day		1
2.	How many authorized dealers are in the city for the company		2
3.	How are the receipts generated at the authorized dealer while receiving parcels		3
4.	Please tick for the information which is printed on the receipts (customer name)		5
5.	Please tick for the information which is printed on the receipts	1.40	4
	( receipts name )		

The above table shows the Mean Analysis of Parcel received by company are displayed in a It shows variable analysis includes the highest mean score of 2.14, from this it is known that, the number of parcel handling lies around per day. The ability to handle a huge number of parcels could be attributed to better value chain, increased customer base and incorporation of information technology.

#### **Table 2: Collecting Parcels**

S.NO.	Item	Mean	Rank
1.	How are the parcels brought from the authorized dealer to the area hub		3
2.	How many trips in a day are made for collecting parcels from the authorized dealers	2.26	1
3.	On an average how long does it take to do the segregation of parcels from different	2.13	2
	location prior dispatch		

The above table shows the Mean Analysis are displayed in the It shows the variable includes the highest mean score of (2.26), from this it is known that, the number of authorized dealer lies around. This could be attributed to the fact that Advanced Tech Energy Edible Ltd are trying to increase their customer network throughout the city. More number of authorized dealers means better service to the customer and addition of more number of customer.

#### **Table 3: Dispatch of parcels**

S. NO.	Item		Rank
1.	How many trips of vehicle are made for the dispatch of parcels to destination in a	2.29	1
	day		

2.	Is the facility for tracking the package available online	1.21	3
3.	On an average how many days does it take to send a parcel anywhere in india	2.18	2

The above table shows the Mean Analysis are displayed in the table. It shows variable includes the highest mean score of (2.29) from this it is known that, Majority of the parcel operators have two trips per days to bring the parcels from its various authorized distributors, one trip in the morning and the other in the evening. The reason for having 2 trips can be attributed to the fact that it gives sufficient time for the dealers to get more parcels to deliver when the next vehicles comes for pick up. More of the Advanced Tech Energy Edible company limit pick up upto 2 trips per day as it is more economical.

### **Table 4: Outsource of logistics**

S.NO.	NO. Item		Rank
1.	On an average how many days does it take to send a parcel outside india		1
2.	What kinds of vehicles are used to dispatch the parcel destination area hub to the	1.27	3
	customer address		
3.	Does your company outsource the logistics to a third party vendor	1.54	2

The above table shows the Mean Analysis are displayed in the table. It shows the variable includes the highest mean score of (2.42) from this it is known that Majority of the company do not outsource there logistics to a third party vendor, the main reason being Advanced Tech Energy Edible industry is fully dependent upon the logistics part, therefore the company's do not want to conciliate on the issues which could result with third party company if it outsource.

#### Table 5: Difference between Gender and Delivery time

S. NO.	Item	Frequency	Significant figure
1.	Difference between gender and delivery time	1.054	0.372

 $H_{0}$  : There is no significant difference among the gender with respect to the delivery time.

H1: There is a significant difference among the gender with respect to the delivery time.

The above table shows the Anova Analysis of differences between Gender and Delivery time. It shows that significant value is greater than 0.05, null hypothesis is rejected. So it is concluded that there is a significant difference between gender and the delivery time.

#### Table 6: Difference between profession and how the parcel dispatches

S. NO.	Item	Frequency	Significant figure
1.	Difference between profession and how the parcel dispatches	0.728	0.537

H<sub>o</sub>: There is no any significant difference between profession and the parcel dispatches.

H1: There is significant difference between profession and how the parcel dispatches.

The above table shows that Anova with F and significant value it shows the table that significant value is greater or lesser then 0.05 it is concluded that significant value is greater then the value frequency accepts null hypothesis.

### Table 7: Differences between profession and parcel received a company everyday

S.NO.	Item	Frequency	Significant Figure
1.	Difference between profession and parcel received a company everyday	1.054	0.372

H<sub>o</sub>: There is no any significant difference between profession and parcel received a company every day.

H<sub>1</sub>: There is a significant difference between profession and parcel received a company every day.

The above table shows that Anova with F and significant value it shows the table that significant value is greater or lesser then 0.05 it is concluded that significant value is greater then the value frequency accepts null hypothesis.

#### CONCLUSION

The clubbing of various Supply Chain Management practices of Indian FMCG organizations emerged as few exclusive factors through research study, which were different on agreement continuum and adoption continuum from each other. The result of study revealed that supply chain partnership and supply chain networking are considered to be dominating factors for Indian FMCG organizations.

FMCG companies have to worry to provide that product which is not only the fulfilling the rules and regulations of government but also satisfy the customer. Edible oil products do exactly that. To achieve this position, the edible industry first wanted to increase its product availability in the market and it did by expanding its coverage area.

The project was excellent and the learning was more than that. It was great to get the knowledge how to manage a territory in an industry like FMCG. Learning was also valuable. The project was basically based on the customer's view on the logistics system in the edible oil industry but it consisted of so many things which I learnt, like how to manage people, how to get maximum output from the people, and how to make a balance in sales. If a company's product is good then it does not have to worry for things and competitors. It gave me understanding that for any FMCG company it is very necessary that first it should make its base work very strong and then it should go for marketing or advertisement. This strategy is also very good. Like my project, the edible oil industry is also doing the same project of expansion of new stores in the whole north to increase its visibility and sales.

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