A study on the growth in Synthetic Lubricants market in India

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Abstract

In engines and machinery, friction is controlled or reduced by lubricants. There are several types of Synthetic lubricants, including esters, Poly Alpha Olefin (PAO) and others. Synthetic lubricants are derived from Synthetic base oils, which can replace and differentiate mineral oil from crude oil. Lubricants derived from oily liquids are not directly derived from petroleum, but show similar characteristics to petroleum-based lubricants. By absorbing the heat generated by moving components of the vehicle and transferring it to the sump or cooler, these lubricants help control the temperature of the vehicle. Collectively, these factors lead to an enhanced overall vehicle life cycle. The aim of this study is to determine the market demand of Synthetic lubricants and to look at the promotion strategies of Synthetic lubricants in order to determine how the market will grow for Synthetic lubricants. The study has been conducted on the basis of secondary data which has been gathered from various books, journals, magazines, newspapers and different reports; out of which, the report on which the study is majorly focused on is: "Synthetic Lubricants Market– Forecast (2020-2025)", by Industry ARC; which analyzes the Synthetic Lubricants Market according to its type, product type and geographical segments. The automotive industry has seen substantially increased production and sales of vehicles in recent years, and that has been a key market driver for Synthetic lubricants. The OICA estimated that the global vehicle production reached 97 million units in 2017. Among other regions, including APAC and North America, there is a great deal of progress being made in the automotive industry.

Keywords: Synthetic Lubricants, India and Demand.

Introduction

Following the United States, China, Russia and Japan, India is the fifth largest lubricant market in the world. According to estimates, the Indian lubricant market is worth over 240 billion rupees and

produces 2 million MT per year (Pant, G. (2008)). One of the fastest growing markets in the world, it has an annual growth rate of 3 to 5%. Compared to the developed countries with stagnating or negative growth rates, India is enjoying an extremely high growth rate due to the widespread use of automobile transportation, there is a high level of rural demand, an increase in industrial production, and infrastructure investments by the government. Lubricants in India were deregulated in 1993, causing global firms to rush to the rapidly growing market to grab a share of the large market (Kim et. al. (2004)). The number of lubricants being marketed in India has increased considerably. Despite the influx of global players, three public sector undertakings continue to dominate the market with their respective brands: “Indian Oil Corporation Limited, with its brand – Servo Lubricants, Hindustan Petroleum Corporation Limited, with its brand – HP Lubricants and Bharat Petroleum Corporation Limited, with its brand – MAK Lubricants", who together have a market share of over half.

Literature Review

Typically, Synthetic lubricants are made from Synthetic base stocks of Group IV and Group V, as well as by chemically modifying mineral lubricant base oils of Group III and adding various performance-enhancing chemical additives (Shahnazar et. al. (2016)). Their molecular structure makes them more fluid and reduces frictional loss, making them superior to mineral oil based lubricants. Their specialized benefits incorporate better low and high temperature consistency execution, better substance and shear steadiness, diminished evaporative misfortune, protection from oxidation, diminished warm breakdown, diminished oil slop issues, broadened channel spans, natural advantage of less oil squander, further developed mileage, longer motor life, unrivaled assurance against store arrangement in motor, decreased possibilities of harming oil path, obstructing and expanded pull and force because of less beginning drag on motor (Bridge et. al. (2017)).

Manufactured greases are delivered out of costly parts and high innovation creation processes (Fratila, D. (2014)). Thus, they are by and large considerably more costly than regular greases based on mineral oils. Semi-manufactured oils are intended to have the greater part of the advantages of engineered greases and are manufactured at a lower cost than the completely manufactured ones. The term engineered grease, utilized in the oil industry speech, normally

alludes to and incorporates both completely manufactured greases and semi-manufactured oils (Saxonhouse, G. R. (1980)). This review observes a similar guideline and understanding while at the same time alluding to the term manufactured oils. Grease derived from minerals is the most commonly utilized sort and they are a lot less expensive than the others.

CHANNEL STRATEGIES OF LUBRICANTS MARKETERS

There are a variety of channels that lubricants marketers in India use to market their goods and services to the end customers. Almost exclusively, lubricants are marketed through physical channels (Saha, D. (2015)). Throughout India, lubricants are available in every corner, even in the most remote regions with the presence of machines and vehicles. However, electronic commerce via virtual channels has yet to make an impact. Lubricants are manufactured in blend plants where they flow physically through channels. Through various distribution points managed by the firm or its channel partners, lubricant is delivered to customers via warehouses, clearing and forwarding agents, wholesalers, stockists, distributors, dealers, etc (Dent, J. (2011)).

Individual car owners, people operating fleets of commercial vehicles, owners of agricultural equipment, boat owners, trawler owners, ships owners; as well as government institutions, including railroads and the military have varying needs and purchase habits. Lubricants marketers utilize a variety of channels, therefore, to address the needs of a variety of customers (Du et. al. (2012)). Synthetic lubricants are not being marketed through any differentiated channel and are available through all channels. This section discusses in detail the various channels.

DIRECT CHANNEL:

Lubricant companies that sell directly to consumers are known to use direct channels. They directly sell their products to customers without referring them to retailers (Agbo, C. K. (2016)). Large and medium companies, as well as airlines, fleet companies, and government agencies like the military and railways use this channel. In order to meet these customers' needs, high volumes of lubricants must be transported by truckloads within short delivery windows. Bidding through sealed tenders is often the method of purchase. Companies that offer heavy discounts to win tenders are at a competitive disadvantage because of high volumes at stake (Kanavos et. al. (2012)).

STATIONS AUTHORIZED FOR SERVICE:

Increasing brand confidence is one of the most important reasons for having a wide network of authorized service providers. Their dealers, therefore, are encouraged to open a number of authorized service stations near their customers, including in small towns. Service stations follow the maintenance standards outlined by the vehicle manufacturer and only use original, approved, and recommended spare parts. Customers at these service stations thus take advantage of almost all the free servicing offers of vehicle manufacturers in the first few months. As a consequence, customers visit less frequently to carry out periodic paid services. Customers prefer independent workshops to authorized service stations for major engine and gearbox maintenance. Still, authorized service stations consume vast amounts of lubricants (Liang et. al. (2012)).

VARIOUS RETAIL CHANNELS:

It is estimated that there are approximately 51,000 fuel stations in India, commonly known as petrol pumps, which belong to the state-owned Indian Oil Corporation, Bharat Petroleum, and Hindustan Petroleum (Saha, D. (2015)). These retail outlets sell lubricants produced by these companies. These outlets are referred to as retail channels. Indirectly, companies supply the channel by directly stocking and reselling to them, as well as through a first level intermediary, who is responsible for distributing. Up until the industry was deregulated in 1993, the only means of retailing lubricants was this channel.

As a result of its wide network, ease of access and familiarity, this is a major channel for customers who fuel their vehicles regularly. In spite of some decline in sales through this channel, a number of marketing initiatives have been launched to combat the trend, which are discussed further in the section on promotions (Chaffey et. al. (2013)).

Channels for resellers

There are four types of automotive parts stores in this channel, including distributors, stockists, and multi-brand lubricants as well as exclusive brand lubricants. The emergence of private sector lubricants marketers of various sizes has mushroomed after the decontrol of the economy (.Morse, E. L. (1999)). India's automotive lubricants market is estimated to be covered by over 30 major players. These companies are developing their distribution network in this channel instead of using

the traditional fuel station channel, so they can reach customers more closely. Distributors represent the mainstay of this distribution channel. Distributors usually have exclusive territories under their control. Alternatives based on exclusive product ranges or segmentation of customers are sometimes also used.

A channel devoted to workshops

When vehicles are serviced at workshops, lubricants are normally bought and pumped into the engine sumps. Lubricants are purchased, stocked and sold by some large-scale independent workshops, as well as being serviced. To increase sales of lubricants, they do it this way (Sheffield et. al. (2005)). Unlike other channels in India, this channel is extremely unorganized, often operating from makeshift premises, with no proper documentation and an unsightly environment. Mechanics are often the ones who set them up and own them, having caught the entrepreneurial bug. Personalized service is provided quickly, inexpensively, with high quality and in close proximity to the vehicle owners. Low capital expenditures and the wide range of customers, has allowed them to expand rapidly. The business volume of lubricating oil change is high in this channel (Cohen et. al. (2013)).

Marketers of lubricants: Promotion strategies

Porter's Five Forces model of competition in the lubricant industry shows intense competition between firms, high bargaining power of consumers and suppliers, and relatively low barriers to entry, with negligible substitution threats providing the only respite. A handful of major players dominate the competitive atmosphere, while a large number of smaller firms compete with each other on a fringe basis (Shimomura et. al. (2012)). In India, from price sensitive lubricant markets to cheaper and lower performing lubricants, the major players find their market share continually being chipped away by fringe players.

Due to this, major players are unable to focus on their core businesses while simultaneously strategizing the launching of premium products at skimmed prices for targeting niche segments. To capture long-term value from customers, lubricants marketers are unleashing a host of market promotion mix tools in an environment of hyper competition (Zook et. al. (2016)). Because lubricants are a low-investment category, the investments made in promotional campaigns are

likely to disappear in clutter. Industry-wide, Synthetic lubricants don't have exclusive or differentiated promotion strategies. Instead, the focus is on the product categories, advertisement and marketing communications to the target customers.

Objectives

- To study the demand of Synthetic lubricants in the market.
- To review the promotion strategies of Synthetic lubricants.
- To know the growth in demand of Synthetic lubricants in the market.

Methodology

The study has been conducted on the basis of secondary data which has been gathered from various books, journals, magazines, newspapers and various reports out of which the report on which the study is majorly focused is the report on: "Synthetic Lubricants Market– Forecast (2020-2025)", which analyzes the Synthetic Lubricants Market based on segments such as by product type, by geography and by type of manufacturer.

Results and Discussion

During the forecast period (2021-2026) as shown in figure 1, the Indian lubricants market is expected to register a compounded annual growth rate of more than 1.5%.

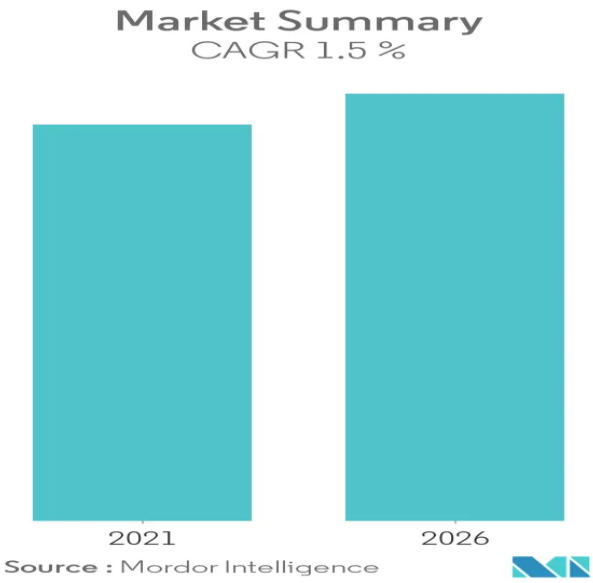

Figure 1. Demand of lubricant

The industrial sector in the country was negatively impacted by COVID-19 in the first half of 2020. As a result of the lockdown during the pandemic, automobile production was halted, and plants were temporarily closed. Lubricant demand was affected by this. The country's automobile production declined from 3.51 million units in the same period of 2019 to 2.16 million units in the first nine months of 2020.

- Among the major factors expected to drive the demand for lubricants in the near future are the increasing use of Synthetic high-performance lubricants.
- In contrast, the slowdown in the automobile industry is expected to slow the market's growth.
- More than 50% of the country's lubricant market was dominated by the automotive industry till 2020.

According to analysts, the size of the Synthetic lubricants market will reach $40 billion by 2025, after growing by 3.2% during the forecast period. Synthetic lubricants are in high demand due to the rising automotive industry and global industrialization. With the introduction of environmental legislation within the automotive sector to minimize carbon emissions, it is expected that Synthetic lubricants will be more in demand, providing many opportunities to Synthetic lubricants manufacturers (Nagendramma et. al. (2012)). As a result of their water solubility, high viscosity indexes, and biodegradability, Synthetic lubricants are becoming increasingly popular. In the market for Synthetic lubricants, high costs are a significant factor.

Market coverage of Synthetic lubricants

ARC provides a detailed analysis of the Synthetic Lubricants Industry in the report: "Synthetic Lubricants Market- Forecast (2020-2025)".

Market Segmentation for Synthetic Lubricants - By Type

The Synthetic lubricants market in 2019 was dominated by Poly Alpha Olefin (PAO). A Synthetic base oil is generally known as PAO, or Synthetic hydrocarbon (Makaryan et. al. (2021)). During alpha olefin catalytic oligomerization, thigh-performance Synthetic lubricants are manufactured.

Synthetic lubricants such as PAO are often used in a wide range of applications and are produced in high quantities. Inherent properties of these compounds include low volatility, high viscosity, low pour point, and high thermal stability and oxidative strength. High-performance functional base fluids for engines, hydraulic systems, transmissions, and compressors are made of them. The oxidative stability of PAO and its wide temperature range make it ideal for a wide range of applications.

Market Segmentation by Product Type for Synthetic Lubricants

Synthetic lubricants market for engine oil in 2019 grew at 3.4% CAGR. Personal vehicles and heavy freight vehicles are the major driving forces of engine oil demand (Reinhart, Y. (2020)). The rapidly developing automotive industry in APAC is also responsible for this dominance. According to OICA, light commercial vehicle production in the APAC region increased by 10.2 % in 2018. International Trade Administration (ITA) data indicates that China is the world's largest vehicle market, with auto production in China expected to reach 35 million units by 2025 (Apisit, S. (2020)). Generally, motor vehicle oil is used to minimize metal-to-metal contact, reduce overall friction and prevent damage. As a result of these liquids, friction of the brake band is reduced, valve operation is improved, gears are lubricated, and torque conversion is improved. The engine oil segment is expected to be driven by rising vehicle sales.

Geographical segmentation of the Synthetic lubricants market

The Synthetic lubricants market in Europe held the largest share of 30% in 2019. In Europe, the demand for Synthetic lubricants is being driven by increased investment in blending plants in countries such as Russia and the Netherlands (Stern, J. (2019)). In addition, stricter CO2 emission regulations have increased the demand for Synthetic lubricants in the transportation sector, as a result of increasing demand for fuel-efficient lubricants. Numerous national eco-labels and schemes have been established in recent years, as well as an international standard describing lubricants' ecological and technical properties. The Synthetic lubricants market in the automotive and industrial sectors has grown since these requirements have been implemented.

Discussion and Conclusion

In the automotive industry, the production and sale of vehicles have experienced significant growth over the years, which has provided the key market driver for Synthetic lubricants.

Globally, approximately 97 million vehicles were produced in 2017, according to the OICA. In North America and APAC, among other places, the automotive industry is experiencing a period of remarkable growth. The number of vehicles sold has also increased dramatically. APAC and North America's automotive industries are booming thanks to technological advances. Volkswagen, GM, FCA, Ford, and Fiat Chrysler Automobiles N.V. all have their main operating base in Brazil. Overall, vehicle sales in 2017 increased by 9.2%. The steady growth of the population in Brazil and Russia will continue to have a positive effect on automotive development. As a result of growing vehicle production, Synthetic lubricants have become more popular. With the increase in road vehicles, Synthetic lubricant demand has grown significantly. A study by the Bureau of Transportation Statistics demonstrates that the typical age of a passenger car in 2000 was 9.1 years and for a light truck, it was 8.4 years. The growing demand for fuel efficiency, in conjunction with the growing number of vehicles, is encouraging oil and lubricant manufacturers to utilize high-quality oils and lubricants, thereby expanding the Synthetic lubricant market.

Challenges faced

Alternative fuels are in high demand

In addition to the increase in demand of Electric vehicles, petroleum-based products are a significant issue for the environment. Alternative fuels reduce carbon dioxide emissions. A compressed natural gas (CNG) vehicle emits less carbon monoxide than a comparable gasoline car, and a liquefied petroleum gas (LPG) vehicle emits less carbon monoxide than an equivalent gasoline vehicle. Since 1992, energy consumption and mobile emissions have been the focus of the Energy Policy Act (EPACT) in the United States. German, French, Norwegian, Swedish, Austrian, and Swiss governments are attempting to reduce their dependence on petroleum products. Synthetic lubricants may experience decreased demand due to these factors.

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