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### "Tyre Retreader's Perception About Quality & Brand"

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#### **Abstract**

Substantial number of scrap tyres is the result of growth of automobile Industry. Advent of technology has paved the way for re-treading industry. This industry has at most important due to various socio-economic benefits. Internationally recognized recycling technology has help to save environment, help in energy conservation and less emission of harmful gases which is the result of tyre manufacturing. However, the Indian re-treaded tyre lacks of systematic research in terms of technology theory, craft and detection etc resulting into re-treaded tyre are not reached to quality standard. Failure of the tread, sidewall, ply, buffer layer and bead delaminating and cracking are the common problems in re-traded tyres. Due to this malfunction of the tyre could be the result of traffic accident of the moving vehicle. This seriously influences the demand of re-treaded tyre, and the person safety. The main aim of this research is to evaluate retreader's perception towards performance of tyres and its influence on brand image. The research was carried out to understand different types of retread tyres and to determine the benefits for retread tyres. The population for this study comprised of all 60 Retreading centres in Maharashtra. Questionnaires were used to solicit information from the respondents along with the telephonic interview with few of them .The study found out that there are various quality parameters use before retreading of tyre and quality is important as per the perception of tyre retreader over the brand but there an association which they have related with the brand and quality which was revealed during interview with them. Retreaders are carrying perception of brand and influencing market demand. Commission received is the major important component of influencing the demand of brands.

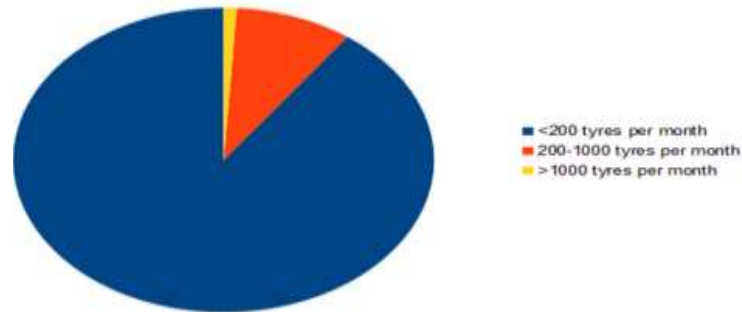
#### **Introduction**

*"As goes the Indian Tyre industry, so goes the Indian Retreading Industry."*

Retreading Industry is growing with the growth of automobile industry ( Retreaders report). Retreading is the process of restoring of old tires for reuse. .In India, roughly half of the retrading industry is organized remaining is unorganized sector. Tread is the grooves which are cut on the tyre surface and ensure the grip between the road surface and tyre. This retreading process extends the life of used tires and

friction becomes less.

There are two options for worn out tyre either to replace with new or retreading of tyre to make it useful for some more time. Although retrading is cost effective than the replacement with new . But retreadeding is depend on the condition of tyre. Not all tyres can be retraded . Only minor defects can be possible to convert in reusable . Advent of new & safe technology, it will be easy and economical to reproduce tyres.

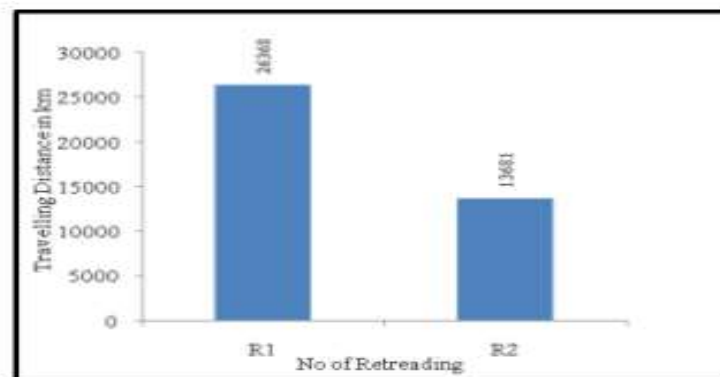


Source: Midas Mileage

Fig 1: Distribution of retreaders

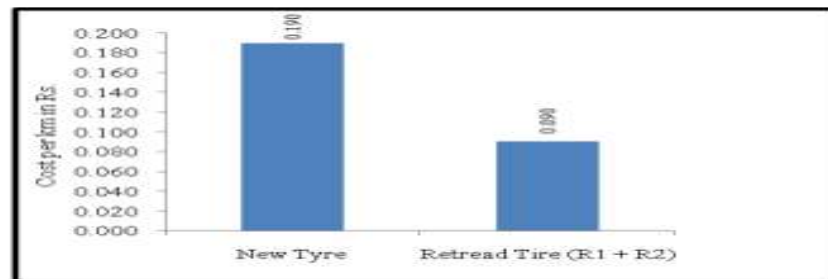
Tire retreading is recycle used tires in an active way. Major benefits of retreading are, it can be done for all vehicle tyres and process is environment friendly. It reduces carbon dioxide emission which is required to manufacture new tyres. Economicaqly it is less costly than new tyre and also saves fuel if worn out tyre are used for longer duration.. Thus it is considered as positive significance for promoting the resource conservation by comprehensive utilization , and sustainable environmental development ( Qiang , et al 2020)

Life of tyre can increase by retreading . It is one of the best process to sace cost of tyre. In practice, commercial vehicles use by the business have to decide whether to retread used tyres or not, It is generally depend on the travel distance after each retreading . Analysis of data of public passenger transportation shows that company can save cost upto 28% and increase life upto 75% as compare to new tyre. (Vankar,2015).



Source: Vankar Bharat et al (2015)

Fig2: Sum of the Total Travelled Distances in Function of Number of Retreading



Source: Vankar Bharat et al (2015)

Fig 3: Comparison for Total Cost Saving on Retreading and New Tyre

In India, retreading is generally done for high price commercial vehicles such as trucks and busses. This can save more than half the cost of a new tyre. Increase in sale of commercial vehicle there is increase in demand of such services. There is huge scope of retreading tyre industry for the commercial vehicle segment in India due to increase in the number of vehicles, rising tyre costs, use of radial tyres, better roads and the introduction of multi-axle heavy duty vehicles

There are big players in the Tyre industry are setting up centers globally to provide retreaded tires. For instance, in March 2019, JK Tyres which is a major player in tyre manufacturing industry, set up its 34th retread center in India with an aim to reach 100 centers by the end of 2020. The center is strategically located on the NH-17 highway connecting the Mumbai-Nasik Highway and will serve as an important transit point for vehicles going to cities like Pune, Mumbai and Surat. (Motor Intelligence report)

### Objectives of the research

- ✓ To understand parameters of quality check before retreading a tyre.
- ✓ To evaluate impact of retreaders perception about different brand

### Literature Review

Retread tires also known as recap tires or remolded tires, This is the process where tyre undergone a remanufacturing process to replace the worn tread on used tires with new tread to extend its life (Anurag Sharma, 2013). Basically there are two types of technology used to retread a tire, Mould Cure (hot system) and Pre Cure (cold system) Siegfried, G. (2000). The majority of problems which are identified for the reasons of treading are Tread Separations and Ply separations followed by Casing. Main reason for the occurrence of the tread separation defects is happened during the repairing step. Analysing these reasons to propose effective actions will lead to quality improvement of tyre (Bahmankhah 2011). Ageing of the tyre is also important parameter to check before retreating by the retreaders (Sempere, Ó. C., & Lozano, M. S., 2020). If we discussed about number of times retreading can be done is depend on cost of new tyre as compare to retreading tyre. Although there is no specific research has been done on retreaders opinion on tyre brand for retreading.

### Methodology

Data collected from retreading centers of Mumbai and some parts of Maharashtra state in India, specifically retreading truck tyres only. Major locations are

Chembur, Vashi, Nerul, Thane Nashik, Nagpur, Chandrapur and Aurangabad etc. The market study gave an opportunity to realize the actual condition of retreading industry, their problems, traditional ways that they are following, positioning of various brands, their requirements and as per that recommendations were generated to increase the visibility of brands and to promote brand in rural areas. Survey by using structured questionnaire of sample retraders has been used. Convenience sampling method as data is mostly possible to collect by using personal networking. Telephonic interview of the close networking retraders had help to get an insight of market..

#### Demographics of the sample are

Type of retreader	Number of retreader
Business	24
Daily Transport	56
Heavy Load	51
Long distance Journey	39
Self-use	19

#### Data Analysis

According to retraders report, Commercial vehicle segment captures the largest market share for tire retreading market. The demand is fueled by the commercial vehicles sales globally which increased with a rate of around 4% during the last 5 years. The demand is rising due to the increase in industrial and logistics activities around the world.

The truck fleet operators are adopting retreaded tires because of the financial benefit it provides them. More than 70% of commercial trucking fleets retread their tires at least one time. As a retread is approximately 1/3 to 1/2 the cost of a new tire, it is a very good option for the fleet operator to save cost. By using a good tire maintenance program, worn tires can be retreaded up to four or five times but normally end users are retreading a tire at least twice.

Table 1: Brands re-treaded more than 10 tyres per month by retreader

Brands	No. of retraders, retraded more than 10 tyres / month	%
MRF	60	20.41
APOLLO	56	19.05
CEAT	54	18.37
GOODYEAR	51	17.35
JK TYRE	46	15.65
BRIDGESTONE	6	2.04
MICHELIN TYRE	0	0.00
CHINESE TYRES	4	1.36
Other BRANDS	17	5.78

MRF, CEAT, APOLLO, GOODYEAR and JK TYRE are major brands in the retreading tyre industry and has maximum frequency of retreading tyres. MRF is market leader and all Retreaders retread MRF tyre at least 10 tyres per month. BRIDGESTONE, MICHELIN TYRE and CHINESE TYRES have very less presence in retreading industry

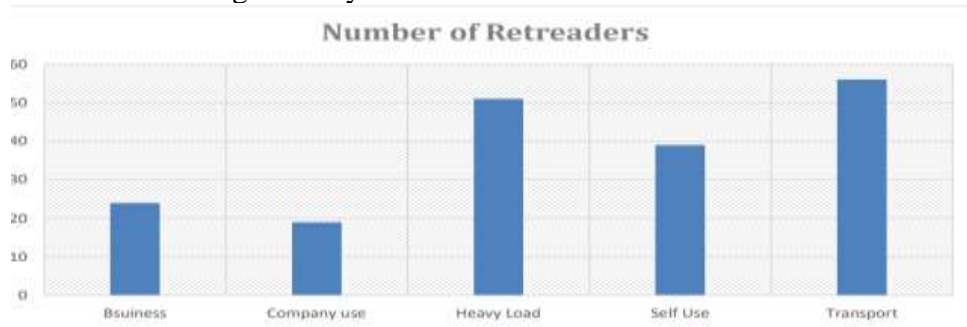


Fig 4: Demographics of sample

Type of customer come for retreading are in the rank of transport services are at highest followed by multipurpose truck drivers

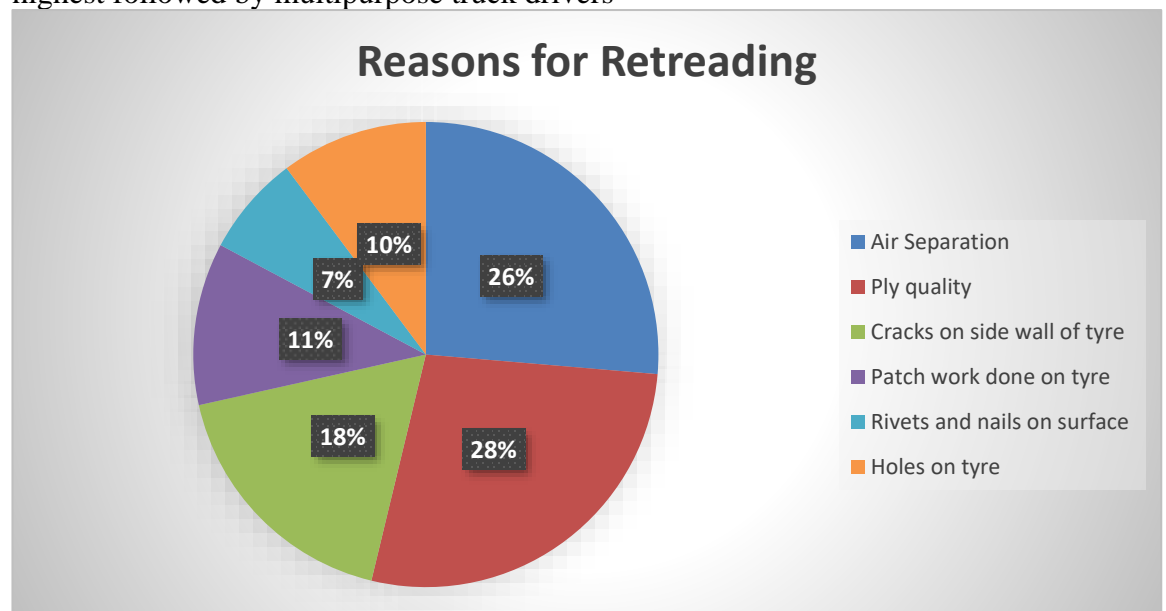


Fig 5 : Reasons for retreading

Quality of tyre come for retreading depends upon the following factors Air separation, ply quality and cracks on side wall of tyre are major variables concern to tyre quality while retreading a tyre.

Factors that influence the retreader to promote a specific brand of tyre

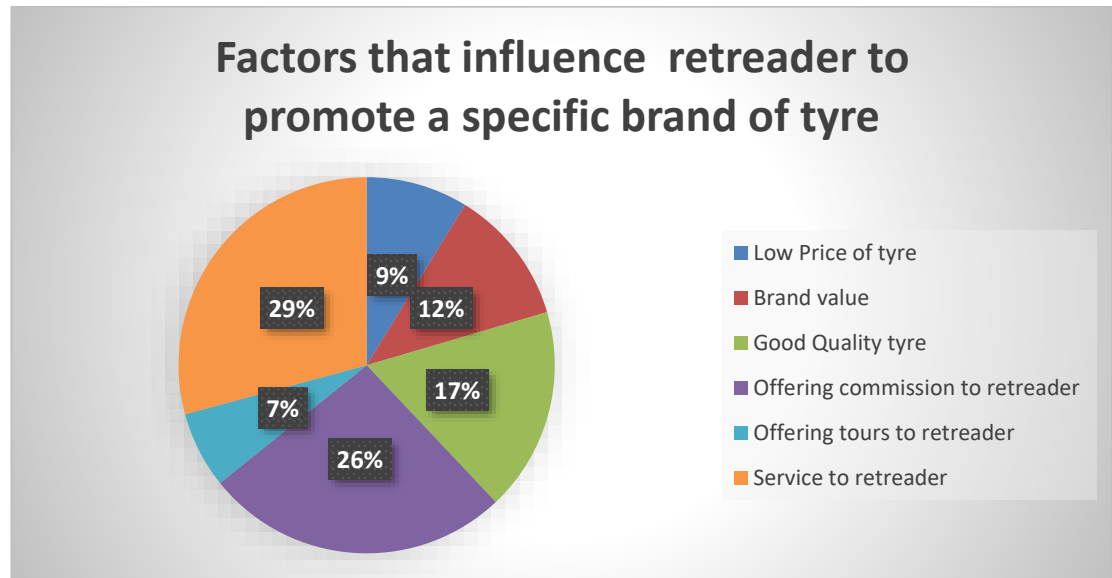


Fig 6: Factors that influence retreader to promote a specific brand of tyre

Those retreaders who are able to market their products as part of an overall fleet tyre management concept and full life package and those who have direct access to their fleet customers are best equipped to survive. Those who have to sell through distributors and those whose products are in direct competition to cheap tyres are the companies who face the bigger challenge. Retreaders who are already tyre distributors have been shown to be more likely to be successful, not only because their profit margins are bigger, but because they are able to have a direct influence over the end user. Commission in the tyre retreading is an important parameter of selection of brand as the graph explains.

### Conclusion

Retreader play a very important role in enhancing the brand image as they come in direct connection with the consumer. They are the live testimonials which brands much leverage on so as to build a strong image in the market. Although there are numerous challenges like best performance as a new tire, fuel consumption is high while using retreads, it is difficult to understand right type of retreading process, the mileage usage of retreads is high, there is lack of awareness of retreads in the Indian market, it is time consuming is to purchase retreads compared to a new tire, product knowledge of retreads is well known within the fleet industries, along with lack of advance technologies in Indian retread industries as more than half percentage is unorganised sector.

Retreaders are promoting the brand primarily depending upon the services and commission on the product. This is followed by quality of tyre. As they are in close connect with user ,they are acting as a influencer and creating image about brand . Better services by the company to these Retreaders will help to ceate demand for the product.

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