

Big Data Analytics based Market Study on GST and Customer Significance over Indian Automobile Segment of Luxury Cars

Syeda Ayesha Siddiqha¹ . Kusum Khehash² . Dollar Konjengbam S³

¹School of Engineering, Presidency University, Bengaluru, India.

²Lovely Professional University, Punjab.

³ICT for Internet and Multimedia, University of Padua, Padua, Italy.

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Abstract – India is known for its rich heritage and cultural values since ancient times. With change in time, India has added various identification parameters worldwide with unique trademark in it. Amongst the many, Indian Automobile Market is yet another emerging field contributing for Indian economy as in India a car represents one’s social status. In this article, a study is conducted on luxury car segment and Indian automobile market after the imposition of GST (Goods and Services Tax). India has witnessed two major revolutions marked in world history, Demonetization and Imposition of One Nation One Tax GST Policy in a span of Six months. These events have a significant impact towards India GDP and growth rate. This article highlights GST vs GDP of Indian economy restricting itself towards Automobile Market. The study is conducted on open social media platforms for review collection, feedbacks and comments evaluation using Bigdata Technology.

Index Terms – Cars, Big data tools, market study, GST

I. INTRODUCTION

This article study is first of its kind to be proposed and evaluated on GST with respect to its impact in GDP focusing and limiting the study parameters within India’s 2nd biggest market, i.e. Automobile. In India, according to Zee Media an average of 3.7Lak vehicles (4 wheelers) are registered every 30days in Bangalore and 3.4Lak in Chennai as of December 2016. Apart from cars, India has a record of having world’s most bi-cycle in 2016.

Looking towards the perspectives of the market and its contribution to GDP is recorded to be 1.6% in general. Since India has seen two major event of Demonetization of 8th day of November 2016 and One Nation One Tax GST Policy on 1st day of July, it is reported to have a major imposition impact on current market scenarios.

Today India is known for Luxury cars and its growing popularity amongst the youth of recorded age group from 22 to 35 years, with peak of elevation at 27.4years on an average. The market targets cars its features with respect to brand name and popularity for technology. Major criteria’s are dependent on selling luxury cars such as Marketing, Digital Platform Polarities and features. This article limits study on i) feature with respect to brand, ii) established brand with respect to promising brands, iii) supply chain demand with respect to popularity on social media.

Objective of Study

- To perform a market’s zerth ground study on GST imposition
- Luxury segment evaluation with current GST market values with previous market values

- GST's significance on Indian GDP as positive and negative factors discussion and evaluation
- Online media and Digital Platform based validation of users and reviewers

Scope of Study

- This study or an article is intended to perform a zeroth level market study marking two major revolution since India Independence on India growth rate
- This study shall be considered as a base bench mark for evaluation of scenarios in various GST products and commodities
- Serves as an medium for Digital Market's and Product review collection environment using Online Social Media (Tweeter)

II. OVERVIEW - INDIAN CAR MARKET & DEMAND GROWTH

India is always a point of discussion for luxury car manufactures and they marketing strategies. Changing economic status is seen on higher scale for major parameters of study such as in customer's attitude, demand and spirit for evaluating new products. Back in 1990's luxury cars and they privilege was restricted with a stipulated borders of upper class families and community with above average social status such as government servants and blooming entrepreneurs. Upto 2007, luxury foreign market adopted policy of "wait and see" and hence hesitated to invest. According to Atwal Jain, in his report in 2012 of luxury manufacturing interest in India, it's described as "In early 2007, a tremendous increase is seen for demand of luxury products in Indian market and a realization for launching and introducing luxury cars in Indian Market"

Since 1980's upto 2005, Indian market had car as symbol of statement, affordable with only one particular class of people such as zamindars, landlords and higher authority government servants. Launch of Maruthi 800 is considered as game changing point for Indian car market with 45,000/- INR. It was during this era

when cars were affordable and network of dealership grew with demand. Upto now, Indian markets were ruled by HM and Maruthi with new players such as TATA in the race. With growing economic status and income, demand for owning cars is realized and in 2005, major foreign car manufactures launched themselves in India amongst which BMW, Mercedes and Audi were few. According to ACG (Autobei Consulting Group) Indian luxury market had expanded with a net worth of \$2.3 billion in 1990's

Today, many interdependent attributes are recorded for evaluating luxury products and they growing demand. In 2020 an estimation of \$150 billion is seen with respect to automobile industry, contributing 12% of total GDP growth contribution. Parallel to economic status growth in Tire I & Metro cities, a research has also shown drastic growth of 18% in HNI's (High Net-worth Individuals) from Tire II and Tire III cities. This has expanded demand factor of luxury in developing cities with trusted dealerships and service centers. Since 2006, BMW entered Indian market with 3,000 units sale and has seen a growth rate of 61% in 2016 with estimated 33,279 units sale.

III. PROBLEM STATEMENT

In present scenario, car manufactures has increased they target orientated market study and has designed one to one approaches for different communities of users based on various variables of demand and customer chain management. With increased in globalization and average income with IT sector influence, a strong inclination is recorded towards luxury cars. Today lower segment luxury cars are launched with minimal features but with brand value and have interrupted economic segments of car manufactures with more prior features then a branded class.

Hence, a leap on luxury as one factor for sales and marketing is no more a core concern for buyers but also prefer brand name and feature based evaluation in prediction to understand buyers with respect to trends and features in near future.

IV. LITERATURE REVIEWS

Various channels of reviews and literature is available on luxury cars, customer demand and Indian market trends. Many online forums, communities and also digital social media platforms are major sources for analyzing the prediction and demand oriented study. ACG (Autobei Consulting Group) has been a constantly pro-active community for providing statistical results in evaluating Indian market prospective and methodologies. From a statistical ratios to Impact of GST published on May 2017 is tracked and hence the same is utilized in our study for evaluating the same with respect to variables considered in study. In 2009, S R Kumar has abbreviated his focus towards customer's v/s brand name. later identifying major influencing parameters such as friends, recommendations, social reviews and price.

Indian car market in luxury segment is majority owned by top three German made brands, Audi, BMW and Mercedes posting a combined scale of 31,000 units in 2016 with a track record of 35,300 units in 2015 with an estimated growth rate of 85,000 units in 2020 as per the result statistics of Economics Times server 2017. On the other hand economic segment car manufactures see a leap of 25,000 units put together in 2015 and the demand scale is likely to be 68,565 units in 2020. The growth rate in this segment is seen with a hike of 15% annually in luxury segment and a drop of 8% in economic segment cars such as Volkswagen, Renault, TATA and Maruthi Suzuki

A primary factor for branded luxury car segments selection is its brand name and foreign make out's and professional cum trendy designs. According to Economic Times report, the Indian Foreign car market is growing significantly by 1.7% to that of China, leading by 7.3% and with Brazil of 2.7% FY 2016. Hence significance is provided towards brand name rather looking forward for features and technology in-use.

V. UNDERSTANDING CUSTOMERS DEMAND

In India like country, customers are Gods and hence higher privilege is provided in satisfying customers and setting philological mindset. Customers have a higher income, rise in disposal income and trend-setting statuses are few to make a bold mark on customer understanding. Technically, Indian market is most promising market according to the latest survey from Zee News Media channel (DNA Reporting) in 2020 and significances are multiple incomes, lifestyle, financial credits, enhancing technology and consumer network recommendation. (Weidman Henning 2012)

For effective evaluation, Survey companies in India have divided Indian customers into three major categories. The Functional category – customers with higher disposable income, technology freaks and demand for new with direct access towards luxury cars, Rewarding Segment – People with Social status and standing opt under this category and last is Indulgence – especially covering youngsters and youth. It is also important to understand that, In India, value for money is an ultimate branding factor. The companies must adopt suitable methodologies in understanding customers expectations with product realize.

Majority of luxury brands, use expensive brochures, cutouts and animated graphics to attract customer's, in prior demonstrating physical experience and hence satisfying customers logical mindset to observe and pay-heed towards marketing hype created by the brands. In India, according to a leading NEWS brand, foreign car manufacturing companies invest 36% more compared to primary Indian and Economic brands such as TATA, Volkswagen and RENUIT. This improves word of mouth perching in social sites and gatherings.

VI. FACTORS INFLUENCING CUSTOMERS

In India, we follow as others follow. With this as bottom-line scenario for marketing, various companies come with various innovative and discussable advertising and launching programs. In this regards, Indian luxury customers are

influenced. Typically, Social media is used for pre-launching advertisement and hence youth and techno customers are targeted. Majority of launches are paid or sponsored in social media and they are target driven. In general these pre-launching programs creates hike on product and hence discussing features amongst customers.

Ms. Puja, in 2014 has categorized an approach for influencing factors such as Audience connection, Friends and Family recommendations, brand image, Age group, Financial Status and Service center availability. Based on these, 76.8% of youth is influenced and 56% of population from Tire II and Tire III cities is influenced. Other primary factors are increased disposal income, availability of loan facilities are few to concern

VII. RESEARCH FINDINGS

Methodology

To evaluate, luxury car demand and its selection with respect to economic brands is a primary objective of study. Statistical data is collected from dealers and Service centers, Reports and survey study is collection from publication houses and online portals, customer reviews and real-time statics is studied from social media and community forums.

On gathering, the data is analyzed, observed using BMP Team's updated reports and stats for pattern identification based on luxury cars influence over brand name in Indian market.

Findings

With respect to our study goal, a Broadway justification can be done on opting branded luxury cars over other affordable luxury cars with economic class. Typically to justify this, we make a comparative study between, Toyota Camry 2.5L with Mercedes-Benz CLA class 45 AMG. Toyota is an economic brand in Indian market manufacturing cars within a price range of 20 Lakhs for a commercial family. Where Toyota Innova, is companies face product in Indian market famous as family car manufacture. Since the footstep of Toyota in India, it is selling

package cars with maximum passenger space and minimal price tag. On the other hand, Benz is known for its class and status symbol for owning imported brand. Though Toyota, a Japanese brand is also imported, it failed to make its face value as that of Benz, on launch of Camry 2.5L with a price tag of 30.70 Lakhs is less afforded compared to Mercedes-Benz CLA class 45 AMG with a price tag of 72.16 Lakhs. In general a relative analysis can be drawn, as 45% of product cost is influenced by its brand name and customers in Indian market is influenced to such posh products.

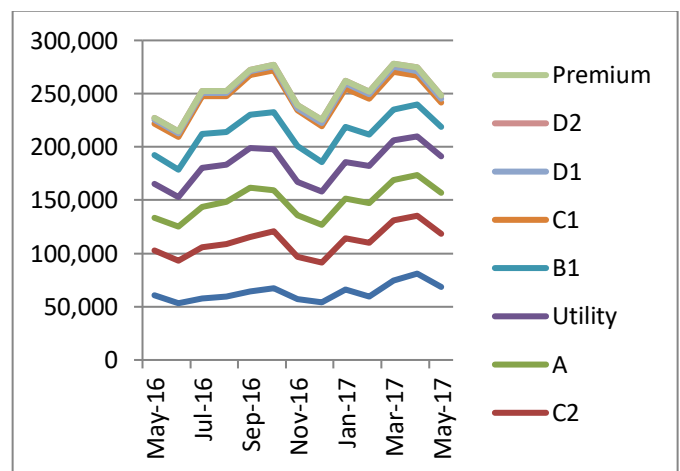


Fig 1: Demonstrating a premium estimation v/s overall auto industry (CARS) scales units from May 2016 to May 2017

Impact of GST

India has seen its major tax reforms since Independence. According to ACG survey report of May 2017, a growth rate can be increased in GDP with 1.5% to 2% on implementing GST. However, such shall also impact luxury car market and customers. According the report of ACG, major impacting factors are importing and exporting parts taxes, distribution taxes, and service cum luxury taxes are waved under 28% slab and few other notable offerings are yet exempted in GST reforms. This reduces the prices ratio of luxury cars after a saturation period; hence a prediction of demand increase towards such branded names shall likely to be increased in near future.

Post GST Tax Rates				
		Base	Cess	Net
Small cars	Petrol	28.00%	1.00%	29.00%
	Diesel	28.00%	3.00%	31.00%
Mid-size cars		28.00%	15.00%	43.00%
Luxury cars		28.00%	15.00%	43.00%
SUVs		28.00%	15.00%	43.00%
Hybrids		28.00%	15.00%	43.00%
Electric		12%	0.00%	12%

Fig 2: Demonstrating Post GST tax rates on Indian Car Segments (Source: <https://www.cardekho.com/india-car-news/impact-of-gst-on-car-prices-in-india-20335.htm>)

VIII. CONCLUSION

Super luxury car makers such as Porsche, Rolls Royce and Lamborghini are now in race to current players of luxury car makers and economic car makers. This impacts system social and logical status with respect to its core brand name and also pushes upper creamy customers of luxury car customers towards super-luxury cars resulting in a trunk hole of 15% loss for luxury brands. Towards the end of FY 2017, majority of international manufactures are expected to establish they production centers in India and hence a large reduction of price with respect to import and parts services can be reduced. This shall make way for economic financial class of customers to afford branded cars and around 15% of current luxury customers to look forward towards super-luxury cars.

It is clear, that India is no longer a poor country interms of trend setting and modernization. With this regard, the major reforms are leading India towards technological improvisations and hence in near future a relative large market is formed for branded products. This is clearly observed from the survey of McKinsey, as the indexing of HNI is increased from 20

million household in 2014 to 35 million households in end of 2017 (an estimative study with given values is conducted to conclude)

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