

**A STUDY ON FACTORS INFLUENCING PURCHASE INTENTION OF
CONSUMERS TOWARDS TWO WHEELERS**Joseph Antony¹, Dr CibyThomas²¹M.tech, Industrial Engineering and Management, Department of Mechanical Engineering, RIT, Kottayam²Associate Professor, Department of Mechanical Engineering, RIT, Kottayam

Abstract — Purchase intention is a plan to purchase a particular good or service in the future. Manufacturers must be aware of the purchase intention of consumers in order to produce and position their product in a highly competitive market. Two wheeler automobile market of India is one of most competitive market in the world and also has emerged into one of the largest automobile market in the world. Purchase intention of consumers depends on several factors. This study aims to explore the factors influencing the purchase intention of consumers towards two-wheelers.

Keywords-purchase intention, two-wheelers, factor analysis

I. INTRODUCTION

In order to manufacture products that meet expectation of customers, the manufacturers must get feedback from consumers who could contribute in giving suggestion on improvement of products based on past experience. The factors affecting purchase intentions of consumers can be understood well by conducting study among consumers who has purchased the product because they have gone through the purchase decision process once and also they know the pros and cons of the product they are consuming. The automobile industry of India accounts for 7.1% of the country's Gross Domestic Product (GDP) [IBEF 2016]. Two-wheeler segment with 81% market share is the leader of the Indian automobile market. The Automotive Mission Plan 2006-2016 released in 2007, visualized India emerging as a destination of choice in the world for design and manufacture of automobiles and auto components with output reaching a level of 145 billion dollars accounting for more than 10% of the GDP by 2016 but has attained only 7.1% of GDP as of 2016. Two-wheeler market of India comprises of mainly three segments which include scooters, bikes and cruisers. The chief producers of two wheelers in India are Hero-MotoCorp, Honda, Bajaj, TVS, Yamaha, Royal Enfield, Mahindra, Vespa and Suzuki. Hero-MotoCorp is the largest two-wheeler manufacturer in India and has a market share of about 46%. Honda has the second place. Among these companies Royal Enfield produces only Cruiser motorcycles. Royal Enfield has climbed into the fifth position among the motorcycle manufacturers in India, on the back of stupendous growth in 2016. The less popular manufacturers include Triumph, Kawasaki, Harley Davidson and KTM.

From a regional perspective, the Southern region leads in terms of two-wheeler sales owing to higher income levels. The eastern region lags far behind the others in two-wheeler demand owing to significantly lower income. There was a decline in sales of two-wheelers due to the demonetization drive by the Government of India for quite some time towards end of the year 2016 and in the beginning of the year 2017.

The objective of this study is to understand the factors affecting the purchase intention of consumers towards two wheelers. Two-wheeler here refers to two wheeled motorcycles. A two wheeler falls under the category of durable consumer goods i.e. a product that doesn't need to be purchased frequently.

II. LITERATURE REVIEW

The literature review of this paper focuses on factors influencing purchase intention of consumers. A number of research papers were explored to discover factors relating to purchase intention. The factors which were relevant to two wheeler purchase intention were retained for study.

According to Kottala Sri Yogi [1] the important factors affecting the purchase of two wheelers were functional aspects, serviceability, conformance, and accessibility. The functional aspects includes Fulfilling the basic needs of a motorcycle , easy to change gear , effective suspension system, easy handling in congested traffic or congested roads and long engine life .The factor serviceability includes the variables aesthetics, reasonable spare parts price, reliability and durability. The factor conformance includes conformance to specifications, appropriate response while taking sharp bends. The factor

accessibility includes acceptable for servicing at any service station and having plastic parts are not easily broken. The factors considered in this study were about quality of the two-wheeler which one perceives after using it.

The study by Dr. A Valarmathi [2] on factors influencing the students buying behaviour of two wheelers has stated the behavioural factors as reputed brand name, better look & style, good mileage, pickup and speed, easy maintenance, after sales service, price, new models, value for money, offers and schemes.

Norah Mwelu Musyoki [4] in his thesis about factors influencing consumer buying behaviour of general motors East Africa's saloon vehicles has shown that perceived price, perceived quality, cultural factors, perceived brand image, level of income.

According to the study conducted by Dr. Ronald Mani & Mr. Debasis Tripathy [3] on the influencing factors of behaviour of consumers of two wheelers are age, occupation, brand, design/style/model, mileage, power, speed, price, technology, after sales service, satisfaction after Purchase.

Social cognitive theory (SCT), of Bandura A [5] used in psychology, education, and communication, holds that portions of an individual's knowledge acquisition can be directly related to observing others within the context of social interactions, experiences, and outside media influences. The theory states that when people observe a model performing behaviour and the consequences of that behaviour, they remember the sequence of events and use this information to guide subsequent behaviours. Observing a model can also prompt the viewer to engage in behaviour they already learned. So according to this theory a part of the knowledge that a consumer utilizes to make purchase decision comes from his environment. A person basically lives in two environments. One is home surrounded by family members, relatives, neighbours etc. And the other one is work environment surrounded by co-workers, friends etc.

The oral transmission of information between consumers is called word of mouth (WOM). According to Brian Mullen & Craig Johnson [6] this WOM becomes an element of the stimulus situation for consumers who receives this oral information. In case of two-wheelers the opinion of other consumers is the information transferred orally.

The study by Herman, R. T, Widiyari, J., Lasmy and Hartono [8] revealed that popular culture affected consumers of Korea. The most common popular culture categories are movies, music, television, games, sports, news, and politics. India is a country rich in popular culture. The social factors identified are:

As a two wheeler driver one of the important factors surrounds a consumer is road accident. According to NDTV report [7]

- 1214 road crashes occur every day in India.
- Two wheelers account for 25% of total road crash deaths.
- 377 people die every day, equivalent to a jumbo jet crashing every day.

There was also an unofficial report that a large percentage of consumers who bought a particular model of motorcycle died in road accidents.

The financial position of a person is determined greatly by income. The study by Wong Ming Wong [9] shows that the purchase intention of automobile consumers is affected by their income

The study by Leow Chee Seng [10] states that product introduced in a market should meet the price expectation of the target customers. If the product is positioned wrongly, affordability mismatch could happen when the product is overpriced. Costs of ownership also include costs of operating and maintaining the product. According to Bruce M. Belzowski [12] Total ownership cost of vehicles consists of depreciation, fuel cost, Repairs, Insurance, Maintenance fees and taxes.

The expenses in relation to two-wheeler vehicle are Price of the vehicle, Maintenance cost, Road tax, Insurance rate, Fuel economy. The resale value of vehicles is as a result of depreciation. The resale value for different model of two-wheelers varies greatly. For example the Cruisers made by Royal Enfield have good resale value compared to other expensive bikes. So finally the Economic factors include.

In order to attract consumers there are several manufacturers offering financial assistance to consumers in the form of credit facility.

According to Chovanová, H. H., Korshunov, A. I., & Babčanová, D [13] Brand image is the key driver of brand equity, which refers to consumer's general perception and feeling about a brand and has an influence on consumer behaviour and brand image has an impact on customer decision making process. The study by Mohammed Alamgir says that well-known branded cars are very famous among the people because consumers trust the brand name. Some brands command high level of brand loyalty due to equity they created. People often purchase well-known brand cars since they are aware of the brand performance. This makes customer's become loyal with the specific brand. Brand offers superior quality of the service up to the customer's expectation and satisfaction. Furthermore, people are much attached to the branded

products, as majority of the people purchase the branded products with the belief that brands show their status and life style in the society.

A consumer of two-wheeler will have to get his vehicle serviced. For this he has to interact with service centre of that particular brand. Through this interaction a consumer perceives the quality of service offered by the brand which might influence his purchase decision of new two-wheeler in future. So service quality is one among the factors that influences brand image. Therefore brand reputation and service quality are interrelated and can affect the brand image.

In the study by Akira Nagasimha [11], country of origin has significant effect on brand perception. According to this study the Japanese considered “Made in Japan” products as inferior to “Made in U.S.A” products and took pride in owning US products than owning Japanese products.

The study by Mohd Rizaimy Shaharudin [14] says that product characteristic attributes, either functional or technical, are associated with consumers’ evaluation of product quality and product quality influences the purchase intention.

The possible factors identified through the literature review and interviews are as follows:

- Work environment
- Family/relatives and neighbours
- Accidents
- Waiting time
- Other consumer’s opinion
- Popular culture
- Income
- Price of the vehicle
- Maintenance cost
- Credit facility
- Road tax
- Insurance rate
- Fuel economy
- Resale value
- Brand reputation
- Country of origin
- Service quality
- Advertisements
- Distance of travel
- Power
- Speed
- Handling
- Build quality
- Auto transmission (Gearless operation)
- Availability of accessories for modification
- Fuel economy
- Kick Starter
- Electric Starter
- Adjustable seat height
- Mobile phone charging facility
- Tubeless tyres
- Alloy Wheels
- Digital speedometer
- Anti-theft Systems
- Pillion seat
- Helmet locking facility

III. METHODOLOGY

The study is based on quantitative research in which data was collected using a structured questionnaire. The aim of this study is to find the factors influencing the purchase intention of consumers towards two-wheelers. For this the possible factors were discovered through literature review and interview. A 5 point Likert-scale questionnaire was developed based on the factors to collect response from consumers. The response data collected was analysed with the help of SPSS software. Exploratory factor analysis was conducted with the help of SPSS software to determine the influencing factors and underlying latent variables.

IV. ANALYSIS

The survey was conducted among a sample size of 601 respondents. The reliability of the measurement scale was tested using Cronbach's alpha in SPSS software. Cronbach's alpha measured was 0.78. The sampling adequacy of data collected was tested using Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy. KMO value obtained was 0.721. A minimum KMO score of 0.50 is considered necessary to reliably use factor analysis.

In order to identify the key factors affecting purchase intention of two wheeler consumers, an exploratory factor analysis was conducted using Principal component analysis method in SPSS software

The table 4.1 shows the Communalities of the variables. Communality is the proportion of variance of each variable that can be explained by the factors. Communality is due to the correlation among variables. Variables with value less than 0.5 were neglected and removed.

Table 4.1 Communalities

Variables	Initial	Extraction
Distance of travel	1.000	.844
Work environment	1.000	.763
Family relatives neighbours	1.000	.805
Other consumer opinion	1.000	.871
Income	1.000	.968
Price	1.000	.978
Credit facility	1.000	.865
Fuel economy	1.000	.962
Maintenance cost	1.000	.935
Brand reputation	1.000	.885
Country of origin	1.000	.764
Service quality	1.000	.721
Advertisements	1.000	.758
Design style	1.000	.867
Alloy wheel	1.000	.750
Build quality	1.000	.884
Speed	1.000	.894
Handling	1.000	.812
Power	1.000	.793
Electric Starter	1.000	.967
Front Disc brake	1.000	.958
Auto transmission	1.000	.904
Adjustable seat height	1.000	.913
Tubeless tyres	1.000	.728

Principal component method was used for factor analysis in SPSS software. The result of factor analysis is as shown in table 4.2. The method of rotation is Varimax with Kaiser Normalization. The factors extracted were named logically as Economic factors, Features, Usage, Brand image, Aesthetics, Social factors.

Table 4.2. Factor analysis

Factors	Component					
	Economic factors	Features	Usage	Brand image	Aesthetics	Social factors
Distance of travel			.915			
Work environment						.870
Family/relatives/neighbours						.895
Other consumer opinion						.928
Income	.981					
Price	.986					
Credit facility	.928					
Fuel economy	.978					
Maintenance cost	.964					
Brand reputation				.939		
Country of origin				.872		
Service quality				.845		
Advertisements				.869		
Design style					.924	
Alloy wheel					.865	
Build quality					.932	
Speed			.944			
Handling			.898			
Power			.888			
Electric Starter		.983				
Front Disc brake		.978				
Auto transmission		.950				
Adjustable seat height		.955				
Tubeless tyres		.851				

V. CONCLUSION

The factors discovered through literature review were subjected to factor analysis. The factors which were retained as important were classified as economic factors, features, usage, brand image, aesthetics, and social factors. This study shows that the purchase intentions of Consumers of two wheelers are influenced by economic factors, features, usage, brand image, aesthetics, and social factors

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