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A STUDY ON PLACING OF INDIA IN
HIGHER EDUCATION MAP AS A TALENT HUB

A STUDY OF FACTOR INFLUENCING CONSUMER BUYING BEHAVIOUR
TOWARDS TWO WHEELERS
(In the special reference to Hero MotoCorp & Bajaj)

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A STUDY ON PLACING OF INDIA IN HIGHER EDUCATION MAP AS A TALENT HUB

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ABSTRACT

India stands at 24th position in the Higher Education System Strength (HESS) global ranking list. The ranking table, which aims to measure quality national environments for higher education institutions. Today, Indian IT Engineers are dominating the Global IT industry. The Indian Education System is credited for producing this new breed of highly successful professionals. Today, the global interest in the Indian Education System is increasing rapidly. India has become a popular Overseas Education Destination that offers a great value proposition: Globally recognized English-medium Education @ Affordable Costs.

Key Words:

Higher Education System Strength, Global Ranking, Education Destination.

Introduction

The success of the Indian Education System's alumni indicates the global recognition of the Indian Education System

- Engineers educated in India dominate the Silicon Valley: In 2015, more than 40% of the Venture Capital funded technology startup companies in Silicon Valley had at least one India-educated founder.
- More than 15% of the teaching faculties in US Universities have their undergraduate degree from a University/Institute in India.
- In the USA, India educated professionals constitute over 10% of the physicians, 21% of NASA employees, 18% of the Microsoft employees, 16% of the IBM employees and 17% of the Intel employees.
- Over 100 of the Fortune 500 companies regularly recruit from Indian university campuses.
- In Nov 2016, according to research published by OPEN DOORS program of iienetwork.org in the USA, India is the leading place of origin for international students in US Universities/Colleges.

English-medium Education

The best kept secret about India – it is the 2nd largest English speaking country

in the world. English is the de facto lingua franca of the government, education and business. In India, 72 million people are English literate.

In India, English-medium education was started in the 19th century - when India was the Crown Jewel of the British Colonial Empire. Over 150 years of English medium education and language diversity in various states of India have resulted in English being the only common language that unites modern India.

Today, many Indians have an English proficiency level that is at par with native English speakers. High English proficiency of Indian professionals going to the USA is one of the reasons for their astounding success in the USA.

American Call Centers in India

The new generations of English speakers in India identify themselves with the modern American culture and prefer the American accent. The growing number of American Call Centers in India that cater to North American customers is a testimony to India's American English accent and proficiency.

Affordable Costs

The best part of the Indian Education System is its affordable price. There are numerous schools, colleges and universities scattered all over India. Most of these educational institutes offer globally recognized English-medium education at very competitive prices- what you would expect in a developing country.

Comparison of Annual Tuition Fees

Country	Annual Tuition Fees (\$)		
	Humanities	Science & Engg	Medicine
US (Public)	\$7,000-\$10,000	\$7,000-\$10,000	\$15,000-\$25,000
US (Private)	\$16,000-\$20,000	\$16,000-\$40,000	\$20,000-\$40,000
Canada	\$2,700-\$9,400	\$2,300-\$9,400	\$2,500- \$10,000
UK	\$8,100- \$16,200	\$8,100-\$17,150	\$13,900-\$27,200
Australia	\$5,400-\$8,600	\$8,000-\$10,500	\$15,000-\$29,100
NZ	\$5,400-\$8,600	\$8,000-\$10,500	\$15,000-\$28,100
India	\$2,150-\$4,600	\$3,000-\$8,500	\$8,000-\$20,000

The total cost of one year of education in India can be as low as low as \$3,950. The exact annual tuition fee varies among various Universities/Colleges in India. It depends upon the number of credits you select in an academic year. The growing trend among many Asian students is instead of going to the USA for a 4-year Bachelor's Degree, many students prefer to go to India for a 4 year Bachelor's Degree and then go to the USA for a 2-year Masters Degree.

In the USA, the cost for a 2-year Master's degree program is usually lower due to the fact that more financial aid is available for Graduate students than for under-grad students.

Safe and Welcoming Environment

India has one of the lowest per-capita crime rates in the world. Traditional Indian values promote a safe and non-violent society. International students in India feel safe to travel on their own within India.

Most International students in India praise the warm hospitality they experience in India. International students are often invited to the homes of their Indian colleagues. Most International students in India easily form lifelong friendships with their Indian colleagues.

India's Rich Cultural Heritage

Studying in India offers a special experience for International students. Students learn about India's rich cultural heritage and valued traditions. Students explore the historical monuments and places of interest spread across the country.

Adventurous students get a chance to visit the Taj Mahal on a starry full moon night, go on a camel safari on the sand dunes in the deserts of Rajasthan or simply soak in the Sun on the warm white sand beaches of Goa in the winter months of Jan/ Feb.

For art lovers, India offers ancient performing art forms such as yoga, Indian dances like Bharatnatyam and Odissi. The musically inclined are drawn to the enchanting Indian music. The colorful Indian festivals like Diwali (festival of lights) and Holi (festival of colors) are a treat to the eyes and enjoyed by the international students.

New Challenges

The new challenge before the country at the beginning of the twenty first century is to become a developed society by the year 2020, which requires that not only a vibrant economy driven by knowledge has to be ushered in soon, but also a new society where justice and human values prevail has to be created. Moreover, challenges in higher education are no longer only nation centric. They have already attained global dimensions. With the explosive growth of knowledge in the past century and with the development of handy tools of information and communication technologies, As a result, knowledge is not only going to be the driver of Indian economy, but also, it is going to permeate into all the strata of Indian society for a better quality of life and living conditions. Therefore, India has to rise to the occasion urgently and reorient its higher education system to be vibrant, competitive,

meaningful and purposeful.

Threats

In India, there is absolutely no substitute to quality of higher education, although the country has been faced for a long time with the serious problem of meeting the quantity needs of our society. It is, therefore, essential that a careful balancing of the two is given priority to meet the twin requirements of the society in the foreseeable future.

Path to Overcome the Challenges

- The first and primary responsibility of the State is to provide the eligible with good quality higher education at reasonable cost.
- A huge dedicated fund named, National Human Resource Development Fund, to the tune of at least one- percent of the GDP, may be created to tackle the equity problems. It shall be the accepted principle that 'no talented person shall be denied access to higher education opportunities on the grounds of economic and social backwardness'. This fund may be dedicated to offer direct financial support in the form of scholarships, partial financial assistance and educational loans to students directly, based on the criteria of talent and financial and social backwardness.
- A well-designed mechanism to spot talents in different disciplines of knowledge is needed for this purpose. Further, foolproof criteria to determine financial or any other social backwardness is required.
- Industries may be encouraged to be partners with educational institutions directly for the development of human resources dedicated to their interests. This could happen in the areas of creating infrastructure, faculty sharing and direct support with funds. The UGC (University Grant Commission) may set-up a High Power Committee to explore these possibilities and to work out the modalities for such a partnership.

Recommendations

- 1 Most of the areas identified for export of higher education are directly concerned with industries. Therefore, Central and State Governments should introduce a range of programmes and incentives designed specially to improve the links between Universities and Industry.
- 2 The Universities and National Institutes of higher Learning should design their courses in collaboration with industry and such courses be updated regularly, e.g., every year, according to need.
- 3 There should be uniformity, as far as possible, in the standards of the courses, academic calendar and the examination system of Universities.

Conclusion

In an environment of global competitiveness it is important that Indian products of the higher education institutions are as competent as graduates of any other country, not only in their scholastic attainments, but also in terms of the value system and richness of their personality. In this regard, Libraries should be fully equipped with the latest books, journals and periodicals. Laboratories should be updated and obsolescence in equipment/facilities should be removed on a regular basis. Working facilities and workload of teachers should be as per the international norms. Teachers should be encouraged to attend various Conventions, Conferences, Seminars, Workshops in their disciplines to update their subject know how. Unless the quality and standard of Indian higher education institutions is enhanced zealously and sustained at a high level through innovation, creativity and regular monitoring, it seems to be difficult for the Indian academics/professionals to compete in the World scene.

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A STUDY OF FACTOR INFLUENCING CONSUMER BUYING BEHAVIOUR TOWARDS TWO WHEELERS

(In the special reference to Hero MotoCorp & Bajaj)

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Abstract

The research titled “A Study of Factor influencing Consumer buying behaviour towards two wheelers” is conducted to understand the various aspects like factor of influence, buying behavior, important external and internal determinant, awareness and attitude of consumer towards automobiles with special reference to two wheelers. In India, for majority of the population money is a big concern and hence two wheelers are the most favored vehicle for commuting. The opportunities in the market are huge as person commuting vehicle become a need for everyone. There are other reasons like social status enjoyment which compels people to buy two wheeler but that does not surpass the basic need of commuting from one place to other in less time.

Key Words:

Consumer Buying Behaviour, Two-Wheeler, Automobile, Customer Satisfaction

Introduction

In two wheeler market in India there are limited numbers of players and demand is huge, therefore the competition is fierce. The market is an oligopoly market with few seller and large number of buyers. As in oligopoly market, where in the competition is high and this become very important for companies to understand the consumer better than other and can plan marketing strategies accordingly, This make the study more valuable and beneficial for automobile manufacturing companies as well. The automobile sector is very important contributor to the economy of India. Since inception the sector remains a key driver for economic growth in our country. The licensing in the sector was abolished in 1991 and the foreign direct investment is also opened up to a limit of 100% for the sector and this

becomes another milestone for development and growth of the sector. India as a market in terms of size and potential was so big that almost every manufacturer across the globe is now present in India and manufacturing the products.

Review of Literature

Kalyana Ramnathan S (2007) is of the perspective that Honda is fixing its grasp over India by making a special holding organization for India-Honda Motors India – with Masahiro Takedagawa. Takedagawa was of the assessment that bike industry can be partitioned into sub sections which don't inexorably comply with motor uprooting alone and saw nothing incorrectly in both Honda bikes operations having comparable item portfolios focused at various consumers. It is normal that HMSI will spend about Rs. 200 crores by 2010 to expand yield to an ideal limit of 1.2 million units.

Crisil Research (2009) in its yearly audit 2009 distinguished that interest for bikes has reached its highest point and is hence anticipated that business would develop at 6 to 7 percent from 2008-09 to 2012-12. Country business sector would keep on fueling bike deals; however urban business sector would confine bike growth to lower single digit in long run and Interest of gearless bikes to witness solid development of 9-11 percent from 2008-09 to 2012-12. Be that as it may, bike business to stay at levels in 2008-09 and 2009-10 because of proceeding with troublesome fund conditions. While monetary execution patterns were relied upon to exceptionally crosswise over players in 2008-09, lower information expenses would empower players to keep up edges in 2009-10. Purchasing conduct in the bike business has been radically changed since a decade ago. Understanding behaviour conduct in the present situation is critical as it is no more a basic errand. Buyer is thought to be the king of the business sector. He is the value producer and not value taker. In the most recent two decades, noteworthy changes have occurred similarly as the bike business is concerned. Prior, there used to be a couple of bike makers who held an imposing business model. Notwithstanding, this circumstance has changed with the section of different contenders, particularly after liberalization and globalization. The remote cooperation saw generation going up hugely—because of the accessibility of numerous option decisions, buyer inclinations and requirements changed. All of a sudden, the purchaser came into core interest.

Tekchandani Viraj (2009) wrote an article on auto two-wheelers in which he stated that the Indian two-wheeler market constitute 20% of the global market and is increasing by around 20% every year. In the bike segment, Bajaj Auto has been making progress while Bajaj bikes had made strides.

Hero Honda, through its across the board merchant system and fuel effective models, keeps on residual appealingly ready to procure prizes of the development in industry. In future, rivalry is liable to be from organizations like HMSI, LML, Suzuki and Kinetic.

Gupta Surjeet Das (2009) talks about the perspectives of Rajiv Bajaj for eventual fate of Bajaj Auto. Rajiv Bajaj needs to change Bajaj Auto into a worldwide two wheeler segment. The organization has 22% of the Indian motorcycle business sector and he needs a coordinating piece of the pie in the worldwide bike market.

According to T P Rajmanohar (2010) the Indian two wheeler industry underwent a major change after the reform process of 1991. This led to motorcycles dominating the two wheeler market capturing more than 80% of the market. In terms of segmentation there are three segments viz. economy, executive and premium. In terms of individual companies Hero MotoCorp dominates the market followed by Bajaj Auto and Bajaj motors. Honda motors and scooters and Bajaj motors are now capitalizing on increasing the market share.

Balaji V. (2011) in his article on Bajaj Motors expressed that the Bajaj Motor Company is the third biggest bike producer in India and one among the main ten on the planet, with a yearly turnover of over \$650 million. It is only company to be honored the world's most prestigious Deming grant in all out quality administration. Regarding labor, the innovative work group has a solid pool of specialized ability worn by state-of the-workmanship framework fit for growing new and inventive outlines. Other than bikes it is a main player in the mopeds market too.

The geared scooters segment has almost disappeared and has been replaced by gearless scooters. In motorcycles also the technology had shifted from two strokes to four strokes. Electric scooters have entered the market. The year 2006-07 saw production of 8.44 million two wheelers and production grew by 10.98%. M.S.Mani Rajan (2012) composed an article on the changing forms of the bike business in India. The creator talked about different Government strategy changes influencing the vehicles segment and the effect of generation of bikes in India. He likewise talked about the patterns inside the bike portion and the development of bike section. He expressed that the properties of bike imperative to clients are looks, force, mileage and solace. Other critical changes in the business sector incorporate recognizing client needs, item separation and item situating. The concentrate likewise contended that individuals in the age gathering of 18 to 20 were influenced by looks and power in a bike.

An article on “issues and future of the two wheeler industry,” by Krishnan Santanan R (2012) looks into various issues faced by the two wheeler industry. Regarding rivalry, the industry is liable to face rivalry from utilized autos and electronic autos. Different issues are the declining edges because of expanded expense of materials and movement in clients' interest to electric vehicles to save money on petrol. As far as development, there are desires that the business is prone to develop by 15%. The majority of the development is liable to originate from bikes. A portion of the Indian bikes organizations are likewise liable to set up plants in remote nations to address send out issues.

Manoj Kumar and Sweta Pathak (2012) expressed that in the course of recent years, the bike market has seen a noteworthy movement from bike to motorbikes. It has constrained the bike creators like Bajaj Autos and LML to move bike fabricating, and to chop down bike generation. Be that as it may, in the meantime, another business sector for high power motorcycle has additionally risen in most recent couple of years. Specialists of the subject are of the view that it makes a huge impact on young girls when you own a bike. With motorcycle individuals feel more self-assured and youthful in contrast with a bike rider. In spite of the value differentials amongst bikes and bikes not being too high, having a bike gives one the sentiment up gradation". It was additionally ascribed that the development of this fragment is because of the activities being taken by the companies incorporating more presentations in the economy class motorcycles and simple financing offices. Electrically worked vehicles (Mostly e-Bikes) are one of the creative developments in the bike business.

Metric Consultancy (2015) has been a pioneer in exploration on bikes in India. In 2001, Metric Consultancy did a broad overview of issues confronted by owners of new bikes in light of a legitimate concern for the clients, as additionally for the advantage of the producers. Metric consultancy did an experimental study of more than 2600 clients to discover the issues confronted by them inside first three months of obtaining their new bike. The study secured Bangalore, Chennai, New Delhi, Pune and Hyderabad. With the end goal of the study bikes were partitioned into four classes mopeds, scooter, bike and e-bikes. Each of the more than 2600 clients were requested that react to 271 inquiries with every inquiry going under one of 11 parameters that the review observed. A comprehensive overview of this extent has been completed in India interestingly. The normal bike has 1.87 issues, with the best having only 0.59 issues for every vehicle. As indicated by the outcomes most purchasers check with friends and relatives, while a couple ask the dealer. The review found that 72% of the respondents checked

with friends, partners and relatives, 7% checked with mechanics and auto experts, 15% settles on their own while 5% checked with the dealer.

Research Objective

Identify and analyze the most important factors affecting consumer buying decision in Hero MotoCorp and Bajaj motorcycle.

Research Hypothesis

Null Hypothesis 1: The factors influencing buying decision for purchasing two wheeler are random and not specific.

Alternate Hypothesis 1: The factors influencing buying decision for purchasing two wheeler are not random and specific.

Sample Design

In this study a Probabilistic Sampling Technique is used. These methods ensure that each member is a potential target buyer and has a probability to be selected as a sample. As study requires choosing samples for two companies, the potential probabilistic sampling used a complex random sampling design named stratified sampling, where-in the population is divided in to sub-population called as strata, which are individually more homogeneous than the total population. Two strata are created, one for each company and overall 500 respondents were selected from Hero MotoCorp and Bajaj motorcycles.

Sample Size

The present study is conducted at a confidence interval of +/- 5%. The level of confidence in study is 95% and value of .05%. Which make Z 1.96, which is standard table value at 95% confidence interval and a standard deviation of 0.5%.

Necessary Sample Size = $(Z\text{-score})^2 * StdDev * (1 - StdDev) / (\text{margin of error})^2$

$$= ((1.96)^2 * .5(.5)) / (.05)^2$$

$$= (3.8416 * .25) / .0025$$

$$= 0.9604 / .0025$$

$$= 384.16$$

$$= 385 \text{ respondents are needed}$$

At the beginning of research, a pilot study was conducted over 50 respondents whose encouraging results helped me to continue my research therefore to make the study more reliable, a total sample size of 500 samples is considered to be appropriate to conduct the study, which is more than the required sample size. The data is collected from walk-in consumer in various leading dealers and company owned showrooms of Hero MotoCorp and Bajaj motorcycles.

Statistical Methods

To achieve the objective of to find out most influencing factor in consumer buying decision, Exploratory Factor Analysis is used. The test is good fit when we try to measure things, which can be measured directly, which is called latent variable. Keeping services offered by automobile companies which fall under selecting interactive marketing strategies, as latent variable, questions are framed with the help of five point likert scale. Five point are stated as highly agree, agree, neither agree nor disagree, disagree and strongly disagree are placed as an option to choose on a likert scale question.

As the variable in consideration is qualitative and in form of factors, that are recorded on psychological scales, the investigation is done using factor analysis. Analysis is a very helpful statistical tool when we have to analyze the relation between variable for complex concepts.

Factor analysis operates on the notion that measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality (Bartholomew, Knott, & Moustache, 2011).

The questionnaire was designed to predict how satisfied a given individual would be from specific marketing factor and which factors brings highest satisfaction.

Kaiser–Meyer–Olkin measure of sampling adequacy (KMO) (Kaiser, 1970) is used to determine the adequacy of sample size. The value for KMO is calculated for all variables. As a standard terms the KMO valued more than 0.5 represent a compact patterns of correlation between variable and factor analysis is appropriate, values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb (Hutcheson & Sofroniou, 1999).

In next step the correlation matrix will be used to identify the correlation between variable, in the correlation matrix if the value is less than 0.2 then it will be excluded from the study because such a lower value shows less correlation with each other. Inter correlation between the variable provides an idea of relationship between the observed variable, which is followed by extraction of factors. Every considered factor in the study is responsible for some variance and rotation. Extraction of factors is used for linear combination of observed variable, which were uncorrelated. The first component has maximum variance. As we move on further successive components explain that there is less portions of the variance and are less correlated with each other. By default SPSS uses the Kaiser's criterion of

retaining factors with Eigen value greater than 1 and same as a standard practice, is adopted here in the analysis. With the help of principal component analysis, the identification of variables accountable for maximum variation can be selected. From Nth element onwards, when the Eigen value was less than 0.7 and the variance was very less. Based on the same, appropriate number of latent variables was extracted for further studies.

Clubbing the factors with same underlying dimensions shall be done based on principal component matrix. The principal component matrix showed the factor which has a co-relation with each other. The total variance is divided into main components. The variance accounting is calculated and tabulated in the form of principal component matrix, where all the values of observed variable is showed. With the help of same, each component is clubbed to form a group, which is subsequently named on the basis of latent variable associated. The variance caused by selected categories can be calculated to know the level of influence caused and hypothesis can be accepted and rejected accordingly.

Factor Analysis

Consumer buying decision has so many factors which are influencing. The factor changes with the type of product, value and uses of products. There are so many external and internal, social and personal determinants also, which are responsible for, the way consumer respond and behave in any given situation.

Factor analysis works on the notion that measurable and observable factors can be lessened to fewer latent variablesthatshare a common variance andare unobservable, which is known as reducing dimensionality(Bartholomew, Knott, & Moustache, 2011).The same is case in the study presented, reason like product features, cost associated, inner drive, customer support and services. The influence of factors is inferred from various reasons but cannot be measured directly, hence in the first part of the study, major factors which can have an influence on buying behaviour are identified and with the help of factor analysis, the study aimed to measure the factor that cause the maximum influence of consumer behaviour and compel consumer to buy a specific two wheeler brand or model.

Identification of factor of influence

The first objective of the research is to know the most influencing factors in consumer buying decision for buying two wheeler. In just to prove the same, the probable influencing factors, which can have an impact on consumer buying decision to buy two wheeler are explored and identified. The

identification and exploration is done with the help of review of existing papers, blogs, articles and journals on consumer behaviour and studies on two wheeler in India. Along with the same a pilot survey of 500 respondents is done to know the probable factors of influence from one to one discussion.

This has resulted to identify the following factors which probably can have an influence on consumer buying decision towards purchasing of two wheeler.

1. New Features
2. Style and looks
3. Cost
4. Brand Name
5. Mileage
6. Power and speed
7. Availability of spare parts
8. Consumer service
9. Maintenance and service charges
10. Resale value
11. Warranty and free service
12. Social Status and reputation
13. Ease of riding
14. Product Life
15. Finance and credit schemes:
16. Dealer endorsement

Test for sample Size

Guadagnoli and Velicer (1988) found that the most essential factors in deciding reliable factor solutions were the absolute sample size and the absolute magnitude of factors loadings. To put it in short, they argue that if a factor has at least four or more loadings more than 0.6 then it is considered reliable irrespective of sample size.

Moreover, factors with at least 10 or more loadings greater than 0.40 are reliable if the sample size is greater than 150. Another option is to utilize the Kaiser–Meyer–Olkin measure of sampling adequacy (KMO) (Kaiser, 1970). The KMO can be determined for individual and multiple variables and represents the ratio of the squared correlation between variables to the squared partial correlation between variables. The KMO measurement varies somewhere in the range of 0 and 1. A value of 0 demonstrates that the aggregate of partial correlations is large in respect to the sum of correlations,

showing diffusion in the pattern of correlations (subsequently, factor analysis is probably going to be inappropriate).

A value near to 1 show that patterns of correlations are relatively compact thus factor analysis should yield distinct and reliable factors. Kaiser (1974) suggests accepting values more than 0.5 as barely acceptable (values underneath this should lead you to either gather more data or reevaluate which variables to include). Besides, values somewhere in the range of 0.5 and 0.7 are average, values somewhere in the range of 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are extraordinary (Hutcheson & Sofroniou, 1999).

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.864
Bartlett's Test of Sphericity	Approx. Chi-Square	9565.035
	Df	105
	Sig.	.000

*“KMO Test Value.864
signifies adequacy of
samples.”*

Factor analysis was used here to understand the interdependence amongst the factors. Bartlett's test of sphericity was used to test the hypotheses. KMO statistics was also used to measure the appropriateness of the factor analysis.

Formation of a co-relation matrix

The question asked in the former likert scale, the agreeeness of consumer towards factors of influence is recorded. As 16 factors are assumed to be important, the response on the same is recorded and a correlation matrix is formed by analysis of data.This is a matrix which shows correlation of one variable with another. The diagonal variable in the correlation matrix is always one, as each variable will correlate with him perfectly. The purpose of this matrix is to know the factors which are highly co related with each other, wherein the value for coefficient of correlation, which is denominated by “r” is <0.9 or >0.3 is identified. To do a factor analysis we need to have variables that correlate fairly well, but not perfectly. Also, any variables that correlate with no others should be eliminated. Therefore, we can use this correlation matrix to check the pattern of relationships. First, scan the matrix for correlations greater than 0.3, then look for variables that only have a small number of correlations greater than this value. Then scan the correlation coefficients themselves and look for any greater than 0.9.

Table: Formation of a co-relation matrix

Table: Formation of a co-relation matrix

	New Features	Style and Look	Cost	Brand Name	Mileage	Power	Spare Parts	Service	Service Charge	Resale Value	Warranty	Status	Ease of Riding	Life	Credit	Dealer
New Features	1	.907**	.349**	-.533**	-.589**	-.843**	-.633**	-.688**	.301**	.343**	-.573**	-.783**	-.815**	.550**	.301**	-.589**
Style & Looks	.907**	1	.379**	-.611**	-.656**	-.815**	-.616**	-.780**	.435**	.408**	-.693**	-.786**	-.791**	.571**	.435**	-.656**
Cost	.349**	.379**	1	-.546**	-.761**	-.480**	-.694**	-.453**	.803**	.530**	-.714**	-.568**	-.515**	.608**	.803**	-.761**
Brand Name/ Reputation	-.533**	-.611**	-.546**	1	.691**	.654**	.330**	.314**	-.579**	-.397**	.791**	.667**	.674**	-.600**	-.579**	.691**
Mileage	-.589**	-.656**	-.761**	.691**	1	.689**	.740**	.549**	-.803**	-.618**	.881**	.716**	.698**	-.834**	-.803**	1
Power & Speed	-.843**	-.815**	-.480**	.654**	.689**	1	.803**	.693**	-.464**	-.503**	.675**	.960**	.983**	-.633**	-.464**	.689**
Spare part availability	-.633**	-.616**	-.694**	.530**	.740**	.803**	1	.694**	-.671**	-.636**	.694**	.869**	.813**	-.574**	-.671**	.740**
Consumer Services	-.688**	-.780**	-.453**	.314**	.549**	.693**	.694**	1	-.465**	-.513**	.597**	.770**	.691**	-.401**	-.465**	.549**
Maintenance and service charges	.301**	.435**	.803**	-.579**	-.803**	-.484**	-.671**	-.465**	1	.803**	-.754**	-.565**	-.484**	.610**	1	-.803**
	New Features	Style and Look	Cost	Brand Name	Mileage	Power	Spare Parts	Service	Service Charge	Resale Value	Warranty	Status	Ease of Riding	Life	Credit	Dealer
Resale Value	.343**	.408**	.530**	-.397**	-.618**	-.503**	-.636**	-.513**	.803**	1	-.595**	-.584**	-.503**	.531**	.803**	-.618**
Warranty free Services	-.573**	-.693**	-.714**	.791**	.881**	.675**	.694**	.597**	-.754**	-.595**	1	.747**	.697**	-.714**	-.754**	.881**
Social status and Reputation	-.783**	-.786**	-.568**	.667**	.716**	.960**	.869**	.770**	-.565**	-.584**	.747**	1	.965**	-.591**	-.565**	.716**
Ease of riding	-.815**	-.791**	-.515**	.674**	.698**	.983**	.813**	.691**	-.484**	-.503**	.697**	.965**	1	-.606**	-.484**	.698**
Product Life	.550**	.571**	.608**	-.600**	-.834**	-.633**	-.574**	-.401**	.610**	.531**	-.714**	-.591**	-.606**	1	.610**	-.834**
Finance credit Scheme	-.633**	-.616**	-.694**	.530**	.740**	.803**	-.633**	.694**	-.671**	-.636**	.694**	.869**	.813**	-.574**	1	.740**
Based on Endorsement and Dealer	.349**	.379**	-.633**	-.546**	-.761**	-.480**	-.694**	-.453**	.803**	.530**	-.714**	-.568**	-.515**	.608**	.803**	1

As the question is somehow related to few latent variables, this is assumed that the factor associated with same latent variable should be correlated fairly. Hence the correlation matrix is also helpful in next step for factor analysis named clubbing of factors.

Extraction of Factors by Principal Component Analysis

The first part of the factor extraction process is to determine the linear components within the data set (the Eigen vectors) by calculating the Eigen value of the R-matrix. To determine the importance of a particular vector we look at the magnitude of the associated Eigen value. We can then apply criteria to figure out which factors to hold and which to dispose of. By default SPSS uses Kaiser's criterion of holding factors with Eigen value more than 1. In the principal component analysis, the study identified four variables which were accountable for maximum variation. From 5th element onwards the Eigen value was less than 0.7 and the variance was very less. Based on the same, four latent variables were extracted for further studies.

Table: Component Matrix

	Component			
	1	3	3	4
New Features	-0.773	-0.537	0.773	0.144
Style & Looks	0.835	-0.403	0.374	0.365
Cost	-0.509	0.895	-0.655	0.649
Brand Name/ Reputation	0.731	0.165	0.747	0.339
Mileage	0.496	0.745	-0.133	0.579
Power& Speed	0.498	0.343	0.635	0.315
Spare part availability	-0.463	0.614	0.395	0.641
Consumer Services	-0.394	0.483	0.674	0.784
	Component			
	1	3	3	4
Maintenance and service charges	0.363	0.665	0.347	0.097
Resale Value	0.637	0.714	-0.738	-0.076
Warranty and free Services	-0.343	0.331	0.133	0.576
Social status and Reputation	0.363	0.306	0.639	0.361
Easy of riding	-0.374	0.311	0.773	0.579
Product Life	-0.837	0.676	0.385	0.385
Finance and credit Scheme	0.363	0.365	0.347	0.697
Based on Endorsement and Dealer	0.496	0.345	-0.733	0.579
Extraction Method: Principal Component Analysis.				
a. 4 components extracted.				

Clubbing of Factors

The principal component matrix showed the factor which has a correlation with each other. The total variance is divided in to four main components. The variance accounting is calculated and tabulated in the form of principal component matrix, where all the values of observed variable is showed. With the help of same, each component is clubbed to form a group, which is subsequently named on the basis of latent variable associated

Factors	Components	Factor Loadings
Factor 1 Product Aspects	New Features	0.773
	Style & Looks	0.835
	Brand Name/ Reputation	731
	Product Life	0.837
Factor 2 Associated Cost Aspects	Cost	0.895
	Mileage	0.745
	Maintenance and service charges	0.665
	Resale Value	0.714
Factor 3 Inner Drive	Power& Speed	0.635
	Social status and Reputation	0.639
	Easy of riding	0.773
	Based on Endorsement and Dealer	0.733
Factor 4 Consumer support and services	Spare part availability	0.641
	Consumer Services	0.784
	Warranty and free Services	0.575
	Finance and credit Scheme	0.687

Reporting the factor Analysis

A principal component analysis (PCA) was conducted on the 16 items with orthogonal rotation (varimax). The Kaiser–Meyer–Olkin measure verified the sampling adequacy for the analysis, KMO =.93 ('superb' according to Field, 2009).

Bartlett's test of sphericity $\chi^2(353) = 19334.49, p <.001$, showed that correlations between items were adequately large for PCA. An initial analysis was run to obtain Eigenvalue for each component in the data. Four components had Eigenvalue over Kaiser's criterion of 1 and in combination

explained 88.33% of the variance.

Table beneath represent Eigen value related with each linear component (factor) after extraction and after rotation. Out of fourteen linear components, SPSS identified four, who's Eigen value were approx. 1 and table shows the percentage of variance shown by them. It shows that there is a significant drop in Eigen value from the 5th component onwards. Hence the first, four Components were considered, which together constitute 88.33% of total variance.

Table: Total Variance Explained

Component	Initial Eigen value			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative%
1	10.053	67.033	67.033	10.053	67.033	67.033	3.896	35.970	35.970
3	1.713	11.416	78.440	1.713	11.416	78.440	3.650	34.334	50.304
3	.933	6.147	84.586	.933	6.147	84.586	3.433	33.816	73.130
4	.557	3.716	88.303	.557	3.716	88.303	3.377	15.183	88.303
5	.474	3.161	91.463						
6	.435	3.831	94.394						
7	.341	1.608	95.903						
8	.178	1.185	97.087						
9	.153	1.033	98.110						
10	.108	.719	98.839						
11	.065	.435	99.364						
13	.047	.313	99.576						
13	.035	.333	99.808						
14	.017	.110	99.918						
15	.013	.083	100.000						
Extraction Method: Principal Component Analysis.									

The maximum rotation is caused by the observed variables which were placed in category product related aspects. 35.97% of the variance in the rotation is caused by factors related to product features and other aspects of product, which make this clear that the biggest influence of consumer to buy a particular two wheeler is product features. This is followed by a 34. 33% of variance caused by components 3 formed. The factors fall in this components

are related to direct and indirect cost to the consumer. The third component in which factors associated with inner drive and desire of the consumer about the two wheeler were placed, caused 33% of the variance which is followed by four components which caused 15.18% of variance. The fourth component which caused 15.18% of the variance is related to service and support available for two wheeler.

This makes us conclude that the maximum influence on consumer buying behavior is caused by product itself. Consumers are more inclined towards new features in the product and the expectation from the marketers is increased. New innovation and added features has been a big influencer and can lead to increase in sales of the company. This is followed by the cost of two wheeler to consumer which summaries that after innovation consumer are looking for efficiency.

The inner drive which is created by external environment and preferences of the consumer causes an impact followed by innovation and efficiency need. The last but an important component is after sales service associated with the product which bring a less influence as of now, as this is generally realized at a later stage in process of buying the product and component included in the category have a wide horizons and values that differ invariably in different cases.

This makes us conclude that the factors which influence the consumer buying behaviour are not random and they are specific in nature. Hence the factor analysis conducted towards fulfillment of our first research objective support the alternate hypothesis which states that the factor influencing consumer buying behaviour towards buying of two wheeler are specific in nature is accepted and hence we reject the null hypothesis.

$$H_0: \mu_{\text{Hero}} = \mu_{\text{Bajaj}}$$

$$H_1: \mu_{\text{Hero}} \neq \mu_{\text{Bajaj}}$$



Suggestions

New Emerging Segments

With many major finding for two wheeler market in India, the study has come up with few major and important suggestions for stakeholders in the industry. The study finds that the size of the two wheeler market is increasing in India. There are new segment which are emerging, who have a need of two wheeler. The largest among them is female working women, who have not started going to work, colleges and other professional institution. Females become more empowered and unlike previously, in urban they are working or studying and hence commuting. They have emerged as the new market segment, which need two wheelers for various purposes. The study suggests

that the marketer must tap this emerging segment as this is going to be as big as current market today.

The application of two wheeler is increased and hence the study suggests that the market also need to position the same with respect to application of the two wheeler along with other target segment. The new emerging market is two wheeler as a taxi, two wheeler as a mode of commuting in emergency, two wheeler for empowered working female, college and school going girls.

Adoption of Technology

Technology is empowering the growth, the adoption of technology become very crucial for all the businesses. Most of the business operations are dependent on information technology and latest application and software based work. Starting from research about the market, advertising, product development, product innovation, sales management, CRM, inventory management, consumer feedback, marketing communication product information and demonstration are facilitated with the help of latest technological innovation, gadgets and mobile application. The study suggests that manufacturer and marketer along with other stakeholder must adopt technology to make the process faster, smoother and better than the competitors. Being laggard in term of adoption of technology can make company loosing market and gives advantage to competitors. The current revolution in Indian telecom market by affordable data services and Smartphone increasing, the market scenario is about to changed extremely.

Scooter Share

The study suggests that the shares of scooters are increasing. Both the companies, Hero MotoCorp and Bajaj have their respective model of the scooters. The scooter is mostly liked by female drivers and they are most emerging segment. As reason is male drive may have a two wheeler since times. The new added rider in the family is either the student or college going or newly employed females. There are other factors like convenience of riding, the leg space make scooter favourite choice of not only females but few categories of male. The study strongly record to have a more strong offering to consumer in terms of product range of scooters.

Digital Advertisement

The companies must focus and adopt the digital channel for marketing communication. Currently most of the consumers are equipped with the latest smart phone. The mobile phone is a device, which consumer holds most of the time. The messages can be communicated almost immediately and in beautiful ways. The internet searching is also done on the mobile. With

having access to the liking and disliking of the consumer, the market get to know about choice and preferences of the consumer. The screen sharing time with the mobile is increasing to a significant extent. Marketer need to have a presence of the screen for brand management, show visibility and all other type of marketing communication activities to keep a share of consumer mind when it comes to two wheeler or any product of the company.

Existing Consumer Services

The study if the data shows that the new consumer strongly believe the word of the consumer who previously own the same two wheeler. Indeed most of the consumer, who planned to purchase a particular model of the bike, search for the consumer who previously owning the same bike and ask for feedback. Indeed they trust them inspite of the fact they may be completely strangers. This makes study suggest that company must focus of existing consumer to resolve all the concern and problems which they have. They must keep a healthy relation with the consumer by a more frequent and supporting communication. A happy consumer is the most valuable advertiser for the product in two wheeler market.

Different Positioning for two wheeler

The market should position two wheeler as daily commuting in a strong way and other motives can be explored. Male student like motorcycle and sports bike, marketer can formulate the marketing strategies accordingly. Wherein the female student liked the scooter the most. Motorcycles are also ranked the top most liked two wheeler in salaried class people, who have less affection to sports bike. To allure the female consumer marker either can let them be on scooters or with the help of product innovation, can bring them on motorcycles. This also can be done by positioning of the female drivers liking rising motorcycle.

Focus of Product Innovation

As the consumer is highly influenced by the product related aspects, manufacturer must continuously focus on product innovation and product development. All the factors which are related to product come first when buying the two wheeler for the consumer is concerned. He also consider cost but as buying two wheeler is a long time affair, a rational buyer keep the better features and quality of the product first in comparison to the cost. When compared within the same segment, the cost of the two wheelers cannot vary much and the difference can be easily justified by the product related features and functions,

Conclusions

In today's scenario where people have no time for purchasing durable and non-durable goods so, there is a need to cater to this problem where consumer can be given service where he can get his goods delivered at his doorstep. Now a new concept is emerging i.e. consumer/customer concept and marketers must focus on such changes to get the first mover advantage ahead of their peers.

Gone are the days when the companies used to produce a product and consumer had no other option but to buy it. Now the time has changed, from product concept to marketing concept, a new concept that is emerging i.e. consumer concept that states "Everything that a consumer want must be produced and deliver at the doorstep in minimum possible time.

If companies will not focus on consumer requirement, soon they will vanish their market share and eventually wiped out of the market. So now it's time to reformulate and make new strategies that can attract the consumers towards the product or mould the behaviour of consumer towards the product. For example in two wheeler sector take an example of Kinetic Honda, It did not change itself according to consumer requirement and eventually kicked out. Other examples are Bajaj Super, Bajaj Priya, and LML Vespa in scooter segment. They did not change according to changing needs of the consumer and resulted into closure of the segment. So now it's time to focus on new emerging concept i.e. consumer concept.

It is a concept where consumer wants the goods or service as per his or her requirements and then delivery of the same in minimum possible time providing them time and money value. The time is not so far when the bikes will be delivered at your doorstep. Therefore, call of time says that focus is to be given on value addition which maximize the consumer experience and facilitate them in buying a product and also offer time value to consumer by delivering the products at doorstep.

Future scope of study

As the study is limited to two wheeler bike segment, the study creates further scope of mentioned dimensions for future research and similar analysis can be done considering specific categories of two wheelers present in the market as the market is growing rapidly and have immense potential in future.

Apart from this role of digitalization and introduction of information technology is increased in various marketing function adopted by almost all the types of companies. The same can be researched further in light of automotive sector in India. A study based on new type transportation can be researched further as pollution, increase fuel price, decreasing supply of

crude oil are major concern in current automobile market. The scope of selling two wheelers with online portal can be researched in future as online selling become a burning trend in India and this is getting more organized day by day.

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