

Determinants of Perceived Risk In Purchase of Car

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The Indian passenger vehicle industry will reach 4.86 million in annual sales by 2016 representing a growth of 10.8 per cent CAGR over the next five years. A buoyant economic growth, growing middle class, rising disposable income levels, relatively low penetration of cars and adequate availability of financing are likely to provide an ideal backdrop for a sustained long term demand growth for the sector.

Perceived risk happens to be a major factor in the purchase decision process of a customer. India continues to have one of the lowest car density (estimated at 13 cars per 1000 people), when compared to China (45), Brazil (160) and Indonesia (42). This provides an ideal platform for car manufacturers to cash in. However, unless the customer reaches a situation where he feels the risk perception is low, it is difficult for a prospective buyer to become a buyer. This study tries to ascertain the various factors that can cause perceive risk while purchasing the car and makes an attempt to find out the influence of risk reduction factors which can further be used by manufacturers and dealers of motor cars.

Keywords : Perceived Risk, Consumer Behavior, Car

Introduction

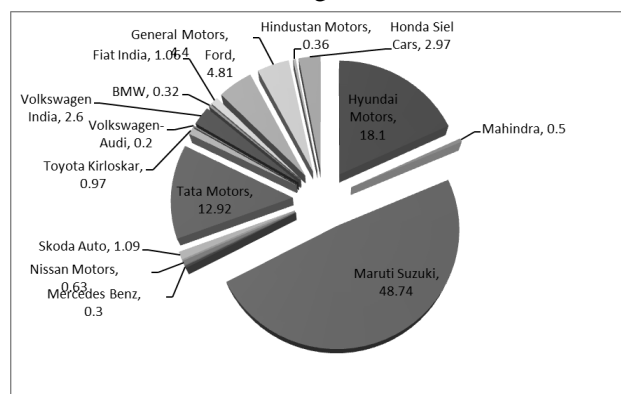
Consumer Behavior is the process involved when individuals or groups select, purchase, use, or dispose of products, services, ideas or experiences to satisfy needs and desires. Consumers have a number of enduring perceptions, or images, that are particularly relevant to the study of Consumer Behavior. A major factor affecting personal relevance and motivation is perceived risk, the extent to which the consumer is uncertain about the personal consequences of buying, using or disposing of an offering. If negative outcomes are likely or positive outcomes are unlikely, perceived risk is high.

Perceived risk is defined as the uncertainty that consumers face when they cannot foresee the consequences of their purchase decisions. The degree of risk that consumers perceive and their own tolerance for risk taking are factors that influence their purchase strategies.

Car Market in India

Since 1991, India has moved to being a market that for most Multi national manufacturers is inevitable. India's crusade to remodel into a global manufacturing hub has received an enthusiastic response from automakers hailing from diverse locations and hues. Data for calendar year 2010 depicts that vehicle production grew by 32.69% over the same period last year with production of around 17,076,659 vehicles.

Fig. 1



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Review of Literature

The various risks has been reviewed as follows in the following research works.

Technical risk	The probability that a purchased product results in failure to function as expected.	Nicolas & Castillo, 2008
Service risk	The probability that the firm will not offer a good service in the future.	Nicolas & Castillo, 2008
Social risk	The probability that a product purchased results in the disapproval of family or friends.	Nicolas & Castillo, 2008
Time Risk	The sensation of wasting time associated with the purchase, and especially, the time that the consumer perceives is unnecessarily spent in looking for and finding goods	Mafe et al, 2009
Psychological risk	The probability that a product results in inconsistency with self-image	Forsythe & Shi, 2003
Financial Risk	The probability that a purchase results in loss of money or other resources	Forsythe & Shi, 2003
Product risk	Product risk is the risk of making a poor or inappropriate purchasing decision	Doolin et al, 2002
Brand risk	Brand risk is the risk that the specific product may have problem	Massad & Tucker, 2000

Objectives of the Study

- To identify factors that can contribute to minimization of perceived risk.
- To identify the factors that contributes to perceived risk in purchase of car.
- To provide suitable suggestions pertinent to the findings

Sampling Frame Work

The convenience sampling procedure was adopted for this study and persons who had taken a car out of the three selected brands in the last three months or were definitely buying a car within a month in Chidambaram town were selected as respondents. Primary data are collected with the help of questionnaire. A total of 104 respondents from Chidambaram town were surveyed.

Analysis and interpretation

The tables showing the results are obtained by processing data using one way ANOVA and independent sample t test. The results obtained have been discussed quoting sufficient supporting literature of previous works done in this area.

From this table it can be inferred that, factors like word of mouth, magazine reviews, test drive, availability of service stations do have a major role in the purchase decision making and serve to reduce the perceived risk associated with the purchase.

Advertisements, mechanics, manufacturer's country of origin have a moderate impact on the decision process and also serve to minimize the perceived risk factors.

Table 1 Factors that can decrease perceived risk

Factors	Mean	Standard Deviation
Word of mouth as my peers own a similar car	2.42	1.252
The sales man	3.36	1.190
The test drive that was offered by the dealer	2.60	1.289
Review that I read from Auto magazines	2.32	1.201
My preference for this brand right from my child hood	3.16	1.301
The frequent advertisements that I saw in television	2.87	1.270
The recommendation of motor mechanic	2.94	1.276
The availability of company authorized Sales / service stations	2.40	2.240
The chosen car manufacturers' country of origin	2.78	1.314
The announcement of extended free service / price reduction / insurance	2.93	1.176
The follow up of customer satisfaction index ratings	3.07	1.360

Source: Primary data computed

Chu (2008) indicated that consumers look for risk reduction strategies to make him or her more comfortable with purchase, or to reduce the perceived risk until it is below his or her level of acceptable risk. In other words, consumers become clearer about their purchase object and know how to solve the uncertainties throughout the transaction process. Therefore, finding key risk reduction strategies for both experience and search goods actually help stimulate consumers' purchase intentions.

From the table it is observed that word of mouth decreases the social and time risk and aids in the purchase decision process. The role of sales executive helps to reduce physical, functional, financial, social and psychological risk. It is the role of the sales executive to demonstrate the various features of the car and hence his role is found important in reducing the various factors

of perceived risk. Brand has an impact on reducing the financial risk proving that customers are willing to pay a higher premium for a recognized brand.

Advertisement is found effective in reducing the social risk and time risk component of perceived risk. Advertisement positions the vehicle based on the target segment and helps to reduce social risk. Solomon (2009) revealed that many people think of Hyundai strictly as a low cost vehicle even though it has received high marks for quality in recent years. The carmaker's "Think About It" campaign tried to get consumers to reconsider their long held beliefs through frank statements like "The logo is there to tell you what the car is, not who you are" that helped customers to switch from their known brands.

Table 2 Risk and Risk Reduction Factors

Risk		Word of mouth	Sales Executive	Test drive	Auto magazines	Brand	Advertisements	Motor mechanic	Service	Origin	Free insurance	Ratings
Physical risk	R - Value	.118	.217(*)	-.117	-.080	.039	.098	.046	.110	.046	.157	-.003
	Sig	.234	.027	.237	.418	.696	.320	.640	.266	.642	.110	.977
Functional Risk	R - Value	.053	.301(**)	.063	-.083	.042	.103	.077	-.023	.037	-.018	.020
	Sig	.591	.002	.528	.405	.669	.298	.439	.818	.707	.857	.840
Financial Risk	R - Value	.176	.242(*)	.075	.055	.208(*)	.102	.100	.122	-.030	.019	.013
	Sig	.074	.014	.452	.578	.034	.303	.314	.217	.764	.845	.892
Social risk	R - Value	.223(*)	.257(**)	.020	.087	.013	.216(*)	.192	.114	.028	.083	-.013
	Sig	.023	.008	.844	.381	.898	.028	.051	.251	.781	.403	.895
Time risk	R - Value	.263(**)	.089	.065	.061	.131	.207(*)	-.027	.077	.017	.055	-.071
	Sig	.007	.370	.513	.536	.184	.035	.785	.436	.865	.581	.476
Psychological Risk	R - Value	.172	.194(*)	.096	.109	.133	.151	-.042	.090	.096	.017	.069
	Sig	.081	.049	.331	.269	.178	.125	.670	.364	.333	.866	.486

** Significant at the 0.01 level (2-tailed).

Source: Primary data computed

* Significant at the 0.05 level (2-tailed)

Table-3 Risk Factors And Brand Of Car

Risk	Brand	N	Mean	Std. Deviation	F	Sig.
Physical risk	Maruti	39	3.0163	.60045	.594	.554 (NS)
	Hyundai	33	3.0000	.60984		
	Tata	32	2.8750	.52491		
	Total	104	2.9677	.57912		
Functional risk	Maruti	39	3.0000	.58700	.425	.655 (NS)
	Hyundai	33	3.1818	.58471		
	Tata	32	3.0469	.55335		
	Total	104	3.0721	.57578		
Financial risk	Maruti	39	3.2650	.61528	.425	.655 (NS)
	Hyundai	33	3.1313	.83539		
	Tata	32	3.1146	.84595		
	Total	104	3.1763	.75939		
Social risk	Maruti	39	3.0983	.73520	.079	.924 (NS)
	Hyundai	33	3.1717	.82757		
	Tata	32	3.1458	.84534		
	Total	104	3.1362	.79262		
Time risk	Maruti	39	3.0667	.74739	.243	.785 (NS)
	Hyundai	33	3.1758	.77097		
	Tata	32	3.0500	.88864		
	Total	104	3.0962	.79463		
Psychological risk	Maruti	39	3.1172	.65043	.158	.854 (NS)
	Hyundai	33	3.0260	.76553		
	Tata	32	3.0982	.73063		
	Total	104	3.0824	.70737		

Source: Primary data computed

From table 4.6 it is observed that respondents preferring to buy Maruti vehicles perceive lower physical risk compared to respondents preferring to buy Hyundai and Tata vehicles. Respondents preferring to buy Hyundai vehicles face less functional risk compared to respondents preferring to buy Maruti and Tata vehicles. Respondents preferring to buy Maruti vehicles perceive less financial risk compared to those preferring to buy the other two brands. This may be due to the value for money positioning being followed by Maruti. Respondents willing to buy Hyundai and Tata vehicles perceive a lower social risk compared to those planning to buy Maruti vehicles. Chabra (2011) revealed that customers perhaps associate Maruti with reliability and affordability but could not relate the brand with luxury and exclusivity. Respondents planning to buy Tata

vehicles perceive the least time risk followed by those who plan to buy Maruti and Hyundai vehicles respectively. Respondents planning to buy Maruti vehicle perceive the lowest psychological risk.

Loudon (2007) identified that brand names can be very valuable assets of the company and some brands will not be considered by the consumer because of this unawareness. One Way ANOVA was applied to identify the significant level of difference between the different brands of car to be owned by the respondent towards the risk components. From P value it was observed that there is no significant difference between the different car brands to be owned by respondent towards risk.

Table 4 Risk and Age Profile

Risk	Source	N	Mean	Std. Deviation	F	Sig.
physical Risk	Upto 30	39	2.8275	.55799	4.740	.011*
	31 - 40	46	2.9466	.59120		
	Above 40	19	3.3062	.47258		
	Total	104	2.9677	.57912		
Functional Risk	Upto 30	39	3.0545	.54697	.124	.884 (NS)
	31 - 40	46	3.0625	.66549		
	Above 40	19	3.1316	.39192		
	Total	104	3.0721	.57578		
Financial Risk	Upto 30	39	2.9487	.73475	2.906	.050*
	31 - 40	46	3.3116	.80486		
	Above 40	19	3.3158	.60094		
	Total	104	3.1763	.75939		

Social Risk	Upto 30	39	3.0085	.72643	1.122	.329 (NS)
	31 - 40	46	3.1630	.88016		
	Above 40	19	3.3333	.68268		
	Total	104	3.1362	.79262		
Time Risk	Upto 30	39	2.9795	.89654	1.086	.342 (NS)
	31 - 40	46	3.1087	.69628		
	Above 40	19	3.3053	.79266		
	Total	104	3.0962	.79463		
Psychological Risk	Upto 30	39	2.8828	.72907	3.989	.022*
	31 - 40	46	3.1118	.69525		
	Above 40	19	3.4211	.56839		
	Total	104	3.0824	.70737		

Source: Primary data computed

From table it is observed that respondents in the above 40 age group perceive the lowest risk towards factors that contribute to risk across all six dimensions whereas respondents in the below 30 age perceive the highest risk across all dimensions. The younger age group is spoilt for choice with multiplicity of brands which raises their expectation bar and comparisons which lead to them perceiving a higher risk across all six dimensions.

From P value it can be observed that respondents of the different age groups vary significantly at 5 per cent level towards physical risk, financial risk and psychological risk.

Simcock (2006) showed that age differences are associated with specific risk factors and that the relationship of age and behavior was not always linear. Whilst most marketing practitioners tended to see the older groups as separate and different, there was little evidence to support this simplistic view.

Suggestions

- It has been found that word of mouth reduces the social and time risk. Positive word of mouth happens only when present users are extremely satisfied with their cars.
- The point of contact for prospective buyers is the dealers. It is found that sales executive have a huge role to reduce physical risk, functional risk, financial risk and psychological risk. Hence sales and marketing executives at the dealer end should be well trained to answer all queries of customers.
- Manufacturers should make available facilities like ABS (Assisted braking system), seat belts for rear seats, child lock, reverse sensor even in low end vehicles as respondents who prefer vehicle for family usage have a higher perceived fear for factors of functional risk
- 48 per cent of respondents in this study give importance to country of origin. But there are strong auto players coming from Korea, India and China.

They identified that there are several types of risks that can discourage consumers from making a choice or delaying the purchase decision. By a proper use of risk reduction factors the perceived risk can be reduced. Hence manufacturers should give adequate importance to factors of perceived risk and in each of their activity should endeavor to have steps that reduces the perceived risk

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ANNEXURE - I

Physical Risks

1. I am not sure about the lighting system in the car
2. I am doubtful if I can get a good after sales service
3. I am not sure about the mileage that my car can give
4. I have a doubt if the car performance will be satisfactory
5. My car will not satiate my thirst for high speed driving
6. I am doubtful if the air conditioning system in the car can hold good in these days of global warming
7. I am not sure if the car is maintenance free
8. I am apologetic I have chosen a car devoid of blue tooth and other apps
9. I am worried I am settling for a car that does not have ABS (Anti lock braking system)
10. I am not sure about the engine pick up/ performance
11. I am afraid if my car has a larger boot space
12. I am afraid if I can have nation wide service outlets

Functional Risks

13. I am not sure that local technician can handle this technologically superior car
14. I feel that this car does not have Functional option like air bags
15. I fear I am buying a model which people complain of break problem
16. I am doubtful this vehicle does not have a road grip
17. I am doubtful of backseat comfort

18. I may not be able to traverse ghat roads in this car along with my friends
19. I am afraid if my car provides me with fully equipped in - cabin experience
20. I am afraid if my car would provide a great driving experience

Financial Risks

21. I am afraid that my car can be stolen
22. I am afraid that I am buying a expensive car
23. I am afraid I will have to pay a higher EMI for buying this car
24. I am afraid if the price of car is within my budget
25. I am confused if the car is worth the money I spend
26. I am not sure if there is a car loan that can help me from the hassle of wasting my time in loans elsewhere
27. I am afraid of my decision to buy a car as I can invest that amount in some immovable properties (Opportunity cost)
28. I am afraid that I go for a car because of the loyalty / exchange bonus
29. I am afraid the price of the car will come down after I buy the car
30. I am afraid the cost of spares for this car can be expensive

Social Risks

31. I am afraid if my social standing will get decreased after buying this car
32. I am afraid if the shape of my car will add my social status
33. I m not sure if I get a sense of more importance among my friends after I own the car
34. I am afraid the car can embarrass me by having starting problem where I may need the help of others to push my car
35. I fear the audio system in my car may looked substandard
36. I am not sure if my friends will complement me for my decision to purchase this car

37. I am afraid if the colour of my car is pleasing to others

Psychological Risks

38. I am confused if the car is liked by all members of the family
39. I am afraid that I will make a poor choice of a car
40. I am buying a car that is entering the market for the first time
41. I am unsure about the performance of my car after 3 - 4 years
42. I am worried the manufacturer will stop this model at any time and may launch a newer model making my car obsolete
43. I am afraid I may not be able to clean / cover the car properly
44. I am worried I can easily find a buyer when I want to dispose my car
45. I am afraid I am selecting the based on the reputation of the company

Time Risks

46. I am worried about the weighting time to get my car
47. I believe I wasted a lot of time in searching the car of my choice
48. I believe it will take a long time for me learn to drive a car
49. I am not sure if I need to spend my time in search of service mechanic
50. I am afraid if the car loan procedure will consume a huge amount of time

