

Models for Consumer's Brand Categorization Process: A comparative Study between Rural and Urban Customers

Nibha Barman,¹Manash Pratim Kashyap²,GunenchandraDas³.

1.Research Scholar.Department of Mathematics. Assam down town University.

2. Department of Statistics.

Assam Down Town University

3. Department of Mathematics,

Assam down town University.

Panikhaiti,Guwahati.

Assam. India

Abstract:

In this paper it is intend to introduce the term 'Brand Categorization Process' which is the more important concept in the study of consumer behaviour. The term is also related to another term 'Consideration Set' which is also an important aspect of consumer behaviour. Here an attempt has to be made to measure as well as compare the awareness set, consideration set and choice set of the population of rural and urban areas. The brand categorization process has an important role in the study of marketing. The consumer's choice process on some staple goods, for example rice, tea and toothpaste for the rural and urban customers are to be considered. It is observed that the awareness set sizes and the consideration set sizes do not differ in large enough for the rural and urban customers, but the choice set size differ for rice. Furthermore, for tea and toothpaste, the urban customers have sufficiently bigger consideration set and choice set in comparison with the rural customers.

Keywords: Brand Categorization Process, Consideration set, Awareness set, Choice set, Consumer Behaviour, Marketing .

1.Introduction

In marketing it is seen that the rapid change is increasing day to day. Brand categorization is one of the main feature which are to be selected by the customers when they want to purchase some commodity. After that consumers choose products by first forming a consideration set and then choosing from these selected brand. When they have to screen many products they want to purchase, then it is cognitive for the consumer and to use consider-then-choose process. Therefore, consideration set is one of the most essential aspect of consumer behaviour which is the subset of brands that the consumers evaluate when making a purchase decision. The study of brand categorization process is going on since 1975 (Narayana and Markin) with the universal set. According to them it is the available brand which exists within the product class at any certain given time. This will be fluctuate overtime as well as

new brands are introduced and the unsuccessful brands are to be withdrawn.(Roberts and Lattin,1991) divided the brands of the market into two categories for which customer is aware of and those which is not aware of. Therefore, awareness set is to be formed by the customer for known brands of a particular product. According to (Ratneswar and Shocker,1991),formation of consideration set is one of the preliminary stage of pre-choice decision making.

Roberts and Lattin,(1991) defined consideration set as evoked set.(Desai and Hoyer,2000) concluded that consideration set enables an opportunity for the brand managers to increase a brand market share. Siddarthe.al(1995) defined the needful choice set which consumers provide a series of managerial decision regarding the competitive position of a brand.Almost all customers use categorization to narrow down colossal product options into something more manageable.This is especially true in nature industries where products and services are often very similar-not easily recognizable.

This paper provides the comparison of different sets of consumer choice tendency by considering staple goods. In this regard Shari Waters, defines staple goods as the products which are regularly purchased by the customers according to their needs. Kotler(2002) defines the goods which are purchased by the customers as regular basis is called staple goods.(Sharma and Srivastava,2008),acclaimed that the change of intensity of market place is increased day by day. But the consumer behaviour differs in the rural and urban areas because of geographical differentiability, culture, purchasing capacity, available options, choice, liabilities, abilities etc.

Rural markets are obviously dependent on their agricultural products, local products like rice, tea by their own garden, farms etc. Therefore the brand categorization process is certainly differs in rural and urban areas. This paper proposes to measure the difference in the brand categorization process due to some selected goods between the rural and urban customers. Here, the staple goods considered are rice, tea and toothpaste. This study will look into the awareness level of the rural and urban customers with respect to the staple goods under consideration along with the other different features of the brand categorization process.

The main objective of this study is to compare the awareness set, consideration set and choice set of rural and urban community sectors for rice, tea and toothpaste.

Considering the nature of the topic data are collected from both primary and secondary sources.To collect the primary data from sampling unit,both stratified and random sampling methods have been adopted and in this connection a suitable questionnaire has to be made to collect information from the sample villages.Secondary information are collected from books,journals and government officials.

2. Abstract Frame Work for Brand Categorization:

A folk of researchers have come to study consumer’s brand categorization process which is an important study in the field of consumer’s behaviour. Since 1963, it’s work is going on still now. Howard(1963) categorised the whole set into two sets viz. awareness set and unawareness set.

The brand categorization process and the consideration set are inter related to one another. Actually, consideration set is the subset of all brands which are to be chosen by the customers with respect to some compulsions from the all brands in the product category. But they have got a few information about the brands. So, it is essential to divide this product category into two parts namely (i) Awareness set and (ii) Unawareness set.

Shocker et.al.(1991) found that Awareness set consists of the items in the Universal set for which the customers aware of. According to him consideration set is one of the part of the awareness set for the limitation of the customers awareness.

2.1 Narayana and Markin Model:

Narayana and Markin(1975) divided the awareness set into three subsets viz. Inept set, Inert set and Evoked set.

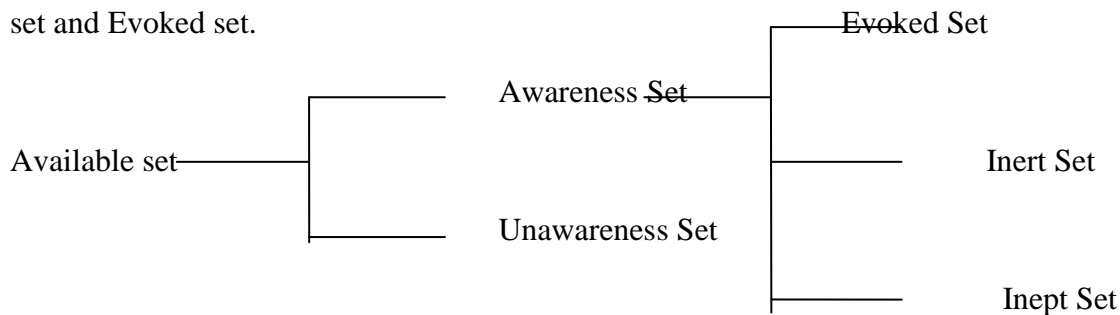


Fig:(2.1) Narayana and Markin Model (1975)

Awareness set or knowledge set consists of the subset of items in the universal set of which, for whatever reason, a consumer is aware of. Consideration set is a part of the Awareness Sets according to the limitation of the consumers awareness. Awareness set is divided into three parts viz. Evoked set, Inert set and Inept set. A consumer’s evoked set develops from the routinized response behaviour i.e. a small amount of time and required information is essential to make the actual purchase selection. Inert set consists of the brands the customer is impassive because they are glimpsed as not having any particular benefits i.e. the brands in the inert set are neither accepted nor rejected, they are impartial. Inept Set includes the brands that consumer excludes from purchase consideration because the brands are known to be unacceptable.

2.2 Howard Model:

In (1977), Howard defined the brand categorization process as “the subset of brands that consumer considers buying out of the set of brands that he or she is aware of in a product class.” He divided the available set in two parts, one is Awareness set and the other is

Unawareness set and from the customers purchasing behaviour he extended Evoked set from the Awareness set.

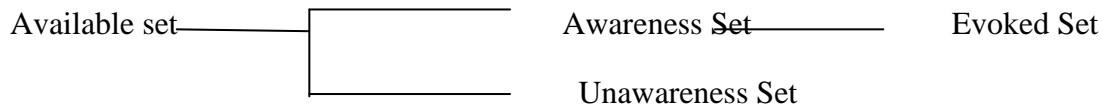
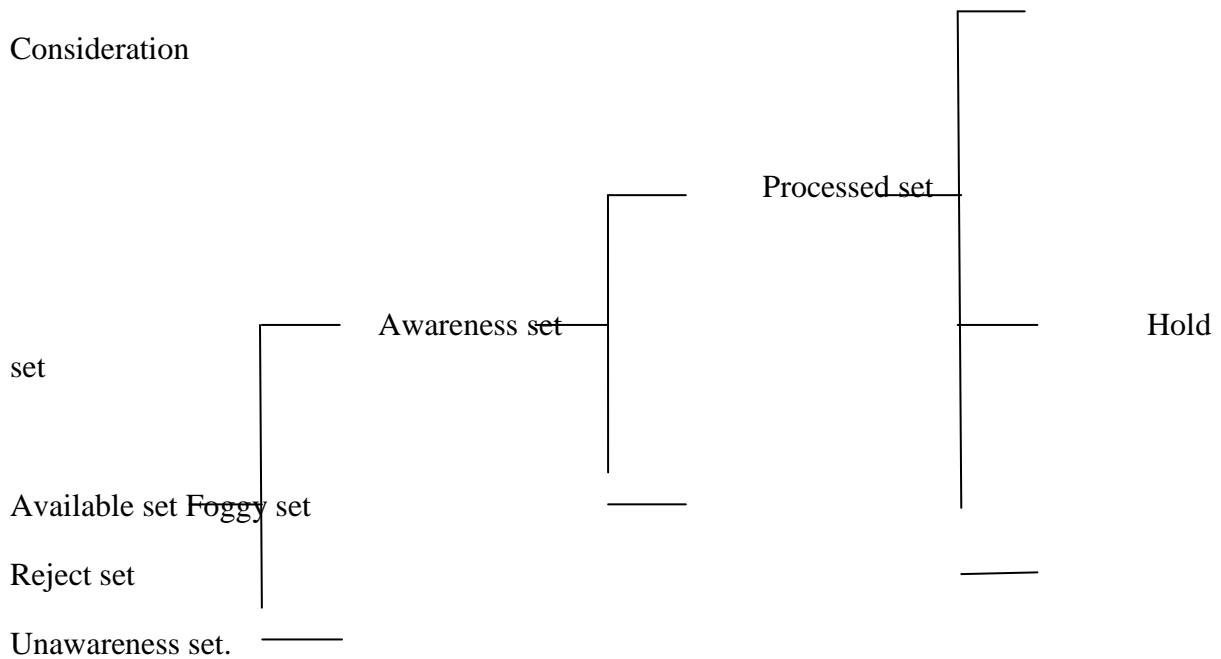


Fig. (2.2) Howard model (1977)

Schiffman and Kanuk (2007) gave a definition for inept set which includes those brands the customers are excluded from their purchase decision. They defined inert set as the brands for the customers which are not give advantages to them and for the consideration set, they defined that this set is most acceptable for the customers which they are wanted to purchase for their routine daily life.

2.3 Brisoux and Laroche Model:

Brisoux and Laroche(1980),divided the awareness set into two categories: one is processed set and the other is unprocessed set which is also named as foggy set.In the processed set consumer judges the brands at least one prominent attribute and form their assumptions and in the foggy set brands are not assessed on any prominent attribute.They then divided the processed set into three subsets named as consideration set, hold set and the last one is reject set. According to him hold set contains the products which the consumer likes or dislikes and the reject sets are not acceptable by the consumers. The consideration set is one of the best choice for them in purchasing their daily needs.



Fig(2.3): Brisoux-Laorche model (1980)

2.4 Brand Categorization Model:

There are four stages in a model for Brand Categorization Process of a consumer’s choice for the brand of a particular product. The elementary stage, which is known as Universal set belongs to the all brands which a customer wants to purchase under some conditions. The second stage is Awareness set, which includes the brands that a consumer is aware of for finding their objectives. The third stage is considered as Consideration set, which is spirited and acceptable by the consumer. According to Shocker et.al.(1991),the fourth stage is named as Choice set which is closely related to the Consideration set. A consumer can choice his or her specified particular goods from this choice set.

Universal set

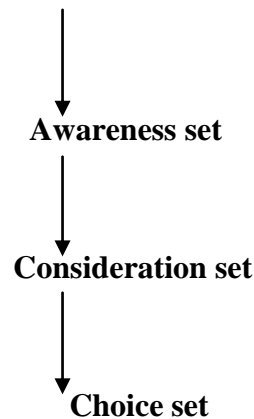


Fig:(2.4) Stages of Brand Categorization Process Model

3. Discussion:

3.1 Study area, Sampling and Data Consideration:

Assam is a beautiful state of North East India. The mighty Brahmaputra flows through it. Located south of the eastern Himalayas, Assam comprises the Brahmaputra Valley and the Barak Valley along with the Karbi Anglong and Dima Hasao districts with an area of 30,285 sq mi(78,440). Assam, along with Arunachal Pradesh, Nagaland, Manipur, Mizoram and Meghalaya, is one of the seven sisters and Sikkim is also a part of this area. Geographically, Assam and these states are connected to the rest of India via a 22 kilometers(14mi) strip of land in West Bengal.

There are 33 districts in Assam viz. Baska, Barpeta, Bongaigaon, Biswanath Chariali, Charaideo, Cachar, Chirang, Darrang, Dhemaji, Dhubri, Dibrugarh, Dima Hasao, Goalpara, Golaghat, Hojai, Hailakandi, Jorhat, Kamrup(Rural), Kamrup(Metropolitan), Karbi Anglong(East), Karbi Anglong(West), Karimganj, Kokrajhar, Lakhimpur, Morigaon, Majuli, Nagaon, Nalbari, Sibsagar, So-nitpur, South Salmara-Mancachar, Tinsukia and Udalguri. Assam is a state of India with

population of approximate 3.12 crores. The density of Assam is 398 per sq.km. It is spread over 78,438 sq.km. The study area includes only the lower Assam's districts of Assam.

The study of research is based on primary data. In lower part of Assam, there are fifteen districts and it is very inconvenient to study the whole districts at a time. Therefore to select the study area, simple random sampling is adopted. For convenience out of fifteen districts, only three districts are to be selected for the study. Accordingly, the data are collected from Kamrup(Metro), Kamrup(Rural) and Nalbari District.

The data are collected through a schedule which are to be prepared earlier after being checked through pilot survey. The sample size for rural and urban area are selected 200 each. With the mentioned sample sizes the results are reached with a confidence level of 95% and a confidence interval of 5%.

The urban consumers are selected using random sampling technique from Departmental store, Super-markets and other popular market places which are spread across the above mentioned districts. However, the rural customers are selected from the rural markets that are to be considered for study. Three different samples are chosen to differentiate their contiguity of the rural and urban area's population.

The data thus obtained are analyzed by the models (Stochastic, Mathematical) and relevant calculations are done in statistical packages like SPSS 17.0, Microsoft Exel etc.

The sample size for urban area is selected from Kamrup(M) and the sample size for rural areas are selected from Kamrup(R) and Nalbari District. In Kamrup(M), there are 245938 households who are located in urban area. This study covers both rural and urban customers, therefore, a sample of households of size 200 from both the populations are selected. The sample size is taken separately for rural and urban area. In Kamrup(M), there are 31 municipal wards. From each of the wards, households are selected randomly taking the total number of households selected from urban area is 200 and the number of households selected from each of the municipal ward is proportional to the total number of households in that ward.

In Kamrup(Rural) District, there are 1010 villages ; out of which 49 villages are selected, i.e one out of every twenty villages. From these 49 villages, a total of 200 households are selected randomly, in such a way that the number of households selected from each village remains proportional to the number of households in that village.

In Nalbari district, there are 472 villages; out of which 23 villages are selected i.e one out of every twenty villages. From these 23 villages, a total of 200 households are selected randomly. After that the data are analyzed.

3.2 Selection of Urban Households: The following method is used to select the sample households in urban area. Let H_{ij} is the number of households for the i^{th} ward of the municipal board of the j^{th} town (Here, $i=1,2,\dots,h_j$; where h_j is the number of wards in the j^{th} municipal board and $j=1$, as there are only one municipal town in the district). A sample of h_{ij} is selected

for each i^{th} ward of j^{th} town municipal board in such a way that the number of household selected from every i^{th} ward endures proportional to the number of households in that ward i.e.

$$H_{ij} = h_{ij} \times \text{sample size} / \text{Total number of households in the } j^{\text{th}} \text{ town or villages} \dots\dots(1)$$

where h_{ij} = the number of household for the i^{th} ward of the municipal board of the j^{th} town.

3.3 Sampling of Households in Rural Area

There are eleven revenue circles in Kamrup(Rural) District and seven revenue circles in Nalbari District. From each revenue circle one out of every 20 villages are selected. The villages are randomly selected from the revenue circles. The numbers of households are taken from the 2011 census. By using systematic sampling, the data are collected from each town/villages. From each ward/villages a household is selected randomly and there after k^{th} households, $(k+1)^{\text{th}}$ household selected involuntarily to the sample. The procedure is going on till the sample of size h_{ij} is interrogated from H_{ij} .

The programme is evolved after executing the pilot survey. The longitudinal data are collected by using this programme.

3.4. Analysis of the Study:

This paper compares the brand categorization process of rural and urban customers and evaluates the sizes of the awareness set, consideration set and choice set for the staple goods rice, tea and tooth paste.

Table 3.4.1, focuses the analysis for the product rice. It is concluded that the mean awareness set size does not differ significantly for urban and rural customers where as the consideration set and choice set size differs significantly between rural and urban population. This gives an idea that urban customers prefer more varieties of rice than that of rural customers.

Table 3.4.2, gives the analysis of the brand categorization process for the product tea. The average awareness set size as well as consideration set size and choice set size differs significantly in case of the two populations. This shows that urban customers are more conscious to purchase different brands of tea in comparison with the rural customers.

Table 3.4.3, shows the brand categorization process of the consumers for the product tooth paste. The awareness set sizes of the rural and urban populations differ significantly means that urban customers are more conscious about different brands of toothpaste. There is a significant difference between rural and urban customers. This means that urban customers prefer more brands of toothpaste than that of rural customers. The choice set size between urban and rural customers do not differ significantly.

Table 3.4.1: Average Size of Different Sets of Brand Categorization Process of Customers in Rural and Urban Population for the product Rice

S/N	Sets of Products	Mean Urban	Mean Rural	z-value	p-value	Conclusion
1	Awareness Set	6.26~6	6.25~6	0.048	0.96	The awareness set size of the urban customers for rice do not differ significantly from that of rural customers.
2	Consideration Set	3.13~3	0.89~1	28.60	0.000*	The consideration set size of the urban customers for rice differs significantly from that of rural customers that means urban customers have more aware about different brands of rice than that of rural customers.
3	Choice Set	1.75~2	0.58~1	20.27	0.000*	The choice set size of the urban customers of rice differs significantly from that of rural customers that means urban customers are more conscious about different brands of rice than that of rural customers.

“*” significant at 5% level of significance.

Table 3.4. 2: Average Size of Different Sets of Brand Categorization Process of Customers in Rural and Urban Population for the product Tea

S/N	Set of Products	Mean Urban	Mean Rural	z-value	p-value	Conclusion
1	Awareness Set	14.295~14	8.41~8	40.41	0.00*	For the product tea,the awareness set size of the urban customers differ significantly from that of rural customers i.e.urban customers are more aware of different brands of tea than that of rural customers.
2	Consideration	6.36~6	2.145~	43.67	0.00*	The size of the

	Set		2			consideration set of urban customer differs significantly from that of rural customer. The urban customers consider more brands of tea than that of rural customers.
3	Choice Set	2.68~3	1.28~1	23.44	0.00*	The sizes of the choice set between urban and rural customers are significantly different. The choice set of urban customers vary from rural customers at a big extent.

“*” significant at 5% level of significance .

Table 3.4.3: Averages Size of Different Sets of Brand Categorization Process of Customers in Rural And Urban Population for the Product Toothpaste:

S/N	Set of products	Averages		z-value	p-value	Conclusion
		Urban	Rural			
1.	AwarenessSet	12.3~12	7	42.33	0.00	The awareness set sizes of the rural and the urban populations differs significantly, i.e. urban customers are more conscious about different brands of toothpaste.
2.	Consideration set	7.34~7	3.21~3	45.67	0.00	There is a significant difference between rural and urban customers for consideration set. This means that urban customers prefer more brands of toothpaste than that of rural customers.
3.	Choice Set	1.56	1.28	0.789	0.79	The choice set size between urban and rural customers do not differ significantly .

“*” significant at 5% level of significance.

4. Conclusion:

The most probable aspect of the study is to understand the brand categorization process of customers of rural and urban areas i.e to select the brand varieties from a Universal set. This study compares the behaviour of the population of rural and urban areas and their impact on staple goods such as rice, tea and tooth paste. The considered products of the study are relatively homogeneous and fall under the category of staple goods, which has the lowest price, regularly purchased and also non-durable. It is known that homogeneous products provide lower variability. The sample size considered for the study is not so big. So, errors must come out. On the other hand, in the survey period, it is seen that most of the respondents finds difficult in reminding brand names, which are the members of their consideration set and awareness set. Therefore, the respondents should be aware of to remember the varieties of brand names at the time of survey period. The brand categorization process of a consumer conceals the three sets viz, the awareness set, the consideration set and the choice set. The main aim of this paper is to compare the brand categorization process of a customer of the rural and urban areas for staple goods. This study concludes that the awareness set of both the rural and urban areas are likely to be same for the goods rice and tea, where as the consideration set, for all the staple goods which are taken for this study are not same for the rural and urban areas. It is observed that the size of the choice set for the products tea and toothpaste are same in the rural and urban population. The awareness set for the product rice are same in the rural and urban areas, but the choice set varies from each other. The awareness set size are quite different for the product tooth paste and tea where as their choice set are same.

This paper helps to understand the awareness set, consideration set and the choice set of the two populations viz. rural and urban. It is seen that a customer is more conscious in purchasing the staple goods. From the consideration set, customers make their choices and the individual will be more aware of the choice of his customers. On the otherhand the marketers may come around with various other conclusions related to the different stages of brand categorization process of the products.

This study does not generalise for the whole country as it has been performed for the North Eastern part of India. In this part, there are varieties of brands of tea which are scattered where as in other parts of the country, there is no availability of such an excessive supply of tea. In case of other goods also, there is some differences in their supply and obviously the average set size must vary.

It is recommended for further research to study the brand categorization process for fast running consumer goods, electronic goods etc. cross classified by gender or economic groups etc.

References:

Aaker, David A and Joachimsthaler Erich (1990). "*Brand Leadership*" published by the press pp.134-136 .

Allenby, Greg, Robert Leone, Jen(1999). "A Dynamic Model of Purchase Timing with Application to Direct Marketing" published by *Amer.Stat.Assoc.*94(446) pp.365-374.

Bolton, Ruth n.(1998) "A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service provider". The role of satisfaction published by *Marketing Science* 55(Jan) pp.1-9.

Boush,David M.and BarboraLoken(1991) "Process Tracing Study Brand Extension Evaluation" published by *Indian Journal of Marketing* February 28,pp.16-28.

Brisoux,J.,E.&Laroche,M.(1980). A Proposed Consumer Strategy of Simplification for Categorization Brands Evolving Marketing thought for 1980.Eds.John H.Summy and Ronald D.Taylor. Carbondale,IL: Southern Marketing Association,112-114.

Brown,J.J.&Wildt,A.R.(1992). Consideration set measurement. *Journal of the Academy of Marketing Science*,20(3):235-243.

Campbell,B.,M.(1969). The Existence and Determinants of Evoked Set in Brand Choice Behaviour.Ph.D Dissertation,Columbia University.

ChattopadhyTanmay,Shivani Shraddha and Krishnan Mahesh(2009) "Do Multiple Time Consumers also observe imperfectly? ;The cse of Automobile consumers in India" published by *Indian Journal of Marketing*,June No.volume xxxix pp.40-47.

Chintagunta,P.,K.(1992). Estimating a multinomial probit model of brand choice using the method of simulated moments.*Marketing science*,11(4):386-407.

Church,N.,J.,Laroche,M.&Rosenblatt,J.,A.(1985). Consumer brand categorization for durables with limited problem solving:An empirical test and proposed extension of the Brisoux-Laroche model.*Journal of Economic Psychology*,:231-253.

Cooper,L.G. and M,Nakanishi (1988). "Market share Analysis Evaluating Competitive Marketing Effectiveness" published by *Kluwer,Academic Publishers*.

Cullen,F.& Kingston,H.(2009). Analysis of rural and urban consumer behaviour towards new food products using a food-related lifestyle instrument. *Journal of Foods Service Business Research*,12(1): 18-41.

Currin,ImranS.,RobertJ.Meyer,and BhanT.Le(1988) "Disaggregate Tree-structured Modelling of Consumer Choice Data",published by *Journal of Marketing Research* 25(August)pp.253-255.

Desai,K.,K.&Hoyer,W.,D.(2000). Descriptive characteristics of memory-based consideration sets:influence of usage occasion frequency and usage location familiarity.*Journal of Consumer Research*,27(Dec):309-323.

Desarbo, W.S. & Jedidi, K. (1995). The spatial representation of heterogeneous consideration sets. *Marketing science*, 14(3): 326-342.

Dwyer, F. Robert (1997). "Customer lifetime valuation to support marketing decision making" published by *Interactive Marketing* No.4, volume 11 pp.6-13.

Elrod, T. & Keane, M., P. (1994). A factor-analytic model for representing the market structure in panel data. *Journal of Marketing Research*, 32(February): 1-16.

Fok, D. P. H. Frances, and R. Paap (2002), "Economic Analysis of the Market share Attraction Model" in P. H. Franses and A. L. Montgomery (eds), *Advances in Econometric vol-16 Econometric Models in Marketing*, Elsevier.

Guadagni, P., M. & Little, J. D. C. (1983). A logit model of brand choice calibrated on scanner data. *Marketing science*, 2(3): 203-238.

Hauser, J., R. & Wernerfelt, B. (1990). An evaluation cost model of evoked sets. *Journal of Consumer Research*, 16(March): 393-408.

Howard, J., A. (1977). *Consumer Behaviour: Application of Theory*, McGraw-Hill.

Howard, J., A. & Sheth, J. N. (1969). *Theory of Buyer Behaviour*. New York: John Wiley.

Hruschka, H., Stoiber, H. and Hamerle, A. (1998). "Analyzing Purchase Incidence and Brand Choice by Hazard models", published by *Journal on OR Spectrum* 20 pp.55-63.

Jain, Dipak; Sing Siddharth (2002). "Customer Life value Research in Marketing. A review and future directions" published by *Interactive Marketing*, No.2, volume 16.

Jedidi, Kamel, Rajeev Kohil and Wayne S. DeSarbo (1996). "Consideration sets Cojoint Analysis", published by *Journal of Marketing Research* 33(August) pp.364-372.

John R. Hauser "Consideration –set heuristics" *Journal of Business Research* 67(2014); 1688-1699.

Kardes, F., R., Gurusurthy, K. Murali, C. & Ronald, J., D. (1993). Brand retrieval, consideration set composition, consumer choice and the pioneering advantage. *Journal of Consumer Research*, 20(June): 62- 73.

Kotler, P. (2002). *Marketing Management*. 10th Ed. 397.

Kfir Eliaz and Ran Spiegler (2011). Consideration sets and competitive marketing, *Review of Economic Studies*, pp.78, 235-262.

Lattin, James M and Randolph E, Bucklin (1989). "References Effects of price production on Brand Choice Behaviour" by *Journal of Marketing Research* 26(August), pp.299-310.

Laroche, M. & Rosenblatt, J. (1983). Brand categorization strategies in RRB situations: Some empirical results. *Advance in Consumer Research*, 10: 549-554.

Maddox,R.,N.,Gronhaug,K.,Homans,R.,E.& Fredrick,E.(1978). Correlates of information gathering and evoked set size for new automobile purchasers in Norway and the U.S. *Advances in consumer Research Edition H.KEITH Hunt.Provo,UT*: Association for Consumer Research, 167-170.

ManashPratimKashyap, DibyojyotiBhattacharjee (2011). Brand Categorization Process for staple goods: comparison between Rural and Urban customers,*Journal of Information Management and Business Review* vol.2,No.4,pp162-172.

Myers,J.,H.(1976). Benefit structure analysis: A new tool for product planning.*Journal of Marketing*,40(October): 23-32.

Narayana,C.,L.&Markin,R.,J.(1975). Consumer behaviour and product performance: An alternative conceptualization,*Journal of Marketing*,39:1-6.

Nedungadi,P.(1987). Formation and Use of a Consideration Set: Implication of Marketing and Research on Consumer Choice.PhD Dissertation,Gainesville,FL: University of Florida.

Oest,R Hans F.P(2005). "Which Brands Gain Share from which Brands? Inference from Store-level Scanner Data",published by *Quantitative Marketing and Economics,Springer Science and Business Media* 3pp. 281-304.

Park,C.Whan,SungY.Jun,and Allan D.Shocker(1996)."Composite Branding Allances; An Investigation of Extension and feedback Effects" published by *Journal of Marketing Research*33(November) pp.453-446.

Roberts,John H(1989). "A Grounded Models of Consideration Set Size Composition" published by *In Anvances in Consumer Research*,volume 16 ed.T.Srull.Proveut; Association for consumer research pp.749-757.

Richard T.Carson.JordanJ.Louviere(2014). "Statistical properties of Consideration sets",*The Journal of Modelling* 13; 37-48.

Shocker,Allan,Moshe Ben-Akiva,BrunoBoccarra and Prakash Nedungadi(1991). "Consideration set influences on consumer decision making and choice: Issues,Models and suggestion" published by *Marketing Letters*,3,pp.181-198.

Shocker,A.,D.,Ben-Akiva,M.,Boccarra,B.&Nedungadi,P.(1991). Consideration set influences on consumer decision –making and choice:Issues,Models and Suggestions.*Marketing Letters*,2(3): 181-197.

Siddarth,S.,Buckling,R.,E.&Morrison.G.,D.(1995). Making the cut:modelling and analyzing choice set restriction in scanner panel data.*Journal of Marketing Research*,32(August): 255-266.

Troye,S.,V.(1984). Evoked set formation as a categorization process.*Advances in Consumer Research*.Ed.ThomasC.Knnear,Provo,UT: Association for Consumer Research: 180-186.

Vroomen,B.,Franses,P.,&Nierop.E.,V.(2004). Modelling consideration sets and brand choice using artificial neural network.*European Journal of Operation research*. 154(1): 1-19.

Wright,P.(1975). Consumer choice strategies: Simplifying vs. Optimizing.*Journal of Marketing Research*,12(February): 60-67.

Wright,P.&Barbour,F.(1977), Phased Decision Strategies: Sequels to Initial Screening. *Multiple Criteria decision Making:North Holland TIMS Studies in Management Science*,M.Starr and M.Zeleny,eds. Amsterdam: North-Holland Publishing Company: 91-109.