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A STUDY ON PRE PURCHASE BEHAVIOUR FOR INDUSTRIAL WATER TREATMENT PLANT WITH REFERENCE TO AHMEDNAGAR AND PUNE DISTRICT

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ABSTRACT

The purpose of this study is to study pre purchase behaviour of industrial consumers in Ahmednagar and Pune District. The questionnaires were given to 20 industrial consumers who use industrial water treatment plant. Out of 20 consumers contacted, 15 questionnaires were received with required coverage and details. The instruments of this study involved two parts: the first section of the instrument consisted of forced-choice questions about basic characteristics of the organization. The second section consisted of variables to measure the pre purchase consumer buying behaviour. The Statistical Package for the Social Science (SPSS) for Microsoft Windows 17.00 was used to complete the analysis of the collected data. Descriptive statistics, including means, standard deviations were implemented in order to investigate the demographic data, one-way analysis of variance (ANOVA) were used to determine whether any significant relationships exist among respondents. In addition, the .05 level of statistical significance was set at all statistical tests in the present study. The findings of the study were generalized as follows: Statistically significant differences were found in the age(duration of operation) of organization and pre purchase decision . Similarly no significant association was found out between amount of water needed in the organization and pre purchase decision. In the end of the study implications and conclusion were provided.

Keywords: Consumer Behavior, Pre purchase decision, Industrial Consumer, Buying Behavior.

INTRODUCTION

The buying behaviour of organizations can be defined as the rational decision-making process in which organization buys goods and services when they have need of any goods or service for their organization. The purchased products and services get identified, evaluated, and chosen among alternative brands and suppliers. Organizational buying is similar to the consumer buyer behaviour without any major differences. Organizations buy the products and services for the betterment of organizational objectives such as manufacture and deliver goods and services to members, customers or the community. Three types of buying situation have been distinguished: the straight rebuy, the modified rebuy, and the new task. The straight rebuy: It is the buying condition in which the buyers buy the product frequently. Buying of those products will be a routine task for the organization. The modified rebuy: A business buying condition in which the buyer wants to change the product specification, its price as well as terms or suppliers. The new task: When the organization buys any products or services for the first time then it is called new task. In this cases, the larger the cost, there

will be more decision participants and also there will be more efforts for collecting information. The new task situation creates more opportunity as well as challenges.

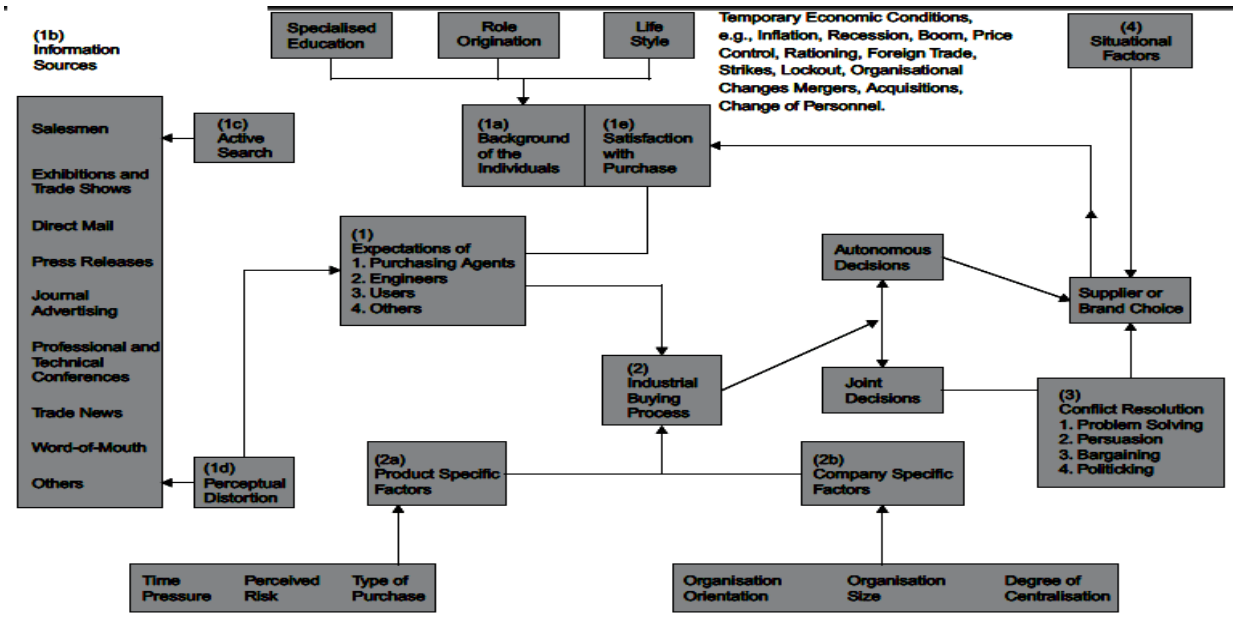
In recent years many conceptual and methodological developments have contributed to the understanding of industrial organizations as consumers. Yet there is still a lack of purpose and no sense of direction to much of the research in the area of industrial marketing/organizational buying behaviour. Industrial (or business) buyers are influenced by many factors when they make buying decisions. Generally, business buyers are influenced by organisational factors or task-oriented objectives (like best product quality, or dependable delivery, or lowest price) and personal factors or non-task objectives (like promotion, increments, job security, personal treatment, or favour). When the suppliers' proposals are substantially similar, organisational buyers can satisfy organisational objectives with any supplier, and hence personal factors become more important. When suppliers' offers differ substantially, industrial buyers pay more attention to organisational factors in order to satisfy the organisational objectives. This paper aims to explore the recent developments in the information processing as they may apply to organizational buying behaviour and pre purchase decision making.

MODEL OF INDUSTRIAL BUYER BEHAVIOUR

The purchases made in an industrial organization involve many more people of different backgrounds and it is more complex. There are three main features in this model:

1. There are different individuals involved who have a different psychological makeup.
2. Conditions leading to joint decision-making by these individuals.
3. Differences of opinion on purchases or conflicts that have to be resolved to reach a decision.

These are shown in Fig as (1), (2) and (3). The persons involved in the decision-making are from quality control, manufacturing, finance, research and development and other possible areas. These may be named as purchase agents, engineers, and users, as referred to in the model. These constitute a purchasing committee. They have:



An integrative model of industrial buyer behaviour

Source:www.wisdomjobs.com/e-university/consumer-behaviour-tutorial-94/10-dot-a-model-of-industrial-buyer-behaviour-10586.html

(1a) Different backgrounds (1b) Different information sources(1c) Undertake active search(1d) They have perceptual distortion(1e) Satisfaction with past purchase.

With these characteristics, they develop certain expectations from the product to be bought. The obvious ones are product quality, delivery time, quantity of supply, after sales service and price. These are known as explicit objectives. There are other objectives as well, which are the reputation of the supplier, credit terms, location of the supplier, relationship with the supplier, technical competence and even the personality, skill and lifestyle of the salesman. These are known as implicit objectives. Different individuals in the purchasing committee give emphasis on different aspects of the product. Engineers look for quality and standardization of the product. Users think of timely delivery, proper installation and after sales service. Finance people look for maximum price advantage. Thus, there are conflicting interests and view that have to be resolved. If autonomous decisions are made, these issue do not surface. There are conditions leading to autonomous or joint decisions.

(2a) Product specific factors Perceived risk: With higher risks joint decisions are favoured. Type of purchase: Items involving heavy investments are made jointly, routine and less costly decisions can be made independently. Time pressure: If goods are urgently required, individual decisions are favoured.

(2b) Company specific factors Size of the organization: Larger the size of the organization, the more the emphasis laid on joint decision. Organization orientation: In a manufacturing organization, the purchases are dominated by production personnel and in a technology oriented organization; the decisions are based on engineers. The conflict that arises for buying decision has to be resolved. The resolution can be done by:

Problem solving Persuasion Bargaining Politicking

The fourth aspect is the influence of situational factors which must be considered. These are economic conditions such as inflation, recession or boom, price contracts, rationing foreign trade, strikes or lock outs. Organizational change such as a merger, acquisition change of key personnel, etc. Sometimes these factors outweigh the realistic criteria of decision-making. This model explains how purchase decisions are made in an industrial organization.

OBJECTIVES

1. To gain in depth insight of and analyse the factors that influence industrial consumer choices of industrial water treatment plant.
2. To examine the pre purchase decision making pattern of industrial consumers in selecting the water treatment plant.

HYPOTHESIS

1. There is a significant difference between the age of the organization and pre purchasing behavior of water treatment plant.
2. There is no significant association between the amount of water needed in the organization and pre purchase intention of water treatment plant.

LITERATURE REVIEW

From a holistic perspective, according to The Chartered Institute of Marketing, understanding buying behaviour involves a consideration of the needs of the customers– both individual andcorporate – as well as what motivates them to purchase. Buying behaviour includes a series of steps from the need identification to the moment of purchase. Kotler (1988) defines buying behaviour as a study of what, when, where, how and how often people buy a product (e.g. a good or service).

Gupta (2006) defined consumer behaviour "as a study of a complex of those factors which resulted in particular buying decisions of consumers based on rationality, emotions or compulsion. According to him, a study of consumer behaviour is likely to reveal whether target consumers of the enterprise emphasize more on the price of the product or its quality. On this basis, suitable pricing strategies and

programmes aimed at upgrading the quality of organizations products to suit the needs, habits and behaviour of consumer will be put in place.

Kotler and Armstrong (2013), Consumer buying behaviour refers to the buying behaviour of the individuals and households who buy goods and services for personal consumption. Consumers around the world are different in various factors such as age, income, education level and preferences which may affect the way they avail of goods and services. This behaviour then impacts how products and services are presented to the different consumer markets. There are many components which influence consumer behaviour namely; cultural, social, personal, and psychological.

Ekerete (2005), describe business or organizational consumers as those organizations that buy goods and services either for use in making other goods and services or for use in facilitating their business operations. Business or industrial goods are those goods intended for use in making other products or for rendering a service in the operation of an organization.

Achison (2000) identified four major influences in the buying behaviour of consumers namely- individual, social organizations and environmental. Each of these variables according to him, in turn is influenced by both task and non task variables. Task variables are those that are directly related to buying problems (product, quality, price, delivery and total offering utilities), while Non task variables are those that extend beyond the buying problems (person factors, recognition, and others). The influencing factors have long been expanded to include. 1. Personal: individual influences (desire to obtain lowest possible price, personal values and need,) 2. Social: Interpersonal (meeting to set specification) 3. Environmental: anticipated change e.g. Price, demand legal and political 4. Organizational: structure, objectives. In spite of the above, purchase behaviour are also affected by other factors.

Assael (1984) identified two major influences in the industrial consumer buying behaviour namely. 1. Industrial buyer influence such as consumer demographic lifestyles, attitudes, needs and personality. 2. Environmental influences or factors external: This relates to individuals like family, culture and reference group. By implication one can include the state of the nation economy.. He concluded that a consumer could be influenced by three major factors. Sociological, psychological and environmental factors and they combine to determine the activities of individuals and groups in obtaining and consuming goods and services. The sequence of decision processes that follow this act is also an essential component of buying behaviour.

Maheswari, M. Uma; Jebanesan, M. Jezer (2013) in their study of consumer behaviour in the changing scenario of the Indian consumer market have focused on pre-purchase information search behaviour of rural pre-owned car owners in Kanniyakumari district, Tamil Nadu. Burgeoning growth of the new car market and the reduced tenure of car ownership resulted in wider availability of used cars. This study is significant as the pre-owned car consumers are potential new car buyers and their experience with a pre-owned car will have a definitive influence on future car purchase decisions. The study has been undertaken with two objectives; to assess the socio-economic and demographic profile of rural pre-owned car owners in Kanniyakumari district and to examine the pre-purchase information search behaviour of rural car owners. Primary and secondary data have been used. The primary data have been collected through structured questionnaire. Judgement sampling method was adopted to select 200 used car owners. Descriptive statistics and Garrett's ranking technique were used for analysis. The pre-owned car market in the study area is dominated by individuals. Pre-owned car was bought due to lower price after brand evaluation but with apprehension on mind. The pre-owned car market can be made organized by proper registration of dealers. To overcome the challenges in reaching rural consumers, the car marketers can formulate effective rural marketing strategies.

A study by Voss and Parasuraman (2003) suggests that the purchase preference is primarily determined by price than quality during pre-purchase evaluation. Given explicit quality information, price had no effect on pre-purchase or post-consumption quality perceptions. Instead, post consumption quality evaluations had a favourable impact on price evaluations.

Another study by Chernev (1997) analyzed the effect of common features on brand choice and the moderating role of attribute importance. It is argued that when brand attributes differ in importance, with the best value on the most important attribute, thus further polarizing brands‟ choice shares. In contrast, when attributes are similar in their importance, common features are likely to have an opposite effect, equalizing brands share.

Reese, R. M., &LaForge, M. C (1995) in their study, a basic model of consumer decision-making was employed to examine for differences among diverse life stage groupings in processes leading to a purchase. Over 400 National Family Opinion households recently involved in the selection process for afmancial services provider reported motivating factors and activities undertaken to bring about need satisfaction. Findings suggest pre-purchase behaviour is moderated by age and the presence of adult companions and/or children, with age being the primary moderating factor.

METHODOLOGY

Present research is longitudinal in nature and tried to focus on pre and post purchase aspects of consumer decision making. The study was dedicated to gain insights into the purchase behaviour of industrial organizations. The research instrument used for the study included structured questionnaire. The instruments of this study involved two parts: the first section of the instrument consisted of forced-choice questions about demographic characteristics. The second section contains variables chosen for this study in order to measure the influence of consumer buying behaviour in selecting water treatment plant. Cronbach's alpha is a coefficient (a number between 0 and 1) that is used to rate the internal consistency (homogeneity) or the correlation of items in a test. If the test has a strong internal consistency most measurement experts agree that it should show only moderate correlation among items (0.70 to 0.90).The reliability coefficients for the variables chosen for the study should have to be more than 0.70, to consider it as an acceptable value.

Table-1 Reliability Statistics

Cronbach's Alpha	N of Items
.933	16

In this study the Reliability analysis shows that all the factors have shown alpha value greater than 0.7, indicating the evidence of reliability and the overall reliability of the instrument is 0.93.So, the items constituting each variable under study have reasonable internal consistency and shows that all the dimensions of consumers buying behaviour have a positive reliability. The factors and dimensions included for analysis carry a good degree of reliability to support the objectives formulated. All dimensions have got significant relationship to make the real representation of the study. Hence it is concluded that the data collected in this study is highly reliable.

DATA ANALYSIS

Total sample size for the customers is 15. For the analysis of the data, researchers used basic techniques of Statistics such as mean, standard deviation, variance, etc; Hypothesis testing is carried out through one way ANOVA,

Table 2- Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Reputation of manufacturer (Brand)	15	3.00	5.00	3.8667	.63994
Cost (Price)	15	2.00	5.00	4.1333	1.12546
Return on investment	15	2.00	4.00	3.6667	.61721

Warranty period	15	2.00	5.00	4.1333	.99043
Reference from existing customers of the Water Treatment Plant	15	2.00	5.00	3.6667	.81650
After sales service performance	15	2.00	5.00	4.2000	1.08233
Operation Mode (Automatic/ Semi-Automatic)	15	2.00	5.00	3.8000	.86189
Output Capacity (liter of water)	15	2.00	5.00	4.2667	1.16292
Water recovery rate	15	2.00	5.00	4.4000	.91026
Valid N (listwise)	15				

From the above table, the items show the factors that the organization considers before making a purchase. When comparing the mean score values per variable, it is evident that their deviation from a maximum attainable score value of five reflects room for improvement. It is clear that cost, warranty period, after sales service, output capacity and water recovery rate are some of the factors that play a major role in decision making of the organization.

H1: There is a significant difference between the years of the organization and pre purchasing behavior of water treatment plant.

Table 3- One way ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	13.708	3	4.569	30.932	.000
Within Groups	1.625	11	.148		
Total	15.333	14			

The results of one-way ANOVA, however, show that significant differences existed between the age (no years of operation) of the organization and pre purchasing behaviour of water treatment plant. Thereby rejecting the null hypotheses. Various Organizations (according to their years of operation) who prefer in using the services of water treatment plant do spend significantly as per their needs. The results are statistically significant and they are in expected direction.

H2: There is significant association between the amount of water needed in the organization and pre purchase intention of water treatment plant.

Table 4- One Way ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.108	3	.703	.665	.591
Within Groups	11.625	11	1.057		
Total	13.733	14			

The results of one-way ANOVA, however, show that no significant association is found among the opinion of industrial consumers between the amount of water needed by organization and the pre purchase intention of water treatment plant. It is seen in the study that other variables such as cost, after sales service play a major role in the pre purchase decision making .Here the alternative

hypothesis rejected and null hypothesis accepted. Although the relationship is in expected direction, ANOVA results do not show the nature of differences among the industrial consumers.

CONCLUSION

Consumer behaviour consists of all human behaviour that goes in making before and after purchase decisions. One can succeed in the competitive market only after understanding the complex consumer behaviour. An understanding of the consumer enables a marketer to take marketing decisions which are compatible with its consumer needs. This learning attempts to gaze at and scrutinize the industrial consumer's mindset in making the purchase decision. Investment is considered as one of the crucial decision being affected by various factors. If the investment doesn't brings fruitful results then it will adversely affects the company's liquidity and solvency position. Investment in water treatment plants is also affected by various factors like your scale of business, purchasing budget, Water treatments methods being used in company premises, environmental factors and other welfare activities being carried on in the organization .This study generated new insights of industrial consumers needs, and how they search for information, and how they evaluate the alternatives during the pre purchase phase of the customer journey. The data collected comprised of the size of industrial organizations taken for the study. Most of the organizations undertaken for the study consist of food and pharma industry. The study mainly focussed on the variables that play a major role in making a pre purchase decision. The variables are shortlisted after a discussion with the organization representatives. It was found out that cost and after sales service are two main variables which influence the decision making. Further a significant relationship is found out between the age (duration of operation) of the organization and pre purchasing behaviour. The more the years of operation the less time they take in making a decision and similarly they depend on traditional factors like cost and after sales service. Newer organizations look out for warranty period, water recovery rate in making a pre purchase decision. Similarly no significant association was found out between the amount of water needed in the organization and purchase intention. This shows that consumers are more influenced by other variables. The purchase of water treatment equipment is a decision that must be carefully considered. Whether the purchase is being made to improve the aesthetic characteristics of the water or to address health considerations, many factors must be determined.

LIMITATIONS AND FUTURE RESEARCH

By exploring pre-purchase behaviour in the context of industrial consumer, this study provides another perspective for understanding consumer behaviour. Although this study intends to offer a new perspective, it is not without limitations. Given individual perceptions and cognitions can change over time, a limitation is that the propositions offered by this study did not incorporate the impact of time on the industrial consumer's internal policies and procedures. Future longitudinal studies, therefore, are needed to validate the theoretical framework.

The relationship of the pre purchase consumer behaviour can still be studied and explored to a greater level. The fact that there aren't much studies being done on the topic is a huge literature gap which needs to be filled. The future researchers can further explore the other variables influencing pre purchase behaviour.

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