CHAPTER VI

SUMMARY AND CONCLUSIONS

This chapter gives a summary of the results and conclusions obtained from this study. It is presented in four sections.

Section 6.1 presents the summary of the results obtained from the four hypotheses formulated for vendor characteristics and information sources in this study.

Section 6.2 narrates the industrial marketing implications stemming from the study which could contribute to a better descriptive foundation upon which it may be possible to build normative theories and or models.

Section 6.3 offers several industrial marketing implications and scope for future research as an extension of the present study.

Section 6.4 points the limitations involved in the study and its findings.

6.1 SUMMARY OF FINDINGS

All the four null hypotheses are rejected by data analysis. Hypothesis I, reveals that some vendor
characteristics are more important than others. The vendor characteristics that are consistently ranked near the top irrespective of purchasing situations are: vendor's technical capability, price, quality and delivery. There is also agreement in ranking management and organisation of vendor as one of the least important characteristic in all the three purchase situations. Lower importance is perceived in viewing training and instructions, problem solving aid and advice in the modified rebuy and straight rebuy situations. The relative importance of some characteristics changed according to the buying problems.

In analysing the importance of information sources, the study indicates that interview with salesmen, information from their own purchasing records and visits to vendor's facilities are important in all the three situations. The buyers are unanimous in ranking classified telephone directories as the least important information source. The positions of other information sources varied according to situations.

The verification of the hypothesis II indicates that eleven of the twenty vendor characteristics differ significantly in their importance because of the type of buying problem. The remaining nine characteristics, namely, progress data on orders, labour relations of vendor's
organisation, management and organisation of vendor, financial position of vendor, credit terms offered, attitude of vendor towards the buyer, the packaging ability of vendor, quality and, moral and legal considerations, exhibit no significant differences in all the three situations.

The relative importance of nine of the fifteen information sources also showed significant differences in importance in the three types of buying situations. The importance of the remaining six information sources viz. interview with salesmen, information from other departments, local purchasing chapters, outside purchase managers, visits to vendor's plants and facilities and classified telephone directories, remained the same in all the three situations.

The test of hypothesis III shows that the original set of vendor characteristics could be reduced to a smaller set representing meaningful factors in each purchase situation. The new task and modified rebuy situations stressed the importance of vendor's technical and production competence followed by the economic criteria. In the straight rebuy, the factors reveal the prime importance of economic criteria, followed by the supplier stability. The four factors extracted in the new task buy are named as technical and production competence, economic and delivery criteria, location and reputation, vendor's attitude. The
five factors obtained in the modified rebuy purchasing situation are: technical and production capability, financial consideration, aid, advice and training, vendor's organisation and attitude, and warranties and legal considerations. In the straight rebuy purchase situation, the four factors surfaced are named as economic criterion, supplier stability, vendor's terms and location and legal considerations.

The factor analyses of information sources resulted in a three factor solution in all the three types of purchasing situations. The information sources combined in a fashion according to the needs of purchasing situations exerting appropriate importance to external, internal, commercial and personal sources of information. In the new task buy, the factors derived are named as external uninitiated personal and impersonal information, external initiated information and internal information. In the modified rebuy, the factors found are: external impersonal uninitiated information, external and initiated information and, internal and external personal information. In the straight rebuy situation the factors emerged are named as readily less readily available information, vendor controlled information, and external initiated information.
6.2 INDUSTRIAL MARKETING IMPLICATIONS

Vendor characteristics

The study identifies the perceived importance of various vendor characteristics in the new task, modified rebuy and straight rebuy purchasing situations. The implications stemming from the study could contribute to better industrial marketing theories and strategies.

6.2.1 Implications stemming from hypothesis I

In describing the relative importance of vendor characteristics in the vendor selection process, the stated contentions that price, delivery, quality would be of utmost importance in all decisions is supported by the results of this study.

New tasks are perceived as high risk situations. Buyers are willing to consider alternatives. Suppliers must convince buyers that their product will work rather than counting on price advantage to win the sale. Price in the new task buy should be viewed in the context of marketing strategy. It is wrong to view price here as an independent or dominant element of marketing strategy while it interacts with all other characteristics to determine its effectiveness. The technical capability including research and development is rated very high. The repair service
facilities and warranties, training aids, general aid and advice are predominant characteristics that are sought after by buyers. Based on these insights the marketers of new task items can plan their strategy giving more emphasis to perceptions which have emerged as important.

The modified rebuy has a mix of new task and straight rebuy features. It is either an upgraded straight rebuy or a formerly new task that has become familiar. Apart from price quality and delivery, the marketers should concentrate on improving their technical capability and production facility which are sought after by the buyers. Marketers who are able to match their efforts with the attributes which have received higher mean ratings stand a better chance of being chosen as suppliers.

The straight rebuy is the most common purchase situation. The purchase is routine and confined to the purchasing department, while in a new task and in modified rebuy, personnel from other departments are also involved. The prime characteristic here is price with prompt delivery and quality. The buyer's expectation of adequate production facility and capacity is in view of promptness in delivery with shorter lead time. The other characteristics such as procedural compliance, sound financial position of vendor and their location are important considerations. Thus, the
purchase executives would generally look for such general simplifications and would prefer dependable suppliers who can provide them with certain degree of buying convenience.

The results indicate that one must take care not to grant any one vendor characteristic a unique position of importance, though some characteristics are clearly more important than others.

6.2.2 Implications stemming from hypothesis II

Technical product complexity, the unique dimension of Industrial Marketing, leads the industrial firm to remain excessive in product engineering, manufacturing and technical orientation. One class of business strategies available that differentiates new task buy with the modified rebuy and straight rebuy purchasing situations is to concentrate on service oriented vendor characteristics such as repair service facilities and warranties, training aids and advice. The real risk lies in these cases being so enamored with technical accomplishment. The flexibility that could be accomplished is in price, procedural compliance and in delivery schedule. The relatively less importance given to the earlier availability of data to evaluate the performance in the new task reduces the dangers of new suppliers entering the organisations.
Not much of differentiation could be obtained between the modified rebuy and straight rebuy situations excepting the expectations of service attributes such as repair service facilities and warranties, and providing general aid and advice. The partial visualisation of this as a new buy is clearly indicated by the above considerations. A mix of service abilities with the routine characteristic offerings are likely to win the contract in modified rebuy. Otherwise the basic strategies could be the same both for modified and straight rebuy purchasing situations.

From all this, one conclusion is clear that marketing in the industrial world is much more of general management responsibilities and strategies than it is in the consumer products field, confirming with Ames (1970). In industrial marketing, company's changes in marketing strategy are more likely to involve capital commitments for new equipments, shifts in development activities or departure from traditional and engineering approaches.

6.2.3 Implications stemming from hypothesis III

The factor analysis of the data for each of the respondent groups provided means for reducing the twenty vendor characteristics to smaller sets of underlying factors. Implications are drawn from factors of the different problem situations.
A comparison of the vendor characteristics that emerged for new task buy and the modified rebuy problems indicated that the factors are somewhat similar. The characteristics combined in a fashion to measure underlying factors regardless of these two problems. On the other hand the samething cannot be said with the straight rebuy purchasing situation. The buyers ratings clearly indicated the grouping of technical production capabilities for new task and modified rebuy as prime factor followed by the economic considerations. The economic considerations dominate the straight rebuy followed by the suppliers stability for continued supply of orders placed. The shift in the perspective from financial consideration to technical consideration gives a clear indication to the marketers, as to how to form the strategies in the cases of new task and modified rebuy. The reliability of supply at low price should be the strategy for straight rebuy situation. Thus the supplier must relate the prospective application and deduce them to the problem/task situation that the customer is likely to encounter.

In general, the implications of the study of the situations indicate that the nature of new task warrants an adaptive selling and the sales force should play a consultant's role and concentrate on winning bids by
influencing specifications and product perceptions rather than by lowballing the price. In contrast, in more routine tasks sales people will have more difficulty in getting the customer to process actively about their products and will find it difficult to avoid emphasizing price and supply, given the customer's perception with those attributes. 'In' suppliers should avoid dissatisfaction while 'out' suppliers should try to make aware of the deficiencies in the current supply arrangement.

6.2.4 Implications stemming from hypothesis IV

The results of this study show that in the paired comparisons of the type of purchasing situations, the discriminating power of the vendor characteristics alter. Comparison of new task and modified rebuy purchasing situations reveals that the vendor characteristics, repair service facilities and warranties offered, price of the product, credit terms offered, training assistance provided, and the location of vendors are effectively discriminating the two situations. The sellers must determine how important these characteristics are in studying the buyers' purchasing situations. Related to the issues, whether these characteristics are casual determinants or influential constructs should be determined for favourable results. The perceived influence is greater even though most of these
occupy middle positions or second line determinants in these purchases.

In comparison of new task with the straight rebuy the characteristics that discriminated the situations are: repair service facilities and warranties, progress communication, price, delivery, location, training aids and past experience with vendors. Clearly the characteristics excepting repair service facilities and warranties, and training aids are the prime consideration for a vendor to be successful in his bid to get the orders in straight rebuy. The importance of product differentiation has been clearly brought out in this case by the qualifying characteristics. The emphasis in modified rebuy is for service attributes while the favourable attitude of the vendors could make the 'in' suppliers to continue in the list. This indicates that specific and measurable objectives and performance are the key to an effective reward in the bids of established products and parts. Feedback supported by evaluation is essential for forward looking orders in this type of products.

**Information Sources**

Industrial Marketing communications are a mix of personal and impersonal, commercial and non-commercial sources aimed at the industrial buyer. The industrial
marketing strategists must plan communication strategy with a keen eye on specific functions, proper mix and interaction or synergy among them. The results of this project could contribute to better descriptive foundations on different purchasing/selling situations.

6.2.5 Implications stemming from hypothesis I

In describing the relative importance of the information sources that are used in the vendor selection process, the often extended view that personal selling by vendor's salesman, information based on visits to vendor's facilities and plants, and the organisations' own purchase records would be of most importance in all types of purchase decision is supported.

In new task purchases besides vendor's catalogs and purchasing directories, the information sources to create awareness, knowledge and liking are very essential. Advertisement in trade journal and participation in trade shows can form an integrated approach to the marketing communication strategy. The view that personal selling by salesman is a dominant element of marketing communication in management is corroborated in this buy. However, it does find a place with other information mix to determine the right strategy. Past research tend to down-play the
efficacy of commercial impersonal sources of information and seem to limit the impact of industrial advertising. In addition, our findings suggest that manufacturer generated information such as catalogs, is also sought by decision participants.

The importance of sales person's interview is uniform both in modified rebuy and straight rebuy purchase situations. In addition the nature and scope of information sought by decision participants largely depend on the non-commercial personal information such as user department, reports, colleagues in other organisations. The findings imply in general, that greater use of a number of different communication vehicles can result in heightened synergy and co-ordination among the various elements of promotional programme.

6.2.6 Implications stemming from hypothesis II

The importance of certain communication sources is increasing, while certain other sources' influence on the buyers tend to remain the same in all types of buying. The results from the hypothesis II indicate that the importance attached by the buyers on interviews with sales personnel, the information sought from other departments, information from purchasing chapters, outside purchase manager's information, visits to vendors plants and facilities, and
information from classified telephone directories are the same irrespective of the purchasing problem or situation. Hence a broadened perspective on communication programme on these can attract or retain the existing customers and should be considered synergistically with other communication tools. Trade shows, purchasing directories show high perceived importance in the new task buy and moderate on modified rebuy and low on straight rebuy. The importance to be attached to catalogs, journal advertisements, credit and financial reports should be more predominant in the case of new task and modified rebuy while relatively less emphasis is on repeat purchases. It may be concluded that the impact of certain information sources remain unaffected while certain other information sources are weighed differently depending upon the purchasing problem at hand and hence strategies need be formulated according to problems with a broadened perspective.

6.2.7 Implications stemming from hypothesis III

The factors that emerged indicate the preference of external uninitiated personal and impersonal information sources as a major influencing source for capital new task buy. The buyers will rely on these information since the buying situation engenders perceptions of greater conflict, pressure and or risk. The source strategy for capital new
task should be formulated with the above factors along with a critical role by sales person's direct interviews with buyers.

In the modified rebuy, external impersonal commercial uninitiated sources secure importance. The relatively lesser newness require the initiated information on the part of the sellers also.

In the routine purchases, the emphasis should be on readily available information and vendor controlled information. In fact when the decision participants are concerned about precision in price and delivery they tend to rely heavily on the manufacturer's information and sales person. Competitive pressures are likely to place extreme demands on industrial marketers to gain greater efficiencies and effectiveness, and greater use of co-ordinated communication vehicles.

6.2.8 Implications stemming from hypothesis IV

The results of the study in the paired comparisons of the types of purchases showed the discriminating abilities of the different information sources. In the comparison of new task vs. modified rebuy trade shows, mail advertisements, purchasing directories, guides and local purchasing chapters are found to be good discriminators. The sellers must
determine how important the sources are, by studying the needs of the buyers' purchasing situations. Related to the issues whether they are casual discriminators or influential constructs should be determined. The perceived influence of these sources are greater even though the rankings are different.

In comparing the new task with the straight rebuy, it is observed that the discriminating information sources are trade shows, mail advertisements, local purchasing chapters, catalogs, journal articles, information from other departments in the purchasing organisations.

The indications are quite clear as to which sources really favour a new task and straight rebuy for product differentiation. The findings relating to buying expectations and criteria among decision participants offer scope for the manufacturers' success.

The differentiations brought out between modified rebuy and straight rebuy situations are rather limited. The information from other departments, local purchasing chapters and the organisations' own purchasing records form the sources of discriminators. These indicate more homogeneous and manageable groupings of information.
Thus the industrial marketing personnel must plan information strategy with a keen eye on specific functions of each purchase and functions of each communication mix and interactions or synergy on them. The effect of any one of these source is a function of its interaction with others although each has a distinct role to play in moving potential customers from unawareness of the company to buying action.

6.3. SCOPE FOR FURTHER RESEARCH

There are several implications regarding future research which are connected with this study. First, the study could be replicated for other industries giving scope for inter industry comparisons for the same types of buying problems. The research could be extended to the study of governmental, institutional buying units and also to non-profit organisational buying. The wide spectrum of organisational buying units could be surveyed to develop more broad based description of vendor selection process.

The research study is limited to the general statement of buying situations. The extension of the project could be for specific item description of the buying problems. The selective items of each buy could systematically be manipulated to measure the perceptions and relative importance of vendor characteristics and information sources.
The study conducted is based on the response of industrial purchasing executives. Similar studies with the marketing executives of industrial organisations could be carried out. The response of the marketers can be compared with that of the purchasing executives and any significant difference could indicate the possibilities of inefficiencies in the particular marketing/buying system involved. If they do not agree on the relative importance of the characteristics, the lack of marketers' programme formulated to the buyers' expectations or the buyers' unreasonable expectations concerning vendors' performance or both can be identified. Similar studies for information sources could also be valuable both to the marketers and industrial buyers.

The general approach employed in this project might help in the future studies to develop normative theories regarding the relative importance of vendor characteristics and buyer information sources.

Research could be done relating to the purchasing units' organisational variables and personal variables of the respondents to the ratings of vendor characteristics and information sources. It is possible that particular organisational variables and particular personal characteristics may underlay some of the findings that were attributed in a casual sense to either the type of problem
or especially the type of industry. More precise casual relationships may be uncovered through further research.

The scope expressed for future research do not exhaust all possibilities, yet they do cover a reasonable set of feasible research extensions.

6.4 LIMITATIONS OF THIS STUDY

The generalization of the problems and subsequent application of the findings presented above should proceed with caution because of the limitations imposed by the size of data collected. To be able to say with confidence that the findings reported above can be generalised to other similar situations would require several replications of this study.

It should also be noted that this study was restricted to an examination of vendor selection decision made by individual decision makers. The potential impacts of buying centre influences were not directly included even though the respondents were advised to take into consideration these effects before filling the questionnaire. The results are what one would expect if the purchasing executives behave as predicted in the three buying situation descriptions. However these results do not hold in any given item/product transaction.