

Full Length Research Paper

International procurement practices of Indian firms

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The study of Indian managers has been undertaken in response to the continuous increase in international activity in the area of procurement. This study is a step in the direction of fulfilling the information requirements of procurement managers around the globe. Based on the statistical findings, it can be concluded that there existed a significant difference in the procurement practices of Indian managers. To meet rising competitive pressures, international sourcing will thus be one of the answers. Managers internationally, will seek increased information on this area. This study seeks to fill the information gap. The result of the survey supports the concept that the practices of the respondents reflect the conditions and requirements of the environment both from the economic/political and social/cultural points of view.

Key words: International trade, procurement, procurement practices.

INTRODUCTION

Shrinking geographic and economic barriers are making the world a smaller place to trade in.

Technology continues to play a significant role in this shrinking of the globe, the internet revolution continues to dramatically alter the way business is done.

In addition to these, competitive pressures are also altering the way procurement decisions are made. According to Carter and Narsimhan (1990), international procurement is a competitive weapon. According to Birou and Fawcett (1993), to meet the international competitive challenge that exists today, firms must be able to offer customers new products of high quality and perceived value ± and because procurement some required inputs internationally can assist firms doing this; international procurement has become an increasingly popular competitive approach. The purpose of this paper is to study the international sourcing practices of Indian managers. Specifically, this study investigates the procurement executives' perceptions of the problems relating to overseas buying, the policies used in working with overseas suppliers, the criteria for choosing overseas suppliers, the existing trading relationships with overseas suppliers, and the performance of their overseas

suppliers.

LITERATURE REVIEW

In the area of international procurement, some good pioneering work has been done in recent years, but a lot remains to be done. This study will focus on the emerging issues neglected by the previous studies and provide an updated report on prevalent international procurement strategies developed by buyers. Caddick and Dale (1987) proposed a formalized, logical research approach in their study of international sourcing from less developed countries. This methodology is definitely superior to "ad hocism". Some important findings of the study were that it proved the existence of cheaper and high quality sources of materials, that the main concern of all procurement people involved in international buying is that of currency fluctuations, and that the procurement work directed toward the international arena must be handled by an experienced senior level procurement official. Hakansson and Wootz (1975) found that in the mid-1970s price was the most important factor in selecting an overseas supplier, not quality or supplier size. Hallen (1982), in a similar study, concluded that a buyer's competence in international business operations was crucial for success in international procurement.

Thorelli (1995) suggested that buyers group foreign

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suppliers into broad categories (such as technologically advanced countries like Japan, Sweden, Taiwan, and West Germany versus less advanced countries like Brazil, China, Poland, and Mexico) and then differentiate their perceptions with these categories (Spekman, 1991). At the same time, the level of commitment is somewhat limited; buyers report that partners do not engage in specialized or customized production and development without a guarantee of a sale.

Hence, in this situation, many of the full advantages of close, co-operative supplier involvement are not realized. Abratt (1986) examined the relative importance of nine criteria in selecting suppliers of laboratory equipment in South

Africa. Results of this study suggested that technical service and product reliability ranked the highest in supplier evaluation.

Indian buyers pursued a strong tendency toward risk-aversion in making international sourcing decisions. This tendency is evidenced from the findings that most Indian buyers sought potential overseas suppliers in homogeneous environments. Birou and Fawcett's (1993) study concluded that today's manufacturers have realized that international sourcing can be transformed from a unique, but traditional, reactive activity to a proactive strategy capable of helping the firm establish a sustainable competitive position.

Palaniswami and Lingaraj (1994) suggest that the selection of a procurement system and of vendors that can accommodate such complexities is crucial to the success of a production system in international environments.

Among other studies that have attempted to understand and capture the dynamic nature of the international environment as it relates to procurement were the studies by Nicholas and Taylor (1995), McMullan (1996), and Vonderembse et al. (1995). Nicholas and Taylor examined the impact of free trade agreements on sourcing decisions in North America and Europe.

METHODOLOGY

To obtain data on the international sourcing practices of managers in India, an "international supplier instrument" was designed. The instrument contained two parts. The first part dealt with demographic and organizational information to be used for differentiation purposes. The second part dealt with specific questions pertaining to various issues in international sourcing.

These questions were compiled from existing literature (Carter and Vickery, 1988; Carter and Narsimhan, 1990; Min and Galle, 1991; Spekman, 1991; Birou and Fawcett, 1993; Min and Galle, 1993; Murphy and Daley, 1995). The questionnaire was pilot tested for content validity on ten organizations in India, prior to mass mailing. The respondents in the pilot study were specifically asked to comment on the wording and sequence of questions. The changes suggested (which were minor) were incorporated in the final questionnaire.

A total of 350 procurement managers located in India working for manufacturing companies were identified as the target group.

For the purpose of this study, only international manufacturing organizations were considered, since the procurement managers in these organizations were involved in dealing with overseas suppliers on a regular basis.

The main source for the preparation of the sampling frame was the Kothari's Economic and Industrial Guide of India. These databases have the capability of identifying companies that purchase overseas.

The potential participants in the India was sent a copy of the survey instrument, along with a cover letter explaining the research project, defining the terms used in the study, and requesting their participation in the study, and a return post-paid envelope.

The cover letter was strongly worded to guarantee the anonymity of the respondents.

A pre-addressed postcard was also included with the mailing so respondents could request an executive summary of the results of the survey.

The participants were asked to mail their responses to a post box address. The two mailings resulted in a response rate of 30.0% (105 surveys returned \pm from Indian companies). The following research hypotheses were proposed and studied:

H₁: There is no significant difference between the responses of Indian procurement managers as far as the perception of the supplier network is concerned.

H₂: There is no significant difference between the responses of Indian procurement managers as far as problems relating to overseas buying are concerned.

H₃: There is no significant difference between the responses of Indian procurement managers as far as criteria for choosing suppliers are concerned.

H₄: There is no significant difference between the responses of Indian procurement managers as far as criteria pertaining to trading relationships with suppliers are concerned.

H₅: There is no significant difference between the responses of Indian procurement managers as far as criteria concerning the performance of suppliers are concerned.

Statistical analysis procedure

For the purpose of data analysis, given the large number of variables identified, the researchers wanted to determine if the items/individual questions related to the concepts being studied. Factor analysis was used to reduce the set of relative performance measures and practices into a smaller set of variables. Factor analysis is a data summation tool that aids in the identification of interrelationships among variables and serves as a tool in identifying common underlying themes that link the variables together.

RESULTS AND DISCUSSION

Tables 1 to 5 show MANOVA, and ANOVA results that were undertaken for testing the hypotheses. In all five cases, the null hypothesis was rejected. For example, in Table 2, the responses of the Indian procurement managers were the independent variable and the four factors extracted to represent the problems associated with international procurement items \pm "country", "communication", "transportation", and "formalities" \pm were the dependent variables. The results indicate that there existed a statistical significant difference in how the procurement managers view the problems associated with international

Table 1. Result of research hypothesis.

Dependent variable	F-value	P-value	Degree of freedom	Mean responses from India
H ₁ : Perception of the suppliers network	13.90	0.0001*	3	
Technology and customer orientation	38.35	0.0001*	1	3.98
Market conditions	22.46	0.0001*	1	4.02
Competitive environment	7.04	0.0093**	1	3.36

*significance level < 0.001; **significance level < 0.01; *** significance level < 0.05; ****significance level < 0.10.

Table 2. Result of research hypothesis.

Dependent variable	F-value	P-value	Degree of freedom	Mean responses from India
H ₂ : Problems relating to overseas buying	3.60	0.0089**	3	
Communication	2.93	0.09****	0	2.08
Transportation	0.50	0.4810	1	2.63
Formalities	3.53	0.063****	1	2.16

*Significance level < 0.001; **significance level < 0.01; *** significance level < 0.05; ****significance level < 0.10.

Table 3. Result of research hypothesis.

Dependent variable	F-value	P-value	Degree of freedom	Mean responses from India
H ₃ : Criteria for choosing suppliers	9.11	0.0001*	3	
Competitive differentiation	16.84	0.0001*	1	1.99
Country specific	5.08	0.0264***	1	2.59
Strategic advantage	18.57	0.0001*	1	1.42

*Significance level < 0.001; **significance level < 0.01; *** significance level < 0.05; ****significance level < 0.10.

Table 4. Result of research hypothesis.

Dependent variable	F-value	P-value	Degree of freedom	Mean responses from India
H ₄ : Criteria pertaining to trading relationships with suppliers	3.45	0.0357***	2	
Commitment	3.92	0.0506****	1	3.90
Openness	6.77	0.0107***	1	4.10

*Significance level < 0.001; **significance level < 0.01; *** significance level < 0.05; ****significance level < 0.10.

Table 5. Result of research hypothesis.

Dependent variable	F-value	P-value	Degree of freedom	Mean responses from India
H ₅ : Criteria concerning the performance of suppliers	13.03	0.0001*	3	
Performance	35.76	0.0001*	1	4.08
Competitiveness	7.99	0.0057**	1	3.20
Flexibility	18.86	0.0001*	1	3.54

*significance level < 0.001; **significance level < 0.01; *** significance level < 0.05; ****significance level < 0.10.

procurement (p-value = 0.0089). To further examine this relationship, four independent ANOVAs, one for each

criterion, were conducted. The results indicate that the procurement managers viewed the factors "country",

"communication", and "formalities" significantly higher. Similar interpretations can be made for Tables 1 to 5. It should be noted that Indian procurement managers had a higher mean score on questions relating to the perception of the suppliers network, trading relationships with suppliers, and performance of suppliers.

CONCLUSIONS AND FUTURE DIRECTIONS

As the globe seemingly becomes smaller, sourcing internationally is going to be the norm rather than the exception. To meet rising competitive pressures, international sourcing will thus be one of the answers and managers internationally will seek increased information on this area. This study seeks to fill the information gap. The result of the survey supports the concept that the practices of the respondents reflect the conditions and requirements of the environment both from the economic/political and social/cultural points of view.

The majority of the characteristics discussed in the paper can be well explained by the causes stemming from the market situation and/or cultural background of the different regions.

Why is it important to be familiar with the practices of other nations, especially in a field like procurement, which is basically considered the internal affairs of a company? Today's widening co-operation between geographic regions and countries of different cultural backgrounds provides an important reason for making such comparisons. The results can be applied in the case of co-operation and supplier partnership: if we want to be successful we have to know about the procurement and management practices of the countries with which we wish to co-operate. Conversely, if we wish to understand either the differences in output, both quality and quantity, or simply the differences in productivity, or want to find ways of improvement, the practices of other countries can provide useful information and lessons. Finally, we think that such studies deepen our knowledge of the general nature of international procurement: if we see common features or similarities in the practice in several different countries then we can say with high probability that those features issue from the general nature of the system.

Five specific hypotheses were developed and tested in this study. In all cases, the null hypothesis was rejected. Thus, based on the statistical findings, it can be concluded that there existed a significant responses of Indian procurement managers as far as the perception of the supplier network, problems relating to overseas buying, criteria for choosing suppliers, criteria pertaining to trading relationships with suppliers, and opinions concerning the performance of suppliers were concerned.

This study represents a somewhat limited range of procurement professionals, given the range and scope of their procurement responsibility, and the type of firms they represent. There are limitations to the study based on the profile of the sample. The sample has been restricted to procurement managers from India. A replication of this study should prove helpful in re-examining the validity of its findings.

Finally, a different instrument with a different set of measures should be used to measure the variables under investigation to reflect the issues not covered by this study and by the current sample. More precise operational measures for each of the factors would also help improve the results of the study.

REFERENCES

- Abratt R (1986). "Industrial buying in high-tech markets". *Ind. Mark. Manage.*, 15(4): 293-8.
- Birou L, Fawcett S (1993). "International procurement: benefits, requirements, and challenges". *Int. J. Procur. Mater. Manage.*, 29(2): 28-37.
- Caddick J, Dale B (1987). "Sourcing from less developed countries: a case study". *J. Procur. Mater. Manage.*, 17-23.
- Carter J, Narsimhan R (1990). "Procurement in the international marketplace: implications for operations". *J. Procur. Mater. Manage.*, 26(3): 2-11.
- Carter J, Vickery S (1988). "Managing volatile exchange rates in international procurement". *J. Procur. Mater. Manage.*, 24(4): 13-20.
- Dale B, Powley R (1985). "Procurement practices in the United Kingdom: a case study". *J. Procur. Mater. Manage.*, pp. 26-33.
- Hakansson H, Wootz B (1975). "Supplier selection in an international environment ± an experimental study". *J. Mark. Res.*, pp. 46-51.
- Hallen L (1982). "International procurement in a small country: an exploratory study of five Swedish firms". *J. Int. Bus. Stud.*, pp. 99-112.
- McMullan A (1996). "Supply chain management practices in Asia Pacific today". *Int. J. Phys. Distrib. Log. Manage.*, 26(10): 79-95.
- Min H, Galle W (1991). "International procurement strategies of multinational US firms". *Int. J. Procur. Mater. Manage.*, 27(3): 9-18.
- Murphy F, Daley J (1995). "International freight forwarders: current activities and operational issues". *Int. J. Procur. Mater. Manage.*, 31(3): 21-7.
- Nicholas EL, Taylor J (1995). "Sourcing implementations of the North American Free Trade Agreement". *Int. J. Procur. Mater. Manage.*, 31(2): 25-34.
- Palaniswami S, Lingaraj B (1994). "Procurement and vendor management in the international environment". *Int. J. Prod. Econ.*, pp. 171-6.
- Spekman R (1991). "US buyers' relationships with Pacific Rim sellers". *Int. J. Procur. Mater. Manage.*, 27(1): 1-10.
- Thorelli H (1995). "Willingness of American industrial buyers to sources internationally". *J. Bus. Res.*, 21-30.
- Vonderembse M, Tracey M, Tan C, Bardi E (1995). "Current procurement practices and JIT: some of the effects on inbound logistics". *Int. J. Phys. Distrib. Log. Manage.*, 25(3): 33-48.