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THE IMPORTANCE OF PHYSICAL VERSUS SERVICE ATTRIBUTES
IN THE
VENDOR SELECTION PROCESS

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ABSTRACT

Recent literature on the topic of vendor selection has focused on a broad, macro view of the relationship between the selection and buying processes. However, most of the studies have not examined such processes in the context of the small business enterprise nor have they discriminated between the importance of physical versus service attributes. There appears to be a paucity of research involving the relative importance of physical versus service attributes by small businesses in their vendor selection. The purpose of this research was to examine the printing needs of small businesses in terms of both physical and service attributes related to the product.

Recent interest in the topic of vendor selection has centered on the relationship between the selection and buying processes. However, there has not been a great deal of attention devoted to the relative importance of physical versus service attributes in the vendor selection process. To address this issue, the total customer base of a printing firm was surveyed to determine the significance of each of these attributes in selecting the firm over its competitors.

A total of 351 questionnaires was mailed to the current customers, past customers, and one-time customers (prospects) of a pre-selected printing firm. Although there were only 72 usable responses forming the basis for the study, several factors were recognized as contributing to this return rate. Probably the one with the greatest effect was the fact that a number of the organizations represented in the sample received 2-4 questionnaires. Even though these questionnaires went to different individuals, several respondents noted that it would be redundant to have more than one response from the same firm.

A draft of the questionnaire was pre-tested through field interviews conducted in one of the large metropolitan areas which the printing company served. The pilot study was designed to establish the questionnaire's appropriateness as a measure of consumer's perceptions regarding service and physical product attributes. A second pre-test was conducted by mail in order to determine the probable expected return rate and if the information obtained would, in fact, answer the questions addressed by this study.

Customer Ranking of Physical and Service Attributes

The relative importance of each attribute was determined by the respondents' ranking of items in each category separately and in combination. Results are presented in Table I.

As indicated in Table I, "overall print quality" is considered the most important physical attribute by the customers. On a scale of 0-200 points for the physical attributes category, "Overall print quality" would receive approximately 65 points. Both "half tone reproduction" and "color reproduction" would receive about 40 points each. The fourth major physical attribute, "binding/trimmers," would receive 35 points. Finally, there was minimal difference in the remaining 20 points available to those items designated as "other" (accuracy, typeset, etc.).

For those items designated as service attributes, "reliable schedule and on-time deliveries," was recognized as the most important as one would suspect. When applying a scale of 0-200 points to weight the relative importance of each service attribute, "reliable schedule" would receive approximately 55 points. Both "timely responsiveness" and "technical expertise" would receive about 30 points each. "Good rapport"

Table I

Customer Ranking* of Printing Needs Related to Both
Physical and Service Attributes

Printing Needs	Rank of Physical Attributes	Rank of Service Attributes	Rank of Attributes When Combined
<u>Physical Attributes:</u>			
Color Reproduction	3		3
Half-Tone Reproduction	2		4
Binding/Trimming	4		5
Overall Print Quality	1		1
Others:			
Accuracy, Typeset	5		11
Insert Preprint	7		13
Make-up	6		12
Paper Show Through	8		14(t)
<u>Service Attributes:</u>			
Good Rapport		5	9
Technical Expertise and Guidance		3	8
Timely Responsiveness and Feedback		2	7
Reliable Schedules and On-time Deliveries		1	2
Cooperative: Flexible Attitude		4	6
Convenience of Full Service		6	10
Others:			
Quarterly Control		7	14(t)
Errors Made Good		8	14(t)

*Ranking is determined by the average customer response as to the relative importance of each item.

and "cooperation and flexible attitude" would receive about 25 points each. The remainder of the items would each receive about 10-15 points.

To determine the importance of physical attributes relative to those dealing with service, respondents ranked the numerous items together and then assigned "points" from a 0-200 point scale. As noted in Table I, "overall print quality" was considered the most important item regardless of classification. Customers then ranked "reliable schedules" as the second most important attribute. Each of these items would receive approximately 30 points during our "distribution" of the 200 points.

The remainder of the top five attributes are all classified as physical attributes. On the basis of scale points, "color reproduction" and half-tone reproduction" would receive about 20 points each with "binding/trimming" receiving 15 points. The remainder of major service attributes which were ranked 6th through the 10th position would each receive 10-15 points in our distribution of points.

Specific Firm Printing Attributes

Table II relates how the respondents perceived an individual firm with respect to printing attributes. Column one of the table represents the percent number of firms which replied that the firm was average or below average. As can be seen, the majority of all respondents felt that the firm was good or superior in all physical and service attribute categories. However, this can be very misleading.

Previous studies have shown that user firms which rate their suppliers (goods or service) as average or below are in an active search for potential new suppliers or they are very willing to entertain a competitor's proposal. Therefore, a firm's purpose is not just to satisfy their customers, but to do it to the point where users are not actively seeking alternative suppliers.

Table II

<u>Attributes</u>	<u>Printing Attributes</u>			
	<u>% Average or Below*</u>	<u>Profit/ Non-Profit**</u>	<u>Number of Employees**</u>	<u>\$ Volume of Printing**</u>
Physical:				
Color reproduction	19.3	Same	Same	Same
Half-tone reproduction	43.5	Same	Same	Same
Binding/Trimming	27.4	Same	Same	Same
Overall Quality	25.4	Same	Same	Same
Service:				
Good Rapport	23.8	Same	Same	Same
Technical Expertise	34.4	Same	Same	Worse/ 1,000,000 over
Timely Responsiveness	42.2	Same	Same	Worse/ 1,000,000 over
Reliable Schedule	39.1	Same	Same	Worse/ 1,000,000 over
Cooperation/Flexibility	37.5	Worse/ 1,000,000 over	Same	Worse/ 1,000,000 over
Convenience	31.0	Worse/ 1,000,000 over	Same	Worse/ 1,000,000 over

* Column 1 represents the percent number of firms which replied that the firm was average or below average out of 63 firms.

** Columns 2, 3, and 4 are crosstabulations of each printing attribute based on firm characteristics.

With respect to physical attributes 43.5% of the respondents said the firm was average or below in half-tone quality. The most important attribute as related in Table I, overall quality, shows that 25.4% were less than satisfied. Accepting the premise stated in the above paragraph, one-fourth of the firm's customers are actively seeking a new printer.

This problem becomes even greater when we look at the service attributes. Reliable schedules, which were rated as being almost as important as overall print quality, indicate that 39.1% of the customers are average or below in satisfaction level. Every service attribute except good rapport had an average or below average satisfaction level of greater than 30%. The table also shows that as the dollar volume of printing increases by firm, the service attributes were rated lower.

In typical sales force management language, this problem can be viewed as an opportunity. Although the data in this study does not allow for a conclusive competitive analysis due to the small number of respondents, the assumption is that similar results would be found in other firms. Thus, if a small firm can adjust and satisfy their "average" customers better, they will not only foster continued patronage, but also attract customers of the competition which are likewise shopping for other potential suppliers.

SUMMARY

Overall, customers placed most of their emphasis on the physical attributes of their printing needs. However, customers considered reliable schedules and deliveries to be a significant factor in their relationships with firms offering printing services. In addition, the overall quality of physical print attributes might be considered a necessary given by users of printing services. This would place greater emphasis on the service attributes when it comes to printer selection or retention. What this might lead to is that all quality printers are expected to do quality printing, but the better firms "service" their client's needs to a greater extent. This information, although relating only to the printing industry, might also be true for other business firms which have both physical and service attributes as a part of their total product offerings. Therefore, it would be important for the firms to consider which attributes are the "real" deciding factors in vendor selection.

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