C.B.U. NEW NON-FOOD PRODUCT ADOPTION DECISIONS

Peter M. Banting, McMaster University
David L. Blenkhorn, Wilfrid Laurier University

Abstract

This research supports the assumption that small, relatively unknown suppliers will have a difficult time introducing their new non-food products to the central buying units of major retail chains. C.B.U. adoption criteria and their relative importance are identified.

One of the most difficult tasks faced by the marketer is the introduction of a new product into a large chain retail organization. This is particularly true for the marketer who represents a smaller supplier and a supplier whose brand is not well known.

In the large chain retail organization, the major obstacle to new product penetration is provided by the screening performed by members of the central buying unit. These individuals monitor sales of current products handled by their company, delete products which are performing poorly, and consider a myriad of new products eagerly presented to them by enthusiastic suppliers and potential suppliers every year. Every decision to add a new product involves a number of elements for the buyer, including the risk of the new item selling weakly, and the difficult deletion decision which must be made to create space for the new item. Since most buyers are evaluated over the long run on the basis of the profitability of the products they are responsible for, there is tremendous inertia toward adoption of new products. Products already handled by the company are familiar and safe generators of sales and profits. New products are unfamiliar and unsafe; their ability to sell is unproved and they could become shelf-warmers. Thus the natural inclination of the buyer is to resist rocking the comfortable boat, and to avoid new products which may torpedo the boat.

How can the small, relatively unknown supplier penetrate such a formidable obstacle as the central buying unit (CBU) of a major retail chain organization?

Methodology

A literature search gave little comprehensive insight concerning the issue. No lists of potential decision criteria used in the non-food industry were found, although a study by Hileman and Rosenstein listed criteria used in the food industry [Hileman et.al.]

Our study identified the subjects to be examined as members of the C.B.U.s of large retail corporations operating in non-food areas. Examples would include Sears, Tandy Corporation, Woolworths, K-Mart, etc.

Decision criteria were identified through a number of extensive personal interviews with purchasing executives of Sears, Canadian Tire Corporation, the T. Eaton Co. Ltd. and Hudson's Bay Company. These interviews not only generated numerous decision criteria containing many items not mentioned in the literature, but also provided the authors with fairly detailed interpretations of specific factors. It should be noted that these interpretations frequently were different from the meaning of the criteria which had been mentioned in the literature.

A three page, self-administered questionnaire was developed and pretested through repeat personal interviews with the buying executives mentioned above.

A revised instrument was mailed to 359 principal buyers in 139 firms across Canada. These buyers were identified as follows: Non-food chain stores with five or more geographic locations were located using the Directory of Retail Chains in Canada. Each firm was contacted by mail and was asked to submit a list of its various buying categories or classes, each group of which was the responsibility of a principal buyer. Follow-up letters were used to ensure maximum participation. In the cases of the largest chains, this technique was supplemented by telephone calls and personal visits.

The research questionnaire was mailed to the 359 buyers thus identified in late August 1980 and was followed with a second wave mailed in late September. One hundred sixty-seven usable questionnaires were returned, providing a 46% rate of response.

A Profile of the Respondents

The type of non-food chains was quite varied, although more than 80% of respondents come from either department store, hardware, automotive, clothing, drug and shoe chain stores (see Table 1). Half of the respon-

TABLE 1
TYPE OF CHAIN STORE

Type of Chain Store	Number of Buyer Respondents	Percent
Department Store	63	38.8
Hardware - Automotive	24	14.8
Clothing	17	10.5
Shoes	10	6.2
Furniture	1	.6
Stationery - Gifts	9	5.6
Jewellery	5	3.1
Drugs	15	9.3
Sporting Goods	3	1.9
Camera - Film	5	3.1
Electronics - Music	4	2.5
Lighting - Electrical	1	.6
Books	2	1.2
Arts and Crafts	2	1.2
Toys	1	.6
TOTAL	162	100.0%

dents had sales in excess of $75 million (see Table 2).

TABLE 2
SIZE OF FIRM

Gross Sales Revenue	Number of Buyer Respondents	Percent
Less than $1 million	1	.7
$1 million-$4.9 million	17	11.3
$5 million-$9.9 million	8	5.3
$10 million-$24.9 million	15	9.9
$25 million-$49.9 million	18	11.9
$50 million-$74.9 million	17	11.3
$75 million-$99.9 million	6	4.0
More than $100 million	69	45.6
TOTAL	151	100.0%

Although 20% of the respondents had greater than 20 years experience in the buying function, more than one quarter of the buyers had been buying for 5 years or less (Table 3). The number of new items adopted by an

TABLE 3
TIME IN BUYING FUNCTION

Years Spent in Buying	Number of Buyer Respondents	Percent
5 years or less	44	26
6 - 10 years	38	24
11 - 15 years	28	17
16 - 20 years	21	13
over 20 years	32	20
TOTAL	163	100%

individual buyer was considered to be an indication of his innovativeness. In Table 4 it can be seen that

TABLE 4
NUMBER OF NEW ITEMS ADDED TO PRODUCT LINE

Number of New Items	Number of Buyer Respondents	Percent
5 or less	5	15
6 - 10	20	14
11 - 20	25	18
21 - 50	28	19
51 - 99	7	5
100+	44	29
TOTAL	129	100%

29% of the respondents purchased 100 or more new items per year. The geographic coverage of the chain operations is displayed in Table 5, where it can be seen

TABLE 5
GEOGRAPHIC COVERAGE OF CHAIN

Geographic Coverage	Respondents	Percent
Within one province	32	19.6
Within several provinces	66	40.5
Covers all Canada	50	30.7
International	15	9.2
TOTAL	163	100.0%

that one fifth of the respondents restricted their operations to one province, while two fifths were nation-wide in scope. The most represented type of product line was clothing followed by supplies and furnishings for the home (Table 6). Roughly one third of the respondents worked in chains employing 5 or fewer buyers (Table 7), while 18% worked in companies with more than 50 buyers. The age of respondents is shown in Table 8. In Table 9 it can be seen that all but one of the respondents had completed high school or a higher level of education. The number of stores in the responding chains is shown in Table 10, while Table 11 indicates the age of responding companies.

TABLE 6
TYPE OF GOODS PURCHASED

Type of Good	Respondents	Percent
Clothing	49	30.8
Home Renovation	29	18.2
House Furnishings	34	21.4
Other	47	29.6
TOTAL	159	100.0%

TABLE 7
NUMBER OF BUYERS IN CHAIN

Number of Buyers	Responses	Percent
1 - 5	51	32
6 - 10	42	26
11 - 20	25	16
21 - 50	11	8
Over 50	27	18
TOTAL	156	100%

TABLE 8
AGE OF RESPONDENT BUYERS

Age	Responses	Percent
24 - 30	30	19
31 - 40	57	35
41 - 50	50	31
51 - 65	24	15
TOTAL	161	100%

TABLE 9
HIGHEST EDUCATIONAL LEVEL OF BUYERS

Education Level	Responses	Percent
Public School	1	.6
High School	71	43.5
Community College	20	12.3
University	61	37.4
Professional Designation	10	6.2
TOTAL	163	100.0%

TABLE 10
NUMBER OF STORES IN CHAIN

Number of Stores	Responses	Percent
5 - 9	18	11
10 - 19	17	11
20 - 29	26	16
30 - 49	13	8
50 - 99	19	12
100 - 199	27	16
200 - 399	24	15
400+	17	11
TOTAL	161	100%

TABLE 11
AGE OF FIRM

Age	Responses	Percent
0 - 19	27	17
20 - 39	28	18
40 - 59	22	15
60 - 99	40	25
100+	40	25
TOTAL	157	100%

Criteria

The list of decision criteria which had been developed and revised according to personal interviews with purchasing executives was organized under seven categories. Respondents ranked the 33 categories on a five point semantic differential scale according to their importance in assessing whether or not to adopt a new product. The seven categories are listed in sequence of their weighted importance to respondents in Table 12.

TABLE 12
CRITERIA SALIENCE

A. PROFIT	
1. Expected profit contribution	470
2. Retailer or dealer markup	454
B. LEGAL CONSIDERATIONS	
1. Potential liability of retailer concerning the new product	418
2. Meets government regulations	454
3. New product raises questions concerning warranty on customer's other products	369
C. TIMING CONSIDERATIONS	
1. Timing of supplier's sales calls	357
2. Product introduction timing	422
3. Economic conditions	382
4. Fit with new trends in market	423
D. PRODUCT/MARKET CONSIDERATIONS	
1. Potential market volume	444
2. Favourable test market results	378
3. Evidence of another major retailer's purchase of product	281
4. Product range	347
5. Quality	456
6. Life cycle considerations	365
7. Competitive price	434
8. Fits gaps in retailer's line	395
E. SUPPLIER	
1. Supplier's known track record	436
2. Well-known brand name	382
3. Single source wide product range	323
4. Financial capabilities	376
5. Initial supply capabilities	430
6. Ability to fill repeat orders quickly	459
F. PRODUCT UNIQUENESS	
1. Distinctive styling	378
2. New combination of function	355
3. Performs some functions better than current products	380
4. New features built into the product	367
5. Function not previously available	366
6. Well-known brand name	378
G. PROMOTION	
1. Advertising support by manufacturer (supplier)	419
2. Instore point of sale promotional material provided by supplier	338
3. Manufacturer's rebates to consumer	282
4. Package attributes	360

It can be seen that the most salient criteria, in order of importance, are:

1) expected profit contribution
2) supplier's ability to fill repeat orders quickly
3) product quality
4) product meets government regulations
5) retail or dealer mark-up
6) potential market volume
7) supplier's known track record
8) competitive price
9) manufacturers' initial supply capabilities
10) product fits new trends in market

Other factors that were considered important in the new product adoption decision which had not been included in our list of 33 items included in order of importance:

1) exclusivity - the desire of the buyer that his chain be the only outlet in his trading areas to handle the new product.

2) Physical Distribution Considerations - terms of purchase vs. SKUs (stock-keeping units), transport mode vs. freight rates, rebates, etc.

3) image - the ability of the new product to be congruent with the image projected by the retail chain and the types of products it already carries.

4) Trustworthiness - the perceived honesty and reliability of the supplier.

A number of hypothesized relationships were tested using Chi Square analysis. At the 5% level of significance it was shown that the businesses with more outlets in their chain operation adopted proportionately more new products per buyer than the smaller chain operations. At the 10% level of significance it was found that in chain stores with a larger number of people responsible for buying, there was a relatively larger percentage of new products purchased. Also at the 10% level of significance it was found that the most innovative firms are in the category 31-80 years in existence, whereas younger firms are likely to adopt a relatively smaller number of new products per year, and the oldest firms tend to be the most conservative, buying the smallest number of new items per year.

In contrast to the company characteristics' relationship to innovation, hypotheses concerning buyer relationships indicated that at the 5% level of significance, buyers with higher educational achievement than high school were relatively more frequently represented in the middle of the distribution of the volume of new items purchased annually. Those whose highest level of achievement was high school completion or less tended to be more often represented in the extremes of new product purchases -- that is they were either more risk averse or more risk tolerant.

Those buyers with educational achievement beyond high school tended to choose to work in chain operations which either operated within the confines of one pro-

vince or were nation-wide in scope, whereas proportionately more of those with high school or less worked in chains whose market encompasses a few provinces. This was significant at the 5% level.

The range of products offered by a new product supplier was found to have substantial appeal among chains of varying size. The larger the chain, the relatively greater importance of the supplier having a broad product range. This was shown by three measures of firm size: by dollar sales, and by number of buyers in the firm, both at the 5% level of significance, and by the number of outlets in the chain organization at the 1% level. None of the other hypothesized relationships were significant.

Factor Analysis

Factor analysis is useful in ascertaining conceptual cohesion underlying response patterns. The 33 criteria used in assessing new products were factor analyzed using varimax rotation and an eigenvalue of 1.00 was set as the lower limit. Eleven factors were extracted and factor loadings greater than .5000 were used to identify the factors. It is interesting to note that the original seven category grouping of criteria used by the authors was not substantiated by the factor analysis. Examination of the eleven factors indicated to the authors that meaningful factor groupings indeed had been attained. The eleven factors explained 65.4% of the variance. These factors and their descriptors are listed in Table 13.

TABLE 13
FACTOR ANALYSIS OF DECISION CRITERIA

Factor	Descriptor	Decision Criteria Included
1	Brand Image	- product well-known brand name - advertising support by manufacturer - supplier well-known brand name
2	Function	- new combination of functions - performs some functions better than current products - new features built into the product - function not previously available
3	Timing	- fits gaps in retailer's line - timing of suppliers' sales calls - product introduction timing - economic conditions
4	Confidence in Supplier	- financial capabilities - initial supply capabilities - ability to fill repeat orders quickly
5	Merchandising Support	- instore point of sale promotional material provided by supplier - manufacturer's rebates to consumer - evidence of another major retailer's purchase of product
6	Risk Reduction	- potential liability of retailer concerning new product - meets government regulations - new product raises questions concerning warranty on customer's other products
7	Profit	- expected profit contribution - retailer or dealer markup
8	Fashion	- distinctive styling - fits with new trends in market
9	Market Potential	- potential market volume - favourable test market results
10	Life Cycle	- quality - life cycle considerations
11	Package	- package attributes

Conclusion

At this stage of the research it would appear that the small, relatively unknown supplier has a better chance of having his new product adopted by one of the larger chain operations since they tend to be more innovative in their new product selection than smaller chains. However, larger chains expect the supplier to have a broad product range. Consequently this would limit the number of small, unknown suppliers who can apply this type of segmentation.

Generally speaking, the importance of brand image, as indicated by factor analysis, would militate strongly against a relatively unknown supplier. To the extent that such a supplier could fulfill the expectations of CBUs regarding the most highly ranked decision criteria (expected profit, ability to fill repeat orders, quality, etc.), his chances would be improved.

References

Hileman, Donald G. and Leonard A. Rosenstein, "Deliberations of a Chain Grocery Buying Committee," Journal of Marketing (January, 1961), pp. 52-55.

Directory of Retail Chains in Canada, Toronto, Ontario, Monday Report on Retailing, 1978.