

# OFFICE FURNITURE IN CANADA



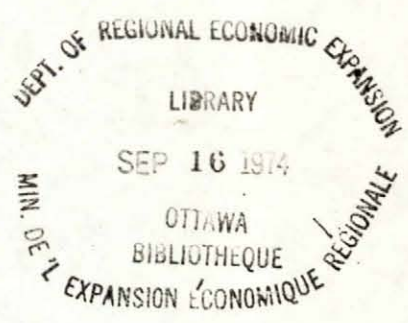
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OFFICE FURNITURE  
in CANADA



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Expansion

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## INTRODUCTION

### The Purpose of this Report

The purpose of this report is to analyze the feasibility of establishing an office furniture manufacturing company in the Atlantic provinces.

### Summary

This report examines six product groups which are not presently manufactured in the Atlantic provinces in significant quantities. It also examines six market segments of the office furniture industry. It concludes that there is only one manufacturing opportunity in the Atlantic provinces for office furniture. It is the opportunity to supply to the executive office segment the following products:

1. Desks
2. Credenzas
3. Tables
4. Bookcases

The projected sales volume of the company would be \$2.3 million. It would employ approximately 80 persons. The total capital investment would be approximately \$1.1 million. The projected return on investment, excluding a D.R.E.E. grant, could be as high as 11%.

The company would have to sell two-thirds of its production to the eastern seaboard of the U.S.A. In this highly competitive market the Atlantic company would have to have senior executives who are outstanding in:

1. artistic design,
2. highly skilled wood working techniques,
3. very capable selling skills.

This company is not locationally sensitive. It could be equally successful located in other parts of North America.

OFFICE FURNITUREPRODUCT DESCRIPTION

This study concerns office furniture which has been classified into the following main classes:

1. Office desks
2. Office tables
3. Executive Credenza
4. Chairs
5. Filing cabinets
6. Book cases and shelving

## 1. Office Desks

The following classifications indicate the variety of office desks which are available.

### a) Executive Desk

The top on this desk is usually 72" x 36". It ordinarily has two pedestals (enclosures into which fit the desk drawers) and a centre drawer. Formerly, the pedestals supported the desk top and legs were attached to the bottom of the pedestal. In many present designs, the legs directly support the desk top, and pedestals are suspended from the top.

### b) Manager's Desk

The top on this desk is usually 60" x 30". In other respects, it is similar to the executive desk.

### c) Secretary's Desk

The top on this desk is usually 60" x 30", that is, the same size as the top on the manager's desk. The significant difference is that this desk usually has only one pedestal and a run-off.

### d) Run-Off or Return

The names "run-off or return" are both used to describe what looks like half a desk which is attached at right angles to the desk. It has a top, usually 42" x 18" to 42" x 21". On an executive's or manager's desk, the return's top is at the same height and mounted flush with the desk top. On the secretary's desk, the return's top is several inches lower than the desk top.

### e) Typist Desk

The typist's desk is similar to the manager's desk except that replacing the run-off is a special typewriter storage in one of the pedestals. This storage is spring loaded so that the typewriter can be stored out of place at night, but can be easily raised into position in the day time.

f) Clerk's Desk

It is similar to a secretary's desk but has only one pedestal. Occasionally, the top has smaller dimensions, such as 48" x 30".

2. Office Tablesa) Working Table

Working tables are usually 60" x 30" or 72" x 36". Often they have the same top as a desk, the same legs, but special reinforcing holding the legs to the table top.

b) Conference Table

Conference tables are usually round, although they may be any shape. They are supported by legs attached to a central pillar. Often they have arborite or formica tops.

c) Board-room Table

The board-room table is usually very long and about 48 inches wide. Although many standard designs are shown in catalogues, some companies have their products especially made to their own design.

3. Executive Credenza

The credenza is usually placed behind or beside the executive desk. It consists of two pedestals, separated by a bookshelf and covered top and bottom. Typical top might have dimensions of 72 inches by 21 inches.

4. Chairsa) Executive Tilter Chair

This chair comes in many sizes and price ranges but has the following:

- 1) arm rests,
- 2) four legged pedestal, usually on casters, often the shepherd castor design.
- 3) a tilter and swivel mechanism to allow the chair to rotate or tilt back.



- 4) often, but not always, a high back with a head rest.

b) Arm Chair

Typically, two or three arm chairs are placed in the office for visitors. They match the tilter chairs, each possessing:

- 1) arm rests,
- 2) four legs without tilter or swivel mechanisms,
- 3) a back not usually more than shoulder height.

c) Secretarial Chair

This chair has:

- 1) four legged pedestal with a swivel mechanism but no tilter mechanism,
- 2) a back rest attached to the swivel mechanism with a leaf type spring.

d) Stacking Chair

This chair normally has:

- 1) four legs,
- 2) back less than shoulder high,
- 3) arm rests (omitted on a stacking side chair).

e) Special Purpose Chairs

There are a multitude of special purpose chairs such as draftsmen, stools, machine operator's chairs, cafeteria chairs, foyer chairs.

5. Filing Cabinets

a) Lateral or Side Files

These cabinets are about 18 inches deep, about 36 inches wide, and each drawer is about 12 inches high. These come in a cabinet usually from two to six drawers high. The significant advantage of side files is that they use less floor space than standard end files, because each drawer is withdrawn only fifteen inches. The overall floor space is therefore 36 (15 × 18) equalling 1,188 square inches.

b) Conventional End Files

These cabinets are about 18 inches wide, 28 inches deep and each drawer is about 9 inches high. They come in a cabinet usually from two to five drawers high. Since the drawer can be withdrawn about 24 inches, the floor space occupied is 18 (24 28) 936 square inches for a file holding two thirds of the material held by a lateral file.

c) Card Files

Card files are now made in both lateral and standard configurations. Their main purpose is to hold computer cards or other types of cards.

d) Metal Cabinets

Metal cabinets come in many shapes and sizes because of their simple construction. They are mainly a closet of steel with some shelving.

6. Book Cases and Shelves

- a) Book cases are upright boxes with shelving suitably spaced for books and catalogues. Shelving is in fact the same. The usual distinction made is that book cases are normally wood whereas shelving is normally painted sheet steel. Book cases may, in addition, have front doors.

THE CANADIAN MARKET FOR OFFICE FURNITURE

The National Market

Table number 1 outlines the overall market in Canada for Canadian office furniture. Historical figures are used up to the year 1972, after which projections are made for years up to 1980.

The demand for office furniture stems from two main sources:

- a) replacement of worn-out furniture
- b) new office furniture for new buildings.

If office furniture lasts an average of twenty years, then the furniture of about twenty years ago will have to be replaced with new furniture. That is, an average of approximately 5% of all presently used office furniture will have to be replaced each year. This continuing replacement market provides a steady yearly demand for office furniture. To this replacement market must be added office furniture to provide work stations for new office workers entering the labour force each year.

According to the forecasts prepared for the Economic Council of Canada, the following are the projected values for the total Canadian labour force:

1972	-	8,825,000	(Actual)
1973	-	9,050,000	
1974	-	9,280,000	
1975	-	9,488,000	
1976	-	9,760,000	
1977	-	10,050,000	

In a study undertaken for the Department of Manpower and Immigration in 1969\* a change in the distribution of employment was forecast for 1975. According to this study, and with the addition of existing values for 1972, the following distribution results.

<u>Employment by Occupation</u>	<u>% actual</u> <u>1961</u>	<u>% actual</u> <u>1972</u>	<u>% forecast</u> <u>1975</u>
Managerial	8.6	9.8	8.7
Professional & Technical	10.0	12.9	15.7
Clerical	13.5	14.9	15.3
Sales	6.6	6.7	6.7
Service & Recreation	10.7	12.7	14.2
Transportation & Communication	6.5	5.3	6.1
Farming	11.8	6.7	4.5
Logging, fishing & mining	2.3	1.5	1.3
Craftsmen	24.5	24.2	23.9
Labourers	5.5	5.3	3.6
TOTAL	100.0	100.0	100.0

For the purposes of this study, it has been assumed that only employment in the first six occupations have a market effect on the demand for office furniture. Thus, whereas in 1961, 55.9% of the labour force works in these occupations, in 1972 62.3% are found in them and in 1975 (a forecast made in 1969) 66.7% of the work force will be so occupied.

Applying these trends to the projected labour force forecast by the Economic Council, the following forecasts of "office furniture users" was produced.

	<u>Total Work Force</u>	<u>% Office Furn.Users</u>	<u>Office Furn. Users</u>	<u>% Growth</u>	<u>Increase In Users</u>
1972	8,825,000	62.3	5,500,000	4.5 %	250,000
1973	9,050,000	63.5	5,750,000	4.8 %	280,000
1974	9,280,000	65.0	6,030,000	4.8 %	300,000
1975	9,488,000	66.7	6,330,000	4.2 %	250,000
1976	9,760,000	67.5	6,580,000	3.8 %	250,000
1977	10,050,000	68.0	6,830,000		

The above table shows that the increase in the users of office furniture is approximately constant at between 250,000 and 300,000 persons per year, and this represents between 3.8% and 4.8% of the present users of office furniture. This analysis shows, therefore, that approximately 5% of all present office furniture is replaced yearly, and that approximately 4.3% of all present furniture represents the yearly increase required to handle additional office workers. In summary, therefore, it can be said that approximately 50% of the demand for office furniture is replacement of old office furniture and approximately 50% of the demand is to provide facilities for new employees who use desks.

The replacement of old office furniture can be delayed or accelerated, depending on the financial resources available for purchases. Therefore, this segment of the office furniture business is quite sensitive to the business cycle. In addition, the number of new employees who enter the labour force is also sensitive to the business cycle. For these reasons, the total market for office furniture in Canada is sensitive to the business cycle, particularly as it is reflected in the construction of new office buildings in Canada. The following table verifies this statement. For example, notice that when office construction increased rapidly between 1967 and 1968, office furniture sales increased from 1969 to 1970.

<u>Year</u>	<u>Value of New Office Building Construction</u>	<u>Factory Shipments Office Furniture</u>
1967	389,110,000	73,600,000
1968	427,146,000	76,000,000
1969	444,227,000	90,700,000
1970	536,442,000	94,100,000
1971	540,893,000	95,800,000
1972	531,842,000	94,400,000

These major factors, the replacement of old office furniture, the addition of new employees into the labour force, and the value of New Office Building Construction have been used to project the sales of new office furniture up to 1980.

The continued high level of new office building construction in 1970, 1971, and 1972, is building up demand for new office furniture which, in addition to replacements which were delayed in 1971 and 1972, will result in two main developments:

- a) A rapid increase in the quantity of office furniture sold in 1973.
- b) A firming of prices followed by significant price increases in 1973.

These two effects are reflected in the projected large \$20 million dollar increase projected for 1973 followed by steady rapid growth at an annual rate of 8% through to 1975 and thence a reduced growth rate of approximately 5% through to 1980. Overall, the picture for new office furniture is one of continued growth in both unit volume and price per unit.

## MARKET SEGMENTS

The following market segments have been identified in the office furniture business:

- a) Executive Offices
- b) General Offices
- c) Factory Offices
- d) Small Businessmen Offices
- e) Household Desks

### Executive Offices

This market segment refers to the executive offices of large banks, trust companies, brokerage houses, head offices of manufacturing, wholesaling, retailing, and the offices of partners in law offices and accounting firms.

Wood is a status symbol for executive offices. There are no present trends indicating a change. One can conclude that wood will be the main material for executive offices for many years to come.

Examples of executive furniture are: the Task, Summit, Signa, lines manufactured by Standard Desk Limited.

The Signa line contains:

- a) 72" x 36" desk, veneered with English Burlled Oak, in a walnut frame, all having a hand rubbed oil finish. Drawers operate on a full suspension steel ball bearing slide. Each desk pedestal has individual locks. Matching the desk is a 72" x 20" credenza, coffee table, corner table and sofa.
- b) Matching this ensemble is the Signa arm chair, the Signa club chair and the Signa sofa. A typical executive tilter chair might be the Summit. The following list prices give some idea of the ensemble:-

Summit Tilter	\$ 498.00
Signa Sofa	\$ 976.00
Signa Club Chair	\$ 504.00
Signa Arm Chair	\$ 341.00
Signa Desk	\$1,542.00
Signa Credenza	\$ 780.00
Signa Coffee Table	\$ 309.00
Signa Corner Table	\$ 309.00

No desks are sold to this market at prices below \$400.00 per unit. Typically, these products are sold through interior office designers, and the very reputable, high quality distributors. The entire market for these products is concentrated in Canada's very large cities. Although it is classed as wooden furniture, it is in 1972 approximately:

- a) Desks \$3 million
- b) Chairs \$1 million
- c) Sofas, Tables, etc. \$1.5 million

Requirements for a successful manufacturer in this business are:

- a) Very capable artistic design,
- b) Very high quality workmanship in manufacturing the product,
- c) Very capable sales force able to convey the merits of the products to the dealers and interior designers.

Factory location is not a major factor.

#### General Office Furniture

By General Office Furniture is meant the furniture used by typists, clerks, clerical supervisors and middle managers in large corporations, such as: banks, insurance companies, trust companies, public utilities, sales offices of large industrial and retail organizations, municipal and provincial governments.



These markets are sold through interior office designers and dealers. In some large installations, architects specify the office furniture.

There are three main trends in this market segment which are:

- a) The continued use of medium priced steel furniture,
- b) The use of "systems" style, particularly in the "open landscape" type of office,
- c) The use of medium priced wood furniture.

When a large company, a provincial or municipal government make a furniture purchase, they are making a twenty year decision. The furniture must not only last twenty years, but it must be comfortable and utilitarian. In addition, the furniture must provide pleasant working conditions. Ideally, it should motivate employees to perform their tasks better. Since the company cannot accurately predict the number or kind of employees it will have, the furniture must be flexible, that is, capable of being adapted to a variety of uses.

The purchaser must be able to add to his stock of furniture, sell it second hand, and replace worn-out parts over its twenty year life.

For these reasons, the design of this furniture, especially in steel, is an expensive time consuming task. Errors result in customer dissatisfaction and high tooling costs.

As a result, in order to compete in this market segment, the office furniture manufacturer must prove to the purchasing decision makers that:

- a) The company will remain in business at least 20 years,
- b) That it has designed an outstandingly suitable line of furniture,
- c) That it has the financial resources to modernize its design of furniture and its manufacturing processes so that it will remain competitive.

For these reasons, the largest selling lines of office furniture to these market segments are medium priced lines. Some examples in steel are:

- a) The 1400 line successfully sold by Steelcase Limited for over thirty years.

- b) The 4900 line by Steel Equipment Limited featuring plastic laminate tops, snap on chromium plated steel legs, full width back panel from leg to leg, all drawers accommodating full length progressive suspension, and having double wall construction. The master lock is centre activated. Drawer fronts fit full width of the pedestal.

Typical list price on a 60" x 30" double pedestal desk is \$379.00.

The next best selling line of Steel Equipment is the 1500/1900 line; a 60" x 30" double pedestal desk listed at \$282.00. In outer looks, there is no great difference in looks. The price difference mainly is in the thickness of steel and the quality of finish as well as certain structural features.

Nearly all manufacturers of steel office furniture have similarly styled desks to compete in this market segment. For example, Sunar has its 3,000 series, Bonnex has its Bon-X, and Office Specialty, Inter-Royal, B.K. Johl, and Cole have similarly competitive products.

During the past three years, the most innovative change in general office furniture has been the introduction of the "systems" style, particularly in the open landscape type of office. For example, in one new office building in Toronto, the cost per work station using the new "systems style" furniture coupled with open landscape design was \$700. compared with \$1,200. per work station for the previously mentioned general office furniture and conventional steel partitions. Not surprisingly, "systems style" furniture is the fastest growing trend in large new general offices. Its impact on some metal office furniture manufacturers has been so great that during the past eighteen months, up to 40% of their production has been this style of furniture.

The Sunar F system is the largest selling line of Sunar Ltd., because:

- 1) It is medium priced.. A 60" x 30" double pedestal desk lists at between \$492.00 and \$520.00.

- 2) It is modular, that is, a wide variety of pedestal combinations is available, from no pedestals to two, three, and four drawer pedestals. Available is a fingertip stationary storage built into the top. A built in wastebasket, pencil-tray and pin tray is optional. An add on writing tablet, can be attached, or alternately a mini-file may be substituted. Bin files and run-offs are part of the line. All of these features permit a large company to stock various types of drawers, pedestals, bin files, and run-offs, so that by simple substitution, a work station particularly suitable to the task to be done could be easily assembled.
- 3) The finish is pleasing to the eye. The tops and panels are textured wood grain, plain, imitation birch, or coloured imitation linen, of formica material.
- 4) Wasted space on many desks has been replaced by vertical files.

The material is chipboard covered with formica, with solid wooden drawers.

The Sunar L is the second largest selling line. Also of wooden construction, it features high pedestals with I side frames replacing the solid side panels of the Sunar F.

The third largest selling Sunar line is the Sunar S system. It provides the durability of sheet steel construction together with the flexibility of the Sunar F system. Coupled with the Uniwall filing system, and certain Sunar components, it can provide a fantastic variety of work station combinations. Priced at about 10% above the Sunar F or Sunar L, it is considered one of the most pleasing innovations in general office furniture in the last five years.

The above three lines were described in some detail to show how, a new innovation was market tested in wood because tooling costs are low; and then designed; and tooled up in steel where the cost would exceed \$250,000. Nearly all major office furniture manufacturers now have competitive lines aimed at this market segment, that is, the large, new, general office.

The channel of distribution for the "systems style" furniture is almost exclusively through architects or interior design consultants. The initial contracts are usually large. Therefore, the expensive start-up costs in marketing, that is, the expensive cataloguing plus the personal selling to architects and interior designers will be absorbed by high contribution margins during the first 40 to 50 months after introduction. As more companies compete in this market segment, contribution margins will decrease so that after 50 months, there is little likelihood that a new company could profitably enter this market segment.

A third trend in the general office furniture market segment is the wooden desk and run-off. Small general offices, that is less than twenty or thirty persons, often purchase wooden desks. Typical examples of these lines are: Nova II by Standard Desk Ltd., Impact by Biltrite, Sylvana 20 by Canabureau, and Opus I by Artopex.

#### Factory Office Furniture

Factory office furniture is used mainly by foremen who are supervising production workers, production schedulers, inventory control clerks, and factory managers. At present, metal desks are the most popular style of furniture used in factory offices. A typical design would be the Spacemaker model by Steel Equipment. All of the metal office furniture manufacturers have a similar design which they have been selling for several years. The factories purchase their furniture from dealers but seldom do they purchase large numbers of units at one time. A second, and common way of obtaining the desks is from the general offices or sales offices of their organization. Quite often, a company will move into a new office building, or completely replace all of their office furniture in the general offices with a new design. When this occurs, the furniture out of the office which was still in good condition is sometimes moved to the factory office to replace worn out furniture there. A third method of obtaining factory office furniture occurs when the maintenance employees within the factory design and build special work desks. These are usually of wood and are often the special type used by foremen in large factories.

Factories purchase metal office furniture because it is sturdy, reliable, and relatively inexpensive. Standard designs like the Standard 1500/1900 model are used so that worn out components can easily be replaced. Special equipment for the

factory office furniture generally consists of: special metal cabinets, special metal storage cabinets, special back supported chairs for production workers, the standing-sitting chair for assembly line workers, and certain heavy metal tables which are used by assembly workers, maintenance personnel and assembly line personnel.

#### Small Businessmen Office

In Canada there are many small businesses run by one man who has a small staff of clerical people such as, bookkeeper, order desk clerks, warehouse clerks, salesmen's desks, and sales managers' desks. In these offices wood is a status symbol just as it is in executive offices. There are at present no trends indicating that wood will not continue as a status symbol. The significant difference, however, is that small businesses usually purchase much less expensive wooden furniture than executive offices. Typically the desk top is made of board or chip board with a textured wood board formica finish on the top and a formica on the bottom. The pedestals are often chip board covered with textured woodgrain formica. Drawers are wood with solid drawer handles and solid legs. At present, one of the most popular designs is the parallel model by Standard Desk followed closely by Nova 2 manufactured by Standard Desk. Biltrite manufactures a similar line of wooden desks. The series 200 by Artopex would fall into this line of desks.

In the same way that these wooden desks are imitations of the expensive executive wooden desks, the office chairs which customers buy to go with the desks are similar in style to expensive chairs. The major suppliers to this market segment are Nightingale, Global, and Atlas. One of the major success stories in the executive chair business has been Nightingale. By imitating expensive chairs but producing them at prices below which no other company could manufacture a useable product, Nightingale has grown to be one of the large suppliers of chairs in less than ten years.

Whereas the executive office desks previously described always sell for a price exceeding \$400, desks in this market segment have price ranges from \$200 to \$400. A typical desk in this market segment would be the model 5/CD-66 double pedestal executive desk with a list price of about \$275.

The small businessman office furniture segment of the market is the largest segment of the wooden office furniture market. In order to be successful in it a company would have to have the following:

1. A national sales force able to call on the small dealers from coast to coast.
2. Excellent industrial engineering, and manufacturing engineering, in order to reduce manufacturing costs to a minimum.
3. Low shipping costs.

For these reasons, the largest company in this market segment is Standard Desk which can obtain the necessary engineering and financial backing from its parent company L Industries. The second best known company in this market segment is Biltrite. There are other companies which have had moderate success competing with these two very successful companies.

#### Household Desks

There is a wide range of furniture in this market segment. Unpainted pine furniture with drawers is often supplied to young students. Some executives and professional men buy more expensive desks, usually of wood, and usually of a known style such as Scandinavian, Spanish Provincial, French Provincial. Others buy desks which are designed for small businessmen's offices.

This market segment is supplied mainly by:

1. second-hand office furniture store,
2. national department stores,
3. selected household furniture stores.

This market segment is small and none of the major office furniture manufacturers aim their products at it.

### Federal Government Office Furniture

The Federal Government purchases a unique design of office furniture. This design was made by the Department of Supply and Services to fill the Federal Government's unique requirements, which are:

1. functional but not necessarily efficient;
2. durable beyond the requirement of the commercial market;
3. cheap;
4. capable of being manufactured by a wide variety of companies, either in wood or in metal.

As can be seen, the requirements of the Federal Government do not coincide with those of the commercial business enterprises which have been previously described.

Interviews with manufacturers and dealers in office furniture found that none of them would be willing to sell the Government design of office furniture in the commercial markets apparently for the following reasons:

1. not stylish;
2. not efficient;
3. too heavy.

Annex "A" of this report represents an approximate estimate of Federal Government purchases of office furniture. Annex "B" represents approximately the Federal Government purchase prices. One of the largest items in the list is the CGSB 44-GP-150 desk which has a purchase price of \$115.37. An estimated cost breakdown to manufacture this item is as follows:

1. material	\$90
2. labour	\$18
3. factory overhead	<u>\$18</u>
Total	\$126

As can be seen from the above analysis, the manufacturing costs of this unit, including factory overhead, but excluding

administrative and selling costs is \$126, whereas the selling price is only about \$115. One concludes, therefore, that the companies which supply office furniture to the Federal Government do not absorb their entire manufacturing overhead, and further do not receive any contribution to their administrative and selling costs nor to their profit. In these circumstances, the profitable and successful companies in the office furniture business prefer not to supply the Federal Government with office furniture. Those companies which do supply the Federal Government with office furniture do for one of two reasons:

1. the companies are desperate, and are unable to gain sufficient business in the commercial market,
2. the companies are successful in the commercial market but use the government business as a filler, that is, they manufacture the product during a period of the year when they are not busy manufacturing commercial furniture.

In this way these companies can continue to maintain their labour force, and make a small contribution to factory overhead. Under these circumstances, good management of these companies requires that all commercial production take priority over government production. Therefore, every effort must be made by these firms to manufacture government furniture only when they do not have sufficient commercial production. Their major complaint is that they cannot receive government orders on time, or timely, so that they can schedule the production into their low periods. Under these circumstances, they are forced to adopt a strategy of delaying shipments to the Department of Supply and Services so that they can schedule it into low production periods and monitor the attitude of purchasing agents at the Department of Supply and Services so that the delays are never quite long enough to persuade the Department of Supply and Services to delete the manufacturer from its list of suppliers. Under these conditions, the Federal Government office furniture market segment represents a non-profit segment of the market.

### THE REGIONAL MARKETS

#### Provincial Breakdown

Table number 4 provides a provincial distribution of office furniture in the year 1971. This distribution has been compared with similar tables for previous years going back to 1966. During



the past six or seven years, the total market for office furniture has grown but the destination of office furniture by province, as a per cent of total sales has remained approximately constant. Considering who purchases the furniture, and that Ontario has the fastest growing economy, that the Atlantic Provinces are mainly rural, and that Alberta and British Columbia have fast growing economies, it is not surprising to see that Ontario has the largest market share and that the entire Atlantic Region has a very small market share. There is no reason to think that this distribution of sales of office furniture will change during the coming five years. In summary one can say that the Atlantic market for office furniture is negligible, that approximately 20% of the market is in Quebec, approximately 40% in Ontario, and approximately 17% is in the Western and Pacific provinces. There appears to be another 10% of the market which is exports of office furniture from Canada to Foreign countries, mainly the United States.

Table number 3 indicates that the exports of office furniture from Canada grew rapidly to the year 1969 after which sales have leveled out. Most of these sales were made to the United States. In the United States the low priced line of metal office furniture is cheaper than the low priced line of wooden furniture. Whereas in Canada the reverse situation is true. What this statement means is that the very standard design, such as the 1400 sold by Steel Case Incorporated, are mass produced at a volume and using more automated production techniques than are used in Canada that cost and therefore prices are considerably lower than prices for the same products in Canada. The main reason for exports to the United States are that:

1. wooden furniture manufactured in Canada is competitive in price in United States and often of superior design,
2. the new designs particularly, the open landscape style of office furniture, are being sold in the United States at premium prices. In addition, a considerable number of low priced office chairs are being sold in United States.

As these new designs penetrated the market, United States companies brought out their design and effectively eliminated the opportunity for further penetration by Canadian manufacturers. The American companies have not only shorter lead times, but much more elaborate and effective sales forces than Canadian companies have in the United States.

### CHANNELS OF DISTRIBUTION

There appear to be three main channels of distribution for office furniture:

1. Direct sale from the manufacturer to the end user as in the case of the federal government, certain large purchasers such as office building development companies, and office rental companies. In total, this volume represents about 10% of the Canadian market.
2. Sale through interior designers and contract furniture houses such as Eatons and Simpsons Contract Division.
3. Sale through office furniture dealers who then sell in small quantities to companies which purchase only a few desks at one time.

Channels two and three account for 90% of sales, and are not dominated by large chains of dealers. Office Specialty and Wilson Ltd., both owned by Molson Industries Ltd., have outlets in all major centres in Canada. Grand and Toy is an office supply company and also sells office furniture and has many outlets especially in Ontario and Quebec. The other important dealers are privately owned.

A Pareto analysis of dealers in Canada yields the expected conclusion; that less than 85 dealers across Canada account for over 80% of the sales of office furniture. In Toronto, 25 of the 175 firms in the office furniture business sell over 80% of the volume. In Montreal, this figure is 12, and in the Atlantic region it is 6, specifically:

- 1) DOMAC
- 2) National Office Furniture
- 3) Office Specialty
- 4) Seaman-Cross
- 5) John Searle
- 6) Colpits

No office furniture manufacturing company can achieve any significant success without capturing a significant share of the business from these 85 dealers.

Although the dealers compete directly with each other, they specialize in particular market segments, and in so specializing, offer slightly different services which give them

an edge in a market segment compared with competitors. Similarly competing dealers dislike selling office furniture from the same manufacturer, because in this situation, price becomes the major basis for a customer selecting a particular dealer. The ensuing price competition between dealers forces prices to unprofitably low levels. Each dealer prefers to be the exclusive representative in his marketing area. At the same time, each dealer likes to represent several manufacturers so that he can assure himself of low prices and alternate sources of supply.

#### Stratification of Dealers

In Toronto and Montreal, dealers are generally stratified as follows:

- 1) Interior Office Designer
- 2) Office furniture dealer
- 3) Office supplies dealer.

#### Interior Office Designer

In new large office buildings, especially for banks, insurance companies, trust companies, and other similar large institutions, the furniture selection begins with the architect who is designing the office building. In modern office building design, the trend is to open landscaping. Therefore, it is important that the architect design the building with that type of office layout in mind. To achieve this goal either the architect, the owner of the building, or the occupier of the building, will retain an interior designer who will actually select the styles of furniture to be used, the styles of partitions, the floor coverings, the wall coverings, and whatever else goes into making a satisfactory interior design. The occupier's aim is to obtain work stations particularly suited to the jobs it plans to have done in the office.

If occupied space exceeds 20,000 sq. ft. the designer will often manage the purchasing of the furniture on a project basis. His activities could include:

- 1) study of paper-work flow patterns
- 2) allocating floor space
- 3) specifying the lighting, partitions, furniture
- 4) calling tenders
- 5) supervising construction

Depending upon the complexity of the job, the interior designer would charge his client about \$25.00 per hour or 15% to 20% of the purchase cost of the furniture. Most interior designers do not have showrooms. They show their clients products from catalogues; or in Montreal and Toronto, take their clients to manufacturer's showrooms. In summary, interior designers service new installations of large general offices, as well as executive offices.

#### Office Furniture Dealers

Factory offices and small businessman offices are serviced mainly by office furniture dealers. Typically, the dealer has a large showroom, from 10,000 sq. ft. to 25,000 sq. ft. and sometimes more. In it he displays samples of the various products he sells, often laid out in attractive office-like settings. As a result, small businessmen can enter the showroom and select the office furniture they like and can afford.

Some office furniture dealers provide an interior design service in an attempt to gain business which normally goes to interior designers. Since this service is usually offered free, it seldom appeals to large companies. Consequently, these dealers remain restricted to the small businessman office.

#### Dealer Purchasing Policies

The following examples will illustrate how dealers try to gain exclusive representation while maintaining their competitive position by having alternate suppliers.

#### Atlantic Region

<u>Dealer</u>	<u>Product</u>	<u>Type</u>	<u>Supplier</u>
A	Desks	65% Wood 35% Steel	90% Standard Desk 90% Office Specialty
B	Desks	85% Wood 15% Steel	70% Standard Desk 20% Biltrite
C	Desks	70% Wood 30% Steel	90% Sunar 90% Allsteel
D	Desks	90% Wood  10% Steel	40% Sunar 35% Biltrite 10% Standard Desk

(continued)

<u>Dealer</u>	<u>Product</u>	<u>Type</u>	<u>Supplier</u>
E	Desks	70% Wood	40% Willis 35% Biltrite 10% Standard Desk
<u>MONTREAL</u>			
F (Interior Designer)	Desks	60% Steel 35% Wood	85% Steelcase Sunar InterRoyal Standard Desk
G (Dealer)	Desks	80% Wood	Biltrite Cannabureau
<u>TORONTO</u>			
H (Interior Designer)	Desks	70% Steel  30% Wood	50% Steelcase 30% Steel Equipment 15% Allsteel 50% Sunar 30% Standard Desk 15% Biltrite
I (Dealer)	Desks	75% Wood  25% Steel	40% Standard Desk 30% Biltrite 20% Artopex 10% Canneburea 50% Cole 30% Interdyal 20% Allsteel

### Dealer's Attitude Towards a New Supplier

None of the interior designers interviewed were interested in purchasing office furniture from an Atlantic based company. They prefer a local factory which they can telephone for information; where damaged goods can be returned; and who can send servicemen to make repairs to major installations. Since interior designers do not carry large inventories, delivery lead times become important. They are normally shorter from a local supplier.

The office furniture dealer, who usually has a large inventory of office furniture has the following requirements, of a new supplier expressed in order of priority:

- 1) New design which has greater appeal to office furniture purchasers than present designs.
- 2) Selling prices equal to or lower than present prices.
- 3) Assurance that the company will remain in business over a long period of time, will stand behind its product i.e. pay for repairs to goods damaged during shipping, or as a result of faulty workmanship, and will manufacture additional units of the same design so that companies can add to their present furniture.
- 4) Provide realistic delivery dates and deliver on time.

The dealer purchasing policies, which have been illustrated show that purchasing has been made on the above criteria. Standard Desk, for example, was the very first recipient of the National Design Council Chairman's Award for Design Management in 1970. It is owned by Litton Industries so it can easily prove its durability. It has used the technical services of Litton Industries to set up a highly efficient new factory near Montreal. Its carefully designed production planning and control systems assure accurate delivery dates. In summary, it does an outstanding job in meeting the above four criteria. The other companies also have excellent performance.

### Typical Pricing of Office Furniture

The following indicates the present pricing structure in the office furniture. Special deals are, however, very common on large orders.

### Wooden Furniture

The quoted dealer discount is 50% off the list price, tax not in price. Dealers may receive an additional 10% volume discount for promoting a particular line of products. On large individual orders, an additional 5% might be given. Another similar structure might be:

50% single item order  
 50/10 for a carload  
 50/10/5 for a very large order, or an annual commitment.

Dealers seldom sell at list. A customer can typically get 10% discount on a single unit.

In the Atlantic region steady customers would normally get a 20% discount on a single unit and 25% discount on a large order. In Montreal, or Toronto, the same situation would command a 20% discount on a single unit and a 30% discount on a large order.

### Steel Furniture

The quoted dealer discount is 40%, tax in price. Volume discounts are 5%. In Montreal and Toronto, however, large orders could/might command a 50 to 60% discount.

Dealers sell steel furniture at the same discounts that prevail in wood, except that a very large job, such as a bank could command a discount of up to 37%.

### Filing Cabinets

The newest development in filing cabinets is the side file. Its major advantage is that it can be placed parallel to a wall and, therefore, takes up much less room than the old fashioned end file. The dealers indicate that in Montreal and Toronto over half of all new filing cabinets purchased are side files. By contrast, in the Atlantic provinces, more than three-quarters of all filing cabinets purchased are end files. Furthermore, in the Atlantic Region the shift to side files is not occurring at the rate at which it changed in Montreal and Toronto. For these reasons, dealers in the Atlantic provinces are continuing to carry in inventory side files.

### COMPETITIVE SUPPLIERS

The following section of the report provides a brief description of the competitors against which an Atlantic company would have to compete. It is provided for the purpose of estimating the kind of strength that an Atlantic company would have to have to be successful in its field, and also for estimating the probable market penetration that an Atlantic company could have in its own particular market area. It also will give some indication of the kind of profit margins which probably will be available in the various products that the Atlantic company will manufacture.



## MANUFACTURERS OF METAL DESKS AND FILING CABINETS

### Introduction

The manufacturing of metal desks, metal file cabinets, and other metal furniture, accounts for over half of all office furniture sold, that is, approximately 47 million dollars per year. These market segments are dominated by only a few companies, which will be described briefly hereafter. All of the companies visited employ certain common techniques which will be described in general terms.

A typical metal office furniture factory would have about 1,000 sq. ft. of space for each employee. Depending upon sales volume it would purchase from 30% to 50% of its sheet steel in coiled stock slit to size at the mill. Another 40% to 50% of the sheet steel would be purchased cut to size from steel service centres. The remaining 20% to 30% of the steel is purchased in standard 8 x 4 sheets which are sheared to size for the low volume items.

The steel then goes to a machine section consisting of brakes, punches, and presses. In all factories in Canada, the layout of this section is excellent, with good material-handling equipment to pass parts from one machine to another. In all the factories visited, the factories were very clean and very safe.

The sheet metal then passes to the next section where it is either spot welded, or MIG welded. After welding it is placed in an in-process inventory section. The in-process inventory is maintained because customers demand a wide variety of colour schemes in their office furniture. In-process inventory can be stored much more compactly than finished goods inventory, and by painting to order instead of to inventory, the company can give short lead times to customers.

When orders are received, the pre-assembled components are picked from in-process inventory and loaded on the paint line conveyor where they pass through the paint section. It consists usually of a wash, phosphating, hand painting, and baking. Because the metal shapes are complex, and because of the wide number of colour changes averaging from 20 to 40 per day, nearly all

factories use hand spraying rather than automatic spraying. Following painting, the components go to an assembly operation. Assembly is handled in two ways generally.

1. An assembly line consisting of a belt conveyor on which the components are placed transfers the product between assembly stations where components are added to make the finished product. This technique is most effective on long runs.
2. The components are assembled onto a dolly which passes along the track where a team of 3 or 4 employees assembles the product. This technique is most effective for short-runs.

In all cases the finished product goes to an inspection and packaging area and from thence to finished goods inventory awaiting shipment.

During 1973, lead times on orders average between 45 and 55 days while most factories work about 1 $\frac{1}{4}$  shifts.

Sunar Industries Limited, Waterloo, Ontario

Sunar industries Limited is a wholly owned subsidiary of Massey-Ferguson Industries Ltd. It consists of two divisions, the Metal Division which was formerly Sunshine Office Furniture Ltd., and the Wood Division which was formerly Art Woodworks Ltd. With a total sales volume of about 12 million dollars per year, it is among the top three office furniture manufacturers in Canada. Its major contribution during the last six years has been its new designs, particularly its "Systems" design, for example, it has brought to the market place the following: Sunar PAS System, Sunar S System, Sunar Uniwall System, Sunar F System, and Sunar L System. These new designs combined with the outstanding Sunshine Designs of the previous company have allowed Sunar to obtain premium prices for their products because of their outstanding designs. These innovative designs have allowed Sunar to penetrate the U.S. market as well. Sunar sells its products to well known interior office designers, and selected, well established office furniture dealers. Sunar has a well laid out metal fabricating factory in a very old factory building in Waterloo. It uses some of the cost reduction techniques such as careful production planning and inventory control, well designed work measurement programs.

Steelcase Canada Limited, Markham, Ontario

Steelcase Canada Limited is a subsidiary of Steelcase U.S.A., the second largest manufacturer of metal office furniture in North America. Its present sales volume in Canada exceeds 10 million dollars per year. It has a factory with more than 350,000 sq. ft. in Canada, plus over 250 employees. In June 1961, Steelcase Canada Limited acquired 100% control of Curtis Products Limited, Cobourg, Ontario. Curtis Products manufactures a complete line of office seating and moveable panel systems. Steelcase manufactures in Canada products which are designed by its parent company in the U.S. It, therefore, can import small component parts which would be expensive to manufacture in Canada while manufacturing the large volume items in the Markham plant. As a result, Steelcase achieves not only lower manufacturing costs but tremendously reduced design and engineering costs. It sells its products through very well known interior office designers and a very limited number of extraordinarily high reputable office furniture dealers. Through its sales policies, it avoids having dealers compete in the same geographical market area with the same Steelcase products. This sales policy coupled with its lower manufacturing costs allows Steelcase to gain a very large share of the large office furniture installations. Steelcase has concentrated on very standard designs. It is not a leader in new designs but rather a perfecter of successful designs. It has a high reputation for very good quality products. As a result, Steelcase selling at competitive prices has achieved significant market penetration.

All-Steel Canada Ltd., 1200 Jules Poitras Boulevard  
Montreal, Quebec

All-Steel was formerly B.K. Johl Incorp. It is presently owned by All-Steel in the U.S.A. which is a subsidiary of CIT Financial Corporation in U.S.A. It has a large dealer network all over Canada which is served by 12 salesmen and 3 sales agents. It manufactures steel office furniture, some library furniture, and partitions. Its present manufacturing space exceeds 300,000 sq. ft. The company has a tool design function whose main function is to reduce manufacturing costs. This combination of national force plus expert manufacturing allows All-Steel Canada Ltd. to be very successful in the middle price steel office furniture business. In particular All-Steel has been successful in the province of Quebec and Eastern Canada selling to interior office designers and selected office furniture dealers. Although it has had less

success in the Southern Ontario market, it has had reasonable success in the Western Canadian market. Its estimated sales volume is 11 million dollars per year.

Interroyal Corporation Ltd., P.O. Box 340, Galt, Ont.

Interroyal Corporation has three divisions in Canada as well as a subsidiary in the U.S.A. It is presently owned by a group of businessmen in New York City. With its three Canadian factories each specializing it offers the widest range of products to the office furniture industry of any Canadian company. Its Galt factory with 100,000 sq. ft. specializes in chairs, hospital beds, partitions, and certain inexpensive tables. Its machine shop and wood shop as well as a carefully designed paint line give it a wide variety of processes in a small manufacturing area. Its Smiths Falls factory with 130,000 sq. ft. specializes in filing cabinets, metal desks, and certain types of metal shelving. Its factory in St. Jean, Quebec with 120,000 sq. ft. produces very high quality wooden furniture directly from raw lumber through rough and finishing mills, machining, sanding, veneering, assembly and finish including upholstery. As a result, the Interroyal sales force which has representatives in all major cities in Canada, can sell a wide range of products, especially to interior designers and the more reputable office furniture dealers. Interroyal provides office chairs, metal desks for the general office, and expensive high quality wooden desks for the executive office. Therefore, Interroyal is one of the few companies manufacturing a full range of products for all needs in the office furniture business. Its sales volume is estimated at 10 million dollars per year.

Office Specialty Limited, Newmarket, Ontario

Office Specialty has two major divisions, its retail dealer division, and its metal office furniture manufacturing division. Its retail division is located in all major cities in Canada. It sells office specialty metal furniture and in addition purchases wooden furniture from other suppliers, mainly Standard Desk, and Harter chairs. The manufacturing division sells all of its metal office furniture through the retail division. Office Specialty is the only company in Canada in the office furniture business which has both retail and manufacturing divisions. This

particular combination is aimed at selling office furniture to the very large purchasers in Canada. The large purchases allow reduced manufacturing costs through large runs. Additional profits are achieved when small quantities of furniture are purchased to add to an office which has already been supplied with Office Specialty Furniture. These small quantities command much higher prices than the original order. Overall profitability is achieved through bi-weekly meetings between the General Manager, the Marketing Manager, the Manufacturing Manager, and the Controller. At this point in time they discuss the orders on hand, the lead time, the overhead absorption and profit. Office Specialty is well financed since it is owned by Molson Industries Ltd. This combination of close control, close coordination and good financing make Office Specialty a formidable competitor in the office furniture business.

#### Steel Equipment Ltd.

Steel Equipment is a division of Eddy Match Company Ltd. Its main factory and head office is in Pembroke, Ontario. At that location it has in excess of 140,000 sq. ft. of factory space. Its estimated sales volume is about \$6,000,000 per year. One of its most important products is the Stor/Wal Lateral Filing Cabinet. This unit accounts for a large portion of its sales. In addition, it sells a wide variety of standard designs, like its 4900 series, and its 1500 and 1900 series. Steel Equipment has not traditionally been a leader in new designs. Its approach has been to copy successful designs of other companies and manufacture and market those designs at a somewhat lower price.

#### Cole Division, Litton Business Equipment Ltd.

The Cole Division is a subsidiary of Litton Industries Ltd. It has a 150,000 sq. ft. factory in Scarborough, Ontario. Its present sales volume exceeds \$6,000,000 per year. The Cole Division manufactures a very standard line of office furniture. It specializes in the single wall construction which it sells mainly through office supplies retail stores. The Cole desk of single wall construction is considered at the low price end of the steel desk market.

## MANUFACTURERS OF WOODEN DESKS

### Introduction

Desk manufacturing in Canada follows a general pattern. Production facilities are broken into two parts, a Breakout Section, and an Assembly Section. In the Breakout Section the wooden veneers or the formica veneers are prepared and laminated to wood or flakeboard depending on the quality of the desk. In addition, drawer panels are manufactured. For narrow drawers the panels are cut to size and grooved. For deep drawers in better quality desks panel sections are first prepared by cutting quarter inch board and regluing it so that grains run in opposite directions. The purpose of this construction is to eliminate warpage over long period time as a result of changes in moisture content of the wood. The grains running in opposite directions tend to counter-balance each other in their expansion and contraction. Legs and other panels, and pedestals are cut to size in this section.

In the Assembly Section the components are assembled together usually with air operated drills and screwdrivers. Air operated sanders smooth the finish. Primary coating and blending is done so that various grains match and present a pleasing effect. Final painting and drying is then done. During the assembly part of the operation the desk usually runs on roller conveyor.

A typical wooden desk furniture factory would have about 500 sq. ft. of space for each employee. In order to minimize finished goods inventory, and satisfy customer demands, most factories make runs of particular designs. The company asks its sales staff to solicit orders for particular designs from its customers. These are put into the run and then shipped out immediately upon completion to the customers. Over a typical cycle of approximately 3 months the company can supply its dealers with a wide variety of desks so that the dealers need keep not more than 3 months of inventory. Since most wooden desks are sold in small volumes, most dealers do not have stock-outs.

### Standard Desk Limited

Standard Desk is a subsidiary of Litton Industries. It has a factory in Laval, Quebec exceeding 180,000 sq. ft. Its present sales volume is estimated to exceed \$11,000,000 per year. This volume makes Standard Desk the largest single manufacturer of wooden desks in Canada. Standard Desk has achieved this position by performing very well in several fields. For example, Standard Desk was the first recipient of the National Design Council Chairman's Award for design and management in Canada. This award is an indication of the outstanding leadership of Standard Desk in the design of wooden office furniture. Standard Desk has a national sales force selling its products to retailers in every major city in Canada. Recently, Standard Desk built a new factory in Laval, Quebec just north of Montreal. With the aid of the engineering staff of Litton Industries the company was able to design very outstanding production facilities using some of the latest wood-working equipment and using a great deal of conveyor to reduce product handling cost. With the aid of sophisticated industrial engineering techniques, Standard Desk has been able to achieve very good labour control, and very good production planning and inventory control.

### Biltrite Manufacturing Incorp.

Biltrite has 135,000 sq. ft. factory in Ville d'Angou. Its sales volume exceeds \$6,000,000 a year to make Biltrite the second largest wooden desk manufacturing company in Canada. It specializes in wooden office furniture. It makes several lines of wooden desks mainly aimed to compete with Standard Desk. It sees itself as a manufacturer which offers dealers an alternative to Standard Desk. In this respect, it has not been an innovator in design but rather a copier of successful leading designs of other companies.

### Artopex

Artopex has a sales volume exceeding \$4,000,000 per year. It manufactures a very limited line of office furniture but it provides a quite different design to the other two leading manufacturers. The different design, particularly the high pedestal design, has been partly the result of limited manufacturing facilities that do not permit Artopex to manufacture a full line of product competitively with the other manufacturers. The main factory of Artopex is just 15 miles north of Montreal.

Canabureau

Canabureau has a sales volume of about \$3,000,000 per year. It is the wooden furniture division which was formerly B.K. Johl Incorp. It is under the direction of Anthony Johl who has built an outstanding reputation as a designer and manufacturer of wooden desks. Canabureau is a new company but has achieved its present success through a combination of innovative designs and low selling prices. Of all new companies in the office furniture business Canabureau probably has the greatest likelihood of expanding because it has knowledgeable people who know the office furniture business intimately.

Interroyal Corporation Ltd.

Interroyal has a wooden desk manufacturing facility in St. Jean, Quebec. In a production area exceeding 120,000 sq. ft. it manufactures a very high quality expensive desk aimed at the executive market. It has built an outstanding reputation for its high quality products.

Henderson Furniture Ltd.

Henderson Furniture has two manufacturing buildings with a total manufacturing area exceeding 200,000 sq. ft. Total sales volume probably exceeds \$4,000,000 per year.

OFFICE CHAIR MANUFACTURERSCurtis Products Ltd.

Curtis Products has a factory in Cobourg, Ontario. It is a completely owned subsidiary of Steelcase of Canada. It manufactures a complete line of office seating and moveable panel systems. Its products are of good design and would be considered of medium price. It has a reputation for very good quality and has been considered a standard in the industry for many years.

Nightingale Industries Ltd.

Nightingale Industries Ltd. has a factory at Wellington St. West in Toronto and at Adelaide St., West in Toronto. Total manufacturing space is approximately 130,000 sq. ft. Total sales volume exceeds \$4,000,000 per year. The company specializes in executive office furniture, posture swivel tilter chairs, boardroom tables and chairs, reception room seating, posture steno chairs, auditorium stacking chairs, acrylic plexiglass chairs, mats, cafeteria tables and seating. Its present sales are estimated to exceed \$7,000,000 per year. Nightingale is a new company



Nightingale Industries Ltd. (continued)

and achieved its fantastic rate of growth by copying very successful designs of other manufacturers but selling them at a price below which no other manufacturer could profitably manufacture and sell the product. Its products are aimed mainly at the small businessman office.

Canadian Atlas

Canadian Atlas has a factory at 2400 Finch Ave., Toronto. It is a new company and a direct competitor to Nightingale. It uses the same approach to design, marketing and manufacturing as Nightingale.

Harter Metal Furniture Ltd.

Harter Metal Furniture has a factory in Guelph, Ontario. It is a subsidiary of Harter Corp. in Sturgis, Michigan, USA. It specializes in the manufacture and sale of office chairs. It has a reputation for good quality design.

Artena

Artena is part of the Artopex combination specializing in the manufacturing of office chairs. It has been extraordinarily successful and grown very quickly mainly by innovative design. Its most outstanding contribution has been the use of the steel rod frame without wooden support. Recently this has been introduced as the Cobra line of executive line of office tilter chair. By producing very attractive innovative designs which were less expensive to manufacture than conventional designs, Artena has been able to achieve high profits and a high rate of growth. As a company it is one of the few organizations in Canada which has been able to achieve the combination of innovative design and reduced costs through design.

Frank Doerner Ltd.

Frank Doerner has a factory in Kitchener, Ontario. It specializes in the manufacture of the tilter mechanisms, and the pedestals of executive tilter chairs. It was the first company in Canada to introduce steel fabricated tilter mechanisms instead of cast mechanisms. Many of its designs have been patented. As a result it has gained a strangle-hold on the Canadian market for tilter mechanisms.

PROJECTED SALES VOLUMEATLANTIC OFFICE FURNITURE MANUFACTURER

The purpose of this section is to estimate the probable sales that an Atlantic company could achieve and to estimate the time required to achieve these sales. The general approach will be iterative in nature. Certain assumptions will be listed. Based on these assumptions the projected sales will be estimated. The assumptions will then be checked to determine if they are valid with the projected sales volume. A typical example is that an assumption will be made that the product will be manufactured at the desired quality at the same cost as all competitive products are made. The projected sales would be estimated based on the conditions which exist in the market place. With the projected sales volume, the manufacturing facility would be analyzed, the projected costs estimated, and the resulting return on investment evaluated. Based on this analysis, a decision can be made upon whether the opportunity is worth pursuing or not.

Executive Office Furniture

Executive office furniture consists of desks and other case goods, chairs, sofas.

Executive Desks

The previous analysis indicates a total market of approximately \$3 million concentrated in Montreal, Toronto, Vancouver. There is in addition, a United States market concentrated in every city in the U.S. The estimated U.S. market is approximately \$40 million per year. The profit margin on executive furniture are quite high, at least sufficiently high that shipping costs are not a major factor in determining viability. Consequently, there is no locational disadvantage in having a factory in the Atlantic provinces to supply executive office desks to both the Canadian and United States market. One of the main competitors in this market is Knohl International Inc. With a world-wide reputation and a superb sales force they have gained market penetration in all of the major countries in the world. A second competitor in Canada would be Herman Miller. This company has produced outstanding design and is considered the design leader in Canada. Unfortunately, the company has not been able to grow and be an outstanding success in spite of outstanding design. Its sales volume would be only 15% of the Canadian market. The other major Canadian manufacturers would be InterRoyal Corporation Limited, Standard Desk Limited, and Sunar Industries Limited. If an assumption is made that an Atlantic company could gain its share of the market considering that it has five competitors, a projected market penetration of 15% might be a reasonable figure, that is \$450,000 sales volume per year.

With better known and more well established competition in the United States a penetration of only 5% of the Eastern Seaboard market could be anticipated, that is, approximately \$1 million per year.

A safe assumption would be that a credenza, some end tables would be sold with each desk. These products could be manufactured with the same equipment that manufactures the desk. They would normally have a design that matches the desk. In a typical layout, the credenza and end tables would sell for half the costs of the desks. Therefore one could project that a sales volume of one and a half million dollars in desks would generate an additional \$750,000 in credenzas and end tables. The total projected sales volume can therefore be, \$2.3 million per year.

Table number 5 outlines the projected profit and loss statement of a company in the Atlantic provinces manufacturing executive office desks plus credenzas and end tables. It indicates a profit of \$121,000 per year on an estimated investment of \$1.1 million, that is a return on investment of about 11%. Financially, this represents a quite satisfactory investment.

An organization capable of achieving this success would have to provide people who are outstanding in the following:

- (a) very capable artistic design,
- (b) capable of organizing wood manufacturing facilities which produce a very high quality product,
- (c) capable of organizing a sales force in the major parts of Canada and the Eastern Seaboard of U.S. which is capable of convincing interior designers and office furniture distributors that the expensive products being produced by the Atlantic company are superior in performance to those which are available from other manufacturers.

Obviously, there are not many people who have both the money and the managerial skill in the office furniture business who are capable of organizing a successful company to take advantage of the above-mentioned opportunity. Some of the present general office furniture manufacturers who do not have a wood operation might be interested in setting up such a company in the Atlantic region to provide executive desks to complement the general office furniture which they are presently selling.

For example, the Eddy Match Company, Steel Case Canada, could be approached. General Fireproofing in the U.S. does not have, as far as is known, a wooden desk manufacturing division. It might be interested in this opportunity.

#### General Office Furniture

The previous analysis on regional markets indicates that the total market for office furniture in the Atlantic region is very small, approximately \$3 million per year. In excess of 80% of this volume is sold through the six dealers listed under the Channels of Distribution. The dealer purchasing policies previously described show that these six dealers would be unwilling to purchase from the same supplier the same desk to be sold into the same market. The most that an Atlantic manufacturer could expect is 70% of the sales volume of two dealers, that is approximately 20% of the Atlantic market. This market penetration suggests a total sales volume in the Atlantic of approximately \$600,000 per year distributed among seven different product groups. The sales volumes required to achieve success in any of these product groups exceeds \$1 million per year. Therefore, one can conclude that the Atlantic market is not sufficiently large to support a furniture manufacturing company manufacturing furniture for the Atlantic region. The section of this report dealing with dealer's attitude towards a new supplier indicates that none of the interior designers, nor any of the office furniture dealers would be interested in purchasing office furniture from an Atlantic supplier unless he could achieve superior performance in the four criteria which they normally use in making their purchasing decision. Achieving superior performance would appear to be beyond the ability of most normal business executives because of the outstanding job being done by present manufacturers of office furniture. Although a more detailed analysis could be made, none will be attempted in this report because the conclusion would be reached that no additional opportunities for the manufacture of office furniture exist in the Atlantic provinces.

Table No. 1

## SHIPMENTS OF OFFICE FURNITURE

PAST AND PROJECTED

Millions of Dollars

	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1980</u>
Wooden Desks	14.6	16.0	18.1	19.1	18.9	16.9	23.3	25.2	27.2	28.5	30.0	38.0
Wooden Chairs	6.5	6.0	7.2	7.1	4.7	4.9	5.1	5.8	6.5	7.0	7.5	10.3
Other Wooden Furniture	4.1	5.1	6.5	6.6	7.3	7.5	8.1	8.8	9.5	10.0	10.5	13.3
Metal Desks	12.5	11.8	14.8	14.9	15.5	14.6	18.6	20.1	21.7	22.8	24.0	30.4
Metal Chairs	11.9	12.1	14.0	13.7	17.5	18.3	18.6	20.1	21.7	22.8	24.0	30.4
Other Metal Furniture	6.8	7.1	10.5	11.3	9.2	7.2	11.6	12.6	13.6	14.2	15.0	19.0
File Cabinets	17.2	17.9	19.6	21.4	22.7	25.0	28.0	30.2	32.6	34.3	36.0	45.6
Total	73.6	76.0	90.7	94.1	95.8	94.4	113.3	122.8	132.8	139.6	147.0	187.0

Ref: Statistics Canada  
 Catalogue No. 35-212

Table No. 2

## Imports into Canada of Office Furniture and Visible Record Equipment

(\$ '000)

<u>From:</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u> (Jan to Nov only)
U.S.A.	3,970	4,641	3,820	4,864	4,861	4,217	4,769
U.K.	244	261	351	284	306	326	248
Denmark	29	52	45	102	73	148	107
Japan	73	51	80	77	65	69	77
W.Germany	58	62	47	78	84	55	26
Sweden	11	47	23	23	16	32	28
France	4	10	12	20	14	19	25
Italy	3	11	13	6	22	14	8
Norway	1	8	4	10	37	12	24
Others	-	-	-	-	-	-	-
<b>Total</b>	<b>4,425</b>	<b>5,172</b>	<b>4,423</b>	<b>5,532</b>	<b>5,500</b>	<b>4,929</b>	<b>(5,391)</b>

Ref: Statistics Canada

Catalogue No. 65-007

Table No. 3

## Exports from Canada of Office Furniture

Millions of Dollars

<u>Year</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Wooden Furniture		1.6	2.2	3.8	4.1	3.0	3.0
Metal Furniture		0.9	2.0	4.6	6.3	6.5	5.9
Total	2.1	2.5	4.2	8.4	10.4	9.5	8.9

Ref. Statistics Canada  
 Catalogue No. 65-007

Table No. 4

## DESTINATION OF OFFICE FURNITURE

Thousands of Dollars

	Atlantic	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Federal Govt.	Exports	Total
Wooden Desks	649	3,845	4,291	422		605	1,226		2,500	16,900
Wooden Chairs	287	1,761	1,402	204	132	444	203	178	309	4,920
Other Wooden Furniture										453
Metal Desks	466	2,350	7,158	637	445	1,565	1,128	646	248	14,643
Metal Chairs	383	2,370	4,456	281		1,124	717	669		10,318
Other Metal Furniture	203		3,237	232	95	669	434	491		7,216
Record Equipment	940	6,486	9,607	824	402	1,177	1,627	1,935	2,648	25,046
<b>Total</b>	<b>2,928</b>	<b>16,812</b>	<b>30,151</b>	<b>2,600</b>	<b>1,074</b>	<b>5,584</b>	<b>5,335</b>	<b>3,919</b>	<b>5,705</b>	<b>79,496</b>

Ref: Statistics Canada

Catalogue No. 35-006



Table No. 5

PROJECTED PROFIT and LOSS

Thousands of Dollars

Sales			2,300
Freight Costs		312	
<u>Cost of Goods Sold</u>			
Direct Material	825		
Direct Labour	466		
Depreciation	52		
Maintenance	5		
Utilities	15		
Municipal Taxes	3		
Supplies	5		
Insurance	2		
Employee Benefits	<u>116</u>	1,489	
<u>Selling Expenses</u>			
Commissions	76		
Duty & Broker's Fees	116		
Advertising & Promotion	<u>50</u>	242	
<u>Administrative</u>			
Salaries	111		
Design Fees	<u>25</u>	136	
Total Costs			2,179
Projected Profit			121
<u>Estimated Investment</u>			
Fixed Assets Building	400		
Production Equipment	300		
Receivables & Inventory	400		
	<u>1,100</u>		
Projected Return on Investment	$\frac{121}{1,100} =$	11%	

ANNEX "A"OFFICE FURNITUREFISCAL YEAR 1972/73

1. Desks -		
	Conventional	393,844.00
	Modular	1,954,639.00
2. Runoffs		559,538.00
3. Credenzas		90,976.00
4. Bookcases -		
	Conventional	71,612.00
	Modular	174,387.00
5. Tables -		
	Conventional	317,920.00
	Modular	623,670.00
6. Chairs, stacking		298,732.00
7. Chairs, posture		789,044.00
8. File Cabinets		1,406,680.00
9. Modular Steel Shelving		414,898.00
		<hr/>
	TOTAL	\$7,095,940.00

ANNEX "B"

<u>PRODUCT DESCRIPTION</u>	<u>ACQUISITION PRICE</u>
1. Desk, Flat Top, Single Pedestal, 60 x 30 to CGSB 44-GP-150, walnut plastic laminated top, 7110-21-857-5212	\$115.37
2. Desk, Flat Top, Double Pedestal, 66 x 36 to CGSB 44-GP-150, walnut plastic laminated top, 7110-21-857-5224	153.36
3. Runoff, Desk, File-Drawer Case, 48 x 18 x 29 to CGSB 44-GP-151, walnut plastic laminated top, 7110-21-857-5273	81.88
4. Credenza, Office, Bookcase with sliding doors and file-drawer case, 48 x 18 x 29 to CGSB 44-GP-153, walnut plastic laminated top, 7110-21-857-5347	113.90
5. Bookcase, 36 x 14 x 46 to CGSB 44-GP-170, case with beige enamel finish, top and shelves with plastic laminated walnut design, 7110-21-862-8229	80.86
6. Table, Office, 60 x 30 x 29, walnut plastic laminated top, to CGSB 44-GP-154, 7110-21-857-5361	77.65
7. Chair, Straight, without arms, stacking type, grey enamelled finish, to CGSB 44-GP-15 7110-21-841-7116	5.95
8. Chair, Rotary, with arms, metal, chrome plated, foam padding with black vinyl-coated fabric and black fabric-covered seat, tilting back, with casters, to CGSB 44-GP-155, 7110-21-855-2177	52.62

<u>PRODUCT DESCRIPTION</u>	<u>ACQUISITION PRICE</u>
9. Filing Cabinet, cap (legal) size, 1 drawer wide, metal enamelled finish, 18" wide x 28 $\frac{1}{4}$ " deep, 4 drawers keyed, to CGSB 44-GP-1, Class D, Type 1, 7110-21-536-4004	\$ 65.79
10. Modular Steel Shelving	
The components are procured separately to make up a complete assembly.	
Refer CGSB 44-GP-7	

## MEMORANDUM



CLASSIFICATION

TO  
A

D. S. VanDusen

YOUR FILE No.  
Votre dossierOUR FILE No.  
Notre dossierFROM  
De

R. H. Pryde

DATE

November 7, 1973.

FOLD

SUBJECT  
Sujet

FEDERAL PROCUREMENT OF OFFICE FURNITURE  
IN THE ATLANTIC REGION

Concurrent with your Atlantic Task assignment and analysis of the office furniture industry in the Atlantic Region, the writer was requested to provide you with a commentary on the following question: "Can the procurement volume of the Department of Supply and Services be employed to assist the office furniture industry in the Atlantic Region?".

After some discourse with DSS furniture procurement personnel and, cursory review of the generally applicable purchasing practices and administrative procedures as my limited time frame would allow, it is apparent that assistance in the form of restricted bid listing has been rendered to Atlantic Region suppliers in other industries and could be extended to the furniture industry as well. In general terms this approach limits the bidding and contract awarding to suppliers in the Atlantic Region for goods consumed within that region. Should a particular company warrant "special" consideration in the opinion of DREE, DSS could be so appraised and would be capable of effecting assistance on an ad hoc basis, providing DREE and DSS could resolve the premium differential. On an open bid basis and in general application, it is my understanding that DSS is not administratively organized to provide such assistance, nor is it surprising that such is the case. To do so in a general manner would necessitate revision in procurement policies, practices and administrative procedures, which not only raises a variety of complex issues, but begs answers to questions such as -

"Would the socio-economic benefits anticipated exceed the tangible and intangible costs so incurred?"

"To what degree should assistance be rendered?"

"Should assistance be extended once only or, for a specific period or, indefinitely?"

"How would such assistance be controlled and evaluated with the concerned company?"

"In the event of two or more companies located within the same region, how would assistance be allocated?"

As you are aware, the office furniture presently purchased by DSS is composed of both wood and steel, unique in design, not commercially marketed and, is both drop-shipped and, shipped direct to DSS specified locations across Canada. In general, the lowest bid from an approved supplier on the appropriate DSS source list is accepted, after a supplier-produced sample has been submitted for evaluation and subsequently approved. It is my understanding that DSS purchases approximately seven million dollars of this commodity annually which represents about eight percent of the Canadian market. It is also my understanding that the profitability of such furniture contracts based on present manufacturers cost and selling values generally appears to be marginal.

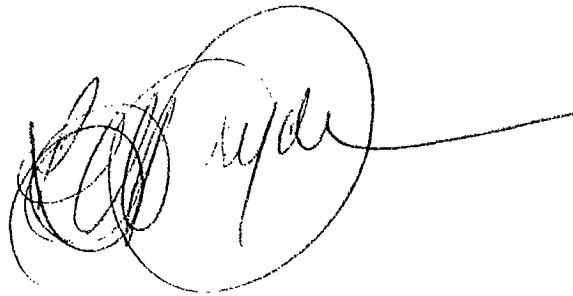
With the above in mind, the abrogation of the procurement policy of "the most product for the least cost" on an open bid basis raises complex issues that no doubt are resolvable but, are under present practices, unmanageable, and could possibly be politically unacceptable. It may be of interest to note that, over the past three week period, lengthy meetings have been held with representatives from the Department of Finance, DSS, IT&C, Treasury Board and DREE to attempt the drafting of terms of reference that might be applied to a working group to be commissioned to study the use of procurement policy to achieve socio-economic objectives. Although no time frame has yet been allocated, it is the writer's opinion that a suggested eight member working group might require twelve months or longer to complete such a task. In any event, the discussions and presently drafted eleven-page proposal clearly indicates some of the many complexities that would require detailed analysis and resolution prior to the revisional application of procurement policy. To a lesser degree, this same inference is applicable to the office furniture industry in the Atlantic Region.

On the other hand, where capacity and therefore delivery capabilities were restricted by the successful low bidder, dual or multiple sourcing of the balance of the requirement would generally be directed to the next lowest bidder or bidders in ascending order of availability and price which may well include Atlantic Region manufacturers. Sourcing decisions made for reasons other than the lowest price must of course be accomplished in a defensible manner as such bids are subject to public advertisement. In addition, the "fair and equitable distribution of procurement funds" legislatively-issued directive must be adhered to and, the integrity of both DSS and the requisitioning departments enhanced and protected. The possibility of creating the impression of a "special" or "favourite" supplier should, of course, be avoided for obvious reasons. It is my further understanding

that Cabinet approval would likely be required should DSS be requested to deviate from their present procurement policies and practices.

In addition to the problems that might be encountered in effecting procurement policy revisions, a further and perhaps equally important question arises in the writer's mind that perhaps should be resolved prior to the contemplation of any procurement analysis and revision proposal, and that is -

"Would the Atlantic Region office furniture industry welcome or reject such assistance if it were offered?"

A handwritten signature in black ink, consisting of a large, circular scribble on the left and a more legible cursive signature on the right, followed by a long horizontal line extending to the right.

