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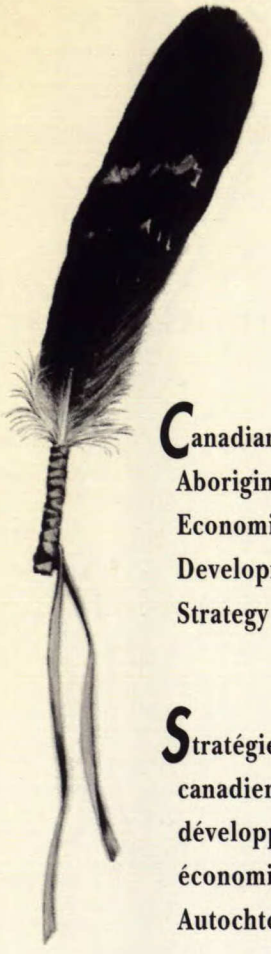

A DO-IT-YOURSELF FEASIBILITY STUDY:

New Manufacturing Ventures

Canadian Aboriginal Economic Development Strategy

Stratégie canadienne de développement économique des Autochtones

Canada

A DO-IT-YOURSELF FEASIBILITY STUDY:

New Manufacturing Ventures

SECTOR
Goods
Manufacturing

SECTEUR
Biens
Fabrication

This book is one of a series of five business feasibility guides written and prepared by **The Manitoba Institute of Management Inc.** They have been produced through funding from Industry, Science and Technology Canada for the Research and Advocacy Program of the Canadian Aboriginal Economic Development Strategy, and are designed to assist Aboriginal people across Canada to assess possible business opportunities. The titles in the series are:

- Retail Ventures
- Construction/Contracting Ventures
- Motel/Hotel/Resort Ventures
- Restaurant Ventures
- Manufacturing Ventures

These guides are available by contacting an Aboriginal Business Development Program Officer in your region about your proposed business project.

THIS FEASIBILITY GUIDE IS DESIGNED TO ASSIST THE READER TO DEVELOP A SOUND NEW VENTURE FEASIBILITY ANALYSIS, BUT CANNOT GUARANTEE EITHER SUCCESS IN OBTAINING FINANCIAL ASSISTANCE OR SUCCESS IN BUSINESS.

NOTE THAT THE EXAMPLES USED ARE NOT OF ANY ACTUAL BUSINESS AND ARE PROVIDED SOLELY FOR THE PURPOSES OF EXPLAINING THE ELEMENTS OF A FEASIBILITY STUDY.

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HELPING YOU
TO HELP YOURSELF

▪ WHAT THIS BOOK IS ALL ABOUT

As a businessperson with a new venture idea, it's very likely that you're prepared to take some risk and to make some serious financial commitments. Probably, you will be asking others to share these risks if you intend to get the venture off to a good start. The big question in everyone's mind; "*Is the venture feasible?*"

How do you find out? Some people never take the time to do the necessary investigations and they find themselves in financial difficulties that could have been avoided. Still others are lucky enough to make a go of it in spite of not having done their homework first. There is still another group that would like to do an analysis on their own but they don't know how to go about working out a venture feasibility study.

If you're in the last category, this workbook will help.

HOW THIS BOOK HELPS

This book is one tool available to you to help analyse and assess your idea. Whether or not you call on the help of professionals such as accountants, bank managers, consultants, or lawyers, the basic knowledge provided in this book will help you avoid financial problems in the future.

Before you go ahead with any new venture you will have to find answers to two basic questions.

(1) Is the idea workable?
(2) If it's workable, will it be profitable?

To help you find answers to these questions, this guide takes you through a sequence of important questions and answers.

Section A MARKET FEASIBILITY	
QUESTIONS	ANSWERS
1. How much of the product is needed?	Step 1: Total Market Potential
2. How much of this product can I sell?	Step 2: Market Share
3. What is the value of sales?	Step 3: Value of Sales

Section B OPERATING FEASIBILITY	
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3. After paying expenses, how much will I make?	Step 8: Sales Less Expenses

Section D VENTURE FEASIBILITY	
QUESTIONS	ANSWERS
1. Is it worthwhile?	Step 9: Break-Even Analysis and Return on Investment
2. Should I go ahead with the venture?	Step 10: Final Decision

This sequence of questions and answers covers what is commonly called a feasibility study. It guides you in gathering specific information so that in the end you will be in a position to say whether or not the idea is feasible.

■ STEPS IN PREPARING A FEASIBILITY STUDY

There are four major parts in the preparation sequence, each with its own set of questions:

Section A: MARKET FEASIBILITY
Section B: OPERATING FEASIBILITY
Section C: FINANCIAL FEASIBILITY
Section D: VENTURE FEASIBILITY

For each question an answer guide and an example is provided to help you analyze the information. Numbers which appear in the left-hand margins of the example pages correspond respectively to the numbered instructions in the previous answer guide to show you how to apply the suggested methods to your own venture. At various points throughout the workbook you will be instructed to record your answers on a worksheet (example, page 71; blank, page 73). The completed worksheet will tie each step of the analysis together in the form of a profit and loss and cash flow statement.

A summary of the work will also be completed at the end of each section. Blank Presentation Format Sheets are provided as an Appendix to the workbook for the preparation of your presentation to banks, potential venture partners, and other interested parties.

SECTION A

MARKET FEASIBILITY

SECTION A
MARKET FEASIBILITY
STEP 1: TOTAL MARKET POTENTIAL

■ QUESTION I — *"How much of the product is needed?"*

There are many ways to find an answer to this question. If the product is already on the market, information on past and current sales is helpful. If the product is entirely new, sales of similar products provide a starting point.

■ ANSWER GUIDE — Use one or all of the following methods to find an answer.

(1) Develop a preliminary estimate of total annual domestic production and import volumes. This gives some idea of consumption (i.e. Total Market Potential). Review published statistics, if they exist, or search out information from government sources, industry trade

associations, or knowledgeable individuals.

(2) If this fails, or to confirm the above estimates, determine the major wholesale and retail customers for the product. Contact these companies to determine their present sources of supply, and some idea of their annual volumes, styles, types and prices, and discuss product specifications and future market conditions. Take the opportunity to discuss the suitability of the proposed product for their market and establish interest in handling the product line.

(3) If this fails, or to confirm the above estimates, contact the domestic producers and major importers to determine their product styles and types, product specifications, prices, annual volumes, methods of distribution and outlook for the future.

(4) On the basis of the compiled information, prepare a projection of the Total Potential Market (i.e. domestic production plus imports).

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1)(2)(3)● The proposal is to manufacture and market paddles and oars for the domestic market. Because the buyers (e.g. department stores, marinas, sporting goods retailers) are widely dispersed, a decision is made to initially market the product to just the larger retail outlets.

- A literature search of government publications and industry journals indicates that little organized information is collected on the domestic production and import volumes of paddles and oars.

- A list of the larger retail outlets for paddles and oars in the market area is prepared (i.e. the telephone books for all major urban centers are obtained from the library. The Yellow Pages are then used to identify the major retail outlets).

- From this list, a contact list is prepared by drawing a sampling of retail outlets from each community.

- Each retail outlet on the contact list is approached. From each one volunteering an interview, the following information is obtained:

- approximate annual order volumes
- present sources of supply
- wholesale and retail prices
- product specifications, styles, types, etc.
- opinions on future market conditions and growth expectations
- interest in handling your product and under what conditions.

(4) From the above, an average order volume in units for each retail outlet is estimated. This, when multiplied by the number of outlets in the market area (i.e. first list prepared), provides an estimate of Total Market Potential. Information gained from interviews on market growth expectations will also allow you to make a projection of the Total Market Potential over the next five years.

ESTIMATED UNIT ORDERS OF PADDLES AND OARS BY MAJOR RETAILERS IN THE MARKET AREA (1989-93)

1989	1990	1991	1992	1993
1,000,000*	1,100,000	1,210,000	1,331,000	1,464,100

*10% growth rate assumed

SECTION A
MARKET FEASIBILITY
STEP 2: MARKET SHARE

■ QUESTION II — *"How much of this product can I sell?"*

Finding an answer to this question is in effect setting a target for your business. While information on the total market reveals the total amount wanted, you are now asked to decide how much of the total amount you are prepared to offer for sale. This will depend upon the nature of your product, the number of competitors, and the like.

■ ANSWER GUIDE — Use one or all of the following methods to find an answer.

(1) If the product is completely new and there are no competitors, you may want to aim at the total market.

(2) If the product is not completely new and there are others in the market, you should aim at some portion of the total market. Set your target in relation to number and size of competitors and product features.

DECISION GUIDE			
NUMBER OF COMPETITORS	THEIR SIZE	THEIR PRODUCT FEATURES	YOUR MARKET SHARE (%)
few	large	similar	5 - 10
few	large	not similar	15 - 25
many	small	similar	10 - 15
many	small	not similar	20 - 30

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1)(2) There are many small competitors offering a similar product. The decision guide indicates that a Market Share of 10% to 15% should be anticipated. This corresponds to the impression and information gained from interviews with larger retailers. A conservative Market Share estimate of 10% of Total Market Potential is chosen.

MARKET SHARE @ 10%

	1989	1990	1991	1992	1993
Total Market Potential	1,000,000	1,100,000	1,210,000	1,331,000	1,464,100
Market Share @	10%	10%	10%	10%	10%
Market Share	100,000*	110,000*	121,000*	133,100*	146,410*

*paddles

SECTION A
MARKET FEASIBILITY
STEP 3: VALUE OF SALES

■ QUESTION III *"What is the Value of Sales?"*

The Value of Sales is equal to the number of units times the selling price per unit.

■ ANSWER GUIDE Use the following methods to find an answer.

(1) Refer to the answer for Question II. These figures were expressed in units.

(2) If the product is similar to that of the competition, use a similar price. If the product is not similar, use the price of a similar product and add an allowance for additional features.

(3) Calculate Sales Value using this formula:

NUMBER OF UNITS	X	SELLING PRICE	=	SALES VALUE

(4) Make a worksheet entry.

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1)(2) The interviews conducted with large retailers indicate a wholesale price range of $2.10 to $2.15 per paddle. A middle price of $2.13 per paddle is chosen.

(3) VALUE OF SALES:

	SALES				
	1989	1990	1991	1992	1993
Market Share (units)	100,000	110,000	121,000	133,100	146,410
Price per Unit	$2.13	$2.13	$2.13	$2.13	$2.13
Sales*	$213,000	$234,300	$257,700	$283,500	$311,900

*rounded to nearest $100

(4) Now turn to the worksheet example (page 71) and see that *"line 1 - Sales"* has been completed. Keep the example out before you so that you can refer to it as the example unfolds. If you have completed the example and are now doing your own analysis, fill in *"line 1 - Sales"* of the blank worksheet on page 73.

SECTION A
MARKET FEASIBILITY
SUMMARY

■ SUMMARY

Now that you have completed Section A of the study, you should summarize your answers in the form of an overall presentation.

(1) Use the following headings for this summary:

INTRODUCTION

A. MARKET FEASIBILITY

1. Total Market Potential
2. Market Share
3. Value of Sales

(2) (a) Under *"INTRODUCTION"* include the following:

(i) a short description of the proposed venture

(ii) the nature of the market--products, competitors, prices, etc.

(iii) the purpose of the feasibility study.

(b) Under *"MARKET FEASIBILITY"*, set out in detail answers to the question on Total Market, Market Share, and Sales Value.

This summary has been completed for the example on paddles and oars. If you are now preparing your own analysis, identical blank summary sheets are provided in the Appendix. Prepare your summary in a similar fashion.

SAMPLE PRESENTATION PADDLE 'N OAR INDUSTRIES LTD.

INTRODUCTION

Paddle 'N Oar Industries Ltd. is planning to manufacture and distribute a line of paddles and oars to the domestic market. There are many small competitors already in this business but an efficient producer could enter this market and manufacture a product of similar quality and offer it at a competitive price. The purpose of this analysis is to examine whether this new venture proposal is workable and profitable.

Section A

MARKET FEASIBILITY

1. TOTAL MARKET POTENTIAL (Page 11)

Information on the Total Market Potential was obtained from interviewing large retailers in the domestic market. Since the number of retailers is widely diffused, an attempt will be made to distribute only to the larger retailers in the early years of the venture. The interviews indicate favorable market conditions in the years ahead and it is felt that real market growth of 10% annually can be anticipated. Estimated Market Potential for the next five years is set out in the following:

TOTAL MARKET POTENTIAL (UNITS)

1989	1990	1991	1992	1993
1,000,000	1,100,000	1,210,000	1,331,000	1,464,100

2. MARKET SHARE (Page 14)

There are many small producers already in the market.

A conservative Market Share of 10% is selected as a target.

MARKET SHARE (UNITS)

1989	1990	1991	1992	1993
100,000	110,000	121,000	133,100	146,410

3. VALUE OF SALES (Page 16)

Based on a wholesale price of $2.13 per paddle, sales over the next five years are estimated as follows:

SALES ESTIMATE

1989	1990	1991	1992	1993
$213,000	$234,300	$257,700	$283,500	$311,900

SECTION B

OPERATING FEASIBILITY

SECTION B
OPERATING FEASIBILITY
STEP 4: PLANT AND EQUIPMENT REQUIREMENTS

■ QUESTION I — *"What Plant and Equipment will I need to produce the product?"*

Now that you know how much you are planning to sell, it's time to decide what Plant and Equipment will be required in order to go ahead with your plans.

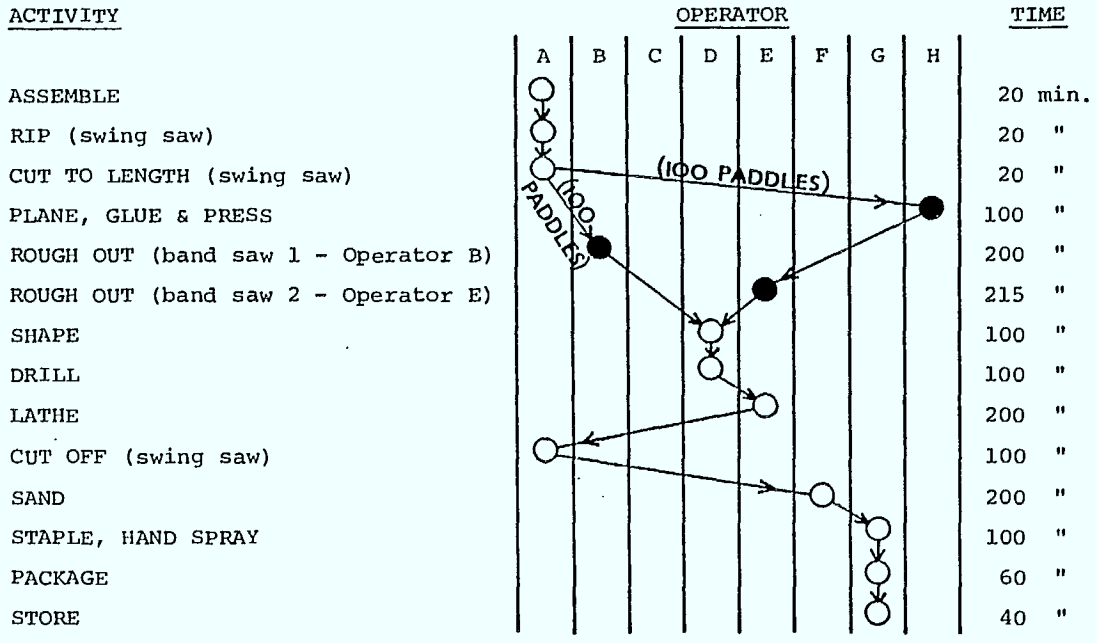
■ ANSWER GUIDE — Use the following methods to help you arrive at an answer.

(1) Prepare a Process Flow Chart which sets out each step in producing the product.

(2) From the Process Flow Chart, identify the Plant and Equipment Requirements.

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1) PROCESS FLOW CHART (ELAPSED TIME BASED ON BATCHES OF 200 PADDLES--VARIATIONS INDICATED)



● solid circles refer to batches of 100 paddles

blank circles refer to batches of 200 paddles

SUMMARY

OPERATOR A	160 min.
OPERATOR B	200 min.
OPERATOR C	200 min.
OPERATOR D	200 min.
OPERATOR E	215 min.
OPERATOR F	200 min.
OPERATOR G	200 min.
OPERATOR H	100 min.

NOTE: The longest operator elapsed time (e.g. 215 minutes for Operator E) determines the actual output.

$$\text{DAILY PRODUCTION} = \frac{\text{production time available}}{\text{longest elapsed time}} \times \text{batch quantity}$$

$$= \frac{8 \text{ hours} \times 60 \text{ minutes}}{215 \text{ minutes}} \times 200/\text{batch}$$

$$= 446 \text{ paddles per day}$$

(2) PLANT AND EQUIPMENT REQUIREMENTS:

FIXED ASSETS

1 copy lathe
2 24" band saws
1 swing saw
1 shaper
1 pneumatic drum sander
1 exhaust fan
1 jointer c/w powerfeed
1 600-gallon dipping tank
5 carts
1 cyclone
1 clamp carrier
1 glue spreader
1 dust and chip removal system
1 air filtering system
1 dipping and drying system
1 rip saw
1 belt sander
1 center drill and jig
1 brushing and buffing system

NOTE: building space to be leased (10,000 square feet)

SECTION B
OPERATING FEASIBILITY
STEP 5: MATERIAL AND LABOR REQUIREMENTS

■ QUESTION II *"What Material and Labor do I require?"*

The Material and Labor required will depend mainly on how much of the product you are planning to sell. Use the answer guide to find the answers.

■ ANSWER GUIDE (1) Make a decision on the unit size or unit quantity of the product you are planning.

(2) Convert annual sales to daily figures.

(3) Determine Labor and Material and related direct costs required to make one unit.

(4) Work out the cost of making one unit.

(5) Work out the cost of making the annual amount and relate this to annual sales.

(6) Enter the results on the worksheet.

EXAMPLE *PADDLE 'N OAR INDUSTRIES LTD.*

(1) Paddles will be sold as single units.

(2) (a) Estimated sales in the first year are 100,000 paddles. (see Step 2)

(b) Converting sales into daily production:

- Available days: 365 days

Less:	weekends	104	
	vacation	10	
	statutory holidays	11	125
	Total		240 days

- Required daily production:

100,000 paddles ÷ 240 days = 417 paddles

NOTE: It was earlier determined that 446 paddles could be produced in an 8-hour day (see Process Flow Chart on page 23).

(3) Material and Labor required to produce one paddle:

(a) *WOOD COST* (based on sales forecast, a 25% scrap loss estimate, and a quotation for poplar lumber at $200 per 1,000 board feet)

(i) *Board Feet per Paddle*

Paddles are to be cut from a 1" X 8" X 10' poplar board which will yield four paddles (two solids and two laminates).

Therefore, board feet per paddle equals:

- 8" (or .67 feet) X 10' = 6.7 board feet per board
- 6.7 board feet per board ÷ 4 paddles = 1.68 board feet per paddle
- 1.68 board feet per paddle X 1.25 (scrap) = 2.1 board feet per paddle

(ii) *Total Annual Lumber Requirements:*

Paddles required for sales = 100,000 paddles

NOTE: Annual production capacity assuming an eight-hour day is 240 days X 446 paddles = 107,000 paddles. Although this capacity is sufficient to meet sales, some overtime may be required to manufacture a required level of finished goods inventory.

- Lumber required to produce sales:

100,000 paddles X 2.1 board feet per paddle = 210,000 board feet

(iii) *Wood Cost per Paddle:*

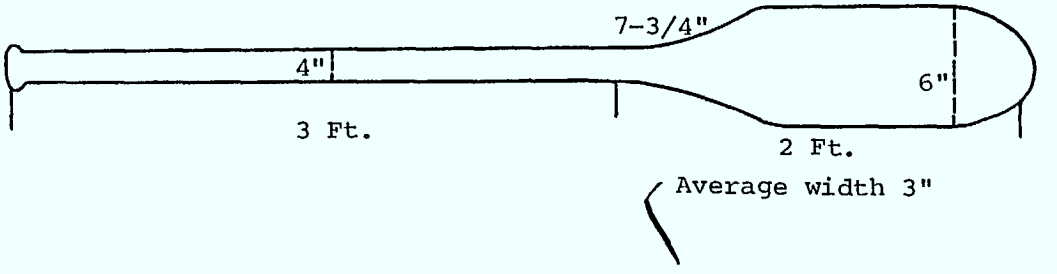
$$210{,}000 \text{ board feet} \times \frac{\$200}{1{,}000 \text{ board feet}} = \$42{,}000$$

$\$42{,}000 \div 100{,}000$ paddles = $ .42 per paddle

(b) *PROTECTIVE COATING COST*

Technical advice indicates that an alkyd base coating is adequate. This covering is less durable than an epoxy coating but is far less expensive ($10 per gallon as compared to $21). It is estimated that one gallon will cover approximately 300 square feet.

(i) *Dimensions of a Paddle:*



Approximate area	2.2 square feet per paddle
Plus:	
a 25% dipping loss	.6 square feet per paddle
Equals: Total	2.8 square feet per paddle

(ii) *Protective Coating Cost per Paddle:*

- Paddles per gallon:

300 square feet ÷ 2.8 square feet = 107 paddles

- Cost per paddle:

$10 per gallon ÷ 107 paddles = $ .093

(c) *LAMINATING GLUE COST* (based on cost of $ .45 per pound for glue and an estimate that one ounce will cover one square foot)

(i) *Square Footage per Paddle:*

Paddle area to be glued	1.00 square foot
Allowance for loss @ 25%	.25 square foot
Total	1.25 square feet

(ii) *Cost per Paddle:*

- one pound at $ .45 covers 16 square feet
- cost per square foot is $ .45 ÷ 16 = $ .028
- square feet per paddle is 1.25
- cost per paddle is 1.25 square feet X $ .028 = $ .035

(d) *PACKING COST* (A corrugated container with wood skids as a pallet would accommodate 12 paddles. The cost of the container is estimated at $ .80.)

- Cost per paddle:

$ .80 ÷ 12 paddles = $ .067

(e) *DIRECT LABOR COST* (based on operational analysis--Process Flow Chart, Step 4)

- Process Flow Chart indicates a requirement of 8 plant employees. A foreman would also be required.

- Cost per hour based on an 8-hour day:

Foreman (@ $12,000 annually)	$6.25
Lathe operator	4.00
Band saw operator	4.00
Band saw operator	4.00
Shaper	3.50
Shaper	3.50
Sprayer	3.50
Rip saw operator	3.50
Laminating	3.80
	$36.05

- Daily cost:

$36.05 X 8 hours = $288.40

- Estimated daily paddle production is 446 paddles. (Recall that this is capacity production for an 8-hour day. The production requirement is slightly understated and, in fact, some overtime would be required to raise the level of production to generate a 25,000-unit finished goods inventory.)

- Direct labor cost per paddle:

$288.40 ÷ 446 = $ .647 per paddle

(4) DIRECT COST OF ONE PADDLE (This is a summary of the direct material and labor costs outlined above.)

- Direct costs per paddle:

Wood cost	$ .420
Protective coating cost	.093
Glue cost	.035
Container	.067
Direct labor	.647
Total	$1.262 per paddle

(5) ANNUAL COST OF GOODS SOLD:

	1989	1990	1991	1992	1993
Estimated sales (Step 2)	100,000	110,000	121,000	133,100	146,410 paddles
Times: Direct Cost per Paddle	$1.26	$1.26	$1.26	$1.26	$1.26
Cost of Goods Sold*	$126,000	$138,600	$152,400	$167,700	$184.500

*rounded to nearest $100

(6) WORKSHEET ENTRY

Turn to the worksheet example for Paddle 'N Oar Industries Ltd. (it should be out before you now). Notice that "line 2 - Cost of Sales" has been completed as above. If you are now preparing your own anslysis, you should enter your own figures on the blank worksheet on page 73.

SECTION B
OPERATING FEASIBILITY
SUMMARY

■ SUMMARY

As in Section A, summarize the answers to the questions in Section B.

(1) Use the following headings for the summary:

B. OPERATING FEASIBILITY

1. Plant and Equipment Requirements
2. Material and Labor Requirements

(2) Under *"1. Plant and Equipment Requirements"*, summarize the steps in making the product. Identify building and equipment.

Under *"2. Material and Labor Requirements"*, set out details of making one unit and determine production cost of making the annual amount.

To help you prepare your own summary, the example of Paddle 'N Oar Industries Ltd. is continued on the following pages.

Section B

OPERATING FEASIBILITY

1. PLANT AND EQUIPMENT REQUIREMENTS (Page 24)

The production methods have been carefully planned for an initial production of 446 paddles per day. Manufacturing includes assembly, laminating, rough cutting, shaping, lathing, sanding, spraying and packaging. We have determined that the following equipment will be required:

1 copy lathe
2 24" band saws
1 swing saw
1 shaper
1 pneumatic drum sander
1 exhaust fan
1 jointer c/w powerfeed
1 600-gallon dipping tank
5 carts
1 cyclone
1 clamp carrier
1 glue spreader
1 dust and chip removal system
1 air filtering system
1 dipping and drying system
1 rip saw
1 belt sander
1 center drill and jig
1 brushing and buffing system

A 10,000 square foot building is to be leased for the plant and offices.

2. MATERIAL AND LABOR REQUIREMENTS (Page 29)

We have also determined that eight plant employees and a foreman will be required.

The direct costs of Material and Labor are set out below:

DIRECT COSTS PER PADDLE

Wood costs	$ .420
Protective coating costs	.093
Glue costs	.035
Container costs	.067
Direct labor	.647
Total	$1.262

We have therefore estimated our Cost of Goods Sold as follows:

	1989	1990	1991	1992	1993	
Paddle Sales	100,000	110,000	121,000	133,100	146,410	paddles
Times: Direct Cost per Paddle	$1.26	$1.26	$1.26	$1.26	$1.26	
*Cost of Goods Sold**	$126,000	$138,600	$152,500	$167,700	$184,500	

*rounded to nearest $100

SECTION C

FINANCIAL FEASIBILITY

SECTION C
FINANCIAL FEASIBILITY
STEP 6: CALCULATION OF OPERATING EXPENSES

■ QUESTION I — *"What cash expenses do I have to meet?"*

Cash expenses include selling, administration, and other operating expenses.

■ ANSWER GUIDE

(1) List every cash expense that will occur: salaries, rent, utilities, insurance, repairs and maintenance, travel, vehicle expense, etc.

(2) Omit interest expense, which will be dealt with later.

(3) Follow the example provided.

(4) Make an entry on the worksheet.

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1) (2) (3) CASH OPERATING EXPENSES:

Plant Manager's Salary (accountant)	$13,000
Taxes	500
Insurance	500
Office supplies	1,000
Saw blades, sandpaper, etc.	900
Repairs and maintenance	1,200
Telephone	600
Rent	3,600
Power and utilities	2,600
Sundry	5,000
Total	$28,900

(4) WORKSHEET ENTRY

Notice that *"line 4 - Cash Operating Expenses"* is filled in on the example worksheet. Expenses in the first year are $28,900, as determined above. In the example this amount has been increased in each subsequent year so that it remains a constant percentage of sales. This is a reasonable assumption. If you are now preparing your own analysis, make an entry on the blank worksheet provided on page 73.

NOTE: Owner's remuneration is not reflected in these examples.

SECTION C
FINANCIAL FEASIBILITY
STEP 7: BUDGETING FOR OTHER EXPENSES

■ QUESTION II *"What other expenses do I have to allow for?"*
"Will I have to borrow money?"

In addition to expenses for salaries, wages, telephone, rent, and the like, allowance must be made for a number of other expenses which arise in the course of running a business. These additional expenses include:

(1) interest
(2) depreciation.

Interest Expense represents the cost of borrowing. Depreciation Expense represents the annual cost of using Plant and Equipment.

In order to make an allowance for these other expenses, follow the answer guide.

■ ANSWER GUIDE *INTEREST EXPENSE CALCULATION*

(1) Calculate the cost of Plant and Equipment.

(2) Calculate the cost of the material you plan to stock (raw material inventory).

(3) Calculate the value of the finished product you plan to stock (finished goods inventory).

(4) Estimate the Value of Sales (accounts receivable) during this period for which credit will be granted.

(5) Total (1), (2), (3), and (4) to arrive at the Total Capital Requirements.

(6) Estimate the amount of personal money you plan to invest in the venture.

(7) Estimate the amount of borrowing required and state sources from which it will be raised.

(8) Work out the interest cost on the amount of borrowing.

N.B. Interest cost is generally included in the amount which you are required to pay to the bank or financial institution. In order to arrive at the annual repayment, refer to the table on level factors, look up the relevant factor, and divide the total sum of the loan by the level payment factor.

LEVEL FACTOR TABLES

INTEREST RATE

REPAYMENT PERIOD IN YEARS	6%	8%	10%	12%	14%	16%	18%
5	4.212	3.993	3.791	3.605	3.433	3.274	3.127
6	4.917	4.623	4.355	4.111	3.889	3.685	3.498
7	5.582	5.206	4.868	4.564	4.288	4.039	3.812
8	6.210	5.747	5.335	4.968	4.639	4.344	4.078
9	6.802	6.247	5.759	5.328	4.946	4.607	4.303
10	7.360	6.710	6.145	5.650	5.216	4.833	4.494
15	9.712	8.559	7.606	6.811	6.142	5.575	5.092
20	11.470	9.818	8.514	7.469	6.623	5.929	5.353
25	12.783	10.675	9.077	7.843	6.873	6.097	5.407
30	13.765	11.258	9.427	8.035	7.003	6.177	5.517

e.g. 5 years at 12% = 3.605

$$\text{Annual Payment} = \frac{\$60,000}{3.605} = \$16,644$$

(9) Make an entry on the worksheet.

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1) COST OF PLANT AND EQUIPMENT:

1 copy lathe 2 24" band saws 1 swing saw 1 shaper 1 pneumatic drum sander 1 exhaust fan	as per package quotation	$31,200
1 jointer c/w powerfeed		1,300
1 600-gallon dipping tank		400
5 carts		1,000
1 cyclone		800
1 clamp carrier		500
1 glue spreader		400
1 dust and chip removal system		2,000
1 air filtering system		1,400
1 dipping and drying system		3,000
1 rip saw		1,000
1 belt sander		500
1 center drill and jig		500
1 brushing and buffing system		500
Total Plant Equipment		$44,500
Office furniture and equipment (desk, chairs, typewriter, calculator, cabinets, etc.)		3,000
Leasehold improvements to leased building		1,500
Total Plant and Equipment		$49,000

(2) COST OF RAW MATERIAL INVENTORY

Raw materials can be ordered and delivered in about two weeks. Therefore, a one-month inventory supply (20 days) will be stocked (with the exception of the protective

coating which will require 600 gallons to fill the dipping tank).

(a) *RAW MATERIAL COST PER PADDLE:* (protective coating not included)

Wood cost	$ .420
Glue cost	.035
Carton cost	.067
	$ .522 (from Step 5)

(b) *PADDLES PRODUCED PER MONTH:*

417 paddles per day X 20 days = 8,340 paddles

(c) *ONE MONTH'S RAW MATERIAL COST:* (protective coating not included)

8,340 paddles X $ .522 = $4,353

(d) *PLUS: PROTECTIVE COATING:*

600 gallons @ $10 per gallon = 6,000

(e) *EQUALS: COST OF RAW MATERIALS:* $10,353

(3) COST OF FINISHED GOODS INVENTORY

It is assumed that a three months' supply of finished goods inventory will be carried.

- Annual sales in first year = 100,000 paddles
- Three months' supply: $\frac{3}{12}$ X 100,000 = 25,000 paddles
- Total direct costs per paddle (Step 5) = $1.262
- Value of finished goods inventory:

  $1.262 X 25,000 paddles = $31,550

(4) ALLOWANCE FOR CREDIT SALES (ACCOUNTS RECEIVABLE)

Selling terms are 30 days net (i.e. all customers pay in 30 days).

- Wholesale price is $2.13 (Step 3).
- Monthly paddle sales in units = 8,340 paddles ((2)(b))
- Value of accounts receivable:

  8,340 paddles X $2.13 = $17,764

- Less: accounts payable on raw materials (also net 30 days) 10,353 ((2)(e))
- Equals: allowance for credit sales $7,411

(5) SUMMARY OF TOTAL CAPITAL REQUIREMENTS:

1.	Cost of Plant and Equipment	$49,000
2.	Cost of Raw Material Inventory	10,353
3.	Cost of Finished Goods Inventory	31,550
4.	Allowance for Accounts Receivable	7,411
		$98,314

(6) PERSONAL INVESTMENT IN VENTURE

The plan is to invest $28,314 in the venture.

(7) ESTIMATED BORROWING:

Total Capital Requirements	$98,314
Less: Personal Investment	28,314
Amount to be Borrowed	$70,000

Plan is to borrow: (1) $60,000 for 5 years @ 12%
(2) $10,000 on a demand loan arrangement with the bank.

(8) Annual repayment on loan of $60,000 for 5 years at 12% = $\frac{\$60,000}{3.605}$ = $16,644 (see table in answer guide).

REPAYMENT SCHEDULE				
	Col. 1	Col. 2	Col. 3	Col. 4
YEAR	PAYMENT	INTEREST PORTION	REPAYMENT PORTION	BALANCE
				$60,000
1	$16,644	$7,200	$ 9,444	$50,556
2	16,644	6,067	10,577	39,979
3	16,644	4,797	11,847	28,132
4	16,644	3,376	13,268	14,864
5	16,644	1,780	14,864	ø

This column to *"line 5 - Interest--Term Loan"* on worksheet example.

This column to *"line 14 - Repayment of Principal"* on worksheet example.

- Column 1 is the Annual Payment.
- Column 2 is the Interest Payment calculated as follows:

OUTSTANDING BALANCE X INTEREST RATE = INTEREST PAYMENT

Example 1: $60,000 X 12% = $7,200
Example 2: $50,556 X 12% = $6,067

- Column 3 is the Loan Repayment Portion. It reduces the amount of the loan:

i.e. $16,644 - $7,200 = $ 9,444
16,644 - 6,067 = 10,577

- Column 4 is the Outstanding Balance. This balance reduces with each payment:

  i.e. Outstanding Balance $60,000
  Less: Principal Repayment 9,444
  New Balance $50,556

(9) WORKSHEET

Several lines can be filled in on the worksheet now. *"Line 5 - Interest--Term Loan"* and *"line 14 - Repayment of Principal"* are entered directly from the Repayment Schedule as indicated earlier.

"Line 15 - (Demand Loan)/Bank Balance" and *"line 6 - Interest--Demand Loan"* can also be completed as follows:

(a) *"LINE 15 - (DEMAND LOAN)/BANK BALANCE":*

Total capital requirements	$98,314
Less: term financing	60,000
Personal investment	28,314
Equals: *"line 15 - (Demand Loan)/Bank Balance"*	$10,000

Enter this amount for the first year only.

(b) *"LINE 6 - INTEREST--DEMAND LOAN"*

Use the following formula:

DEMAND LOAN	X	ANNUAL INTEREST RATE	=	DEMAND LOAN INTEREST
$10,000	X	12%	=	$1,200

Enter this amount for the first year only.

■ ANSWER GUIDE *MAKING ALLOWANCE FOR DEPRECIATION*

Allowance must be made for the cost of using all buildings, machinery, and equipment which have a fairly long life. Allowance for this expense takes the form of an annual rate (i.e. 10%, 20%) which is applied to the value of the item.

Use the following methods to calculate depreciation allowance.

(1) Set out the cost of fixed assets (buildings, machinery, equipment).

(2) Call the Taxation Office and find out what rate (percentage) is allowed for depreciation on each item.

(3) Apply this rate to the cost of the items and calculate depreciation expense.

(4) Deduct the depreciation expense from the cost of the items to arrive at the new value.

(5) Set out the information in a schedule as below:

DEPRECIATION SCHEDULE		
YEAR	DEPRECIATION EXPENSE	BALANCE TO BE DEPRECIATED
1		
2		
3		
4		
5		

(6) Make an entry on the worksheet.

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1) COST OF FIXED ASSETS: (2) DEPRECIATION RATE:

ITEM	COST		RATE	
Plant Equipment	$44,500	X	*20% =	$8,900
Office Furniture	3,000	X	*20% =	600
Leasehold Improvements	1,500	X	*10% =	150
	$49,000			$9,650

Average Depreciation Rate = $\frac{\$9,650}{\$49,000}$ X 100 = 20%

*These rates are examples only.

(3)(4)(5) DEPRECIATION SCHEDULE:

Col. 1	Col. 2	Col. 3
YEAR	DEPRECIATION EXPENSE	BALANCE TO BE DEPRECIATED
1	$9,800	$39,200
2	7,840	31,360
3	6,272	25,088
4	5,018	20,070
5	4,014	16,056

This column to *"line 7"* and *"line 12 - Depreciation"* on worksheet example.

- Column 1 is the year in which Depreciation Expense is calculated.
- Column 2 is the Depreciation Expense--calculated by applying rate to balance:

e.g. $\frac{20}{100}$ X $49,000 = $9,800

- Column 3 is the new Balance:

  i.e. $49,000 less $9,800 = $39,200

(6) WORKSHEET ENTRY

Notice on the worksheet that two more lines have been completed, *"line 7 - Depreciation"* and *"line 12 - Depreciation"*. If you are working on your own feasibility analysis, enter the figures on the blank worksheet.

SECTION C
FINANCIAL FEASIBILITY
STEP 8: SALES LESS EXPENSES

■ QUESTION III *"After paying all my expenses, how much do I make?"*

In seeking an answer to this question, you are really trying to find out whether the venture is or is not profitable. The figure which indicates profitability is *"Net Profit after Taxes"*. If this figure is positive, the venture is profitable.

Follow the answer guide to calculate this figure.

■ ANSWER GUIDE (1) Review your worksheet, making sure that all the figures are entered on the correct lines.

(2) Calculate the following:

(a) Gross Profit (Sales less Cost of Sales)

(b) Net Profit before Taxes (Gross Profit less Total Expenses)

(c) Income Tax (Net Profit before Taxes times Tax Rate): Call the Taxation Office and find out what tax rate applies at this level of profits.

(d) Net Profit after Taxes (Net Profit before Taxes less Income Tax)

(e) Cash Flor from Operations (Net Profit after Taxes plus Depreciation)

(f) Actual Cash Flow (Cash Flow from Operations less Repayment of Principal and Demand Loan).

(3) If Actual Cash Flow is negative (i.e. deficit), this figure is the amount of the demand loan you will need at the start of the next year. Calculate and enter Interest Expense on line 6 of the worksheet for the next year.

(4) Repeat the above for subsequent years.

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

The worksheet is now complete. Net Profit after Taxes *(line 11)* is positive in all years. Therefore, the venture is profitable.

SECTION C
FINANCIAL FEASIBILITY
SUMMARY

■ SUMMARY — Summarize the answers to all questions in this section using the following headings:

C. FINANCIAL FEASIBILITY

(a) Cash Operating Expense Schedule
(b) Capital Cost of Fixed Assets Schedule
(c) Initial Working Capital Schedule
(d) Principal and Interest Schedule
(e) Depreciation Schedule

■ ANSWER GUIDE — Follow the illustration in the example.

Section C

FINANCIAL FEASIBILITY

Set out below are the following schedules:

(a) Cash Operating Expense Schedule
(b) Capital Costs of Fixed Assets Schedule
(c) Initial Working Capital Requirements Schedule
(d) Principal and Interest Schedule
(e) Depreciation Schedule

(a) CASH OPERATING EXPENSE SCHEDULE: (Page 37)

EXPENSE	AMOUNT
Plant Manager's Salary	$13,000
Taxes	500
Insurance	500
Office supplies	1,000
Saw blades, sandpaper, etc.	900
Repairs and maintenance	1,200
Telephone	600
Rent	3,600
Power and utilities	2,600
Sundry	5,000
	$28,900

(b) CAPITAL COSTS OF FIXED ASSETS SCHEDULE: (Page 41)

FIXED ASSET	AMOUNT
1 copy lathe	$.
2 24" band saws	.
1 swing saw	31,200.
1 shaper	.
1 pneumatic drum sander	.
1 exhaust fan	.
1 jointer c/w powerfeed	1,300.
1 600-gallon dipping tank	400.
5 carts	1,000.
1 cyclone	800.
1 clamp carrier	500.
1 glue spreader	400.
1 dust and chip removal system	2,000.
1 air filtering system	1,400.
1 dipping and drying system	3,000.
1 rip saw	1,000.
1 belt sander	500.
1 center drill and jig	500.
1 brushing and buffing system	500.
Total Plant Equipment	$44,500.
Office Furniture and Equipment	3,000.
Leasehold Improvements	1,500.
Total Fixed Assets	$49,000.

(c) INITIAL WORKING CAPITAL REQUIREMENTS SCHEDULE: (Pages 41, 42, and 43)

CATEGORY		AMOUNT
1. Inventory		$41,903
Raw Material	$10,353	
Finished Goods	31,550	
2. Accounts Receivable		7,411
Total Requirement		$49,314

(d) PRINCIPAL AND INTEREST SCHEDULE: (Page 44)

YEAR	PAYMENT	INTEREST PORTION	PRINCIPAL REPAYMENT	BALANCE OF PRINCIPAL
				$60,000
1	$16,644	$7,200	$9,444	$50,556
2	16,644	6,067	10,577	39,979
3	16,644	4,797	11,847	28,132
4	16,644	3,376	13,268	14,864
5	16,644	1,780	14,864	ø

(e) DEPRECIATION SCHEDULE*: (Page 48)

YEAR	DEPRECIATION EXPENSE	BALANCE TO BE DEPRECIATED
1	$9,800	$49,000 $39,200
2	7,840	31,360
3	6,272	25,088
4	5,018	20,070
5	4,014	16,056

*20 % depreciation rate assumed

Based on the above schedules, we have prepared a pro forma profit and loss together with a cash flow schedule for the years 1989 to 1993 inclusive.

PRO FORMA PROFIT AND LOSS, AND CASH FLOW SCHEDULE 19 89 TO 19 93					
	19 89	19 90	19 91	19 92	19 93
1. Sales	$213,000	$234,300	$257,700	$283,500	$311,900
2. Cost of Sales	126,000	138,600	152,400	167,700	184,500
3. Gross Profit	87,000	95,700	105,300	115,800	127,400
4. Cash Operating Expenses	28,900	31,864	35,047	38,556	42,418
5. Interest--Term Loan	7,200	6,067	4,797	3,376	1,780
6. Interest--Demand Loan	1,200	ϕ	ϕ	ϕ	ϕ
7. Depreciation	9,800	7,840	6,272	5,018	4,014
8. Total Expenses	47,100	45,771	46,116	46,950	48,212
9. Net Profit before Taxes	39,900	49,929	59,184	68,850	79,188
10. Income Tax (@ 25 %)	9,975	12,482	14,796	17,213	19,797
11. Net Profit after Taxes	29,925	37,447	44,388	51,637	59,391
12. Depreciation	9,800	7,840	6,272	5,018	4,014
13. Cash Flow from Operations	39,725	45,287	50,660	56,655	63,405
14. Repayment of Principal	(9,444)	(10,577)	(11,847)	(13,268)	(14,864)
15. (Demand Loan)/Bank Balance	(10,000)	20,281	54,991	93,804	137,191
16. Actual Cash Flow	$20,281	$54,991	$93,804	$137,191	$185,732

SECTION D

VENTURE FEASIBILITY

SECTION D
VENTURE FEASIBILITY
STEP 9: BREAK-EVEN ANALYSIS AND RETURN ON INVESTMENT

■ QUESTION I *"Is it worthwhile?"*

Now that you have found answers to the questions on market, operating, and financial feasibility, you are in a position to take a hard look at the entire venture.

Among the more important things you will be looking for are:

(a) the minimum amount of sales you will have to get in order to cover your expenses (Break-Even Sales and Market Share). This will tell you how much risk is involved.

(b) the rate of return you will receive on your investment (Return on Investment).

Use the answer guide to find out.

■ ANSWER GUIDE

(1) Calculate the Contribution Margin of one (1) Unit. (Selling Price less Direct Cost per Unit)

(2) Calculate minimum amount of Sales to cover Expenses. (Divide Total Expenses by Contribution Margin.)

(3) Convert minimum amount of Sales to dollars. (Sales Unit times Selling Price)

(4) Calculate Break-Even Market Share. (Divide minimum amount of Sales by Total Market Potential figure.)

(5) Calculate Return on Investment for each year. (Net Profit after Taxes divided by Owner's Investment)

EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1) CONTRIBUTION MARGIN PER PADDLE:

Selling price (wholesale price) = $2.13 (Step 3)
Less: direct costs = 1.26 (Step 5)
Equals: Contribution Margin $ .87

(2) MINIMUM AMOUNT OF SALES TO COVER TOTAL EXPENSES:

Total Expenses ÷ Contribution Margin

(see worksheet example)

$60,330 ÷ $ .87 = 69,345 paddles

(3) BREAK-EVEN SALES DOLLARS:

69,345 paddles X $2.13 = $147,705

(4) BREAK-EVEN MARKET SHARE:

$$\frac{\$147,705}{\text{Total Market Potential X } \$2.13} \text{ X } 100$$

$$\frac{\$147,705}{1,000,000 \text{ paddles X } \$2.13} \text{ X } 100 = 6.9\%$$

(5) RETURN ON INVESTMENT:

	1989	1990	1991	1992	1993
Owner's Investment	$28,314*	$58,239**	$95,686**	$140,074**	$191,711**
Net Profit after Taxes	29,925	37,447	44,388	51,637	59,391
Return on Owner's Investment***	105.7%	64.3%	46.4%	36.9%	31.0%

*Initial Owner's Investment (Step 7)
**Subsequent Owner's Investment (initial Owner's Investment plus Net Profit after Taxes)

e.g. $28,314 + $29,925 = $58,239

***Return on Investment = $\frac{\text{Net Profit after Taxes}}{\text{Owner's Investment}}$ X 100

i.e. $\frac{\$29,925}{\$28,314}$ X 100 = 105.7%

NOTE: Profit includes owner's remuneration.

SECTION D
VENTURE FEASIBILITY
STEP 10: FINAL DECISION

■ QUESTION II — *"Should I go ahead with the venture?"*

The decision about whether to go ahead with the venture is the final but most important decision. Use the answer guide to help you to make this decision.

■ ANSWER GUIDE

(1) Review the information on (a) Break-Even Market Share and (b) Return on Investment.

(2) Compare Break-Even Market Share with the Market Share Target.

(3) Compare the return you would get on your investment as a fixed/term deposit with the return you would get from the venture.

(4) Make your decision as follows:

(a) Using the information on Market Share Target and Break-Even Market Share (2), select the one statement that applies:

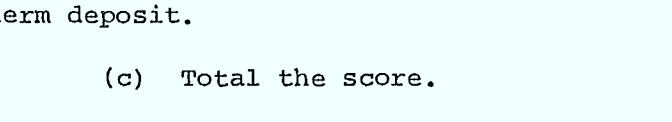
		SCORE
☐	Market Share Target is greater than the Break-Even Market Share by at least 5%.	10
☐	Market Share Target is greater than the Break-Even Market Share by less than 5%.	5
☐	Market Share Target is less than the Break-Even Market Share.	0

(b) Using the information on Return on Investment (3), select the one statement that applies:

		SCORE
☐	Return on Owner's Investment is at least 10% greater than the rate you would get on a fixed/term deposit.	10
☐	Return on Owner's Investment is between 5% and 10% more than the rate you would get on a fixed/term deposit.	8
☐	Return on Owner's Investment is less than 5% more that the rate you would get on a fixed/term deposit.	5
☐	Return on Owner's Investment is less than the rate you would get on a fixed/term deposit.	0

(c) Total the score.

(d) Check the score on scale provided below:



EXAMPLE PADDLE 'N OAR INDUSTRIES LTD.

(1)(2) COMPARISON OF BREAK-EVEN MARKET SHARE AND MARKET SHARE TARGET:

Target Market Share	= 10.0%	(Step 2)
Break-Even Market Share	= 6.9%	(Step 9)
Difference	3.1%	

(4) (a) SCORE: 5 points

(3) COMPARISON OF RETURN ON INVESTMENT FROM VENTURE WITH A FIXED/TERM DEPOSIT:

Return on Investment (5 year average)	= 56.9%	(Step 9)
Rate on Fixed/Term Deposit	= 10.0%	(assumed)
Difference	46.9%	

(4) (b) SCORE: 10 points

(4)(a)(b) TOTAL SCORE: 15 points

DECISION ——————————— FAVORABLE

SECTION D
VENTURE FEASIBILITY
SUMMARY

As in Sections A, B, and C, summarize the answers to the questions in the form of a summary analysis, making reference to your findings on Break-Even Market Share and Return on Owner's Investment.

Use the completed example as your guide.

GOOD LUCK!

Section D

VENTURE FEASIBILITY

A Market Share Target of 10% was chosen. However, we have determined that a minimum Market Share of 6.9% is required to cover Total Expenses. This 3.1% difference provides a reasonable safety margin.

The average Return on Owner's Investment that can be realized from the venture is 56.9%. When this is compared with the rate that would be realized on a fixed deposit (e.g. 10%) it is apparent that the venture is feasible.

USING THE WORKSHEET

WHEN YOU FINISH:

	COMPLETE LINE NO.
Section A **MARKET FEASIBILITY**	
Step 1 - Estimate Total Market Potential	1
Step 2 - Estimate Percentage Share	
Step 3 - Estimate Sales	
Section B **OPERATING FEASIBILITY**	
Step 4 - Estimate Plant and Equipment Requirements	2
Step 5 - Estimate Direct Labor and Material	
Section C **FINANCIAL FEASIBILITY**	
Step 6 - Estimate Cash Flow Expenses	4
Step 7 - Estimate Other Cash Flow and Non Cash Flow Expenses	5, 6, 7, 8, 12, 14, 15
Step 8 - Complete Worksheet	3, 9, 10, 11, 13, 16

WORKSHEET EXAMPLE

PADDLE 'N CAR INDUSTRIES LTD.

PROFIT AND LOSS AND CASH FLOW

		1989	1990	1991	1992	1993
1	Sales	$213,000	$234,300	$257,700	$283,600	$311,900
2	Cost of Sales	126,000	138,600	152,400	167,700	184,500
3	Gross Profit	87,000	95,700	105,300	115,800	127,400
4	Cash Operating Expenses	28,900	31,864	35,047	38,556	42,418
5	Interest--Term Loan	7,200	6,067	4,797	3,376	1,780
6	Interest--Demand Loan	1,200	¢	¢	¢	¢
7	Depreciation	9,800	7,840	6,272	5,018	4,014
8	Total Expenses	47,100	45,771	46,116	46,950	48,212
9	Net Profit before Taxes	39,900	49,929	59,184	68,850	79,188
10	Income Tax (@25%)	9,975	12,482	14,796	17,213	19,797
11	Net Profit after Taxes	29,925	37,447	44,388	51,637	59,391
12	Depreciation	9,800	7,840	6,272	5,018	4,014
13	Cash Flow from Operations	39,725	45,287	50,660	56,655	63,405
14	Repayment of Principal	(9,444)	(10,577)	(11,847)	(13,268)	(14,864)
15	(Demand Loan)/Bank Balance	(10,000)	20,281	54,991	93,804	137,191
16	Actual Cash Flow	$ 20,281	$ 54,991	$ 93,804	$ 137,191	$ 185,732

USING THE WORKSHEET

WHEN YOU FINISH:	COMPLETE LINE NO.
Section A **MARKET FEASIBILITY**	
Step 1 - Estimate Total Market Potential	1
Step 2 - Estimate Percentage Share	1
Step 3 - Estimate Sales	1
Section B **OPERATING FEASIBILITY**	
Step 4 - Estimate Plant and Equipment Requirements	2
Step 5 - Estimate Direct Labor and Material	2
Section C **FINANCIAL FEASIBILITY**	
Step 6 - Estimate Cash Flow Expenses	4, 5, 6, 7, 8
Step 7 - Estimate Other Cash Flow and Non Cash Flow Expenses	12, 14, 15, 3, 9, 10, 11, 13
Step 8 - Complete Worksheet	16

WORKSHEET

PROFIT AND LOSS AND CASH FLOW

		19__	19__	19__	19__	19__
1	Sales					
2	Cost of Sales					
3	Gross Profit					
4	Cash Operating Expenses					
5	Interest--Term Loan					
6	Interest--Demand Loan					
7	Depreciation					
8	Total Expenses					
9	Net Profit before Taxes					
10	Income Tax (@__%)					
11	Net Profit after Taxes					
12	Depreciation					
13	Cash Flow from Operations					
14	Repayment of Principal	( )	( )	( )	( )	( )
15	(Demand Loan)/Bank Balance	( )				
16	Actual Cash Flow					

APPENDIX I

PRESENTATION FORMAT SHEETS

AN ANALYSIS TO DETERMINE THE FEASIBILITY

OF ESTABLISHING A

_____

VENTURE

DATE: _____

PRESENTATION FORMAT SHEETS

Page _____

INTRODUCTION

Section A

MARKET FEASIBILITY

1. TOTAL MARKET POTENTIAL

Page ____

2. MARKET SHARE

3. VALUE OF SALES

Page ____

Section B

OPERATING FEASIBILITY

1. PLANT AND EQUIPMENT REQUIREMENTS

Page ____

2. MATERIAL AND LABOR REQUIREMENTS

Section C

FINANCIAL FEASIBILITY

Set out below are the following schedules:

(a) Cash Operating Expense Schedule
(b) Capital Costs of Fixed Assets Schedule
(c) Initial Working Capital Requirements Schedule
(d) Principal and Interest Schedule
(e) Depreciation Schedule

(a) CASH OPERATING EXPENSE SCHEDULE:

EXPENSE	AMOUNT
	$

PRESENTATION FORMAT SHEETS

Page _____

(b) CAPITAL COSTS OF FIXED ASSETS SCHEDULE:

FIXED ASSET	AMOUNT
	$

Page ____

(c) INITIAL WORKING CAPITAL REQUIREMENTS SCHEDULE:

CATEGORY	AMOUNT
1. Inventory	$
2. Accounts Receivable	_____
Total Requirement	$

Page _____

(d) PRINCIPAL AND INTEREST SCHEDULE:

YEAR	PAYMENT	INTEREST PORTION	PRINCIPAL REPAYMENT	BALANCE OF PRINCIPAL
1	$.	$.	$.	$.
2				
3				
4				
5				

(e) DEPRECIATION SCHEDULE*:

YEAR	DEPRECIATION EXPENSE	BALANCE TO BE DEPRECIATED
		$.
1	$.	$.
2		
3		
4		
5		

* ___% depreciation rate assumed

Based on the above schedules, we have prepared a pro forma profit and loss together with a cash flow schedule for the years 19__ to 19__ inclusive.

PRO FORMA PROFIT AND LOSS, AND CASH FLOW SCHEDULE 19__ TO 19__					
	19__	19__	19__	19__	19__
1. Sales	$	$	$	$	$
2. Cost of Sales					
3. Gross Profit					
4. Cash Operating Expenses					
5. Interest--Term Loan					
6. Interest--Demand Loan					
7. Depreciation					
8. Total Expenses					
9. Net Profit before Taxes					
10. Income Tax (@ __%)					
11. Net Profit after Taxes					
12. Depreciation					
13. Cash Flow from Operations					
14. Repayment of Principal	( )	( )	( )	( )	( )
15. (Demand Loan)/Bank Balance	( )				
16. Actual Cash Flow					

Page ____

Section D

VENTURE FEASIBILITY

NOTES