Development
Strategy

## Stratégie

canadienne de
développement
économique des
Autochtones

# ROUTES TO PROFITABILITY: 

## Operating Controls For Small Service Industry Businesses

## Canadà

# ROUTES TO PROFITABILITY: <br> <br> Operating Controls For Small <br> <br> Operating Controls For Small Service Industry Businesses 

 Service Industry Businesses}

Reference Collection / Collection de référence<br>SECTOR<br>Services<br>SECTEUR<br>Services



Industry Canada
Libitary - Queen
腎皆242011
Industrie Canada Bibliothèque - Queen

# ROUTES TO PROFITABILITY: OPERATING CONTROLS FOR SMALL SERVICE INDUSTRY BUSINESSES 

© 1991 The Manitoba Institute of Management, Inc.

## TABLE OF CONTENTS

INTRODUCTION ..... 1
PART A RESTAURANT ..... 3
PART B SHOPPING CENTRE ..... 15
PART C CONTRACTOR ..... 21
PARTD HAIRDRESSER ..... 29
PART E TRAVEL AGENCY ..... 37
PART F AUTOMOTIVE FIRM ..... 45
PART G PROFESSIONAL FIRM ..... 49
APPENDIX BLANK FORMS ..... 59

## INTRODUCTION

Many new service industry businesses are able to operate profitably through the first few periods with little in the way of formal systems and controls. However, to sustain a profitable operation through changing business cycles requires more than intuitive management, even if the operation remains small. And if the operation begins to grow, the lack of formal controls will not allow the business owner to make informed decisions necessary to sustain that growth and ensure profitability.

This book is one of a series of four operating controls guides written and prepared by the Manitoba Institute of Management Inc. (MIM). 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 make informed decisions to maximize business profitability. The titles in the series are:

Small Retailers<br>Small Wholesalers<br>Small Service Business<br>Small Manufacturers

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

Before any business achieves sustained profitability, it must have control over its operations. To help you achieve this control, this workbook identifies critical operating concerns for seven types of service industry businesses. These are particular areas within each type of business which require careful management to ensure profitability.

This guide book is divided into seven parts:
PART A Restaurant
Part B Shopping Centre
PART Contractor
PART D Hairdresser
PART E Travel Agency
PART F Automotive Firm
PART G Professional Firm

Proceed through each part that applies to your type of business, following the steps and corresponding examples. Once your have a grasp of the concepts you can begin to implement your own system using the blank forms in the back of this book. Should you have questions about the information in this book, please contact the business development officer who provided it to you.

## THIS GUIDE IS DESIGNED TO ASSIST THE READER TO MAKE INFORMED DECISIONS TO MAXIMIZE PROFITABILITY BUT CANNOT GUARANTEE SUCCESS IN BUSINESS.

NOTE THAT THE EXAMPLES USED ARE NOT OF ANY ACTUAL BUSINESSES AND ARE PROVIDED SOLELY FOR THE PURPOSES OF EXPLAINING THE ELEMENTS OF AN OPERATING CONTROLS SYSTEM.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means: electronic, mechanical, photocopy, recording or otherwise without the prior written permission, including waivers, from The Manitoba Institute of Management Inc.

Copyright 1991
by
The Manitoba Institute of Management

PART A RESTAURANT

CRITICAL OPERATING CONCERN. Control of food and labour costs is essential because they generally account for $65 \%$ to $75 \%$ of a restaurant's total costs. If you are not presently using any form of controls, you can achieve some fairly dramatic results with the following approaches, provided you implement some form of portion control.

## PLANNING THE MENU

Your menu plan must ensure that you charge enough to cover food costs and generate sufficient gross profit to cover all costs of operation. The following steps outline how to establish an effective (and profitable) pricing schedule.

STEP 1 Set up a separate Menu Item Log similar to that in Figure 1 for each menu item. Note that you list the ingredients and amount per serving and record the cost of each item for that day. With this information you can then determine the menu item food cost and margin.

STEP 2 You should plan your overall menu to maintain food costs at a specified percentage of sales (eg. 35\%). While you may not be able to price every item to achieve this percentage, you will find it is a good starting point. Use the menu pricing chart on page 7 as your guide.

STEP 3 Set up a Profit Simulation Sheet similar to the example in Figure 2. You post each menu item to a line. Note that each item's "selling price" and "food cost" is posted to the upper portion of the respective boxes. The only unknown is "total units sold." If you keep your sales slips, you can make rough monthly estimates. The remaining calculations are extensions. You should post the entire menu, completing the upper portion of each box. Remember to include the "total operation" calculation at the bottom of the sheet which is the summation of all menu items.

If the total food cost level as a percentage of sales does not yield the desired gross margin, repeat the process once again using the lower portion of each box. You can re-price menu items, change ingredients, reduce costs, add or eliminate items until you achieve your desired margin.

## MENU PRICING CHART

|  |  | $\leftarrow$ | TARGET FOOD COST PERCENTAGE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 33\% | 34\% | 35\% | 36\% | 37\% | 38\% |
| $\uparrow$ | s. 50 | 51.52 | S1.47 | SL43 | \$1.39 | S1.35 | s1.32. |
|  | . 60 | 1.82 | 1.76 | 1.71 | 1.67 | 1.62 | 1.58 |
|  | . 70 | 212 | 206 | 200 | 1.94 | 1.89 | 1.84 |
|  | . 80 | 242 | 235 | 229 | 222 | 216 | 211 |
|  | . 90 | 273 | 265 | 257 | 2.50 | 243 | 237 |
|  | 1.00 | 3.03 | 294 | 286 | 278 | 270 | 263 |
|  | 1.10 | 3.33 | 3.24 | 3.14 | 3.06 | 297 | 289 |
| $\begin{aligned} & \mathbf{T} \\ & \mathbf{O} \\ & \mathbf{T} \\ & \mathbf{A} \\ & \mathbf{L} \end{aligned}$ | 1.20 | 3.64 | 3.53 | 3.43 | 3.33 | 3.24 | 3.16 |
|  | 1.30 | 3.94 | 3.82 | 3.71 | 3.61 | 3.51 | 3.42 |
|  | 1.40 | 4.24 | 4.12 | 400 | 3.89 | 3.78 | 3.68 |
|  | L.50 | 1.55 | 4.41 | 429 | 4.17 | 4.05 | 3.95 |
| $\begin{aligned} & \mathbf{C} \\ & \mathbf{O} \\ & \mathbf{S} \\ & \mathbf{T} \end{aligned}$ | 1.60 | 4.84 | 4.71 | 4.57 | 4.44 | 4.32 | 4.57 |
|  | 1.70 | 5.15 | 5.00 | 4.86 | 4.72 | 4.59 | 4.47 |
|  | 1.80 | 5.45 | 5.29 | 5.14 | 5.00 | 4.86 | 4.74 |
| $\underset{F}{\mathbf{O}}$ | ${ }^{1.90}$ | 5.76 | 5.59 | 5.43 | 5.28 | 5.14 | 5.00 |
|  | 200 | 6.06 | 5.88 | 5.71 | 5.56 | 5.41 | 5.26 |
| $\begin{aligned} & \mathbf{M} \\ & \mathbf{E} \\ & \mathbf{N} \\ & \mathbf{U} \end{aligned}$ | 210 | 636 | 618 | 6.00 | 5.83 | 5.68 | 5.53 |
|  | 220 | 6.67 | 6.47 | 6.29 | 611 | 5.95 | 5.79 |
|  | 230 | 697 | 676 | 6.57 | 6.39 | 6.27 | 6.05 |
| $\begin{aligned} & \mathbf{I} \\ & \mathbf{T} \\ & \mathbf{E} \\ & \mathbf{M} \end{aligned}$ | 240 | 7.27 | 7.06 | 6.86 | 6.66 | 6.49 | 6.32 |
|  | 250 | 7.58 | 7.35 | 7.14 | 694 | 676 | 6.58 |
|  | 260 | 7.88 | 7.65 | 7.43 | 7.22 | 7.03 | 6.84 |
|  | 270 | 8.18 | 7.94 | 7.71 | 7.50 | 7.30 | 7.11 |
|  | 280 | 848 | 824 | 800 | 7.78 | 7.57 | 7.37 |
|  | 290 | 8.79 | 853 | 829 | 806 | 7.84 | 7.63 |
|  | 3.00 | 9.09 | 88. | 8.57 | 833 | 811 | 7.89 |
|  | 3.10 | 9.39 | 9.12 | 886 | 861 | 838 | 816 |
| $\downarrow$ | 3.20 | 9.70 | 9.41 | 9.14 | 889 | 865 | 842 |
|  | 3.30 | 10.00 | 9.71 | 9.43 | 9.17 | 89 | 8.68 |
|  | 3.40 | 10.30 | 10.00 | 9.71 | 9.44 | 9.19 | 895 |
|  | 3.50 | 10.60 | 10.29 | 10.00 | 9.72 | 9.46 | 9.21 |

Example: A menu item with a total food cost of 70 cents should be priced at $\$ 2,00$ to achieve a $35 \%$ food cost target.

## EXAMPLE: GOLDEN EAGLE RESTAURANT

Figure 1 Menu Item Log

| MENU ITEM: Turkey Dinner |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| INGREDIENTS <br> Type \& Amount Per Serving | $\begin{aligned} & \text { DATE } 1 / 31100 \\ & \text { Food Cont } \\ & \text { Perserving } \end{aligned}$ | $\begin{aligned} & \text { DATE } 3 / 31 g 0, \\ & \text { Food Cout } \\ & \text { Per Serving } \end{aligned}$ | DATE $\qquad$ Food Cort PerServing | DATE $\qquad$ Food Cont PerServing | DATE $\qquad$ Food Cont Per Serving |
| Soup ( $4<8$ ) | . 14 | . 14 |  |  |  |
| Apperizer (20z) | . 10 | . 10 |  |  |  |
| Meat (8coz) | 1.84 | 210 |  |  |  |
| Poutw (Scoop) | . 20 | . 22 |  |  |  |
| Vegecable (Sooop) | - . 08 | . 08 |  |  |  |
| Dewert (202) | . 20 | . 16 |  |  |  |
| Coffee or Tea | . 20 | . 24 |  |  |  |
| Roll \& butter | . 06 | . 10 |  |  |  |
| Serviette | . 02 | . 12 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| TOTAL HEM FCOD COST | 5284 | \$3.16 |  |  |  |
| SELLING PRICE | 58.10 | \$8.10 |  |  |  |
| Margin | 55.26164.9\% | 54.91/61\% |  |  |  |

NOTE: In the illustration the second costing indicates that the gross margin on the item has fallen from $64.9 \%$ to $61.0 \%$, a $3.9 \%$ drop.
The available options are these:
Reprice the item so that the margin is maintained. This action should only be taken when a change in menu is appropriate.

Reduce the cost of the menu ingredients that are rising in price either by changing suppliers or re-negotiating a price.

Reduce the overall menu item cost by changing the ingredient mix or reducing portions. This action can only be taken if the level of service will not be noticeably affected.

Eliminate the item.
Very often, changes which affect only a few menu items can cause dramatic improvements in profit performance.

Figure 2 Profit Simulation

|  | (1) | (2) | (3) | $\begin{gathered} \text { (4) } \\ \text { (1) } X(3) \end{gathered}$ | $\begin{gathered} \text { (5) } \\ \text { (2) } x(3) \end{gathered}$ | $\begin{gathered} (6) \\ (4) \cdot(5) \end{gathered}$ | $\frac{(6)}{(4)} \stackrel{(7)}{\times} \quad 100$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Menu Item Descriplion | Selling Price | Food Cost | Total Units Sold | Total Dollar Sales | Total Food Cost | Total <br> Dollar <br> Gross <br> Margin | Gross Margin \% of Sales | Remedial Action |
| Turikey Dinner | \$810 | \$284 | 85 | S68850 | \$24L40 | \$447.10 | 64.9\% | reprice |
| Turky Diane | 5870 | 5284 | 85 | \$739.50 | S24140 | \$49810 | 67.3\% |  |
| Fish Dinoer | S6S0 | 5228 | 100 | \$65000 | 522800 | \$42200 | 64.9\% | no action |
|  | 56.50 | 5228 | 100 | \$659,00 | 522800 | 542200 | 64.9\% |  |
| Cheestburger | \$1.90 | \$.76 | 450 | \$855.00 | \$34200 | \$ 513.00 | 600\% | no arcion |
| Cleeseburger | \$1.90 | . 66 | 450 | \$855.00 | \$297.00 | \$558.00 | 65.2\% | get better deal |
| Creescourger Platuer | 53.90 | S1.80 | 500 | \$1.950.00 | 590000 | \$1,050.00 | 53.8\% | change |
| Crecseburger Placer | 53.90 | S1.46 | 500 | \$1.950.00 | 573000 | \$1,22000 | 625\% | $\underbrace{\substack{\text { ingredients }}}_{\text {mix }}$ |
| French Fries | 5.90 | . 32 | 1500 | SL,350.00 | \$480,00 | \$870.00 | 64.48 | reprice |
| French Fica | \$1.00 | . 32 | 1500 | \$1,500.00 | \$48000 | \$1,02000 | 6808 | ling |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| TOTAL OPERATION |  |  |  | 55,493,50 | \$2,19240 | \$3,302.10 | 60.1\% |  |
|  |  |  |  | 55,694.50 | \$1,976.40 | \$3.718.10 | 65.2\% |  |

NOTE: In the example, the simulation of the present menu (e.g. the upper portion of each box) indicates that gross margin will be $60.1 \%$ of sales. This is unacceptable. The simulation is repeated using the lower portion of each box. Items are repriced, ingredients changed, costs reducted, items eliminated (or added), and so on until the desired margin is achieved; $65.2 \%$ of sales in the example.

## STAFEING SCHEDULE

The restaurant owner/manager should schedule food service personnel to provide good, efficient service. To accomplish this objective while minimizing labour costs, follow the steps outlined below.

STEP 1 If the restaurant is very small, prepare a rough sales forecast for the planned period (eg. day, week, month). You can use sales history for the same period last year as a starting point. This information should be readily available if you are using the One Book system.

STEP 2 Prepare a staff schedule. First, you list the total hours planned for each employee and then you extend the hourly wage costs by the earnings rate for each. Therefore, the total wage cost for all staff for the period is the sum of the individual wage costs.

STEP 3 Check the suitability of Steps 1 and 2 above with the following calculation:
$\%$ Labour Cost $=\frac{\text { Total Wages for Period }}{\text { Sales Forecast for Period }} \quad$ x 100
Strive to maintain labour costs at the appropriate percentage of sales.

STEP 4 As the size of the restaurant increases along with the number of food service employees, prepare a staff schedule similar to the example in Figure 3 to monitor labour costs.

## EXAMPLE GOLDEN EAGLE RESTAURANT

Sales Forecast for February 15th is $\$ 600.00$
Staff Schedule:
Employee
D. Erasmus
R. Jones
J. Bear
W. Harvey

Hours
7.5

7
7.5
5.5

Rate
$\$ 5.00$
$\$ 5.00$
$\$ 6.00$
$\$ 4.50$

Total Cost
$\$ 37.50$
$\$ 35.00$
$\$ 45.00$
$\$ 24.75$
$\$ 142.25$

Formula Check:

$$
\begin{aligned}
& \text { \% Labour Cost }=\frac{\text { Total Wages for Period }}{\text { Sales Forecast for Period }} \quad \mathrm{x} \quad 100 \\
& \% \text { Labour Cost }=\frac{\$ 142.25}{\$ 600.00} \times 100=23.7 \%
\end{aligned}
$$

Figure 3 Staff Schedule


## LIOUOR CONTROL

If your restaurant serves liquor, you will also need measures to control how much you invest in liquor stock. To determine the appropriate quantity and variety of stock you should maintain, follow the steps outlined below.

STEP 1 Set up a Master Liquor Ledger similar to the example in Figure 4. Use one page for each liquor line.

STEP 2 Determine par stocks and minimum order quantities for each item in the ledger.

STEP 3 Check the Master Ledger weekly to determine items which are below par stock level and place orders for minimum order quantities as required.

STEP 4 Post deliveries and requisitions to the Master Liquor Ledger so you can determine and monitor stock.

## EXAMPLE GOLDEN EAGLE RESTAURANT

Figure 4 Master Liquor Ledger

| Item: Brand X <br> Supplier: Ward \& Com. |  |  |  |  | $\begin{aligned} & \text { Bin: A } \\ & \text { Par } \\ & \text { Stock: } \\ & 30 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 7777 | Min. order: 30 |  |
| Date |  |  | + | - | - | = |
|  |  | Delivery | Bar Une | Management Use | Storea |
| 49990 | Stock |  |  |  | 80 |
| 4990 | R 10 |  | 20 |  | 60 |
| 79990 | R12 |  | 35 |  | 25 |
| 99990 | D 111 | 30 |  |  | 55 |
| 119990 | R151 |  | 15 |  | 40 |
|  | Consumption |  | 7 |  |  |
| 129990 | Stock |  |  |  | 40 |

## Par Stocks

These are quantities of each liquor line which should be available for sale during the period between ordering and delivery (ie. lead time).
Example:
Sales of Brand X for one week average $\$ 840$. If gross profit is $50 \%$ then cost of sales is

$$
\frac{50}{100} \times \quad \$ 840=\$ 420
$$

The period between ordering and delivery is normally 3 days. To this should be added a safety factor of 1 day to allow for emergencies. Lead time, therefore, equals four days's consumption at a cost as follows:

$$
\frac{\$ 420}{7} \times 4=\$ 240
$$

Brand X costs $\$ 8.00$ per bottle.

$$
\text { Par Stock }=\frac{\$ 240}{\$ 8}=30 \text { bottles }
$$

## Minimum Order Quantities

This is the minimum amount that should be ordered so as to maintain the par stock of each item in the Master Liquor Ledger. In most cases it will be equal to the period of consumption at cost.
For example:
Period of consumption at cost $=\$ 240$
At a cost per bottle of $\$ 8$
$\begin{aligned} & \text { At a cost per bottle or } \$ 8 \\ & \text { Minimum order quantity is }\end{aligned} \frac{\$ 240}{\$ 8}=30$ bottles

## Figure 4: (CONTINUED)

## Weekly Master Ledger Check

Follow the general rule as follows:
When stock on hand for an item falls below the par stock level, order the minimum order quantity.(Refer to figures in Master Liquor Ledger).

## Example:

Stock of Brand X fell below 30 bottles on 7/9/90.
Order for 30 bottles placed on 7/9/90 and received on 9/9/90.
Monitor Stocks
Follow figures shown in Master Liquor Ledger. For example:

Stock at 4/9/90 is 80 bottles
On 4/9/90 bar requistions 20 bottles
On 7/9/90 bar requistions 35 bottles
Stock on this date falls to 25 bottles and order is placed for 30 bottles, etc.

In order to prevent the bar from becoming overstocked, requistions should only be made in the form of empty bottles for full ones.

## PART B <br> SHOPPING CENTRE

## I

CRITICAL OPERATING CONCERN. There is very little an owner can do to influence revenues, costs, and profitability of a shopping mall, once it has been constructed and leased. Financing, utilities, and most other operating costs are fixed. In some cases, leases will incorporate percentage of volume clauses, but the businesses in the shopping centre must experience high sales volumes to effect any increase in the rent they pay. If these increases are not significant and revenue is based on rentals alone, then at the outset, a leasing plan and its implementation is a critical operating concern.

## DETERMINING RENTAL INCOME

Prior to the construction of a new shopping centre or the purchase of an existing one, the prospective owner must ensure that the rental income will cover all costs. A method for determining rental income is outlined in the steps below.

STEP 1 Conduct a feasibility study to determine the size of a shopping centre which can be supported by the market. Then calculate the average rental rate per square foot which the owner(s) of the centre must achieve. It is important to know this latter amount so that it can be matched or exceeded. It will establish the rental revenue which can be generated from the centre for several years to come.

STEP 2 Prepare a leasing plan which indicates the type of tenant, the area to be leased by each, the rental rate per square foot, and the rental revenue. This plan should indicate the same average rental revenue per square foot which you determined in your feasibility study. If the leasing plan rate does not match or exceed the rate you calculated in Step 1, you should test alternative leasing plans.

STEP 3 In order to implement Step 2, you must negotiate the target rental rates with each prospective client. Note that you may not be completely successful in each negotiation. When this happens, revise the target average rental rate in subsequent negotiations using the following formula:

Revised Rent per square foot $=$
 RS
$\mathrm{TR}=$ Target Rental per square foot
$L S=$ Leased Space in square feet
$A R=$ Agreed rental rate per square foot
$R S=$ Remaining Space to be leased

## EXAMPLE: T.H.E. SHOPPING CENTRE

(1) Assume that a feasibility analysis has indicated that an average rental rate of $\$ 8.00$ per square foot is required.

NOTE: A manual for the New Venture Decision is available as part of this series. Useful data to estimate market potential for various retail tenants is available through Statistics Canada.
(2) Leasing Plan


NOTE: This is the initial leasing plan which indicates an average rental revenue of $\$ 7.01$, an amount below the target average rental rate of $\$ 8.00$ per square foot. The above plan will be re-worked until the average rental rate of $\$ 8.00$ per square foot is either achieved or exceeded.
(3) Assume that negotiations with the food store have just been completed and the agreement is for 2,500 square feet at $\$ 6.50$ per square foot, a rate below the target of $\$ 7.00$ per square foot. Assume further that $\$ 8.00$ per square foot is required overall and that the total leasable space is 9,050 square feet. In subsequent negotiations the overall rental target rate of $\$ 8.00$ per square foot is revised to:

Revised Rent per sq. ft.

```
\(=\quad \underline{(T R / s q . f t . ~ X ~ T o t a l ~ s q . ~ f t .) ~}-(\mathrm{LS} \times\) AR/sq. ft. \()\)
                                    RS
\(=\quad(\$ 8.00 \times 9,050\) sq. ft. \()-(2,500\) sq. ft. X \$6.50 \()\)
                                    \(6,550 \mathrm{sq} . \mathrm{ft}\).
\(=\frac{\$ 72,400-\$ 16,250}{6,550}\)
\(=\quad \$ 8.57\)
```

Subsequent rental negotiations should be based on a rate of $\$ 8.57$ per square foot.

PART C CONTRACTOR


#### Abstract

CRITICAL OPERATING CONCERN. Smaller contractors often rely on "rules of thumb" in preparing a price on tendered contracts. They will apply an àrbitrary multiple to an estimate of materials and labour to cover overhead costs and hope to make a profit. Very often, however, the rule of thumb used has no relation to the financial cost structure of the business. As a result, contracting firms may be inadequately compensated for their hard work.


## PRICING TENDERED CONTRACTS

Contractors must ensure that submitted and awarded tenders generate enough revenue to cover all costs of operation. The following steps outline methods for establishing prices on tendered contracts and the subsequent control necessary for contracts already awarded.

STEP 1 Construct a "break even chart" which depicts the relationship of your company's fixed, variable and total expenses to sales at all levels of output. Figure 5 provides an illustrated example. It measures all expenses and income from sales on the vertical axis and the units of output (eg. man-days) on the horizontal axis. Profits (or losses) at any output level are measured by the vertical distance between the Total Contract Costs line and the Total Contract Sales line.

## EXAMPLE: ARROW CONTRACTING LTD.

Figure 5 Break Even Chart


NOTE: The above break even chart can be constructed from the most recent Income Statement as follows:
(1) CONTRACT SALES - The contract sales total is taken directly from the Income Statement. On the chart this is $\$ 300,000$ and represents an output level (eg. horizontal axis) of 3,500 man-days. Man days can be calculated by dividing the average daily wage rate into total wages shown on the Income Statement. The contract sales line is drawn through $\$ 300,000$ (at 3,500 man days) from zero (at zero man days).
(2) VARIABLE COSTS - Contract direct labour and material can be taken directly from the Income Statement as well. This is the largest element of variable cost. These amounts will likety be shown as direct labour and purchases respectively. Again, these expenses have been incurred at the 3,500 man day level of output. Note also that at zero man days variable costs are also zero.
(3) FIXED COSTS - All remaining expenses are fixed which means they are constant for all levels of output. This will include administrative costs, occupancy costs, and so on. All costs on the Income Statement should have now been accounted for.

Figure 5 (Cont'd.)

## Tailor-made "rules of thumb"

At the beginning of the year a contractor forecasts the anticipated output level, say 3,500 man days. The break even chart tells the contractor that the following cost-volume-profit relationships apply:

Contract Sales $\$ 300,000$
$\begin{aligned} & \text { Variable Contract Cost } \\ & \text { (direct labour and materials) }\end{aligned} \$ 205,000$
Fixed Contract Costs 40,000
(overhead)
TOTAL CONTRACT COST $\overline{\$ 245,000}$
Contract Profits $\$ 55,000$
Therefore:

| OVERHEAD FACTOR | $=$ | Fixed Con | Cos |  | x | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Variable Contract Costs |  |  |  |  |
|  |  | \$40,000 | X |  |  | 19.5\% |
|  |  | \$205,000 |  |  |  |  |
| PROFIT FACTOR | = | Contract Profits |  |  | x | 100 |
|  |  | Variable Contract Costs |  |  |  |  |
|  |  | \$55,000 | x | 100 |  | 268\% |
|  |  | \$205,000 |  |  |  | 20.8\% |

## TENDER PRICE

If direct labour and materials (i.e. variable costs) were estimated to be $\$ 5,000$, the tender price should be determined as follows:

Direct Labour and Material $\$ 5,000$
Contribution to Overhead (19.5\% x $\$ 5,000$ ) 975
Contribution to Profit ( $26.8 \% \times \$ 5,000$ )
TENDER PRICE
1,340
TENDRPRI
$\$ 7.315$
This is a first estimate, of course. The price at which the contract is actually tendered depends upon how badly the contractor wants the job and his estimate of how stiff the competition is likely to be. He knows now, however, that if he tenders under this price that he must make it up on other jobs to cover his overhead and reach his profit target.

STEP 2 Using information provided by your break even chart, determine a tailor-made rule of thumb for the amount to be added to material and labour costs on a contract to cover overhead expenses and contribution to profit. You can calculate the factors for overhead and for profit as follows:

| OVERHEAD FACTOR | $=\frac{\text { Fixed Contract Costs }}{\text { Variable Contract Costs }} \quad$ x | 100 |
| :--- | :--- | :--- | :--- | :--- |
| PROFIT FACTOR | $=\frac{\text { Fixed Contract Costs }}{\text { Variable Contract Cost }} \quad$ x | 100 |

STEP 3 Keep a running tally on contracts awarded to see how close actual tendering conforms to the above plan.

EXAMPLE: ARROW CONTRACTING LTD. (CONT'D.)

RUNNING TALLY ON AWAREDED CONTRACTS

| Direct Labour and Material @ 100\% | Overhead @ 19.5\% | Pront @ 26.8\% |  |
| :---: | ---: | ---: | ---: |
| Job No. 1 | $\$ 9,000$ | $\$ 1,840$ | $\$ 2,450$ |
| Job No. 2 | 4,000 | 905 | 1,200 |
| Job No. 3 | 4,500 | 900 | 1,215 |
| Job No. 4 | 3,000 | 585 | 804 |
| Job No. 5 | 6,000 | 1,200 | 1,560 |
| 4 |  |  |  |
| Job. No. 30 | 5,000 | 975 | 1,340 |
|  |  |  |  |
| SUB-TOTAL | $\$ 100,000$ | $\$ 18,000$ | $\$ 25,000$ |
|  | $100 \%$ | $18 \%$ | $25 \%$ |

If the overall output level (i.e. man days) is being achieved as planned, the tally indicates that contracts are not generating sufficient revenue to cover planned amounts of overhead and profit. Action should therefore be taken to increase the tender price on succeeding contracts so as to cover overhead and profit.

$\vdots$
$\vdots$
$\vdots$

CRITICAL OPERATING CONCERN. Control over the direct costs of labour and material is critical to a hairdressing operation Combined, these costs account for approximately $65 \%$ of total costs. A knowledge of costs per unit (or service) basis will allow the owner/operator to price for appropriate margins and, therefore, to increase profits.

## PRICING HAIRDRESSING SERVICES

Hairdressers must ensure that services are priced to recover all direct costs and generate sufficient gross margin to cover all costs of operation. The following steps outline methods for pricing services and controlling both direct and indirect costs.

STEP 1 Set up your appointment book similar to the example in Figure 6. In addition to serving as a schedule for each hairdresser, it also serves as a summary of services performed each day. At the end of any given period, you can simply sum the totals on each sheet to determine the total number of each service performed.

STEP 2 Set up a separate Service Log similar to the example in Figure 7 for each service performed in the salon. List the various services performed along with the time taken for each. This time multiplied by the hourly wage rate converts to a standard cost for the operation. You should also cost the various materials used for each service performed.

## EXAMPLE: THE BEAUTY SHOPPE

Figure 6 Schedule and Services Summary
SCHEDULE AND SERICES SUMMARY


Figure 7 Service Log
SERVICE LOG

| SERVICE: Perm A |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LABOUR (AT STANDARD OPERATION) | $\begin{aligned} & \text { DATE: } \\ & \text { S/28/89 } \end{aligned}$ | $\begin{aligned} & \text { DATE: } \\ & \mathbf{3} 3199 \end{aligned}$ | DATE: | DATE: | DATE: | DATE: |
| 1. review condition of hair, diveras ayling etc. <br> 2. condition hair <br> 3. rinso \& shampoo <br> 4. cut hair <br> S. insertrods <br> 6 apply perm solution <br> 7. rinse \& condition <br> \& towellabow dry <br> 9. cuutryte bair <br> $125 \min \div 60=208 \mathrm{brk}$ <br> 208 brg @ 98 hr . | 5 min. <br> 10 min <br> 5 min <br> 30 min <br> 30 min <br> 20 min. <br> 5 min <br> 5 min <br> 15 min <br> 125 min | 10 min <br> 15 min. <br> 5 min <br> 30 min <br> 30 min. <br> 20 min <br> 5 min. <br> 5 min <br> 20 min. <br> 140 min <br> 233 hra <br> (9) 59 hr . |  |  |  |  |
| LABOUR TOTAL | S16.65 | 520.97 |  |  |  |  |
| MATERIALS (AT STANDARD) <br> shampoo <br> creme rinse <br> perm solution <br> curling papers | $\begin{gathered} .75 \\ .75 \\ 5.00 \\ .82 \end{gathered}$ | $\begin{gathered} .80 \\ .80 \\ 5.25 \\ .90 \end{gathered}$ |  |  |  |  |
| MATERTALSTOTAL | \$7.32 | \$7.75 |  |  |  |  |
|  | 523,97 | 52872 |  |  |  |  |
| PRICE MARGIN | S41.50 <br> \$17.53 <br> 4225 | S4L.50 <br> $\$ 1278$ <br> 30.8\% |  |  |  |  |

NOTE: In Figure 7, the second costing indicates that the margin has dropped from $42.2 \%$ to $30.8 \%$, a decrease of $11.4 \%$. The options are these:
a) Reprice so that the margin is either maintained or improved. However, you should take this action only after you have compared competition prices.
b) Reduce the cost of the service, primarily by changing methods.
c) Eliminate the service or alter it in some manner to yield the perception of a different service. Then reprice.

STEP 3 Calculate a financial simulation based on the above data. Begin by listing each service and record the selling price and cost from the Service Log. Then recorded the number of each service performed by summing from the Schedule and Service Summary. Calculate the total retail, direct cost and gross margin for each service and for the total of all services.

If the level of gross margin is insufficient, repeat the process once again. You might try repricing some services, reducing costs of others, and in some cases, eliminating or adding services. Continue to work with the simulation until you reach the appropriate level of gross margin.


## CONTROL OF LABOUR COSTS

While most owners will seek to compensate their hairdressers fairly, they need to ensure that labour costs are always in line with the volume of work. The following steps outline two methods for labour cost control. Choose the one which best applies to your situation.

STEP 1 If the hairdressing salon is reasonably well established and a good quality hairdresser is able to maintain a high activity level, set a commission rate which is a consistent percentage of the revenue which that person actually generates.

STEP 2 If the hairdressing salon is not yet established and even a good quality hairdresser is still unable at this point to maintain a high activity level, set a pay policy based on a minimum pay level (independent of activity) plus commission. Of course, the commission rate would be applied to revenue generated beyond the minimum level.

## EXAMPLE: THE BEAUTY SHOPPE

(1) Let's say the commission rate is set at $50 \%$. That means the hairdresser is paid $50 \%$ of the income she generates for the business. Note that the actual commission rate you choose will have to be based on local conditions and rates offered by other salons. However, commissions paid to hairdressers (including owners) should generally not exceed $58 \%$ to $60 \%$ if you are to retain sufficient gross margin to operate your business.
(2) Let's say you choose a minimum pay level of $\$ 5.00$ per hour. Again, the actual rate you choose must be in line with labour laws and local conditions. Based on an 8 hour day, the cost to the business is $\$ 40$ ( 8 hours $\mathrm{x} \$ 5 /$ hour). The plan involves paying the first $\$ 40.00$ of revenue earned on a given day to the hairdresser. The next $\$ 40.00$ of revenue is paid to the business. If yet additional revenue is earned, (now in excess of $\$ 80.00$ ), you pay a commission rate of $50 \%$ on the additional amount. As long as the revenue your business earns is at least twice the minimum pay level on any given day, the net effect will be the same as paying a $50 \%$ commission rate. If total sales revenue falls below this amount, the net effect will be a higher percentage commission cost for the business. The advantage, of course, is that the employee is guaranteed a minimum earnings rate until the business is established. The onus is on the owner to establish the activity level of the business as quickly as possible.

I I 1

PART E

## TRAVEL AGENCY


#### Abstract

CRITICAL OPERATING CONCERN. A travel agency with a high proportion of ticket selling activity must rely on the productivity of its employees. The agent typically operates on narrow profit margins as illustrated below:


$$
\begin{array}{lr}
\text { Sales } & 100 \% \\
\text { Cost of Services Provided } & \frac{22 \%}{8 \%} \\
\text { Commission Income } & \frac{7 \%}{1 \%} \\
\text { Operating Expenses* } & \\
\text { Net Profit Before Tax } & \\
& 50 \% \text { of operating expense is payroll } \\
& \\
\text { The payroll becomes a fixed cost factor in the short term if the agency is } \\
\text { small and must be minimally staffed to provide service. It is only with } \\
\text { adequate employee productivity that the agency can generate traffic. }
\end{array}
$$

## EEEICIENT SELLING ACTIVITY

In effect, the public is buying convenience when it buys service from a travel agent. It is important that the agent does not confuse business for efficiency. The following operations controls are recommended to ensure efficient time use in ticket selling activity.

STEP 1 Conduct a periodic employee productivity analysis similar to the example on the following page. This analysis will allow you to determine how well employees use their time to provide travel counselling and prepare travel arrangements.

STEP 2 Alternatively, you can set up a Ticket Selling Tally similar to the example in Figure 8 and maintain an ongoing employee productivity analysis.

## EXAMPLE: TRAVELLING UNLIMITED LTD.

## Periodic Employee Productivity Analysis

1. Hourly Employee Cost

$$
\begin{array}{cccc}
\text { Average Wage Per Employee } & \div & \text { Available Hours per Employee } & =\text { Wage Cost per Employee } \\
\$ 15,000 & \div & 2,000 & =\$ 7.50 \text { per hour }
\end{array}
$$

2. Time Per Sale*

Domestic Air Travel .30 hours
International Air Travel .80 hours
Other Transportation .25 hours

* based on agent's estimates or a log kept by employees

3. Wage Cost Per Sales

| Domestic Air Travel | \$7.50 | x | . 30 | = | \$2.25 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| International Air Travel | \$7.50 | x | . 80 | = | \$6.00 |
| Other Transportation | \$7.50 | X | . 25 | $=$ | \$1.88 |

4. Revenue Needed Per Sale to cover Wage Cost

Wage Cost Per Sale $\div$ Commission Rate

| Domestic Air Travel | (7\% Commission) | \$225 | $\div$ | . 07 | = | \$32.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| International Air Travel | (10\% Commission) | \$6.00 | $\div$ | . 10 | $=$ | \$60.00 |
| Other Transportation | (8.5\% Commission) | \$1.88 |  | . 085 |  | \$22.00 |

5. Revenue Needed Per Sale to Cover Total Operating Expenses

## Revenue Needed Per Sale to Cover Wage Cost x

total operating expense
total wages
Domestic Air Travel
International Air Travel
Other Transportation
6. Actual Average Sale

Domestic Air Travel
International Air Travel
Other Transportation

| Monthly <br> Sales | Number |  | Average |
| ---: | :---: | :---: | ---: |
| $\$ 48,000$ | Sales | $=$ | Sales |
| $\$ 42,000$ | 800 |  | $\$ 60.00$ |
| $\$ 6,000$ | 3000 |  | $\$ 140.00$ |
|  |  | 120 |  |

It is apparent that the average sale for Domestic Air Travel is insufficient to cover operating costs. The remaining areas are profitable. Since ticket price and commission rates are normally fixed the only operating variable that can be controlled is the wage cost or productivity level. If wages are competitive then productivity is the only operating variable left. Measures should be undertaken to improve employee productivity in this area.

EXAMPLE: TRAVELLING UNLIMITED LTD.
Figure 8 Ticket Selling Tally


The tally recording sale amount and transaction time enables the agent to monitor employee productivity since figures for Actual Average Sales can be produced on an ongoing basis.

## PRICING TENDERED CONTRACTS

The travel agency owner must ensure that contract tenders for tours, cruises and other commercial accounts are priced to cover all contract costs and make an adequate contribution to profit. If such contracts make up an important percentage of your business, you are advised to review PART C which deals with tendering for contractors.

## EXAMPLE: TRAVEL UNLIMITED LTD.

## Contract Price Determination (Shorthand Method)

1. Hourly Employee Cost
\$7.50/hour (as determined previously)
2. Total Cost Per Hour

Hourly Employee Cost $\quad \mathrm{x}$

## Total Operating Expenses

Total Wages
$\$ 7.50 \quad 2=\$ 15.00$ per hour (assuming wage costs are $50 \%$ of total operating expenses)
3. Contract Revenue Per Hour Needed to Cover Total Costs (Break Even)

| Total Cost Per Hour |  |  |  |
| :--- | :--- | :--- | :--- |
| $\$ 15.00$ | $\div$ | .12 | Commission Rate |
| $=$ | $\$ 125.00$ per hour @ | $12 \%$ commission |  |

4. Break Even Contract Price

| Break Even Hourly Rate |
| :---: | :---: | :---: |
| $\$ 125.00$ |$\quad$| $\mathbf{x}$ |
| :---: |
| $\mathbf{x}$ | | Estimated Hours |
| :---: |
| 40 hours |$=\$ 5,000.00$

5. Tender Price*

Break Even Contract Price

| + |
| :--- |
| + |$\quad$| Profit |
| :--- |
| $(10 \% \times \$ 5,000.00)$ |$\quad=\quad \$ 5,500.00$

* The profit percentage factor is determined as outlined in the section for Contractors. Here it is assumed to be $10 \%$.

If the agent is successful in winning the tender he knows that 40 hours can be spent on the contract. A time record should be kept for the job to ensure that over-runs are monitored.

## PART F AUTOMOTIVE FIRM

CRITICAL OPERATING CONCERN. An automotive dealership selling both new and used equipment must be able to determine whether adequate profit finally results after completing a long chain of equipment sales. Most equipment sales involve a trade-in of used equipment as well as payment of cash. If a dealership allows too much on a trade-in, or incurs too much reconditioning expense, or sets the selling price on a used unit too low, profits from earlier transactions could be wiped out.

## UNIT RECORD CONTROL

After allowing for trade-ins, reconditioning expenses, and price deals, automotive firms must be able to make a profit. The following steps describe how to use a unit record as a means to ensure effective gross profit control.

STEP 1 Keep a unit record or wash out sheet for each chain of new and used equipment sales. Figure 9 provides an example of a unit record control. Most equipment sales involve a trade-in of used equipment and a payment of cash. The sale for the unit record is the sum of the trade-in allowance plus the cash payment. The gross profit or loss is the difference between the sale price and the total cost. You enter each additional sale and trade-in of the series onto the unit record in the same way, terminating with a sale for cash with no trade-in (or scrapping the trade-in). The Grand Total Gross Profit for the chain of transactions from the purchase of the new equipment to the cash sale of the last trade-in is the sum of all the profits and losses in the series.

STEP 2 Keep completed unit records in a separate file for each financial period. If the period's income statement does not yield a favourable gross profit result (eg. $15 \%$ for new and used car sales), check the unit records to identify the problem source. You should also check current unit records for transactions occurring in the present financial period.

## EXAMPLE: FRIENDLY CAR COMPANY

Figure 9 Unit Record
NEW and USED UNIT RECORD and CONTROL
LICENCE NO $\qquad$ NEWUNTT
NO. $\qquad$

| MAKE | YEAR | MODEL | COLOUR | SERIAL NUMBER |  | TIRES | TRANSMISSION |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sea Dos | 1990 | Zephyr 340 Efectic | Greeo | 6030 H-5161 |  | N/A | N/A |  |
| WHOLESALE FINANCE | ADVANCE |  | DUEDATE | DATE PAID | RENEWAL AMOUNT |  | DUE DATE | DATEPAID |
|  | N/A |  |  |  |  |  |  |  |



USED UNITS

| 1st | Lome Wutunet |  |  |  |  |  |  | ADDRESS: |  |  | Anytown |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Trade | SALESMAN: J. Roche |  |  |  |  |  |  | COMMISSION: |  |  | 10\% |  |  |  |
| DATE | DETAll. | CosT |  | $\begin{aligned} & \text { RECOND } \\ & \text { EXPENSE } \end{aligned}$ |  | $\begin{aligned} & \text { TOTAL } \\ & \text { COST } \end{aligned}$ |  | SALE |  | GROSS |  |  |  |  |
|  |  |  |  | PROFT |  |  |  | LO |  |  |
| Sepr 299 | Trade-in alkowed | 630 | 00 |  |  |  |  |  |  | 630 | 00 |  |  |  |  |  |  | Name: Moto Sea Doo |
| Sept 3/90 | Alcemator |  |  | 40 | 00 | 40 | 00 |  |  |  |  |  |  | Year: 1979 |
| Oct 30 | Comminsion | 85 | 00 |  |  | 85 | 00 |  |  |  |  |  |  | Model: Zephyr 200 |
| Oct 30 | Cash rate(trade-in allowed) |  |  |  |  | 735 | 00 | 885 | 00 | 130 | 00 |  |  | Mowor No. 4259F2694 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Serial No. 6024F.130 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Licence:- |
| 2nd | SOLD TO:_Erank Morton ADDRESS:____ Anyorm |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trade | SALESMAN: I_ Roche COMMISSION: $10 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oct 30 | Trade-in alowed | 140 | $\infty$ |  |  | 140 | 00 |  |  |  |  |  |  | Name: Moto Sea Doo |
| Dec. 1 | Comminion | 10 | $\infty$ |  |  | 10 | 00 |  |  |  |  |  |  | Year: 1963 |
| Dec 1 | Cash sale (notrade-in) |  |  |  |  | 150 | 00 | 100 | 0 |  |  | 50 | 00 | Model: Zephyr 150 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Mouor No. 3296C4299 |
|  |  | , |  |  |  |  |  |  |  |  |  |  |  | Serial No. TE140D-15201 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Licence: - |



COMMISSION:

| 3rd | SOLD TO: |  |  |  |  |  |  | DDRES |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Trade | SALESMAN: |  |  |  |  | - | CO | OMMIS | SION |  |  |  |  |  |
|  |  |  |  | - |  |  |  |  |  |  |  |  |  | Name: |
|  |  |  | - |  |  |  |  |  |  |  |  |  |  | Year: |
|  |  | $\bigcirc$ |  |  |  |  |  |  |  |  |  |  |  | Model: |
|  | $\square$ |  |  |  |  |  |  |  |  |  |  |  |  | Moor No. |
|  | $\checkmark$ |  |  |  |  |  | - |  |  |  |  |  |  | Serial Na |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | License: |

4th SOLD TO: ___ ADDRESS: $\qquad$
Trade SALESMAN:
COMMISSION:


PART G PROFESSIONAL FIRM

CRITICAL OPERATING CONCERN. A professional firm must be able to control the time expended on behalf of clients and set professional fees which are sufficient to recover all costs including overhead and time that is unavailable for billing. An organization enjoying considerable market success can still be unprofitable if it does not carefully monitor and control its fee structure and billing procedures.

## BILLING CONTROLS

The following steps outline two methods professional firms can use to ensure they are fully paid for their services. Choose the one which best applies to your situation.

STEP 1 If professional service is limited to relatively few clients on a contract basis, keep a weekly time report similar to the example in Figure 10. Here, you can keep track of the exact time and expense spent on each contract on a weekly basis. You can then post this information to the client's account in your accounts receivable ledger and bill your client accordingly at the end of the month.

STEP 2 Alternatively, if you offer professional service to a large number of clients on a more or less random basis, keep a client visit slip like the example shown in Figure 11. Consecutive pre-numbering of the visit slips ensures that all visit records have been accounted for. You can then post these slips to the clients' accounts which in turn you would use to make up your monthly bills.

EXAMPLE: SURVEYORS INC.
Figure 10 Time Report

| NAME: __J.Mercredi___ Dec.31-Jan_4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cuent name | Cuent | expenses | Houps |  |  |  |  |  |  |  | Rate |  | FEES |  |
|  | CASE |  | Sun. | Mon | Tuea. | Wod | Taus. | Fri | Set. | Total | per Hour |  |  |  |
| Natod's | A. 100 |  |  | 3 |  |  |  |  |  | 3 | 50 | 00 | 150 | 00 |
| W.L. Tekphone | A.080 |  |  |  | 7 |  |  |  |  | 7 | 50 | - | 350 | 00 |
| Eage Lumber | A-092 |  |  |  |  | ${ }^{3}$ |  |  |  | 3 | ss | 00 | 165 | $\infty$ |
| Sxroy Blig Materials | A. 121 |  |  |  |  | 2 |  |  |  | 2 | 50 | $\infty$ | 100 | - 0 |
| Nakoda's | A. 102 |  |  | 2 |  | 2 |  |  |  | 4 | 50 | $\infty$ | 200 | $\infty$ |
| Sweetran Daires | A-105 |  |  | 2 |  |  |  |  |  | 2 | 55 | 00 | 110 | D0 |
| Brgrone Ent | A-110 |  |  |  |  |  | 4 | 1 |  | 5 | 50 | 00 | 250 | $\infty$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | - | 7 | 7 | 7 | 4 | 1 | - | 26 |  |  |  |  |

EXAMPLE: MEDICAL ASSOCIATES
Figure $11 \quad$ Client Visit Slip

## PATIENT VISIT SLIP

R. N. QUACK, M.D.P. N. SAWBONES, M.D.I. V. SHRINK, M.D.C. S. BEDPAN, M.D.

| DATE: <br> $8 / 18 / 90$ |
| :--- |
| PATIENT NAME: <br> B. Okamow |
| EILLING NAME: <br> Same |
| BILLING ADDRESS: <br> 1416 Truro Avenue., Anytown |


| 1. INITIAL VISIT, ROUTINE | $\checkmark$ | 8. HOME VISIT, FOLLOW-UP | 15. SPEC. DIAG., SERVICE |
| :---: | :---: | :---: | :---: |
| 2 DIAG. EXAM, MINOR |  | 9. HOSP. VISIT, | 16. SPEC. THERAP. PROCEDURE |
| 3. DIAG. EXAM, MAJOR |  | 10. HOSP. VISIT, FOLLOW-UP | 17. ANESTHESIA |
| 4. FOLLOW-UP VISIT, ROUTINE |  | 11. CONSULTATION | 18. SURG. OBSTETRICS ORTHOP., MINOR |
| 5. FOLLOW-UP VISIT, PROLONGED |  | 12. IMMUNIZATION | 19. SURG. OBSTETRICS ORTHOP., MAJOR |
| 6. RE-EXAM, COMPLETE |  | 13. INJECTION, SPECIAL | 20. RADIOLOGY |
| 7. HOME VISIT, INITIAL |  | $\begin{aligned} & \text { 14. DRUGS, SUPPLIES, } \\ & \text { MATERIALS } \end{aligned}$ | 21. LABORATORY |

REMARKS:


## PRICING CONTROLS

Professional firms must ensure that their fees for service cover all costs of operation. The following steps are designed to help you establish and monitor an hourly rate based on the volume of your business and your overhead requirements.

STEP 1 Calculate an hourly cost estimate as a guide in preparing a price for professional services. If you know the time required to complete the service and you can estimate the cost of that time, then you can calculate the professional fee cost. Use the charge scale below which indicates the hourly cost relative to chargeable hours available annually and total annual expenses.

CHARGE SCALE
CHARGEABLE HOURS

| total EXPENSES | 600 | 700 | 800 | 900 | 1,000 | 1,100 | 1,200 | 1,300 | 1,400 | 1,500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$10,000 | 17 | 14 | 13 | 11 | 10 | 9 | 8 | 8 | 7 | 7 |
| 20,000 | 33 | 29 | 25 | 22 | 20 | 18 | 17 | 15 | 14 | 13 |
| 30,000 | 50 | 43 | 38 | 33 | 30 | 27 | 25 | 23 | 21 | 20 |
| 40,000 | 67 | 57 | 50 | 44 | 40 | 36 | 33 | 31 | 29 | 27 |
| 50,000 | 83 | 71 | 63 | 56 | 50 | 45 | 42 | 38 | 36 | 33 |
| 60,000 | 100 | 86 | 75 | 67 | 60 | 55 | 50 | 46 | 43 | 40 |
| 70,000 | 117 | 100 | 88 | 78 | 70 | 64 | 58 | 54 | 50 | 47 |
| 80,000 | 133 | 114 | 100 | 89 | 80 | 73 | 67 | 62 | 57 | 53 |
| 90,000 | 150 | 129 | 113 | 100 | 90 | 82 | 75 | 69 | 64 | 60 |
| 100,000 | 167 | 143 | 125 | 111 | 100 | 91 | 83 | 77 | 71 | 67 |

Example: If annual total expenses are $\$ 80,000$ and there are 1,400 chargeable hours, then a rate of $\$ 57$ per hour is needed to cover total expenses.

STEP 2 Monitor the recovery per hour on completed contracts. If you keep time sheets, you can record total hours on the job, as well as the fees and expenses to be charged, on the client's accounts receivable ledger card. When the job is complete, post the total professional fee and the hours on a running tally for the year. At any time, you can calculate the average recovery per hour as follows:
Average recovery/hour $=$ Total Professional Fees
Total Hours

STEP 3 Monitor the chargeable utilization percentage each month, once again by maintaining a running tally of total hours charged and total available hours. You can calculate the chargeable utilization percentage as follows:

Chargeable Utilization \% $\quad=\frac{\text { Chargeable Hours }}{\text { Avaitable Hours* }} \quad x \quad 100$
*NOTE: Available hours should be calculated on a standard of 7 hours a day and should not be increased to include overtime.

## EXAMPLE: SURVEYORS INC.

a) Chargeable hours available annually.
-1.5 professionals @ 240 working days each

- 2520 hours ( 240 days $x 7$ hours $x 1.5$ people)
b) Estimated time actually charged (@ 60\% of chargeable hours available)
$-1500(2520$ hours $x 60 \%=1512$; say 1500$)$
c) Estimated Total Annual Expenses (eg. salaries, direct expenses, overhead)
- \$75,000
d) Hourly cost estimate
- Estimated Total Annual Expense $\div$ Chargeable Hours
- $\$ 50$ per hour $(\$ 75,000.00 \div 1500)$
- note that the charge scale yields the same result

By charging \$50 per hour and maintaining a chargeable utilization rate of $60 \%$ of available hours, the operation should break even by just covering total expenses of $\$ 75,000.00$.

Recovery Per Hour
RUNNING TALLY ON COMPETED JOBS

| DATE | (1) <br> PROFESSIONAL <br> FEE | (2) <br> YEAR-TO- <br> DATE | (3) <br> HOURS | (4) <br> YEAR-TO- <br> DATE | (5) = (2) + (4) <br> RECOVERY PER <br> HOUR |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Jan. 12 | $\$ 4,000$ | $\$ 4,000$ | 75 | 75 | $\$ 53.33$ |
| Jan. 15 | 2,000 | 6,000 | 40 | 115 | 52.17 |
| Feb. 1 | 4,000 | 10,000 | 83 | 198 | 50.50 |
| Feb. 5 | 16,000 | 26,000 | 325 | 523 | 49.71 |
| Feb. 10 | 1,000 | 27,000 | 20 | 543 | 49.72 |
| Feb. 14 | 10,000 | 37,000 | 210 | 753 | 49.14 |
| Feb. 28 | 14,000 | 51,000 | 275 | 1,028 | 49.61 |

* Professional fees should include only the fee portion of client invoices and not incidental expenses also charged to clients. On the other hand, if expenses cannot be charged to a client, you should subtract them from the client invoice before entering them on the tally.

NOTE: If the proportion of hours in work-in-process is high the usefulness of the above tally will be diminished. The procedure works best where contracts are relatively small and numerous.

RUNNING TALLY ON UTILIZATION OF TIME

| DATE <br> CHARGEABLE <br> HOURS | (2) <br> YEAR-TO- <br> DATE | (3) <br> AVAILABLE <br> HOURS | (4) <br> YEAR-TO. <br> DATE | $(5)=(2)+(4)$ X 100 <br> CHARGEABLE <br> UTILIZATION \% |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Jan. 4 | 26 | 26 | 35 | 35 | 74.3 |
| Jan. 11 | 21 | 47 | 35 | 70 | 67.1 |
| Jan. 18 | 20 | 63 | 35 | 105 | 60.0 |
| Jan. 25 | 30 | 97 | 35 | 140 | -69.3 |
| Feb. 1 | 32 | 129 | 35 | 175 | 73.7 |
| Feb. 8 | 20 | 149 | 35 | 210 | 71.0 |
| Feb. 15 | 23 | 172 | 35 | 245 | 70.2 |

With recovery per hour running at $\$ 49.61$ per hour against a target of $\$ 50$ per hour, and chargeable utilization running at $70.2 \%$ against a target of $60 \%$, on a to-date basis, the firm is achieving its financial objectives.
Bear in mind, however, that the $\$ 50$ per hour target rate only provides for the recovery of costs; it does not include any element of profit. Presumably, the professionals who constitute the firm strive to cover their salaries, rather than to earn a profit. (In other words, simply covering all expenses may be satisfactory, if these costs include professional salaries.)


## APPENDIX BLANK FORMS

Menu Item Log

MENU ITEM:

| INGREDIENTS <br> Type \& Amount Per Serving | DATE: $\qquad$ <br> Food Cost <br> Per Serving | DATE: $\qquad$ <br> Food Cost <br> Per Serving | DATE: $\qquad$ <br> Food Cost <br> Per Serving | DATE: $\qquad$ <br> Food Cost <br> Per Serving | DATE: $\qquad$ <br> Food Cost <br> Per Serving |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| . |  |  |  |  |  |
|  |  |  | - |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| TOTAL ITEM FOOD COST |  |  |  |  |  |
| SELLING PRICE |  |  |  |  |  |
| MARGIN |  | , |  |  |  |

Proflt Simulation

| (1) | (2) | (3) | (4) | (5) | (6) | (7) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Staff Schedule



SCHEDULE AND SERVICES SUMMARY

| NAME: | NAME: | NAME: | NAME: |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 9: 00 \mathrm{AM} \\ & 9: 15 \\ & 9.30 \\ & 9.45 \end{aligned}$ |  |  |  |
| $\begin{aligned} & 10: 00 \mathrm{AM} \\ & 10: 15 \\ & 10: 30 \\ & 10: 45 \end{aligned}$ |  |  |  |
| $\begin{aligned} & 11: 00 \mathrm{AM} \\ & 11: 15 \\ & 11: 30 \\ & 11: 45 \end{aligned}$ |  |  |  |
| $\begin{aligned} & 12: 00 \mathrm{PM} \\ & 12: 15 \\ & 12: 30 \\ & 12: 45 \\ & \hline \end{aligned}$ |  |  |  |
| $\begin{aligned} & 1: 00 \mathrm{PM} \\ & 1: 15 \\ & 1: 20 \\ & 1: 45 \end{aligned}$ |  | . |  |
| $\begin{aligned} & \text { 2:00 PM } \\ & \text { 2:15 } \\ & \text { 2:30 } \\ & 2: 45 \end{aligned}$ |  |  |  |
| $\begin{aligned} & 3: 00 \mathrm{PM} \\ & 3: 15 \\ & 3: 30 \\ & 3: 45 \end{aligned}$ |  |  |  |
| $\begin{aligned} & 4: 00 \mathrm{PM} \\ & 4: 15 \\ & 4: 30 \\ & 4: 45 \end{aligned}$ |  |  |  |
| HAIRCUTS <br> SHAMPOOS \& SETS <br> HAIR COLOURING |  | PERMC <br> PERMD <br> OTHER |  |

SERVICE LOG
SERVICE:

| LABOUR (AT STANDARD <br> OPERATION | DATE: | DATE: | DATE: | DATE: | DATE: | DATE: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

Tlcket Selling Tally
TICKET SELLING TALLY

For week/month/period
Employee $\qquad$


NEW and USED UNIT RECORD and CONTROL
NEWUNIT


## SOLD To:

[__
ADDRESS:
SALESMAN:
COMMISSION:


USED UNITS
Ist SOLD TO:_____________


3rd SOLD TO:


Trade SALESMAN:
COMMISSION:

|  |  | Name: |
| :--- | :--- | :--- |
|  |  |  |
|  |  | Year: |
|  |  |  |
|  |  | Model: |
|  |  | Motor Na |
| GRAND TOTAL GROSS PROFIT |  |  |

Time Report


```
LKC
E78 .C2 R6 c.2
Routes to profitability :
operating controls for small
service industry businesses
```

DATE DUE
DATE DE RETOUR

|  |  |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

