

MAKING BUSINESS WORK

ACCOUNTING THAT MATTERS

BY IAN HODGE

AMUSA, PH.D.

© Copyright 2002-2006, Ian Hodge, All Rights Reserved.

No part of this material may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without permission in writing from the publisher. If published in electronic format (e.g. PDF file), then it may not be copied or distributed to any other person or company without the written permission of the publisher.

Publisher: Clarion Communications LLC

939 Mohican Drive

Ashland OH 44805

U.S.A.

E-Mail: ihodge@clarion-communications.com

Table of Contents

Introduction: Making Business Work	1
Lesson 1: The Accounting Framework	5
Lesson 2: The Chart of Accounts	15
Lesson 3: Daily Transactions.	21
Lesson 4: Putting It All Together	29
Lesson 5: Setting Performance Standards for the Business	35

Introduction

Making Business Work

It is the aim of many people to build their own business. This is an admirable goal and one that is sometimes not as successful as many would like. There are a number of reasons for this. In his book, *The E-Myth*, Michael Gerber identifies one of the very real problems with people who go into business for themselves: they know nothing about *business*. They know many things about the work that is done in a business, so if their business is a plumbing business they know how to install and fit plumbing to a very high standard. But when it comes to running a *business*, they fall short in skills and knowledge of how business works.

These lessons are designed to help people understand business. By stepping through the elements of a business such as management and finance, the lessons will equip the reader with practical knowledge and many of the skills that are necessary to *manage* a business.

Much of my consulting work has been to privately owned, family operated businesses. Now no one employs a consultant in their business until they have a problem, and the problem is usually stated in one sentence: “I am not making enough money.”

In every instance, to resolve this problem meant teaching someone in the business how to do something. It may have been how to implement reporting strategies so that the person at the helm gained knowledge of what was happening in his business on a daily or weekly basis. It may have been implementing an appropriate accounting system so that the financial transactions of the business were completed in a timely and professional manner. In every instance it required me to teach people about “the needs of the business.” Staff and business owners must learn to ask questions such as: “What does this business need in order to achieve . . .?”

In one business I attended, they had an accounting system that was reasonably proficient. Because of the cashflow of the business, and the amount of outstanding accounts receivable (i.e. money owned to the business from customers), the accounting clerk would process accounts payable (i.e. money owned to suppliers), place the processed check in an envelope ready to mail, then put that envelope in a shoe box, and send the envelope when there were sufficient funds to cover the payment. There were tens of thousands of dollars of payments sitting in this shoe box, covering about three month’s transactions of the business.

Now the problem with this strategy was very simple. The accounting system gave no knowledge of the *current* state of the business. The accounting system showed that all suppliers have been paid, and that in order to cover these funds the bank account was severely overdrawn. The reality was that the bank account was not as overdrawn as the accounting system showed. At the same time, the accounting system did not tell the real picture about what was owed to suppliers, which was the sum total of all outstanding payments that had not been made – including those in the shoe box. According to the accounting system, these payments had been made, whereas in reality they had been processed but not been made, merely entered into the accounting system, then placed in the shoe box where real money management was going on.

This might be called “Shoe box” accounting. It is not the way to run a successful business, since a successful business needs timely and accurate financial information to allow management to make good decisions.

There were two other problems related with this example, and they were the underlying causes of the “Shoe Box” accounting system. Neither the owner of the business, nor his accounts clerk understood financial management. The clerk knew she had to pay the bills – somehow. The owner of the business, because he never received financial reports that kept him abreast of the current state of the business, not only in terms of its revenue, but also in terms of its balance sheet (assets and liabilities), was spending money at a greater rate than he should have.

This is a very easy problem to occur in a business with novice owners. They build a successful business that starts making a million dollars a year, they see \$20,000 going into the bank every week and they begin to think they are on an easy street. This is not always the case, especially in some types of business where net profit margins are low. Most of that weekly income is committed to covering current expenses, and there is little or no scope for “extra” spending outside of covering normal purchases to allow the business to function. An accurate and timely financial report will give this information, therefore someone in the business needs to know what such a report should include and how to interpret the data.

But financial problems are not the only problems in a business. In one of my favorite consulting jobs, I was placed in the business to solve the owner’s problem: “I’m not making enough money”. The business manufactured fire doors. Like an insurance policy, you buy them and hope you never have to use them. Now fire doors are a simple product to make. The business bought the fireproof core, cut it to size, cut thin veneer strips to put around the edges plus two larger sheets which were glued onto front and back. This gives the fire doors a more aesthetic appearance in any building.

My initial investigation revealed that it was costing the company between \$77-\$95 for the materials for its doors, which they then sold for prices in the \$175-\$250 range. To get that lower price, a buyer had to buy fifty doors, so the profit margins appeared quite good in this business.

My investigation, however, had not covered one other major expense in the manufacture of these doors: labor. So I knew immediately that the labor costs associated with the fire doors were the reason the business owners were not making their money. I asked the business owner how long should it take to make a door. He said it should take about thirty minutes. “How long was it actually taking?” I asked. “I don’t know,” he said.

I went down into the workshop and asked the workers how long does it take you to make a door. They were nervous in telling me, since they are often wary of consultants who do

nothing but get people fired from their jobs. Eventually, they said it probably took them about two hours.

My further analysis, however, showed that the business owners were buying almost 4.5 hours of labor for each door they sold. This was the reason the business was not making money. Now the business owner had not informed his foreman that he expected the doors to be finished in thirty minutes, and the foreman, not being trained in management practices to measure and report performance levels, had allowed some very sloppy practices to develop on the shop floor.

This story illustrates the point that someone in the business, the person at the top, needs to know what is going on. Financial and management reports are the “eyes and ears” of the business. Without them, the business flies in the dark and reaps the results. Sooner or later a crash landing occurs, and when it does it can be a long and painful period of recuperation.

One of the reasons these problems occur is because there are no performance standards set in place in the business. These are setup in the business planning period, which planning must include a budget. Now a budget is useless unless it becomes a standard for the business. Anyone can put figures into a spreadsheet and make a budget look good. But the figures in this budget must be realistic and achievable goals for the business. Without them, the business flounders – eventually. It might get away without them for a number of years, but there will come a day of reckoning. This day of reckoning can be avoided if proper business practices are put in place in the first instance.

These lessons on “Making Business Work” are designed to teach current and prospective business owners what they need to know to build highly successful businesses. There are not many issues that need to be covered, but they are critical to the success of any business. The areas covered are:

1. Understanding Accounting

Lesson 1: The Accounting Framework: the Balance Sheet

Lesson 2: The Chart of Accounts

Lesson 3: Daily Transactions (Income Statement)

Lesson 4: Putting It All Together

Lesson 5: Setting Performance Standards for the Business

2. Five Inescapable Concepts of the Business

T — Transcendence or ownership

H — Hierarchy or authority

E — Ethics — what standards will be used.

O — Oaths, or sanctions, rewards

S — Succession, or the future

3. The Five Components of the Business

A. Ownership

B. Executive Office

- C. Marketing and Sales
- D. Production
- E. Finance and Administration

4. How to Develop a Business Plan

5. Marketing the Business.

I have put Accounting at the top of the list because without a basic knowledge of how accounting systems work, business owners (and staff) cannot understand how the business is traveling. Is it successful financially? The accounting system will give an answer to that question.

Lesson 1

The Accounting Framework

Why You Need to Understand Accounting

In the confusion and misunderstanding of accounting, it is easy to say, “I don’t need it.” The fact is, if you’re in business, you need to understand and *use* accounting methods, because they provide you with important information about your business. From the accounts of the business, it is possible to identify many issues in business that need to be addressed. For example, if the company is making little or no sales (i.e. there is little income), we can begin to ask why is income so low. Is it because our prices are too high? Is it because we lack the sales skills?

On the other hand, we might have a lot of income but little profit. This might mean that we do not control our expenses properly, or perhaps it might indicate that sales staff is selling our goods or services too cheaply. Sales people are notorious for getting sales by discounting the price (what is called “buying business”), and a well-constructed accounting system will help identify these issues.

A good accounting system needs to be put with general management reporting so that those in charge can identify what is happening in the business, find areas that need to be improved, then set on a plan of improvement that will enhance the business and secure its future.

Concepts you will learn in this chapter:

- Assets
- Liabilities
- Equity
- Debit
- Credit
- Chart of Accounts
- Trial Balance

Many people are confused by accounting. I sympathize with them, for I struggled with accounting for many years. Part of the reasons for the confusion arises from school bookkeeping classes which often takes part of the accounting area and attempts to teach this part without providing an understanding of the whole.

The material covered here has only one aim: to teach people how to *understand* accounting. It does not teach, for example, some of the more complex transactions that might take place in a sophisticated accounting system. But it does teach you how to understand *double entry* accounting. Armed with the knowledge, most small businesses can survive very well and manage the financial accounting of their business with ease.

Let's start with a simple formula and some terminology that we will need to understand.

$$\text{Equity} = \text{Assets} - \text{Liability}.$$

Terms:

Equity. Sometimes called owner's equity. This is what the owner (or owners if there is more than one) have. It is the total of Assets minus Liabilities. That is, if the business has a bank account (an asset) containing \$100 and there are no liabilities (debts owing to another person or company), then the Equity is equal to \$100.

Assets. These are things the business possesses that have tangible value. It could be money in the bank. It could be a motor vehicle that the company has purchased that has value in the marketplace. In this instance, the motor vehicle asset would be worth what it could fetch in the second-hand motor vehicle market. That value would depend on whether it is sold to a car yard for a wholesale price or sold directly to a buyer at closer to current retail price. This indicates that we have some choices to make when we value assets that we own.

Liabilities. This is what we owe the bank (or other sources of borrowed funds) or our suppliers at a particular point in time. Liabilities are often classified as short term or long term, since a business might borrow money in order to function with a five-year pay back period. Short term liabilities are those owed to suppliers who might give us seven, fourteen or thirty days in which to pay.

Accounting takes place by writing (or typing) the details of a transaction which are recorded as *debits* or *credits*. We'll explain these words in detail as we go along, but for now it is enough to remember that these words tell us what *kind* of transaction is taking place.

In the development of accounting over the centuries, it was eventually understood that by duplicating each financial transaction in the system, a series of checks and balances could be put in place to make sure that the information was accurate. This is what is referred to as a *double-entry* system of accounting. A double-entry system has two transactions. One of them will be a *debit* transaction; the other will be a *credit* transaction. The same amount must occur as both a debit and a credit in order for the accounting books to be verified as being accurate. By making the entry twice, there is a chance to verify that the data is accurate.

An accounting system has two major sections. One is called a *Balance Sheet* (we'll learn about the other one later). A Balance Sheet is a way of putting the mathematical formula above (Equity = Assets - Liabilities). The Balance Sheet thus has three components, and these are three components of the formula Equity = Assets - Liabilities.

In order to achieve a double-entry system of accounting, however, it is necessary to apply a little math and rearrange the formula above so that it looks like this:

Original Formula:

$$\text{Equity} = \text{Assets} - \text{Liabilities}$$

Double Entry Formula:

$$\text{Assets} = \text{Liability} + \text{Equity}$$

Remember our example above that looked like this:

$$\text{Equity} = \$100 - \$0$$

$$\text{Therefore Equity} = \$100$$

Well now it looks like this:

$$\$100 = \$0 + \text{Equity}$$

$$\text{Therefore Equity} = \$100$$

If we were to place an imaginary line down the page where the “equals” sign exists, we would see that both “sides” of the imaginary line balance (that is, they add up to the same amount).

$$\$100 = \$0 + \$100$$

Assets	=	Liabilities + Equity

Fig. 1. T-Bar showing accounting formula.

In *calculating* the Equity, the formula $\text{Equity} = \text{Assets} - \text{Liabilities}$ is used. But in *displaying* the information in Balance Sheet format, the formula $\text{Assets} = \text{Liabilities} + \text{Equity}$ is used. There is no magic here, just a little math to reformat the basic formula. We could now represent the Balance Sheet formula like this, Fig. 1.:

A Balance Sheet is thus a way of displaying financial information, and it is called a Balance Sheet because the entries on each side must balance.

This accounting formula ($\text{Assets} = \text{Liabilities} + \text{Equity}$) is all you need to understand in order to comprehend modern accounting systems. It is neither complex nor difficult, but sometimes it is necessary to think about how particular transactions might be put into such a framework. Before we do that, however, we need to understand the words *debit* and *credit* a little better.

Most confusion in accounting that I have come across arises because there is a lack of understanding of the words *debit* and *credit*. Rather than give a definition of these words from a dictionary or accounting text book, let's see how the words are used in accounting transactions. This will explain the words better than any text book or dictionary.

Our basic asset is usually a bank account. Most of us wish it were healthier, but we must settle for whatever it is right now. (In our example above, the bank account has \$100.) However, we've been fortunate enough to have someone gift us \$500 and we want to add this to our Balance Sheet report:

	Assets	=	Liabilities	+	Equity
Previous Balance:	\$100	=	\$0	+	\$100
Gift	\$500	=	\$0	+	\$500
New Balance	\$100 + \$500	=	\$0	+	(\$100 + \$500)
Or	\$600	=	\$0	+	\$600

Notice that in order to achieve this Balance Sheet we had *two* transactions. One of them *added* an amount to the Asset called Bank Account. The other entry in the Balance Sheet *added* the same amount to the Equity account.

The addition to the Bank Account is called a *debit*. The addition to the Equity account is called a *credit*. These two words – *debit* and *credit* – are used to indicate the two transactions that are necessary for double-entry accounting.

For every debit there must be a corresponding credit somewhere in the system. And this is where the confusion can arise. Many people are familiar with their bank statements and on these bank statements a credit transaction increases the account while a debit transaction decreases the account. And the confusion arises because of the tendency to think in a single category. *A debit transaction can either add or subtract an amount, just as a credit transaction can add or subtract an amount.* Remember this and it will save a lot of confusion.

The important question is this one: which side of the accounting equation are we looking at?

On the Assets side of the accounting equation, a debit transaction *adds* an amount to the Asset, whereas a credit *subtracts* an amount.

However, on the “other” side of the accounting equation (i.e. , on the Liabilities and Equity side of the equation), a credit *adds* an amount, whereas a debit *subtracts* an amount.

We could represent this thus, Fig 2.:

Now we understand why our bank statements show credit as increasing and debit as decreasing the account. To the bank, your account is a *liability*. Therefore, it follows the rule for the Liabilities/Equities side of the accounting equation: Credit adds, debit subtracts.

Assets	=	Liabilities + Equity
Dr +		Dr —
Cr —		Cr +

Fig. 2. T-Bar showing how debits and credit are used, depending on which side of the ledger is being used.

So, there you have it. A debit (abbreviated to Dr) can add either an amount to the Assets list, or it can subtract an amount from the Liabilities or Equity. On the other hand, a credit (abbreviated to Cr) subtracts from the Assets side, while adding to the Liabilities and Equity side.

If we were to display the transactions we have used above under the two headings, Debit and Credit, we would see them displayed like this:

	<u>Debit</u>	<u>Credit</u>
Opening Balance		
Bank Account	\$100	
Equity		\$100
Gift		
Bank Account	\$500	
Equity		\$500
Totals	<u>\$600</u>	<u>\$600</u>

There you have the framework of a Balance Sheet and therefore the basis of modern accounting. Notice that the debit transaction was always listed first, followed by the credit transaction.

But let's think about this a little more. I listed above an item called "Opening Balance" which had the original \$100 in our bank account. How did that money get there? It usually gets there in the first place by the business owner supplying the business with the start-up money it needs, in this case, \$100. Therefore, our accounting transactions really should look something like this:

	<u>Debit</u>	<u>Credit</u>
Opening Balance		
Bank Account	\$100	
Owner's Capital		\$100

Which would look something like this in our Balance Sheet:

<u>Assets</u>	=	<u>Liability</u>	+	<u>Equity</u>
\$100	=	\$0	+	\$100

If, on the other hand, the start-up money for the business was obtained by borrowing from the bank (or another source), then the transactions would appear like this instead.

	<u>Debit</u>	<u>Credit</u>
Opening Balance		
Bank Account	\$100	
Bank Loan		\$100

Which would look like this in our Balance Sheet:

<u>Assets</u>	=	<u>Liability</u>	+	<u>Equity</u>
\$100	=	\$100	+	\$0

What the accounting system tells us, however, is the *current* condition of the business, and if all the financial transactions of the business are recorded immediately they occur, then the financial reporting system can continually inform the business owners of the *present* state of their business. We'll understand this even more when we complete the next section of the tutorial.

Notice that the group called Assets has an item under it called Bank Balance. Under Equity, we have an item called “Owner’s Capital.” These items are referred to as *accounts*. This is the list of items we use under all headings, and they take the title Chart of Accounts. A Chart of Accounts, therefore, is merely a list of the items used in the accounting system to list Assets, Liabilities or items referring to the Owner’s Equity.

Also notice, that when we list debits and credits, debits are always listed in the left-hand column, while credits are listed in a right-hand column. To list these the other way around is to do it incorrectly, since accounting standards and conventions determine how these are done. We can add great confusion at times by following our own path. Besides, if we use computerized accounting, it will follow the accounting standards. So we might as well get used to it right now.

EXAMPLE

John Brown has started a company called Brown’s Enterprises. He has provided the company \$1,000 to cover startup expenses such as government fees, printing of business cards, etc. He also borrowed \$1,000 from his father, Bert Brown. List the debit and credit transactions to show this, then show the *result* of the transactions in the Accounting formula.

	<u>Debit</u>	<u>Credit</u>
Opening Balance		
Bank Account	\$1,000	
John Brown’s Equity		\$1,000
Bank Account	\$1,000	
Loan from Bert Brown		\$1,000
TOTALS	<u>\$2,000</u>	<u>\$2,000</u>

If we look at the Balance Sheet, we see

<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Equity</u>
\$2,000	=	\$1,000	+	\$1,000

Both “sides” of the balance sheet add to the same amount, therefore the books balance.

Let’s assume that the business has decided it does not need \$1,000, and it therefore wishes to return to Bert Brown \$500 of the money he had loaned to it. The transactions would look something like this.

	<u>Debit</u>	<u>Credit</u>
Loan Repayment		
Bank Account		\$500
Bert Brown Loan Account	\$500	
TOTALS	<u>\$500</u>	<u>\$500</u>

If we combine all the transactions into one list, it would look like this:

	<u>Debit</u>	<u>Credit</u>
Opening Balance		
Bank Account	\$1,000	
John Brown Equity Account		\$1,000
Bank Account	\$1,000	
Bert Brown Loan Account		\$1,000
Loan Repayment		
Bank Account		\$500
Bert Brown Loan Account	\$500	
TOTALS	<u>\$2,500</u>	<u>\$2,500</u>

Notice that our totals do no more than add up the transactions in each column to see if they are in balance. It is called a Trial Balance and tests to see that the debits and credits are equal.

When the individual transactions are listed, however, we need to consider whether the debits and credits recorded *add* to an account or *take away* from an account. Consider the Bank Account. It has had two transactions recorded for it, one was the Opening Balance and the other was the loan repayment.

	<u>Debit</u>	<u>Credit</u>
Bank Account	\$2,000 (+)	\$500 (-)

Since the Bank Account is an asset, debits *add* amounts to the account while credits *deduct* amounts. Here the current Bank Balance is \$1,500.

Bert Brown's Loan Account, however, looks like this.

	<u>Debit</u>	<u>Credit</u>
Bert Brown Loan Account		
Loan Repayment	\$500 (-)	
Loan		\$1,000 (+)

Since the Loan Account is a Liability, credits *add* amounts while debits *deduct* amounts. We can see that Bert Brown is still owed \$500.

If we display the *result* of all the transactions, and take into consideration the plus and minus signs, then the Balance Sheet totals will show

<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Equity</u>
\$1,500	=	\$500 +		\$1,000

If you are using a computerized accounting system, when it prints the Balance Sheet, it will print them down the page something like this:

BROWN'S ENTERPRISES**Balance Sheet**

Assets	\$1,500
Liabilities	\$ 500
Equity	\$1,000
Total Liabilities plus Equity	\$1,500

Therefore: Assets = Liabilities + Equity

EXERCISES***Exercise 1***

Answer these questions.

- a. Are debits listed in the left or the right column? _____
- b. For every debit, there must be a _____ of the same / different (Cross out one) amount?
- c. The Accounting Equation is: _____ = _____ + _____
- d. What is a liability? _____

Give an example: _____

Exercise 2.

Mary Smith Has started up a company called Mary's Knitwear. In order to get started, she borrowed \$5,000 from the bank and contributed \$1,000 of her own money. Show the credit and debit transactions for these transactions (Trial Balance) then display the result in a Balance Sheet.

Work page . . .

This page left blank intentionally.

Lesson 2

The Chart of Accounts

Concepts You Will Learn

Chart of Accounts

In the first lesson we learnt about the Balance Sheet. We studied that Balance Sheet in very broad terms, and in this lesson we will expand our understanding of the Chart of Accounts and learn about the General Ledger.

In Lesson One we learnt how to use the accounting equation

$$\text{Assets} = \text{Liabilities} + \text{Equity}.$$

In the examples used in Lesson One, we used an asset called a bank account and a liability called a loan account in order to illustrate how a Balance Sheet works. Assets, remember, are those things owned by the business that usually have some tangible value. That is, they are worth more than \$0. Sometimes a business may record assets with \$0 value, but for our purposes here, we'll think of assets as having some value above \$0.

In real life there are many things that make up a Balance Sheet. For example, there is the obvious asset of money in the bank. If the business owner buys a computer to run his computerized accounting package, then this computer is an asset, and it would be listed as an asset in the Balance Sheet. Think of other things that might be listed as an asset: motor vehicles, office furniture, buildings, etc. There might be tools and other equipment needed to operate the business. Farmers need tractors, whereas plumbers need a small back-hoe and plumbing tools. Both of them need a vehicle of some kind to get around in while running the business.

If the business has two bank accounts, then both accounts will be listed as assets. Businesses often keep a small amount of cash on the premises to buy postage stamps, tea or coffee for the staff. This amount of cash, called Petty Cash, is also an asset of the business.

There is another item that belongs in the list of assets. Let's say the business makes a sale to a customer, but gives that customer 30 days in which to pay. The business now has money owing to it, and this amount is an asset of the business. It is commonly referred to as Accounts Receivable (or Trade Debtors).

From these items, we can construct a list of Assets that might look like this:

Assets: Bank Account
 Petty Cash
 Accounts Receivable
 Motor Vehicle
 Office Furniture
 Office Equipment
 Computer Equipment
 Business Equipment

This list of items is called the Chart of Accounts. The Chart of Accounts is a list of all the items (or they can be called *accounts*) that make up the Assets, Liabilities and Equity sections of the Balance Sheet. (There are more items we'll add in the next lesson, but for now we are dealing with the Balance Sheet.)

Think about Liabilities. What kind of items would we find that make up the liabilities of a business. An obvious one is money lent to the company, perhaps by a bank, or by the owners themselves when they start the business. When a business buys supplies of various kinds, such as stationery, and is given a time period before payment is due, the Balance Sheet needs to reflect these amounts, therefore we have a Liability item called Accounts Payable (or Trade Creditors).

So our Liabilities section of the Balance Sheet might look like this:

Liabilities: Accounts Payable
 Owner's Loan Account
 Bank Loan Account
 Government Taxes

That last item here is an interesting one, because it reminds us that where any transaction involves money being paid to the government, then that portion should be identified and placed in the Liabilities section of the Balance Sheet so that we know how much is owed to the government at any time. An important component for many businesses is withholding taxes on staff wages. This item would occur even in a one-person business, since that employee (even if he is the business owner) will be paid wages from the company and therefore incur government taxes of some kind.

Other items that might be included in the Liabilities section would include money that must be deposited into staff retirement accounts.

The final area of the Balance Sheet, the Equity section identifies the value of the business that belongs to the owner. In theory, if the business owner sold all the assets and converted

them to cash, paid out any liabilities that had been incurred, the balance would be the owner's equity or real worth of the business.

If we list our Chart of Accounts from the items above, it looks like this:

Assets	Bank Account
	Petty Cash
	Accounts Receivable
	Motor Vehicle
	Office Furniture
	Office Equipment
	Computer Equipment
	Business Tools
Liabilities	Accounts Payable
	Bank Loan
	Government Taxes
Equity	Owner's Capital Account

We do not *have* to list the items in exactly the format used here. For example, Computer Equipment might be a part of the list called Office Equipment, so it would look like this:

Office Equipment
 Computer Equipment
 Photocopier

One of the very great advantages of an accounting system is its *flexibility*. It can be set up in different ways to suit the needs of different businesses. While at the end of the day the accounting system records a list of debit and credit transactions, the format of the Chart of Accounts can be structured to suit the individual needs of each business. There is not a real lot of variation, but enough to make it easy for each business to set up a Chart of Accounts to help it operate successfully.

There is no magic formula in determining a Chart of Accounts. The first question to ask is this: What information is needed to run and operate this business? When that question is answered, it is relatively easy to construct a Chart of Accounts that has meaning for the business. Some of the considerations will be driven by government regulation, such as taxation requirements. But more information is needed than that required by the government. Its only interest in your business is the tax revenue it will gain. It is not concerned with general information that will enhance management of the business. One of the reasons so many businesses get into a little trouble is that they give the accounting work to an accountant, whose training is in compliance with tax law, rather than in business management. The result is that the untrained business accountant fails to provide the business with correct management information.

Each of the accounts that make up the Chart of Accounts is given a number in most computerized accounting systems. With a little imagination and planning, groups of numbers can refer to the three sections of the Balance Sheet, perhaps like this:

Assets
1000 - 1999

Liabilities
2000 - 2999

Equity
3000 - 3999

We can see from this, that any account number beginning with a '1' refers to the Assets, whereas a '2' refers to Liabilities, and so on. This is a very organized and easy-to-follow system of numerically identifying items in the Chart of Accounts

EXERCISES

Review the material in Lesson One then complete these exercises.

1. What is another name for Accounts Payable? _____
2. From the following data, calculate the owner's Equity to complete the Balance Sheet Report.

Assets

Bank Account	\$3,000
Accounts Receivable	\$2,500
Office Furniture	\$1,000
Computer Equipment	<u>\$2,500</u>
Total Assets	_____

Liabilities

Accounts Payable	\$1,500
Bank Loan	<u>\$5,000</u>
Total Liabilities	\$_____

Equity

Owner's Equity	\$_____
----------------	---------

3. Trade Debtors is also referred to as _____
4. Construct a Trial Balance from the following information. Susan Johnson started her T-shirt company by borrowing \$10,000 from the bank. In addition, she put \$5,000 of her

Liabilities: _____

Equity: _____

6. Joe decided to start his own plumbing business. In order to do this, he opened a bank account with \$5,000, then purchased \$2,250 worth of plumbing tools with money from this bank account. Create the Trial Balance transactions that would reflect Joe's business activity.

	Debits	Credits

7. Now, construct a Balance Sheet for Joe's plumbing business, showing the Assets, Liabilities and Equity accounts that Joe might have created.

Assets

_____ \$ _____
 _____ \$ _____

Liabilities

_____ \$ _____

Equity

_____ \$ _____

Result: \$ _____ = \$ _____ + \$ _____

Lesson 3

Daily Transactions

Concepts you will learn

Revenue

Expenses (or Costs)

Direct and Indirect Expenses

Gross Profit (or Gross Margin)

EBIT (Earnings Before Interest and Taxes)

Taxable Income

Net Profit

Profit and Loss (or Income) Statement

In the first lesson we learnt about the Balance Sheet and how it tells us the state of affairs of the company. The Balance Sheet tells (or *should* tell) the business owner(s) what is the current value of the business. Remember, it is only current if all the financial information pertaining to the business has been entered into the accounting system.

In order to arrive at the Balance Sheet, however, most of the accounting transactions are entered into the system *outside* of the Balance Sheet then *transferred* into the Balance Sheet Accounts. Some transactions are entered directly into the Balance Sheet as we have learnt in the previous lessons.

In Lesson One I said there were two major sections of the accounting, the first being the Balance Sheet. The second section is called the Profit and Loss Statement (often called “P and L” or “P&L” for short). It is often referred to as the Income (or Revenue) and Expense Statement.

As these words indicate, this area of accounting has to do with the buying and selling transactions of the business. The plumber fixes a water leak and charges for his time and materials. He will record the total amount of his bill as a sales item in the Income section of the P&L. However, the plumber will have incurred expenses in order to fix that leak. There

is the cost of running his motor vehicle so he can get to the job. Perhaps there were pipes or washers he had to buy in order to complete this particular job. He used some kind of stationery to write out his invoice for the customer, and this stationery is an expense to the business. And if he had to send the invoice in the mail, then postage costs will also be added to his list of expenses. These items that he purchased will be entered into the Expense area of the “P&L.”

The way these items are recorded is to create additional items in the Chart of Accounts like this:

Income (or Revenue)

Sales

Fees

Expenses (or Costs)

Motor Vehicle fuel

Water Pipes

Printing and Stationery

Labor

Postage

Telephone

If we look at some of these expenses, however, we will see that some of them are *directly* related to the particular job completed by the plumber. If he purchased water pipes for the particular job, then these pipes were an expense or a cost directly associated with completing *this* job.

Let’s illustrate this with another example. You engage a builder to build a house for you. He looks at the plans, calculates the material he needs, then purchases this material in order to build your house. These material costs are *directly* related to your house. Had this builder not secured your contract, he would not have to buy this material. The materials are a *direct* cost.

On the other hand, this builder uses stationery to send his invoices to his customers, but the cost of buying a ream of stationery is spread across many jobs that the builder completes. The cost of this stationery, therefore, is an *indirect* cost. That is, it cannot be easily assigned to one particular customer of the business.

Let’s say this builder employs a book keeper to create his invoices, pay his bills, etc. He pays this person an hourly rate. He employs this person to undertake work on all his jobs. On the other hand, he also employs casual carpenters to help him on his jobs. If he needs one for a particular section of work, he employs them, otherwise he does not. These carpenters are a cost *directly* related to a particular job.

So, in order to better manage our businesses, we will want to divide our costs (or expenses) into direct and indirect costs like this:

Revenue

Sales

Direct Costs

Building materials

Casual labor

Indirect Costs

Accounts clerk

Postage

Stationery

etc

Now that we know how to record our income and expenses, we can calculate two very important items from the data. The first of these is *Gross Profit* or *Gross Margin*. It is calculated thus:

$$\text{Gross Profit} = \text{Revenue} - \text{Direct Costs}$$

Gross Profit tells us if we have enough money – after paying our direct costs – to cover our indirect costs *plus* produce profit for the business. By the way, a common name for Direct Costs is “Cost of Goods” or “COGS” for short. I prefer to use the term Direct Costs since it indicates more clearly the nature of what is being identified, the direct cost of doing a particular job.

EBIT

In displaying the P&L results for a company, it is often done by applying interest payments and taxes as the last items. Both interest and taxes can often distort the true earning potential of a business, so it is prudent to see what the business earns before interest and taxes are applied.

The key figure in any business, then, is the one called Earnings Before Interest and Taxes (EBIT). The taxes referred to here are the taxes that the business enterprise will pay based on its profit for the year. (It does not include other taxes, such as employee withholding taxes, which are deducted as either a Direct or Indirect expense.) It is calculated thus:

$$\text{EBIT} = \text{Revenue} - \text{Direct Costs} - \text{Indirect Costs}$$

Once EBIT is determined, we *add* to this amount any interest that might have been earned during the reporting period, and we *subtract* any interest paid. This is the amount on which tax is usually payable.

$$\text{Taxable Income} = \text{EBIT} + \text{Interest Earned} - \text{Interest Paid}$$

Our final calculation in the P&L is called *Net Income*. It is calculated thus:

$$\text{Net Profit} = \text{Gross Profit} - \text{Indirect Costs} + \text{Interest Earned} - \text{Interest Paid} - \text{Taxes}$$

Another way of putting Net Profit is

$$\text{Net Profit} = \text{EBIT} + \text{Interest Earned} - \text{Interest Paid} - \text{Taxes}$$

It is worth remembering here that profit does not necessarily mean money for the owners. Management writer, Peter Drucker, has correctly identified profit as “The future cost of staying in business.” It is only after these long term costs have been met from the business that the owners should take some of the profit as a shareholder’s dividend.

It is therefore *very* important that the business correctly identifies *long term* costs associated with its operation and apportion these costs on a monthly or periodic basis, since the shareholders will want all the profit sent to them as their dividend. But long term costs incorrectly accounted for are not profits and should not be granted to the shareholders.

A Profit and Loss Report, then looks like this (the right-hand column is the total amount for each group):

Profit and Loss Statement

(Or Income Statement)

For the Period

January 1 to June 30

Revenue

Sales	<u>\$200,000</u>	
		\$200,000

Direct Costs

Materials	\$100,000	
Labor	<u>\$ 35,000</u>	
		<u>\$135,000</u>

Gross Profit		\$ 65,000
---------------------	--	------------------

Indirect Costs

Clerk wages	\$ 32,500	
Stationery	\$ 500	
Motor vehicle expn	\$ 1,500	
legal fees	<u>\$ 500</u>	
		<u>\$ 35,000</u>

E B I T		\$ 30,000
----------------	--	------------------

Interest Earned	\$ 2,500	
Interest Paid	\$ 7,500-	
Taxable Income		<u>\$ 25,000</u>
Tax @ 30%	\$ 7,600-	
Net Profit		<u>\$ 17,500</u>

Our Chart of Accounts, again, is not limited to those items illustrated in this example. We can create a Chart of Accounts that is meaningful to a particular business and provides business owners and managers with information to help them manage the business. For example, a computer store might sell computers, monitors, printers and other items, as well as provide technical support services to fix and repair computers. The Chart of Accounts will help this business to identify revenue from these two basic activities as well as costs associated with them. In this instance, the Chart of Accounts could look something like this.

Revenue

Equipment sales
Repair & technical sales

Direct Costs

Equipment at cost
Technical labor
Rent for tech workshop
Rent for Sales Showroom

Indirect Costs

Accounting fees
Legal fees
Telephone
Fax
Office Supplies
etc.

Interest Earned**Interest Paid****Taxes**

EXERCISES

1. Identify each of the following Expense items as either a direct or indirect expense.

Materials to make window frames _____

Fees paid to an accountant to complete
the end of year financial reports _____

Printing _____

Tea and coffee for the staff canteen _____

Advertising _____

2. In Lesson Two you had to create a Balance Sheet Chart of Accounts for your own (real or imaginary) business. Now create the Chart of Accounts that would be associated with the Profit and Loss Statement of that business.

Revenue

Direct Costs

Indirect Costs

3. Fill in the blank. EBIT is calculated as:

Revenue — _____ — Indirect Costs.

4. Bill's Building Business builds homes for people based on the plans they supply. Indicate whether the expense items listed below are Direct or Indirect costs by crossing out the incorrect answer.

Timber	Direct / Indirect
Telephone Charges	Direct / Indirect
Roofing Tiles	Direct / Indirect
Stationery	Direct / Indirect
Nail-gun Hire	Direct/Indirect
Bank Charges	Direct/indirect
Fuel for work truck	Direct/indirect
Legal Fees	Direct/indirect

This page left blank intentionally.

Lesson 4

Putting It All Together

At the beginning of Lesson 3, I said that the way to get business activity into the balance sheet was through the P&L section of the accounting system. In this lesson, we are going to see how our Chart of Accounts is used in real life accounting, following the rules for double-entry accounting. Remember, double-entry means that every transaction must be recorded *twice*: once as a debit and once as a credit.

Now that we've learned about the Profit and Loss section of the Chart of Accounts, we need to know how to use this section in terms of accounting transactions as debits and credits. Remember the T-Bar from Lesson One? It looked like Fig. 1

<u>Assets</u>	=	<u>Liabilities + Equity</u>
Dr +		Dr —
Cr —		Cr +

Fig. 1. T-Bar showing how debits and credit are used, depending on which side of the ledger is being used.

The important thing to grasp is that on the left-hand side of the bar, a debit transaction *adds* money to an account, while a credit transaction *subtracts* an amount from an account.

We could draw a line under these elements of the Balance Sheet, then add our P&L elements under them are represented in Fig. 2.

<u>Assets</u>	=	<u>Liabilities + Equity</u>
Dr +		Dr —
Cr —		Cr +
Expenses		Revenue

Fig. 2. T-Bar showing how Revenue and Expenses are related to the debits and credits.

In days when accountings were recorded in a book, the various elements of the accounting system were referred to as *Journals*. The sales were recorded in the Sales Journal. Expenses were recorded in Purchases Journal. There is also a journal for transactions that allow access to all the items in the Chart of Accounts. It is called the *General Journal*.

Transactions from these independent journals are eventually copied, or in more formal jargon, *posted*, to the *General Ledger*.

(The terms used here are utilized in many computerized accounting packages.) The General Ledger is no more than all the elements of our Chart of Accounts. Every transaction for every account is found in the General Journal, and from this we can calculate the Balance Sheet items. In the Sales Journal, however, we only get to see details pertaining to sales transactions. We would see, for example, who the customer was in any transaction, and the amount of money involved in a particular transaction. When we go to the General Ledger, however, the customer is not so important. We do not usually report customer names or anything to do with customers in the Balance Sheet other than their financial transactions with us. The Balance Sheet might contain, however, the sum total of money owed from all the customers in an Asset account called Accounts Receivable (or Trade Debtors). Some of the Balance Sheet amounts are thus derived from the Sales and Purchases Journals.

Modern computer software allows the interaction between the various Journals to be immediate. If a sale is made, the money is either received and deposited into the bank account otherwise an Accounts Receivable amount is created for the sale. In either case, if we were to print a Balance Sheet report it would have included the most recent transactions.

Some accounting software packages do not automatically post the transactions to the General Journal at the time of data entry. These packages require a process called "Posting" to be completed most usually at the end of each month. Other packages may contain a facility where the user can either have automatic posting at the time of transaction or wait and post at selected times.

Now that we have completed the picture of how the accounting system integrates all aspects of our business, we can see how the various transactions might occur in our double-entry system of accounting. Consider these transactions

1. Cash from a sale to M. Jones for \$100

	<u>Debit</u>	<u>Credit</u>
Bank Account	\$100 (+)	
Sales		\$100 (+)

Remember, the bank account is an Asset account, a debit account (debit *adds* to the account).

Because revenue accounts are credit items (i.e., credit *adds* to the account), a plus sign has been placed besides the sales amount to indicate how we would do the maths with this number when we come to add up the balance for that account.

2. A Sale was made to Great Computer Systems for \$950. They have 30 days in which to pay their account

	<u>Debit</u>	<u>Credit</u>
Accounts Receivable	\$950 (+)	
Sales		\$950 (+)

Accounts Receivable is an Asset account; therefore a debit *adds* to the account.

3. When Great Computer Systems pay their invoice of \$950, another double-entry transaction is recorded.

	<u>Debit</u>	<u>Credit</u>
Bank Account	\$950 (+)	
Accounts Receivable		\$950 (-)

In this case, we have received a payment which goes to the bank account. At the same time, we need to reduce the Accounts Receivable by the same amount, indicated that this money is no longer an Asset owing to the company, but is now an Asset in the bank.

4. Postage stamps purchased for the business

	<u>Debit</u>	<u>Credit</u>
Postage Stamps	\$100 (+)	
Bank Account		\$100 (-)

5. Printing costs for new brochures which will be paid for in 30 days

	<u>Debit</u>	<u>Credit</u>
Printing	\$500 (+)	
Accounts Payable		\$500 (+)

Printing is an expense account, or Debit account (Debit *adds* to the account).

Accounts Payable is a Liability account (a Credit Account, so credit *adds* to the account)

6. When the printing Bill is paid, the accounting transactions look like this:

	<u>Debit</u>	<u>Credit</u>
Accounts Payable	\$500 (-)	
Bank Account		\$500 (-)

From these examples, we note a few important things (some of which have been stated in earlier lessons).

A. The Debit transaction is recorded first.

B. A debit can be plus or minus. It depends in which side of the T-bar the account is located.

C. Credit can be plus or minus. Again, it depends on which side of the T-Bar the account is located.

D. All transactions contain a debit and credit.

E. Not all transactions contain a plus and a minus account. All transactions, however, contain a debit and a credit. Sometimes the debit and the credit can both be plus accounts, or they could both be minus accounts.

The important questions we need to ask in every transaction:

i. Does this transaction add or subtract an amount from the account?

ii. Is this account a debit account or a credit account? If it is a debit account, the debit adds to the account and a credit subtracts. If it is a credit account, credit adds to the account whereas a debit subtracts.

7. Joe's Mowing spends \$50 on fuel for the mower. Joe, the owner, paid cash for it. The transactions look like this.

	<u>Debit</u>	<u>Credit</u>
Mower Fuel	\$50	
Bank Account		\$50

Mower Fuel, a P&L account (debit), records the expense. The Bank account (Balance Sheet) records a reduction in the bank account by the amount of the transaction. In this instance the credit transactions *subtracts* from the account because it is an Asset account.

If, on the other hand, Joe obtained fuel on his account and agreed to pay for it within the next 14 days, instead of reducing the bank account by the amount of the sale, he has created a liability. So the transaction is recorded thus:

	<u>Debit</u>	<u>Credit</u>
Mower Fuel	\$50	
Accounts Payable		\$50

Sometimes we have to ask the question: What am I spending money on? In the case of fuel for the mower, Joe is buying something that will be consumed fairly rapidly. Therefore, it is "expensed" in the Purchases Journal.

If, however, Joe purchased a new ride-on mower for \$1,500, he has effectively changed the nature of his Assets. Instead of owning cash in the bank, he now owns a shiny new mower. In this case, the mower purchase is not expensed in the Purchases Journal, rather it is a transfer of Assets. The Transactions would look like this:

	<u>Debit</u>	<u>Credit</u>
Victa Mower	\$1,500	
Bank Account		\$1,500

Both of these accounts are Asset accounts, so the credit *subtracts* from the Bank Account.

If, on the other hand, Joe purchased his new mower on credit, then the transactions would be:

	<u>Debit</u>	<u>Credit</u>
Ride-on Mower	\$1,500	
Accounts Payable		\$1,500

In this instance, Accounts Payable is a Liability account and therefore the credit *adds* to the account, increasing the liabilities by \$500.

If you can grasp how these transactions fit together, you can see how the Balance Sheet will always reflect the current state of affairs of the business if it is kept up to date. These concepts are not difficult, and with a little practice it is easy to learn how the Balance Sheet and P&L components work together.

EXERCISES

1. Record the debit and credit transactions for the following business activities.
 - a) A grocery store makes a cash sale of \$50.

	<u>Debit</u>	<u>Credit</u>
_____	_____	_____
_____	_____	_____

- b) The grocery store buys stock valued at \$1,000. It will pay for this at the end of the month.

	<u>Debit</u>	<u>Credit</u>
_____	_____	_____
_____	_____	_____

- c) A business borrows \$5,000 from the bank.

	<u>Debit</u>	<u>Credit</u>
_____	_____	_____
_____	_____	_____

d) Joe's Mowing had 14 days to pay for the new mower which cost \$500. He now makes the payment (see above for previous transaction at time of purchase).

	<u>Debit</u>	<u>Credit</u>

e) A school purchases 30 new desks that cost \$25 each. It agrees to pay the supplier in 30 days.

	<u>Debit</u>	<u>Credit</u>

f) A business receives its telephone account for an amount of \$350 and has 21 days in which to pay the amount.

	<u>Debit</u>	<u>Credit</u>

g) A business receives its bank statement, and the bank has charged it \$15 in service fees.

	<u>Debit</u>	<u>Credit</u>

Hint: Are bank fees a cost to the business?

Lesson 5

Setting Performance Standards for the Business

Concepts you will Learn

Budgets

Key Performance Indicators

Break Even

Productivity Factor

While businesses often succeed in spite of the lack of formal management systems in place, this only occurs with very small businesses. As more staff are employed, so it becomes more critical for the business to put in place those management and financial disciplines that give the business the best chance of success. Success, however, needs to be defined. Does it mean making a huge profit for the owners? Does it mean keeping everyone employed indefinitely?

Every business needs clear goals. These goals commence with the business owners. Why have they invested in this business? To make money? Most likely. But these goals need to be translated into a financial document usually called a Budget, but which I prefer to call Performance Standards.

Let's say the goal of the company is to make 10% return on the invested capital. If the invested capital is \$500,000, then the business needs to return to the investors \$50,000 a year in order to meet the goal (or the "standard") of 10%. The next question which must be asked, then, is this one: What percentage net profit (See Chapter Three for explanation of Net Profit) can be made in this particular kind of business. If it is a manufacturing business it might make 10% net profit, in which case, the business needs to produce \$500,000 in revenue (or income) each year in order to make that profit. If, on the other hand, that same business is making only five percent net return, then it needs to have revenue of \$1 million.

Now we are in a position to put together a budget for this business. To do this, we first define our Chart of Accounts for the Profit & Loss section of our financial statements. The Profit and Loss accounts are revenue and expense items under the following headings:

Revenue
Direct Costs
Indirect Costs

We will ignore interest and taxes for the time being and add these in at the end.

So, our Chart of Accounts might look something like this:

Revenue (We will use numbers in the 4000-4999 range as unique identifiers)

4001 Revenue from Sales

Direct Costs (Identifier Range 5000-5999)

5001 Materials
5100 Direct labor
5110 Retirement entitlements for Direct labor
5120 Withholding Taxes for Direct labor

Indirect Costs (Range 6000-6999)

6010 Accounting Fees
6020 Bank Charges
6030 Computer Hardware expenses
6035 Computer Software
6040 Legal costs
6050 Office Supplies
6060 Printing and Stationery
6070 Office Telephone
6075 Mobile Phones
6080 Insurance premiums
6100 Indirect labor (e.g., office secretary)
6110 Retirement benefits for Indirect labor
6120 Withholding taxes for Indirect labor
6200 Motor Vehicle Running Costs (fuel & tires)
6210 Motor Vehicle repairs & maintenance
6220 Motor Vehicle Insurance
6900 Miscellaneous expenses

This Chart of Accounts while not a complete list, provides a good indication of what is required in each of the sections. Miscellaneous expenses are those of a small nature that are not easily grouped and are, in the scheme of things, usually insignificant. If an expense item

is significant, it probably should be listed as a separate item so that expenses allocated to this area can be seen in any report.

Once our Chart of Account is determined, it is now possible to determine the budget or standard for each item.

4001	Revenue	\$	1,000,000
5001	Materials	\$	300,000
5100	Direct labor	\$	350,000
5110	Pension Entitlements	\$	35,000
5120	Withholding Taxes	\$	<u>75,000</u>
		\$	760,000
	Gross Profit	\$	240,000
6010	Accounting Fees	\$	2,000
6020	Bank Charges	\$	200
6030	Computer Hardware	\$	5,000
6035	Computer Software	\$	1,800
6040	Legal costs	\$	0
6050	Office Supplies	\$	2,000
6060	Printing and Stationery	\$	5,000
6070	Office Telephone	\$	7,000
6075	Mobile Phones	\$	4,000
6080	Insurance premiums	\$	1,000
6100	Indirect labor	\$	100,000
6110	Retirement benefits	\$	10,000
6120	Withholding taxes	\$	30,000
6200	Motor Vehicle Costs	\$	5,000
6210	MV Repairs & maintain	\$	1,000
6220	Motor Vehicle Insurance	\$	800
6900	Miscellaneous expenses	\$	<u>200</u>
	Total Indirect Costs	\$	175,000
	EBIT (see Chapter 3)	\$	65,000

In determining the amounts that are spent against each item it is usual to look at historical expenditure and base any expectation against this. However, in the case of a new business where there is not historical data, it might be necessary to go to a Chamber of Commerce or some similar organization where information can be obtained pertaining to certain classes of business. These industry averages could then be used in establishing performance standards for the new enterprise.

Once the budget is in place, however, we can take two further steps in business management. One of these is the development of a business plan. This will be studied in future lesson material.

Break Even

However, there are two key items that need to be established in the life of any business. The first is what is called Break Even. This is the situation where the business pays all its expenses, all its wages (even to any shareholders who may be employed in the business), but does not make any net profit. It is, in other words, the amount of revenue required to keep the business operating so that it does not go backwards financially speaking.

Break Even is the amount of revenue needed to cover all expenses. In the example above, Break Even is \$935,000. This is the absolute minimum needed to keep the business afloat (at least in the short term).

Having determined Break Even, however, we can now determine the price we charge for our products or service.

Let's say our business here is a steel manufacturing business. It receives orders to make certain items, purchases the raw steel, cuts and welds it into shape, delivers it and installs it. What kind of business is this? What product or service does it sell? The usual answer is it sells steel, but this is not accurate. What this business sells is value-added labor service. If it buys steel rods, has them delivered in the back door then ships them out the front door, the business will make little or no money unless it does something with those steel rods while they are in the factory. In this case, what this manufacturer sells is *labor*.

How much should this business charge for its labor? All the expenses of the business will be met only if the laborers on the shop floor do some work. If they don't work, there is no revenue (or income) generated for the business. But it is not enough that they work. They must work at a certain income rate in order to meet the needs of the business, all the expense *except* the cost of the materials (this cost will be recovered from the customer). It is all the other expenses that need to be covered by the workers in the factory.

This is an easy amount to calculate. Taking the performance stands above, we take out material costs, and are left with total expenditure of \$465,000 in Direct Costs, plus \$175,000 in Indirect costs, a total of \$640,000.

Let's say this business has ten people working on the shop floor. They work 40 hours each week for fifty weeks of the year. This business has $10 \times 40 \times 50$, a total of 20,000 labor hours it can sell. In order to recover the \$640,000 dollars, it must sell its labor at \$32 an hour.

In real life, laborers never work 100% of their time. There are illnesses, time off for family events. Or, what is more important, if the business cannot *sell* all its available labor, then the labor rate must change.

If the business can only get 16,000 hours out of its work force (i.e. 80% of total time) then its charge out rate must be an hour.

The term *productivity factor* can refer to different things in a business. In this case, we have used the term to indicate the general productivity of the direct laborers. If they can only achieve 16,000 out of 20,000 hours, then the productivity level is 80%.

In the sales area, however, they have the target of selling these 16,000. If they can only sell 90% of these available labor hours (or 14,400 hours) then the business has to increase its labor recovery rate to (approx) an hour.

Alternatively, it may be able to reduce its staff, thereby reducing costs below \$640,000 which will permit it to maintain a recovery rate of \$40 an hour. Whatever labor rate is used, it is added to the customer's invoice. If the bill is acceptable to him, it is paid. But if the customer can find someone whose cost structure allows him to buy labor at \$35 an hour, the customer has a supplier who will be able to sell the same services at a lower rate. So there is constant pressure on businesses to control expenses, thereby keeping its recovery rate as low as possible to maintain its competitiveness in the marketplace.

Of course, if the business wants to make a profit, then it must charge more than this, since this is the break-even recovery rate. If the break-even rate is \$40 an hour and the business want to make ten percent profit, then it must charge \$44 an hour.

There are other uses of the financial information, all critical to the business. For example, when a business sells on credit, allowing the customer to pay at some date in the future, these amounts owing need to be managed or they can cripple a business. A good financial system must be able to report who owes the business money, and how long it is outstanding. Someone in the business must be assigned the responsibility of ensuring those amounts are paid on time. Debt collection, it is called, and letting this one item slip can make life very difficult for business owners and managers.

On the other side of this is balancing expenditure in the company. Somehow revenue and expenditure must be matched. It is preferable to collect money at the same time it is paid out, or even better, *before* it is paid out. There are ways of calculating the average number of days it takes to collect money and to pay it out. When comparing these numbers, we would see that a business that pays out in 35 days but collects in 45 days has to finance 10 days of business operation. If expenses run at \$1 million a year, this amounts to approximately \$50,000 (\$5,000 per day). Where does the business get this money? It borrows, pays interest, thus reducing the profitability of the business.

As you can see, the budget (performance standards) has many practical uses in the business.

1. It can be used to determine revenue targets for the business. Someone (the Sales Manager) will be assigned responsibility for generating the revenue (the Break Even amount).
2. It can be used to control expenses. If the revenue targets are met and the expenses limited to those in the performance standards, then the business makes its profit. All staff should be assigned the responsibility of maintaining costs according to the performance standard.
3. It can be used to determine recovery rates for labor services.
4. It can be used to manage Accounts Receivable, ensuring the revenue of the company is there when it is needed.

Key Performance Indicators

These key items are some of the Key Performance Indicators of any business. In the example we have used here, these KPI items are:

Revenue

Material costs
Direct labor
Indirect expenses
Available labor Hours
Available labor hours actually sold

If management is kept informed of these items on a regular basis (most probably weekly in this kind of business), then the business has a very good chance of success, since management is receiving important information that will permit it to make the right decisions to ensure the business stays afloat.

If revenue is down, either sales must be increased or costs reduced.

If costs are up, either a new supplier must be found or prices increased to cover those costs.

If customers are objecting the prices are too high, then management must find a way to improve productivity levels so its recovery rate can remain competitive.

Accounting methods and systems are at the heart of any business. We deny them at our peril, and without them we do not have the correct information to manage our businesses to the success level we aspire to.

These lessons do not provide a comprehensive approach to accounting. Like many professions, accounting has areas of debate. For example, some people do not like to include labor as a direct cost. I do. There is enough flexibility in the system for one business to do it one way while another does it a different way.

What is critical is that owners and managers get the right information to help them manage the business effectively. I have seen many hours wasted on accounting system trying to refine the account down to the smallest expense item. This is not a productive use of time in my opinion. The business does not need to focus on its small costs; it needs to focus on its large costs, those that, if not managed and kept in check, can break a business.

If a business has a budget, it is often not used in the correct manner. When a business has a set of Performance Standards, however, these get assigned to each staff member who is then held accountable for their portion of the standards.

These standards also become critical in the growth of the business. If the aim of the business is to double its revenue over the next five years, then the million-dollar salesperson must become a two million-dollar salesperson. Or else the business needs to hire an additional salesperson, or get rid of the existing one and hire a two million-dollar salesperson.

These five accounting lessons should provide you with enough background to commence building your own Chart of Accounts. Then you can assign the Performance Standards to these.

Get started . . . now! And may God bless you in your business enterprise.

EXAMPLE

A school has ten classrooms, each of which can seat 30 students. The total running costs of the school including wages for all teachers and support staff amounts to \$900,000.

a) If the school can fill each one of the seats in all the classrooms, what minimum price would it need to charge to recover all its costs?

Answer: The School can hold 300 students. Therefore, if it allocates the total expenses over all these students, its minimum tuition rate is $900,000 \div 300 = \$3,000$ per student.

b) If the school can only fill 85% of its available seats, how much will it need to charge to recover costs?

Answer: First, determine number of students: $300 \times .85 = 255$. Therefore, 255 students have to pay for the \$900,000 expenses. The tuition fee required for this is $900,000 \div 255 = \$3,529$ (approx) per student. If the market will not pay this price, then the school must find a way to either fill all its seats or reduce its expenses (or perhaps a successful outcome will include both activities).

EXERCISES

1. If a business has total revenue of \$2,000,000 and total expenses of \$1,800,000, what is the break-even amount for the business? _____

2. A bookshop sells books (of course). When it buys a book, it gets 50% discount from the publisher. It sells all its books at full retail price and does not discount. The costs of running the bookshop — including rent, wages, and other expenses (but not the cost of buying books to sell) — amount to \$300,000 for a year. What revenue will the book store need to achieve to cover all its costs, including the purchase of the books?

3. If this book store opened 250 days each year, what is the average value of sales you would expect each day? _____

4. If you were the owner of the bookstore, and you were enjoying life in Hawaii while staff looked after your store, what is the SINGLE MOST important Key Performance Indicator you would like to see? (Tick the one you think most important)

- How many hours the store was open
- Total wages bill
- Daily sales figures
- Total costs of books

Details of Advertising and promotion programs

5. A printing shop has a four-color print machine. The machine costs \$2 million, but is rented by the firm for \$200,000 a year. It requires two staff members to run it for each shift of eight hours, and their total costs to the business amount to \$100,000 a year. It requires maintenance for one hour every day. In addition, there are three salesmen, one manager, two accounting clerks who work in the business, and their combined wages and commission's bill comes to \$750,000. Rent on the building costs \$50,000 a year. Other expenses amount to \$200,000.

- a) What are the total expenses for this business? _____
- b) If the business works 240 days in a year, how many hours are available for the press to be in operation? Daily? _____ Yearly? _____
- c) If the sales staff can actually sell all these available hours, what is the recovery rate the business must charge for its printing work for the business to break even? _____
- d) The comparison of actual hours available to be sold and actual hours sold is called the _____

6. Why should a budget be called a performance standard? _____
