

General Ledger and Financial Control

IBM

Data Processing Application

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Data for Decision

The management team of a successful business makes decisions on the basis of facts. And the number, timeliness and accuracy of the available facts depend directly on the accounting methods employed.

Your accounting methods channel a great number of details into books and journals. These books and journals pass on their information and conclusions to subsidiary ledgers higher in the accounting scale. And at the apex of the accounting scale is the general ledger—the terminal point of all your accounting entries, the summary of your company's activities.

The general ledger and the financial reports that it provides demand the highest degree of accuracy: accuracy in summaries of great masses of detail, in the shortest possible time. So, the general ledger and financial reports to management demand accuracy, efficiency and speed.

These are the significant facts in summary form, supplemented by comparative and historical data. These are the facts management can use to analyze past performance, evaluate present conditions and visualize the future. These are the data for decision.

General Ledger Accounting

The evolution of accounting methods closely parallels increased production and the consequent growth of business. The first double-entry bookkeeping method used only two books—the daybook or journal, and the ledger. Each transaction was carefully recorded in the journal, both the debit and the credit side. Then the items were posted to the appropriate accounts in the ledger. This was usually a bound book, of considerable size, with groups of pages set aside for each type of account: receivables, payables, capital accounts, plant and equipment, and all the others.

Gradually, individual ledgers were established for all accounts in the general ledger. Only the totals from these subsidiary ledgers appear in the trial balance and in the control account in the general ledger.

Now the general ledger represents the control or master records, and the details supporting these master records are assigned to the subsidiary ledgers.

Let us outline briefly the basic requirements for an efficient general ledger accounting procedure:

CHART OF ACCOUNTS — preparation of general classifications.

SOURCE RECORDS — processing original data for multiple use.

TRIAL BALANCE — proof of all subsidiary ledgers.

INCOME STATEMENT — total income less expenses.

BALANCE SHEET — assets less liabilities equals net worth.

GENERAL LEDGER — producing the summarized record of all the company's transactions.

Chart of Accounts

Five broad divisions of accounts can include all the types of accounts you are likely to have in your company's operations:

ASSETS — things owned by the company, or amounts due the company.

LIABILITIES — amounts owed by the company.

EXPENSE — holding accounts to be entered to surplus as loss.

INCOME — holding accounts to be transferred to surplus as profit.

CAPITAL — proprietorship accounts owed to the stockholders.

Double-entry bookkeeping provides that every entry must have a compensating debit and credit. Regardless of how many entries are made, debits must equal credits. Figure 1 shows how these balancing debits and credits affect the above accounts.

DEBITS	CREDITS
Increase Assets	Decrease Assets
Decrease Liabilities	Increase Liabilities
Increase Expenses	Decrease Expenses
Decrease Income	Increase Income
Decrease Capital	Increase Capital

Figure 1. Balancing entries.

An orderly account classification is necessary to the preparation of well arranged and intelligible statements. This is the chart of accounts. But the chart of accounts must be designed to fill the specific and individual needs of a particular company, its activities, and the final reports needed by that company.

You will find many variations in different charts of accounts, but they should all possess certain characteristics:

1. Explicit account names.
2. Sequence-numbered account codes.
3. Items arranged in the same order as used for financial and operating statements.
4. Simple yet comprehensive format, with room for expansion and with provision for special factors such as company subsidiaries, divisions, branches and departments.

EXPLICIT ACCOUNT NAMES

The name of any account should be short and terse; yet it should explain clearly the function and purpose of that account. These are typical account names, and we shall build our sample chart of accounts around them:

Cash on hand and in banks
 Accounts receivable
 Reserve for bad debts
 Notes receivable
 Marketable securities
 Inventories
 Land
 Buildings
 Depreciation reserve for buildings
 Equipment and machinery
 Depreciation reserve for equipment and machinery
 Prepaid interest
 Prepaid expenses
 Patents
 Good will
 Other assets
 Accounts payable
 Accrued liabilities
 Statutory obligations
 Notes payable
 Debentures
 Dividends payable
 Other liabilities
 Capital stock
 Surplus
 Profit and loss
 Sales
 Cost of sales
 Sales administrative expense

Research
 Selling expenses
 Warehouse and transportation
 Service, maintenance, and installation
 Dividends from partly owned companies
 Rents received
 Discounts allowed
 Factory burden — labor
 Factory burden — supplies
 Factory labor
 Materials and parts used

There will very likely be others in various organizations, but these will serve our purpose in this discussion.

ACCOUNT CODES

Many systems of coding account numbers are in use. This is one of the more common patterns:

Major Account	Minor Account
three digits	three digits
xxx	xxx

Starting with the first digit of the major account code, the code is organized as follows:

BALANCE SHEET GROUPS	INCOME STATEMENT GROUPS	MANUFACTURING STATEMENTS
1xx Assets 2xx Liabilities 3xx Proprietorships	4xx Operating income and expense 5xx Non-operating income and expense	9xx Manufacturing Costs

Then the second digit of the major account code would further divide the general classifications:

11x Current assets
 12x Fixed assets
 13x Deferred charges
 14x Intangibles
 15x Other assets
 21x Current liabilities
 22x Long-term liabilities
 23x Other liabilities
 31x Capital stock accounts
 32x Surplus
 41x Sales income
 42x Operating expenses
 51x Non-operating income
 52x Non-operating expenses
 91x General factory burden
 92x Factory labor
 93x Materials used

The third digit, then, would represent:

111	Cash on hand and in banks
112	Accounts receivable
113	Reserve for bad debts
114	Notes receivable
115	Marketable securities
116	Inventories
121	Land
122	Buildings
123	Depreciation reserve for buildings
124	Equipment and machinery
125	Depreciation reserve for equipment and machinery
131	Prepaid interest
132	Prepaid expenses
141	Patents
142	Good will
151	Other assets
211	Accounts payable
212	Accrued liabilities
213	Statutory obligations
221	Notes payable
222	Debentures
223	Dividends payable
231	Other liabilities
311	Capital stock
321	Surplus
322	Profit and loss
411	Sales
412	Cost of sales
421	Selling expense
422	Research
423	Sales administrative expense
424	Warehouse and transportation
425	Service, maintenance and installation
511	Dividends from partly owned companies
512	Rents received
521	Discounts allowed
911	Factory burden, labor
912	Factory burden, supplies
921	Factory labor
931	Materials and parts used

This completes the coding of the three digits of the major account code. The minor account code is in two sections: (1) the first digit and (2) the two remaining digits. The first digit would stand for:

MAJOR	MINOR	TITLE
111		Cash on hand and in banks
	1xx	Demand deposits in domestic banks
	2xx	Demand deposits in foreign banks
	3xx	Special bank accounts
	4xx	Cash on hand
	5xx	Redeemable items
	6xx	Other cash items

112		Accounts receivable
	1xx	Domestic customers
	2xx	Foreign customers
	3xx	Employees
	4xx	Officers, directors, stockholders
	5xx	Licenses
	6xx	Agency and intercompany
	7xx	Associated companies
	8xx	Other companies
113	100	Reserve for bad debts
114		Notes receivable
	1xx	Domestic customers
	2xx	Foreign customers
	3xx	Employees
	4xx	Officers, directors, stockholders
	5xx	Licenses
	6xx	Agency and intercompany
	7xx	Associated companies
	8xx	Other companies
115		Investments and marketable securities
	1xx	Wholly controlled subsidiaries
	2xx	Controlled companies
	3xx	U. S. government
	4xx	State, city, county, municipal
	5xx	Foreign government
	6xx	Other corporates
	7xx	Own — reacquired
	8xx	Miscellaneous
116		Inventories
	1xx	Raw materials
	2xx	Manufacturing supplies
	3xx	Work in process
	4xx	Parts and subassemblies finished
	5xx	Finished goods
	6xx	Miscellaneous — unclassified
121		Land
	1xx	Operating property
	2xx	Idle property
	3xx	Outside property
	4xx	Land held in fee
	5xx	Operated for other corporations and individuals
123	100	Reserve for depreciation—buildings
124		Equipment and machinery
	1xx	Machinery
	2xx	Tools, dies, jigs, fixtures
	3xx	Rental and royalty machines—leased
	4xx	Furniture and fixtures

- 124—cont. 5xx Other operating equipment
- 6xx Non-operating
- 7xx Building equipment
- 8xx Construction and betterment order in process

- 125 100 Reserve for depreciation — equipment and machines

Now two digits remain in the minor account code to be used for detailed identification of the item:

MAJOR	MINOR	TITLE
111		Cash on hand and in banks
111	1xx	Demand deposits in domestic banks
111	101	Bank of America
	102	First National
	103	U. S. Bank
	104	Republic Bank
	105	American National
	106	First Trust Co.

Thus, applying the coding system, money on deposit in the Republic Bank is identified by the account number 111-104.

Let's pause for a moment to note that assigned major account codes have been arranged in the order used for preparing financial and operating statements. Figure 2 shows a typical balance sheet and an income statement.

In assigning these code numbers to the various accounts, provision was made for the detailed descriptions; yet whole blocks of possible code classifications were deliberately left unused.

These blocks of numbers provide room for expansion in the chart of accounts. Some of the possible causes of expansion would be:

1. New companies coming into the organization as affiliates or subsidiaries.
2. Major products or activity classes being established as company divisions.
3. Company expansion by acquisition of plants or establishment of branch offices.
4. Formation of new operating departments.

You now have a workable and flexible chart of accounts. As transactions occur within the company, they are recorded in the subsidiary ledgers and summarized. These summaries—totals of the various activities of your company—are the source data for the general ledger.

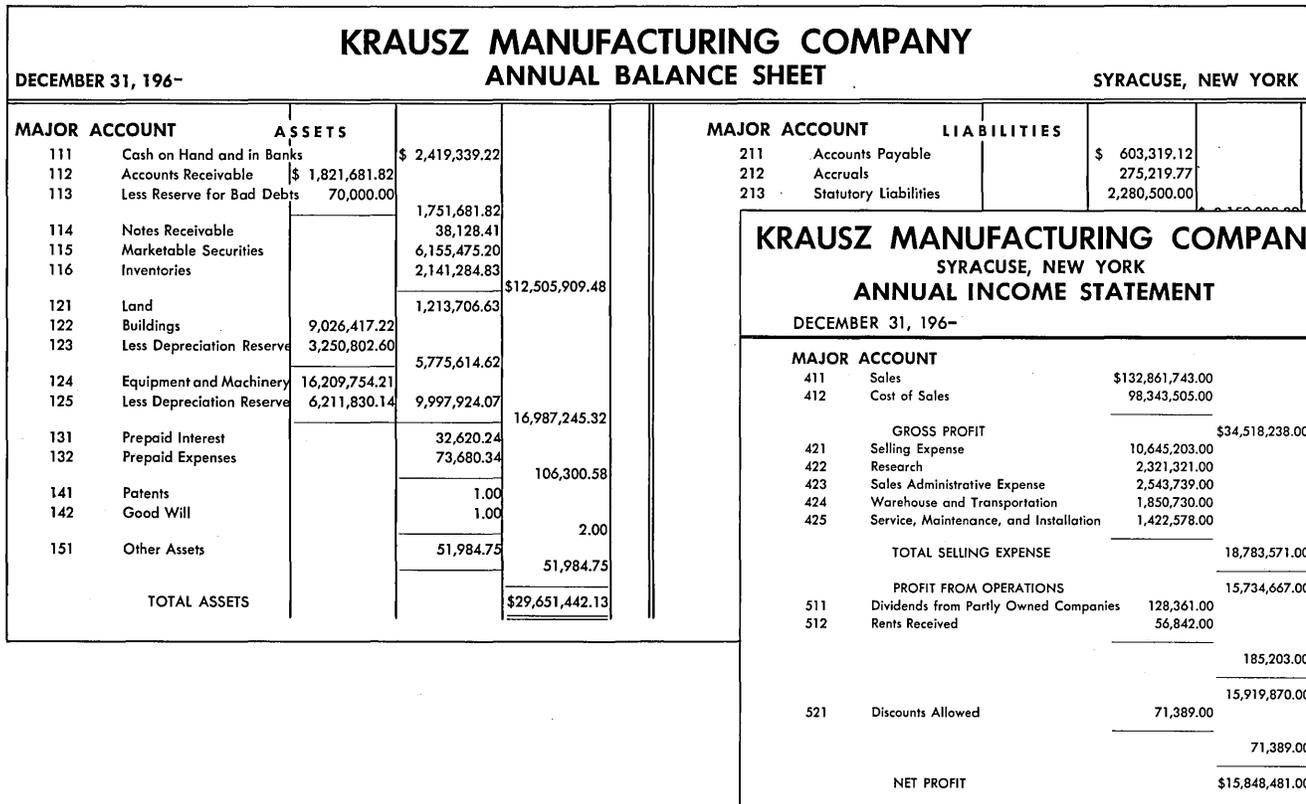


Figure 2. This is the company's net worth.

Source Records

The method of preparing the source information for general ledger entries depends directly upon the method used in posting and maintaining the various journals and subsidiary ledgers.

SUMMARY CARDS

In many cases, the IBM data processing method of accounting is used for applications and procedures such as accounts payable, accounts receivable, payroll and labor, inventory and material. This method of processing accounting data includes the preparation of general ledger information as one of the final steps in the subsidiary ledger application.

The information is prepared in the form of a punched summary card. At the end of the accounting period, the accounting machine prints the final reports for each subsidiary ledger.

The cards for each individual accounting application are arranged in account-number sequence, mechanically and at high speed. Then an account distribution summary (Figure 3) is prepared for each application. As the accounting machine prints the distribution summary, cards with totals by account number are summary-punched. Summary cards so obtained are filed for

use as general ledger entries at the end of the accounting period.

JOURNAL VOUCHERS

Some of the accounting operations may be performed in another way, and summary-punched cards will not be available. Journal vouchers are prepared to handle this kind of transaction, and general ledger entry cards are punched from these vouchers. A good example transaction is a contribution to a charity. One of your officers writes a check request. When the check is prepared, the cashier prepares a voucher, and the information appearing on the voucher is punched in an entry card.

Journal vouchers result from correction or adjustment entries too. At the end of an accounting period in accounts payable, for instance, a number of invoices have been received on the last day or two. They may not be processed in time to appear in the accounts payable distribution summary, but they are legal liabilities, and they affect both balance sheet and income statement.

These unprocessed items of payables are manually entered on a journal voucher. The distribution is shown on the voucher and general ledger entry cards are punched.

SOUTH LAKE SAND COMPANY							Source Code	
SOUTH LAKE, WISCONSIN								
ACCOUNT DISTRIBUTION SUMMARY								
SHEET 3 OF 5			SOURCE 4 ACCOUNTS PAYABLE				DATE 3/30/6- JOURNAL 1294	
ENTRY DATE	SOURCE	VOUCHER NUMBER	VENDOR OR CUST. NUMBER	DEPT. OR BR.	ACCT. NO. GEN.-SUB.	NET DEBIT OR CREDIT-	TOTAL DEBITS*	TOTAL CREDITS-
3/19	4	46402	7731	408	116-103	764.25		
3/21	4	46733	2910	391	116-103	51.24		
3/29	4	47841	3466	100	116-103	600.00		
					116-103	\$ 4,732.29*\$	\$ 4,720.29*\$	12.00-
3/05	4	41750	7604	132	116-104	347.85		

Figure 3. A summary for each subsidiary ledger.

Similarly, correction entries are made by writing a voucher. Vouchers vary greatly in form, even within a given organization, but the information can be punched into a general ledger accounting card and thus standardized (Figure 4).

PREPUNCHED JOURNALS

Some subsidiary ledgers may be for the same amount each period, for example, depreciation, rents, mortgage redemption, interest payable, and insurance. Cards representing these journals are prepunched with all the significant information that will remain constant. Then

they are retained in a file until the end of the accounting period.

When the final reports are being prepared for trial balance, the current card for each prepunched journal is removed from the file and completed. This may involve punching date or amount. These cards are merged with the other general ledger cards and are ready for processing the final reports and the general ledger.

The source information has been collected and prepared. Results of all the company's transactions have been recorded and summarized. You are ready to write final reports and to make general ledger entries by machine-processing the general ledger accounting cards (Figure 5).

ACCOUNT TITLE AND EXPLANATION						DEPT.	APPROPRIATION	OFFICE	EMPLOYEE	ACCOUNT	AMOUNT	
											DEBIT	CREDIT
- A -												
Middletown Service Laundry								813		425-816	142	30
New York Ice Company								813		425-813	67	98
Acme Printing Company						26				425-273	1 990	48
" " "						26				425-274	591	69
" " "						26				425-275	236	00
" " "						27				425-273	2 832	50
" " "						27				425-275	758	66
" " "						27				425-274	279	00
Zessich Litter Company						26				425-281	931	81
" " "						27				425-281	993	07
Unvouchered Accounts Payable to set up										425-212		13 061 57

JOURNAL VOUCHER										
DATE		VOUCHER NO.		ACCT. NO.		DEPT.	DEBIT	CREDIT		
DR	CR	GEN.	SUB.							
Charitable Donations		421	24				2200.00			
United Fund for 196-		421	01					2200.00		
Knox County Comm Payee United Fund, 196-										
Approved <i>J. M. Hadden, Treas.</i>										
Countersigned <i>BRO</i>										

JOURNAL VOUCHER								
DATE		VOUCHER NUMBER		ACCT. NO.		DEPT.	DEBIT	CREDIT
DESCRIPTION OF ENTRY		GEN.	SUB.					
Debit Sales				720			4 25	
Credit Accts. Rec.				430				4 25
Adjust Invoice 19216								
Change zone 1 price, should be zone 2 - Additional credit 5% of \$84.90 = \$4.25								
BR.	CUSTOMER NUMBER	SALES MAN	CUSTOMER NAME					
46	2743	63	John Doe Inc.					
APPROVED BY _____								

Figure 4. There are many possible voucher forms.

Trial Balance

At the end of each accounting period, a listing of all the general ledger accounts is prepared. This trial balance will establish the accuracy of the entries to the general ledger and provide the opportunity to make adjusting and closing entries.

The general ledger cards, in account-number sequence, are removed from the file. Then they are merged with the account balance cards from the last accounting period. These cards are processed in the accounting machine, and the trial balance is written (Figure 6). The trial balance shows each account balance, current month entries both debit and credit, and the new account balance.

Your accounting department will examine this working trial balance for deviations, evidence of error, or

variance from complete balance. Then they will make the adjusting and closing entries. They prepare a journal voucher for these entries, and punch the necessary cards. The cards are listed by account number, and the listing becomes a supplement to the trial balance.

Sometimes information is not available until the trial balance has been prepared. For instance, you must have the total cost of a service department before final distribution of charges to other departments can be made. Data of this type, handled as closing entries, completes the entries for the current accounting period.

So this completes the trial balance—a complete, accurate accounting of your company's operations up to date. Management reports can now be prepared. Usually the first of these is the income statement.

ODIN BROCKTON PLANT				GENERAL LEDGER TRIAL BALANCE				
SHEET 1 OF 4				ACCOUNTING PERIOD ENDING JUN 30 196-				
DATE	SOURCE	REFERENCE NUMBER	ACCOUNT NUMBER	DESCRIPTION OF ENTRY	CURRENT MONTH'S ENTRIES			BALANCE FORWARD
					DEBITS	CREDITS	NET CHANGE	NEW BALANCE*
5/31/6-			111	CASH BAL FWD				\$ 1,727,436.65
6/15/6-	7	1296	111	CASH RECEIPT	\$ 189,318.24			
6/15/6-	8	1299	111	CASH DISBURSEMENT		\$ 274,726.62		
6/29/6-	7	1305	111	CASH RECEIPT	\$ 693,747.22			
6/29/6-	10	1321	111	JOURNAL ENTRY		\$ 191,634.71		
6/29/6-	8	1332	111	CASH DISBURSEMENT		\$ 516,726.50		
6/29/6-			111	BALANCE	\$ 883,065.46*	\$ 983,087.83*	\$ 100,022.37-	\$ 1,627,414.28
5/31/6-			112	ACCOUNTS RECEIVABLE BAL FWD				\$ 1,312,676.24
6/15/6-	9	1295	112	SALES	\$ 551,189.75			
6/29/6-	7	1317	112	CASH RECEIPT		\$ 923,550.11		
6/29/6-	9	1304	112	SALES	\$ 684,733.59			
6/29/6-			112	BALANCE	\$ 1,235,923.34*	\$ 923,550.11*	\$ 312,373.23*	\$ 1,625,049.47*
5/31/6-			113	RESERVE FOR BAD DEBTS BAL FWD				\$ 15,821.40
6/29/6-	10	1324	113	JOURNAL ENTRY		\$ 3,162.15		
6/29/6-			113	BALANCE		\$ 3,162.15*	\$ 3,162.15-	\$ 18,983.55*
5/31/6-			114	NOTES RECEIVABLE BAL FWD				\$ 267,155.22
6/29/6-	10	1297	114	JOURNAL ENTRY	\$ 5,139.45			
6/29/6-			114	BALANCE	\$ 5,139.45*		\$ 5,139.45*	\$ 272,294.67*

Figure 6. A check of all transactions this accounting period.

Income Statement

Corporations whose securities are sold on the open market must file their income statements with the Securities and Exchange Commission. The Commission's rigid requirements result in a standardization of detail and completeness of these income statements.

However, other businesses vary considerably, especially if their statements are not subject to regular examination by outside agencies. This is not due to intent to limit the information presented, but because of the time and expense involved in maintaining detailed accounts and the resulting detailed income statements.

The IBM method of processing data makes it possible to handle large amounts of detail quickly and at low cost. When the trial balance has been completed and proved, the cards that were used to prepare the trial balance and the closing entries are separated—income items from balance sheet items. You can separate them quickly by sorting on the account-code digit that designates each type of item.

A satisfactory income statement (Figure 7) contains three broad sections:

1. Gross Profits
2. Operating Profits
3. Profit and Loss

GROSS PROFITS

When the income cards were separated from the other general ledger cards by the high speed sorter, they retained account-number sequence.

The accounting machine accumulates, adds, subtracts and prints the totals for the income statement in one operation. Now the income statement is ready for analysis by management.

The gross profit section points out volume of sales, ratio of returns and allowances to gross sales, cost of the product sold, and the relationship of profit to dollar volume of sales.

DRJ WIRE COMPANY			
MONTHLY INCOME STATEMENT		FOR THE PERIOD ENDING MAY 31, 196-	
GROSS SALES	\$ 1,656,380.15		
RETURNS AND ALLOWANCES	33,841.20		
NET SALES		\$ 1,622,538.95	
COST OF SALES	\$ 1,174,733.85		
		\$ 1,174,733.85	
GROSS PROFIT			\$ 447,805.10
ADMINISTRATIVE AND GENERAL EXPENSE	\$ 23,196.44		
SELLING EXPENSE	\$ 101,863.50		
RESERVE FOR BAD DEBTS	\$ 1,656.38		
TOTAL OPERATING EXPENSE		\$ 126,716.32	
OPERATING PROFIT			\$ 321,088.78
CASH DISCOUNTS ALLOWED	\$ 30,145.72		
INTEREST PAID	1,160.19		
NET PROFIT OR LOSS BEFORE SPECIAL CHARGES			\$ 289,782.87
SPECIAL CHARGES	\$ 8,620.34		
INCOME AND EXCESS PROFITS TAX	\$ 41,415.62		
NET PROFIT OR LOSS			\$ 239,746.91

Figure 7. The three basic sections.

OPERATING PROFITS

The items in this section are shown here in condensed form. To the executive reading the income statement, these items are significant as trends in the company's operations. Excessive amounts in any of these items affect the profitable operation of the company. When this is apparent, you will want a complete breakdown of all the items that made up the questionable total for explanation or correction of an undesirable situation. The flexibility of the IBM method of processing data makes such detailed supplementary reports quickly available.

PROFIT AND LOSS

This is one of the most important aspects of a business—and the test frequently applied to determine efficiency in operation. That is why extreme care must be used to insure that every factor affecting profit and loss has been included in the income statement. Management decisions are vitally affected by the statement of profit and loss; it must be accurate and up to date.

COMPARATIVE STATEMENTS

In addition to showing total income less expenses, income statements can show comparisons between the current period and a similar period the previous year,

or the previous accounting period; year-to-date figures can be shown, and variations between the comparisons printed for easy analysis. Furthermore, a comparative income statement (Figure 8) can show any combination of these analytical aids to management.

BUDGET DETAIL

Another significant advantage of the IBM method of preparing income statements appears in budgeting. Your organization may operate under a careful planning and budgeting system. At the end of each accounting period, you will want to know your budget status.

If your original budget was punched in IBM cards, these cards are merged with the general ledger income cards for the first accounting period. Then the income statement can be prepared with a comparison between actual figures and budget figures. The variance is shown, and management retains firm control over the company's operations (Figure 9).

While the cards are processed and the accounting machine prints the statement, the summary punch prepares summary cards. These cards will then be used in the preparation of the statement for the next accounting period; budget and year-to-date figures will be current on every statement thereafter.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 2px;"> Routing <input type="checkbox"/> President's Office <input checked="" type="checkbox"/> Treasurer <input type="checkbox"/> Comptroller <input type="checkbox"/> Accounting <input type="checkbox"/> Sales Manager <input type="checkbox"/> Plant Superintendent </div> <div style="text-align: center;"> <h3 style="margin: 0;">SOUTH LAKE SAND COMPANY</h3> <h4 style="margin: 0;">COMPARATIVE INCOME STATEMENT</h4> </div> <div style="text-align: right;"> PERIOD ENDING MAY 31, 196- </div> </div>						
ACCOUNT NUMBER	DESCRIPTION	CURRENT MONTH		YEAR-TO-DATE		INCREASE* OR DECREASE-
		THIS YEAR	LAST YEAR	THIS YEAR	LAST YEAR	
411	SALES					
411-100	GROSS SALES	\$ 1,223,195.85	\$ 1,083,474.02	\$ 4,739,999.14	\$ 3,415,174.67	\$ 1,324,824.47 *
411-200	LESS RETURNS & ALLOW	1,726.40	1,912.71	3,245.97	3,464.22	218.25 -
	NET SALES	\$ 1,221,469.45	\$ 1,081,561.31	\$ 4,736,753.17	\$ 3,411,710.45	\$ 1,325,042.72 *
412-100	LESS COST OF SALES	581,786.15	541,950.16	2,852,146.73	2,008,762.23	843,384.50 *
	GROSS PROFIT	639,683.30*	539,611.15*	1,884,606.44*	1,402,948.22*	481,658.22 *
421	SELLING EXPENSES					
421-100	SALARIES & COMMISSIONS	\$ 184,373.27	\$ 179,264.48	\$ 705,623.06	\$ 541,579.46	\$ 164,043.60 *
421-200	TRAVELING EXPENSE	14,425.15	13,790.80	53,726.92	42,968.21	10,758.71 *
421-300	DELIVERY EXPENSE	6,140.20	5,956.00	28,364.15	16,428.19	11,935.96 *
421-400	ADVERTISING EXPENSE	1,582.00	1,450.25	18,250.00	5,225.75	13,024.25 *
421-500	OFFICE SALARIES	27,684.35	25,829.15	94,342.18	79,415.14	14,927.04 *
421-600	STATIONERY & SUPPLIES	1,380.60	1,295.00	4,982.76	3,576.82	1,405.94 *
421-700	TELEPHONE	1,315.85	1,305.62	4,148.15	3,381.26	766.89 *
421-800	BUILDING	6,725.00	6,215.10	25,175.00	18,634.55	6,540.45 *
421-900	MISCELLANEOUS	1,460.38	1,385.75	4,965.48	3,519.47	1,446.01 *
	TOTAL SELLING EXPENSE	\$ 245,086.80*	\$ 236,492.15*	\$ 939,577.70*	\$ 714,728.85*	\$ 224,848.85 *

Figure 8. Details and comparisons help analysis.

COMPARATIVE INCOME STATEMENT							
PERIOD ENDING JUN 30 196-			BUDGET DETAIL			TO <i>Mr. Steen</i> 331	
ACCOUNT NUMBER	DESCRIPTION	CURRENT PERIOD			YEAR-TO-DATE		
		BUDGET	ACTUAL	VARIANCE	BUDGET	ACTUAL	VARIANCE
410	SALES						
411-100	GROSS SALES	\$750,750.00	\$788,346.91	\$ 37,596.91	\$ 4,504,500.00	\$ 4,618,376.60	\$ 113,876.60
411-200	LESS RETURNS & ALLOW	750.00	801.45	51.45	4,500.00	3,921.83	578.17-
	NET SALES	\$750,000.00	\$787,545.46	\$ 37,545.46	\$ 4,500,000.00	\$ 4,614,454.77	\$ 114,454.77
412-200	LESS COST OF SALES	400,900.00	403,588.37	2,688.37	2,405,400.00	2,342,819.50	62,580.50-
	GROSS PROFIT	\$349,100.00	\$383,957.09*	\$ 34,857.09	\$ 2,094,600.00	\$ 2,271,635.27*	\$ 177,035.27*
421	SELLING EXPENSES						
421-100	SALARIES	\$ 13,750.00	\$ 14,218.43	\$ 468.43	\$ 85,000.00	\$ 88,761.33	\$ 3,761.33
421-110	COMMISSIONS	110,225.00	112,397.14	2,172.14	1,040,500.00	1,066,374.26	25,874.26
421-200	TRAVELING EXPENSE	1,000.00	857.77	142.23-	6,000.00	5,263.49	736.51-
421-300	DELIVERY EXPENSE	5,000.00	4,919.67	180.33-	22,000.00	28,475.92	1,524.08-

Figure 9. Budget operations at a glance.

BRANCH INCOME

After your consolidated income statement has been processed, you can prepare individual income statements for branches, divisions, departments, or any subclassification punched in the cards.

The general ledger income-item cards can be sorted for the breakdown being studied, and individual income statements prepared (Figure 10).

In addition to showing comparative and year-to-date figures, the illustration includes a percentage column. The figure appearing in this column is the percentage of gross sales represented by each expense item.

Arranged in sequence for income-statement writing, the general ledger cards are processed in a calculating punch to compute the percentages.

This type of report provides the basis for a rapid and discerning analysis of the operations of each unit of your business. Comparisons are drawn between similar periods and between various units. Furthermore, each unit becomes aware of its achievements compared with those of the other units. This awareness is an added factor contributing to successful operation. With the income statements prepared, you have established the result of your company's operations for the current period—profit or loss.

This amount of net profit or net loss will affect the net worth of the business at the close of this accounting period. So a card is punched with the amount of profit or loss, and included with the cards that you use to prepare the statement of all assets, liabilities and net worth—the balance sheet.

D & R ECONOMY STORES									
STORE INCOME AND EXPENSE									
STORE LOCATION RICHMOND		MONTH JULY							
ACCT.	INCOME AND EXPENSE	CURRENT MONTH	%	YEAR-TO-DATE	%	SAME MONTH LAST YEAR	%	YEAR-TO-DATE LAST YEAR	%
500	SALES	\$20,300.00-		\$140,200.07-		\$19,500.00-		\$135,000.00-	
501	BEGINNING INVENTORY	25,261.98		24,334.00		24,500.00		25,000.00	
505	PURCHASES	8,975.72		92,015.57		9,375.00		95,750.62	
506	ENDING INVENTORY	20,507.70-		20,507.70-		22,375.00-		21,750.00-	
508	GROSS PROFIT	6,570.00-	32.36	44,358.20-	31.63	8,000.00-	41.02	35,999.38-	26.66
	CONTROLLABLE EXPENSES								
550	SALARIES	1,828.75	9.02	15,802.25	11.27	1,808.75	9.27	11,656.00	8.63
551	COMMISSIONS	151.00	.74	3,127.62	2.23	152.00	.78	3,428.60	2.54

Figure 10. Unit operations highlighted.

HASTING-WHITE TOOL COMPANY COMPARATIVE BALANCE SHEET

PERIOD ENDING: JUNE 30, 196-

MAJOR ACCOUNT	DESCRIPTION	TOTAL	PREVIOUS MONTH THIS YEAR	CURRENT MONTH		OVER* OR UNDER-	% OVER* OR UNDER-
				THIS YEAR	LAST YEAR		
ASSETS							
111	CASH AND RECEIVABLES						
	CASH	\$ 15,673.38	\$ 16,739.73	\$ 15,248.61	\$ 1,491.12 *	9.8 *	
112	ACCOUNTS RECEIVABLE	32,967.21	33,291.18	32,968.32	322.86 *	.9 *	
113	RESERVE FOR BAD DEBTS	329.57-	332.91-	329.68-	3.23 *	.9 *	
114	NOTES RECEIVABLE	1,000.00		1,500.00	1,500.00 -	100.0 -	
115	MARKETABLE SECURITIES	2,164.30	5,898.13	3,673.21	2,224.92 *	60.6 *	
	TOT	\$ 51,475.22*	\$ 55,596.13*	\$ 53,060.46*	\$ 2,535.67***		
116	INVENTORIES	\$ 183,621.83	\$ 161,298.67	\$ 149,238.61	\$ 12,060.06 *	8.1 *	
	TOT	\$ 183,621.83*	\$ 161,298.67*	\$ 149,238.61*	\$ 12,060.06***		
LAND AND BUILDINGS							
121	LAND						
122	BUILDINGS		\$ 50,238.96		\$ 50,238.96 *	*	
123	RES. FOR DEPREC.	\$ 2,116.45-	2,363.74-	\$ 1,767.88-	595.86 *	33.7 *	
	TOT	\$ 2,116.45-	\$ 47,875.22*	\$ 1,767.88-	\$ 49,643.10***		
EQUIP. AND MACHINERY							
124	EQUIP. AND MACHINERY	\$ 10,873.98	\$ 8,339.61	\$ 16,298.38	\$ 7,958.77 -	48.8 -	
125	RES. FOR DEPREC.	3,245.67-	3,469.22-	2,975.12-	494.10 *	16.6 *	
	TOT	\$ 7,628.31*	\$ 4,870.39*	\$ 13,323.26*	\$ 8,452.87*-*		
DEFERRED CHARGES							
131	PRE-PAID INTEREST						
132	PRE-PAID EXPENSE	\$ 1,231.19	\$ 1,348.16	\$ 1,741.93	\$ 393.77 -	22.6 -	
133	CONTRACT EXPENSE						
	TOT	\$ 1,231.19*	\$ 1,348.16*	\$ 1,741.93*	\$ 393.77*-*		
INTANGIBLE ASSETS							
141	PATS., COPYRIGHTS, ETC						
142	OTHER INTANGIBLES	\$ 1,333.98	\$ 1,026.93	\$ 1,238.97	\$ 212.04 -	17.1 -	
143	RES. TO AMORT. INTANG.						
	TOT	\$ 1,333.98*	\$ 1,026.93*	\$ 1,238.97*	\$ 212.04*-*		
151	OTHER ASS MISCEL						

COMPARATIVE BALANCE SHEET

PERIOD ENDING **NOV 30 196-**

TOTAL		ACCOUNT NUMBER	DESCRIPTION	END OF CURRENT MONTH	DECEMBER 31 LAST YEAR	INCREASE* OR DECREASE-
LIAB	11		CURRENT ASSETS			
		111	CASH	\$1,219,884.07	\$1,304,176.42	
				\$1,219,884.07*	\$1,304,176.42*	\$ 84,292.35 -
		112	ACCOUNTS RECEIVABLE	\$1,623,246.12	\$1,510,132.15	
		113	LESS RESERVE	18,163.20	17,115.23	
				\$1,605,082.92*	\$1,493,016.92*	\$ 112,066.00 *
		114	NOTES RECEIVABLE	\$ 271,332.20	\$ 269,473.42	
				\$ 271,332.20*	\$ 269,473.42*	\$ 1,858.78 *
		116	MERCHANDISE INVENTORY	\$2,902,170.32	\$2,810,278.90	
		117	LESS RESERVE	32,695.15	29,146.45	
				\$2,869,475.17*	\$2,781,132.45*	\$ 88,342.72 *
			TOTAL CURRENT ASSETS	\$5,965,774.36*	\$5,847,799.21*	\$ 117,975.15 *
		12	FIXED ASSETS			
		121	LAND	\$ 312,469.43	\$ 312,469.43	
				\$ 312,469.43*	\$ 312,469.43*	*
		122	BUILDINGS	\$2,149,939.67	\$2,140,961.80	
		123	LESS RESERVE	986,225.05	978,710.22	

Figure 12. Several approaches to writing a balance sheet.

The General Ledger

The final statements have been prepared. The general ledger account cards were used to prepare the trial balance. Adjustment and correction cards were punched and a supplement was prepared to prove and update the accounts for the current accounting period. The cards were separated into two groups: income-item cards and balance sheet cards. The income statement and the balance sheet are finished, and now you are ready to process the general ledger.

All the cards—income items, balance sheet items, account balance summaries, adjustment and correction cards—are part of general ledger processing. Your operator merges all these cards into a single group arranged

in account-number sequence. Then the accounting machine writes the general ledger in one operating process. As the machine prints each new account balance, a summary punch prepares a new account balance card to be used for the next period's trial balance, income statement, balance sheet and general ledger.

Actual form of the general ledger varies according to the needs of each individual business. Some of the more common (Figure 13) are shown here:

1. A separate sheet each month for each major account.
2. A continuous listing of all ledger entries each month.
3. A facsimile-posted ledger card for each major account.

KRAUSZ MANUFACTURING COMPANY

GENERAL LEDGER

MAJOR ACCOUNT 421 SEPTEMBER 196-

ACCOUNT TITLE	MINOR ACCT. CODE	BEGINNING BALANCE	CURRENT MONTH		CLOSING BALANCE
			DEBIT	CREDIT	
GENERAL AND ADMINISTRATIVE EXP					
SALARIES					
GENERAL AND OVERTIME	179	\$ 277,001.71	\$ 26,126.20	\$ 1,974.93	\$ 301,152.98
TEMPORARY	195	5,939.59	389.24		6,328.83
TRAVELING EXPENSE	300	41,644.32	5,156.81	259.58	46,541.55
OCCUPANCY	400	96,039.31	13,186.59	10.14	109,215.76
	410	4,962.00	564.36	2.70	5,523.74
PLIES	507	10,601.82	2,326.57	362.41	12,565.98
	508	891.70	265.74		1,157.44
	510	852.76	908.75	3.24	1,758.27
	740	10,719.16	861.03	4.71	11,575.48
	770	24,153.35	3,900.75	1,649.68	26,404.42
	771	3,409.63	353.96		3,763.59
	781	469.26	34.58	10.51	493.33
		\$ 660,659.57*	\$ 82,436.91*	\$ 6,364.95*	\$ 736,731.53*

NATIONAL PRODUCTS COMPANY

GENERAL ACCOUNTING REGISTER

REPORT NO. 801
July 31, 196-

SHEET 1 OF 11

ACCOUNT NUMBER	SUB.	OPENING BALANCE	CURRENT MONTH		CLOSING BALANCE
			REFERENCE	DEBIT OR CREDIT	
GENERAL			VOL. REF.	ACCOUNT NUMBER	
111		\$ 134,033.34			
111			802113	\$ 166,685.71	
111			802511	850.00	
111			104211	188,694.45-	
				21,158.74-	\$ 112,874.60*
112		\$ 3,989.76			
					* 3,989.76*
113		\$ 62,205.91			
113			702311	\$ 175,506.15	
113			710312	1,492.59-	
113			802000	168,990.89-	
113			710313	401.83-	
113	651		710174	184.51	
				4,805.35*	
114		\$ 101.25			
114			121423	\$ 872.50-	
				872.50-	
116		\$ 5,850.00			
					* 1,145.15
121		\$ 158,950.49			
121			710321	\$ 1,145.15	

GENERAL LEDGER

MAJOR ACCOUNT 111 111 CASH MAJOR ACCOUNT 111

DATE	SOURCE	JOURNAL NUMBER	ACCOUNT NUMBER	DESCRIPTION OF ENTRY	CURRENT MONTH ENTRIES		BALANCE YEAR-TO-DATE
					CREDIT	DEBIT	
12/31			111	BALANCE FORWARD			\$1,304,176.42
1/15	7	1210	111	CASH RECEIPT	\$296,820.32		
1/15	8	1215	111	CASH DISBURSEMENT		\$298,615.45	
1/31	10	1232	111	JOURNAL ENTRY		40,132.60	
1/31	7	1239	111	CASH RECEIPT	601,248.73		
1/31	8	1242	111	CASH DISBURSEMENT		598,122.15	
					\$898,069.05*	\$936,870.20*	\$1,265,375.27*
1/31			111	BALANCE FORWARD			\$1,265,375.27
2/15	7	1259	111	CASH RECEIPT	\$290,124.32		
2/15	8	1262	111	CASH DISBURSEMENT		\$295,463.10	
2/28	7	1276	111	CASH RECEIPT	625,195.20		
2/28	8	1278	111	CASH DISBURSEMENT		620,163.25	
2/28	10	1281	111	JOURNAL ENTRY		49,256.04	
					\$915,319.52*	\$964,882.39*	\$1,215,812.40*
2/28			111	BALANCE FORWARD			\$1,215,812.40
3/15	7	1296	111	CASH RECEIPT	250,420.13		

Figure 13. General ledger forms to fill every need.

Financial Control

Basic accounting documents like the income statement, balance sheet and general ledger are very important to your organization. But just as important are the operating and administrative reports that can help management get clearer insight into the factors that affect profit and loss.

It is true that compiling detailed and varied operating and administrative reports takes time and money. Yet these contain the data that may mean the difference between profit and loss. And the IBM method of processing this data removes the objections of time and money. The needed information is already in your files in the form of punched cards and the facts can be tabulated, rearranged by any classification, and used to produce valuable and significant reports.

At the end of each accounting period, the detail and expense cards used in the general ledger procedure are filed. Periodically, all this material can be summarized by account, subaccount, division, department, branch, or any other classification.

If the summarized data is coded into punched cards, these operating report cards (Figure 15) result in reduced card volume, faster report processing, and greater economy of time and money. Furthermore, we can now calculate income and expense ratios and percentages quickly and accurately in a calculating punch.

The operating report card shows current and year-to-date expense and revenue. It also shows the ratio of expense to revenue. And the entire process is an automatic machine operation.

501 500 CLEVELAND				CURRENT MONTH	348226	3081642	.113		
ACCOUNT NO.				YEAR TO DATE	1037589	9347649	.111		
MONTH	YEAR	BRANCH NUMBER	BRANCH R ACCOUNT NAME	EXPENSE AMOUNT			REVENUE AMOUNT	% EXPENSE TO REVENUE	
0	0	0	0	0	0	0	0	0	
1	1	1	1	1	1	1	1	1	
2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	
7	7	7	7	7	7	7	7	7	
DATE	BR. NO.	REFERENCE NO.	ACCOUNT NO.	CURRENT MONTH			YEAR TO DATE		
8	8	8	8	8	8	8	8	8	
MAJ. SUB.				EXPENSE AMOUNT	REVENUE AMOUNT	%	EXPENSE AMOUNT	REVENUE AMOUNT	%
9	9	9	9	9	9	9	9	9	
1	2	3	4	5	6	7	8	9	

Figure 15. Complete flexibility for use of data.

Expense and Revenue

Comparisons of expenses and revenue are reliable indicators of the soundness of a business. So expense-to-revenue reports of all kinds have significance to the policy-making executives of your company. These reports are available on the basis of any category or classification punched in the card. Let's look at some of the more common uses.

Corporate officers are interested in an expense-to-revenue analysis on a company-wide basis. All the general ledger cards, processed in a calculating punch for ratio computations, affect this study (Figure 16).

By comparing branch or division expense-to-revenue percentages, top management and branch managers keep informed about efficiency or lack of efficiency. The national average is quickly established during the calculating punch operation and becomes a standard for evaluating the individual company units.

If the listing of the expense-to-revenue figures is arranged by low-to-high sequence, the national average card clearly marks the dividing line between above-average and below-average offices. This makes it possible to devote careful attention primarily to those units that are experiencing substandard operations (Figure 17).

HARKNESS, HOLLOWITH & CO.							
EXPENSE-TO-REVENUE STATEMENT							
PERIOD ENDING DECEMBER 31, 196-							
ACCOUNT	DESCRIPTION	CURRENT YEAR		LAST YEAR		INCREASE* OR DECREASE-	% INC.* OR DEC.-
		AMOUNT	% OF NET SALES	AMOUNT	% OF NET SALES		
411	NET SALES	\$ 673,906.86	100.0	\$ 625,818.04	100.0	\$ 48,088.82*	7.7*
412	COST OF SALES	\$ 468,929.58	69.5	\$ 441,134.22	70.5	\$ 27,795.36*	6.3*
	GROSS PROFITS	\$ 204,977.28	30.4	\$ 184,683.82	29.5	\$ 20,293.46*	19.9*
423	SELLING EXPENSES	\$ 32,863.65	4.9	\$ 31,627.43	5.1	\$ 1,236.22*	4.0*
424	GENERAL EXPENSES	\$ 29,743.18	4.4	\$ 30,814.39	4.9	\$ 1,071.21-	3.5-

Figure 16. The company's progress at a glance.

BAKER, BAKER AND COLE INC.				BRANCH OFFICE ANALYSIS EXPENSE RATIO STATEMENT			
EXPENSE CLASS TOTAL PERIOD ENDING MARCH 31, 196-							
BRANCH	DESCRIPTION	CURRENT MONTH			YEAR-TO-DATE		
		TOTAL REVENUE	EXPENSES	% EXP. TO REV.	TOTAL REVENUE	EXPENSES	% EXP. TO REV.
41	WASHINGTON	20,663.09	6,860.15	33.2	62,293.68	20,183.15	32.4
35	ST. LOUIS	24,160.48	8,238.72	34.1	75,176.25	24,732.99	32.9
24	MINNEAPOLIS	15,923.70	5,652.91	35.5	46,833.41	15,548.69	33.2
17	DETROIT	48,234.52	15,627.98	32.4	149,145.73	49,814.67	33.4
2	ALBANY	26,784.90	10,281.85	35.4	73,422.16	24,596.42	33.5
18	GRAND RAPIDS	11,810.14	3,755.62	31.8	34,961.72	11,782.10	33.7
22	LOS ANGELES	59,312.88	19,336.00	32.6	160,175.26	5,445.96	34.0
20	INDIANAPOLIS	19,777.25	6,744.04	34.1	56,712.44	19,395.65	34.2
13	DALLAS	14,145.86	4,866.18	34.4	38,550.19	13,184.16	34.2
36	SALT LAKE CITY	9,640.27	3,181.29	33.0	29,119.52	9,988.00	34.3
27	NEW YORK	147,791.10	45,076.29	30.5	376,297.62	129,822.68	34.5
37	SAN FRANCISCO	66,844.75	20,922.41	31.3	184,571.14	63,861.16	34.6
	NATIONAL AVERAGE			32.8			34.8
32	PITTSBURGH	33,526.19	11,264.80	33.6	96,349.27	33,625.90	34.9
30	OMAHA	8,731.41	3,117.11	35.7	21,680.34	7,609.80	35.1

Figure 17. Each branch office—above or below national average.

Many companies with branch office or division operation use comparative expense-to-revenue studies for each operational unit. Some others prepare these reports only for those subdivisions that are operating above the national average. In any case, the desired reports are quickly available. The general ledger cards are selected by the branch or division code, and the appropriate cards processed in the accounting machine (Figure 18).

Financial officers have individual preferences for analysis reports. And these preferences can be satisfied if the data involved has been processed by the IBM method. For instance, a study of office expenses on a company-wide basis will be of significance and will affect planning

for expansion, relocation of facilities, and personnel programs.

Your machine accounting department can separate expense-item cards from revenue cards simply by sorting group codes. Reports such as distribution expense, administrative expense, cost-of-production summaries, rents, furniture and fixtures, can be written (Figure 19). As these reports are written by the accounting machine, the summary punch prepares current summary cards to be used in the comparative figures for the next report. The cards will also supply year-to-date figures as they accumulate and are in turn summary-punched.

BAKER, BAKER AND COLE INC.			COMPARATIVE REPORT OF REVENUE AND EXPENSES					
NEWARK BRANCH								
PERIOD ENDING MARCH 31, 196-								
BRANCH	ACCOUNT NUMBER	DESCRIPTION	CURRENT MONTH			YEAR-TO-DATE		
			THIS YEAR	LAST YEAR	% INC.* OR DEC.	THIS YEAR	LAST YEAR	% INC.* OR DEC.
25	411	SALES						
25	411-100	NET SALES	\$ 30,816.42	\$ 29,790.65	3.4*	\$ 93,476.49	\$ 88,132.17	6.1*
25	411-100	LESS COST OF SALES	15,175.15	16,050.40	5.5-	46,104.26	44,196.40	6.3*
		GROSS REVENUE	\$ 15,641.27*	\$ 13,740.25*	+13.8%	\$ 47,372.23*	\$ 43,935.77*	+7.8%
25	423	BRANCH OFFICE EXPENSE						
25	423-100	SALARIES-SALESMEN	\$ 1,595.36	\$ 1,481.46	7.7*	\$ 4,510.50	\$ 4,672.90	3.5-
25	423-110	COMMISSIONS-SALESM	3,116.20	3,276.04	4.9-	9,473.17	10,040.25	5.7-
25	423-200	TRAVELING EXPENSES	105.15	92.40	3.7*	409.26	560.24	27.9-
25	423-300	DELIVERY EXPENSES	412.75	441.70	6.6-	1,403.05	1,501.36	6.6-
25	423-310	FREIGHT OUT	96.10	106.32	9.6-	306.72	336.44	8.9-
25	423-400	ADVERTISING	175.90	83.10	111.1*	640.11	701.10	9.2-
25	423-500	SALARIES-OFFICE	3,482.26	3,261.44	7.9*	10,375.89	8,704.15	19.1*
25	423-510	SALARIES-BLDG.SERV.	250.45	238.75	5.9*	760.24	720.04	5.6*
25	423-600	STATIONERY	184.60	160.22	15.1*	540.20	543.15	.5-
25	423-610	MISCELLANEOUS	73.25	80.40	8.9-	205.98	245.47	16.9-
25	423-700	TELEPHONE SERV.LOC.	176.88	180.16	1.8-	490.10	524.42	6.5-
25	423-710	TELEPHONE SERV.TOLL	90.17	86.73	4.0*	200.63	237.01	15.4-
25	423-720	TELEGRAMS	85.15	70.10	21.5*	180.19	195.46	7.8-
25	423-730	POSTAGE	97.30	92.15	5.6*	205.84	296.75	36.3-
25	423-810	RENT	1,244.31	1,250.00	.5*	3,750.00	3,750.00	*
25	423-820	LIGHT AND POWER	165.00	159.26	3.6*	410.67	498.01	17.5-
25	423-830	OFFICE REPAIRS	64.49	56.17	14.8*	205.32	256.73	20.2-
25	423-840	DEPR.-FURN.AND FIXT	79.20	70.16	12.9*	207.60	210.48	1.4-
		TOTAL BRANCH EXPENSES	\$ 11,494.52*	\$ 11,186.66*	+2.8%	\$ 34,275.47*	\$ 33,993.96*	+0.9%
		BRANCH NET INCOME	\$ 4,146.75*	\$ 2,553.59*	+62.4%	\$ 13,096.76*	\$ 9,941.81*	+31.7%

Figure 18. Pointing out reasons for operational improvement—or its lack.

ACCOUNT NUMBER		BR. NO.	DESCRIPTION	JANUARY	FEBRUARY	MARCH	JUNE	YEAR-TO-DATE
421-600			STATIONERY					
421-600	1		AKRON	\$ 40.20	\$ 35.15	\$ 33.01		\$ 108.36
421-600	2		ALBANY	18.60	22.10	20.80		61.50
421-600	3		ATLANTA	50.25	53.15	56.15		159.55
421-600	4		BALTIMORE	101.23	105.96	96.20		303.39

BRANCH OR ACCOUNT NO.		BRANCH OFFICE OR ACCOUNT	JAN.	FEB.	MARCH	APRIL	MAY	OCT.	NOV.	DEC.
		NATIONAL AVERAGE	11.9	11.5	11.0					
1		AKRON	11.5	12.1	12.3					
2		ALBANY	10.4	10.0	9.8					
3		ATLANTA	12.5	12.3	12.6					
4		BALTIMORE	14.1	13.8	14.6					

BRANCH NO.	BRANCH NAME	CURRENT MONTH			YEAR-TO-DATE		
		REVENUE	EXPENSES	% E T O R	REVENUE	EXPENSES	% E T O R
36	SALT LAKE CITY	\$ 4,299.34	\$ 415.73	9.7%	\$ 12,047.89	\$ 1,144.55	9.5%
35	ST. LOUIS	24,160.48	2,464.37	10.2%	75,176.25	7,216.92	9.6%
2	ALBANY	3,906.93	375.07	9.6%	12,924.73	1,266.62	9.8%
17	DETROIT	48,234.52	4,437.58	9.2%	149,145.73	15,063.72	10.1%
13	DALLAS	8,547.34	820.54	9.6%	25,330.95	2,583.76	10.2%
18	GRAND RAPIDS	4,842.92	537.56	11.1%	14,486.41	1,506.59	10.4%
27	NEW YORK	225,499.95	25,255.99	11.2%	683,983.76	73,870.79	10.8%
24	MINNEAPOLIS	15,923.70	1,592.37	10.0%	46,833.41	5,104.84	10.9%
32	PITTSBURGH	20,716.59	2,133.81	10.3%	62,714.30	6,835.86	10.9%
10	CHICAGO	99,968.03	11,396.36	11.4%	300,432.16	32,747.11	10.9%
37	SAN FRANCISCO	19,345.36	2,282.75	11.8%	60,346.25	6,577.74	10.9%
	NATIONAL AVERAGE			11.1%			11.0%
12	CLEVELAND	30,816.42	3,482.26	11.3%	93,476.49	10,375.89	11.1%
41	WASHINGTON	20,663.09	2,252.28	10.9%	62,293.68	7,039.19	11.3%

Figure 19. Flexible reporting to fill any need.

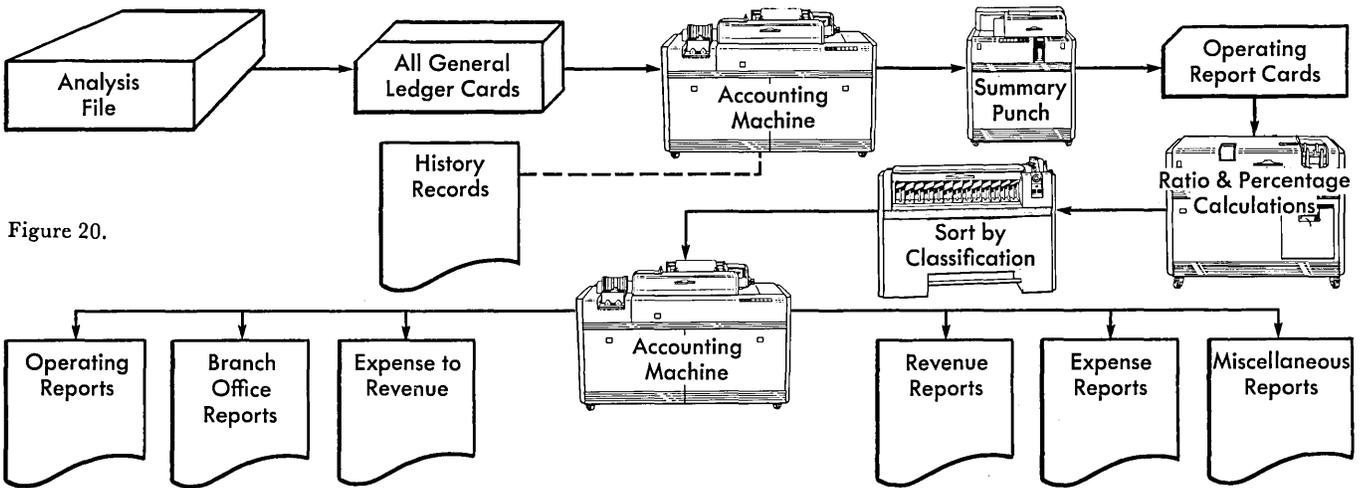


Figure 20.

Budgets and Budgetary Control

Management planning is one of the most vital functions of your company's executive team. Business transactions are planned before they happen. Sales management sets a goal for next year's sales accomplishment—not a guess, but a calculated and attainable goal.

Production management plans an entire production program. Personnel anticipates your needs and plans for them. Equipment, buildings, furniture, office supplies, maintenance supplies, raw materials—an endless list of planned requirements — are all studied, evaluated, planned and budgeted.

PLANNING THE BUDGET

Your accounting department must mold all these varied plans and estimates into a single, workable management tool called the master budget. In many cases this can be an extremely difficult job. However, the IBM method of data processing can reduce budget preparation to a systematic and routine operation because of the flexibility of the basic unit of data—the punched card.

Let us examine a typical procedure for preparing a budget. Actual procedures vary greatly, but their basic idea is the same. Expense information is available in the general ledger files for every department or division in the organization. These cards are separated by whatever classification determines a budget unit, and the cards are processed in an accounting machine or a calculating punch to accumulate expense totals by classification, for the previous twelve months. At the same time, the machine prepares a summary card showing departmental identification, account name and number, present weekly budget, weekly expense during the last accounting period, and average weekly expense during the last twelve months.

You can see that now it is easy to prepare standardized estimate sheets (Figure 21) for each department budget planner. With the data available to them, budget planners then post their requirements on the estimate sheets and return the sheets to accounting.

12 MONTHS ENDING SEPT 30		EXPENSE BUDGET ESTIMATE		PURCHASING	DEPT 210
ACCOUNT NAME	ACCT. NO.	ESTIM. BUDGET 196- -WEEKLY---MONTHLY-	CURRENT BUDGET PER WEEK 196-	EXPENSE PER WEEK SEPT.	AVERAGE EXPENSE PER WK. PAST YR
ADMIN & TECHNICAL ASST	204				69
BUYER & INTERVIEWER	222	1,097	10,124	3,081	3,000
CLERK	233	82	78	91	1,031
SECTY STENO & TYPIST	237	156	150	87	343
MACHINE & EQUIP MAINT	252	5	4	5	5
CLEANER & GARDENER	260			1	
REWORK LABOR PRODUCT	280	579	400	433	579
OTHER INDIRECT LABOR	281	9	3	50	9
EXPEDITER	292				3
OVERTIME PREMIUM	302			2-	15
OTHER SUPPLIES	409	4	6	1	4
MACH & EQUIP MAINT	455	6			6
DRAWING SUPPLIES	462			25	3
STATIONERY SUPPLIES	468			131-	230
PARTS SCRAPPED	472	2,268	1,300	1,349	2,268
PARTS USED	473	2		1	2
MACHINE & EQUIP MAINT	513	1		1	1
MANUFACTURING	516	754		337	754
DUES & SUBSCRIPTIONS	523	9	8	5	9
OTHER FEES	539	3			3
TRAVELING & SUBSIST	588	150	100	76	165
CASH DISCOUNTS	613				7
ACCTG MACHINE SERVICE	671	5		5	2
REWORKING EXPENSE	846	270 CR	225-		270-
EMPLOYEE BENEFITS	881			448	48
OCCUPANCY	882			166	17
SERVICE OVERHEAD REDIS	895	5		1	5
		4,865	10,124	4,905	5,653
					8,306

Figure 21. Department managers estimate budgets on standard forms.

Now high level management has standardized, readable documents for review, comment and adjustment. Plans are beginning to crystallize on the basis of factual information. The figures are entered into the cards, and the preliminary budget can be prepared and distributed in a short time.

All people concerned with the budget have an additional opportunity to suggest changes and adjustments in this preliminary budget. Any changes that are approved are entered into the budget cards. Then these cards are merged with the expense cards by means of a high speed collator operation.

Now a proposed budget can be written. It is listed by account number and shows the proposed weekly, monthly and total budget, the totals for the last twelve months, and the variance and percent-of-variance between recent experience and proposed budget.

This is distributed once more. Your budget supervisor is especially interested in accounts showing significant variance from past experience. He has the opportunity, before the company has committed itself, to look for justification of any unusual situations. Furthermore, he can be aware of such unusual circumstances without spending time unnecessarily on accounts that are normal. This is a basic concept of management by exception, as it has developed from management's rapidly increasing workload.

Now all the reviews of the budget are completed, and corrections made. The final budget figures have been decided on and approved. Now the budget can be written on the accounting machine, and each department given copies of the section affecting its operations.

This budget can show the authorized weekly and monthly budget, and special monthly variations, and the total for the year (Figure 22).

PURCHASING		DEPT 210				
ACCT. NAME	ACCT. NO.	APPROVED WEEKLY	BUDGET MONTHLY	SPEC. MO. VARIATIONS	PROPOSED 196- TOTAL	
BUYER & INTERVIEWER	222	1,097	10,124		175,241	
CLERK	233	82			4,018	
SECTY STENO & TYPIST	237	156			7,644	
MACHINE & EQUIP MAINT	252	5			245	
REWORK LABOR PRODUCT	280	579			28,371	
OTHER INDIRECT LABOR	281	9			441	
OTHER SUPPLIES	409	4			196	
MACH & EQUIP MAINT	455	6			294	
PARTS SCRAPPED	472	2,268			111,132	
PARTS USED	473	2			98	
REARRANGEMENT	510	100		2,420-	2,480	
MACHINE & EQUIP MAINT	513	1			49	
MANUFACTURING	516	754			36,946	
DUES & SUBSCRIPTIONS	523	9			441	
OTHER FEES	539	3			147	
TRAVELING & SUBSIST	588	150			7,350	
ACCTG MACHINE SERVICE	671	5			245	
REWORKING EXPENSE	846	270-			13,230-	
SERVICE OVERHEAD REDIS	895	5			245	
		4,965	10,124	2,420-	362,353	

Figure 22. Managers get copies of the final budget.

You can also furnish your department managers and the budget department with a complete breakdown of the budget. This shows the budget for the coming year and the spread over the next twelve months (Figure 23). Department and project managers have found this a valuable aid to planning.

BUDGET REPORTS

During the budget period, supervisors and their managers find it helpful to study periodic expense-to-budget statements. These are readily available from the budget cards and the current general ledger expense cards.

These cards can be arranged in sequence and merged in a collator. Then, statements can be prepared by expense account classification (Figure 24). This particular statement compares expenses with the budget for the current month and year to date. It also shows the number of weeks in the current accounting period, and also in the year to date.

The current month budget column can show the latest revised budget. However, you may find it desirable to leave the approved budget amounts unchanged in the

year-to-date column; then changes can be reflected in the authorized changes column. The original budget, plus or minus authorized changes, minus expenses, is the net variance year to date. The net variance from budget is also computed and listed on this report.

The same cards can be rearranged in many ways to highlight information or to present it significantly. For instance, a division superintendent or branch manager can quickly detect any unusual situations in the accounts or departments under his supervision with an expense-to-budget report showing the total budget and expense for each department (Figure 25).

CENTRAL BUDGET CONTROL

The budget has become management's means of control and development of the business. And to assist this control, many summary reports can be provided, such as:

- departmental listings showing total budget per department.
- listings showing total budget per account.
- supplementary listings showing each departmental budget breakdown for every account.

TESTING LABORATORY														
DEPT	ACCT	196-	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
88	802	203	9,300	775	775	775	775	775	775	775	775	775	775	775
88	802	215	1,617	99	132	165	132	132	158	125	66	158	132	186
88	802	217	48,265	2,955	3,940	4,925	3,940	3,940	4,728	3,743	1,970	4,728	3,940	5,516
88	802	233	4,900	300	400	500	400	400	480	380	200	480	400	560
88	802	237	4,410	270	360	450	360	360	432	342	180	432	360	504
88	802	248	20,580	1,260	1,680	2,100	1,680	1,680	2,016	1,596	840	2,016	1,680	2,352
88	802	252	49	3	4	5	4	4	5	4	2	5	4	5
88	802	258	49	3	4	5	4	4	5	4	2	5	4	5
88	802	262	49	3	4	5	4	4	5	4	2	5	4	5
88	802	280	98	6	8	10	8	8	10	8	4	10	8	10
88	802	281	5,488	336	448	560	448	448	538	426	224	538	448	626
88	802	302	1,176	72	96	120	96	96	115	91	48	115	96	135
88	802	304	8,820	540	720	900	720	720	864	684	360	864	720	1,008
88	802	403	98	6	8	10	8	8	10	8	4	10	8	10
88	802	588	3,675	225	300	375	300	300	360	285	150	360	300	420
88	802	589	1,421	87	116	145	116	116	139	110	58	139	116	163
88	802	652	3,675	225	300	375	300	300	360	285	150	360	300	420
88	802	881	20,041	1,227	1,636	2,045	1,636	1,636	1,963	1,554	818	1,963	1,636	2,291
88	802	882	9,310	570	760	950	760	760	912	722	380	912	760	1,064
88	802	883	17,248	1,056	1,408	1,760	1,408	1,408	1,690	1,338	704	1,690	1,408	1,970
88	802	884	2,793	171	228	285	228	228	274	217	114	274	228	318
			184,279*	11,488*	15,059*	18,630*	15,059*	15,059*	17,918*	14,347*	7,917*	17,918*	15,059*	20,766*

Figure 23. A month-by-month guide for department operations.

EXPENSE BUDGET STATEMENT											
DEPT. NAME	TYPENAKING		DEPT. MANAGER	W J GROTHAUS		PROJECT MANAGER	W E RAYHER		PROJECT NO.	DEPT. NO.	MONTH ENDING
			CURRENT MONTH			YEAR TO DATE					
ACCOUNT NAME	ACCT. NO.	DEPT. NO.	WORKING DAYS	DIRECT HOURS	OVER (+) OR UNDER (-) BUDGET	WORKING DAYS TO DATE	WORKING DAYS REMAINING	DIRECT HOURS	PERCENT		
			20	3006		35	210	5395			
			BUDGET AMOUNT	ACTUAL EXPENSE		ORIGINAL BUDGET AMOUNT	(+ OR -) AUTHORIZED CHANGES	ACTUAL EXPENSE	OVER (+) OR UNDER (-) BUDGET		
DIRECT LABOR											
DIRECT LABOR	100	090	6272	6386	114-	10976		11406	430-	3.9-	
SERVICE SALARIES & WAGE											
TECHNICIAN	217	090	420	388	32	735		670	65	8.8	
PARTS IN PROCESS INSP	242	090	44		44	77			77	100.0	
MACHINE & EQUIP MAINT	252	090	48	122	74-	84		213	129-	153.6-	
TOOL MAINTENANCE	258	090	200	80	120	350		129	221	63.1	
CLEANER & GARDENER	260	090		6	6-			8	8-	0-	
GENERAL LABORER	262	090	4		4	7			7	100.0	
STOCK ROOM & REC	268	090	100	102	2-	175		179	4-	2.3-	
REWORK LABOR PRODUCT	280	090	40		40	70		1	69	98.6	
OTHER INDIRECT LABOR	291	090	32	49	17-	56		202	146-	260.7-	
SERVICE FEES ETC											
MACHINE & EQUIP MAINT	513	090	20		20	35			35	100.0	
TOOL MAINTENANCE	514	090	40		40	70			70	100.0	
MANUFACTURING	516		4		4	7			7	100.0	
TRAVELING & SUBSIST	588	090		16	16-			16	16-	0-	
RECOVERIES & ADJUSTMENT											
SERVICE OVERHEAD RED	895	090	32	3	29	56		3	53	94.6	
TOTAL			2340	2164	176	4095		4148	53-		

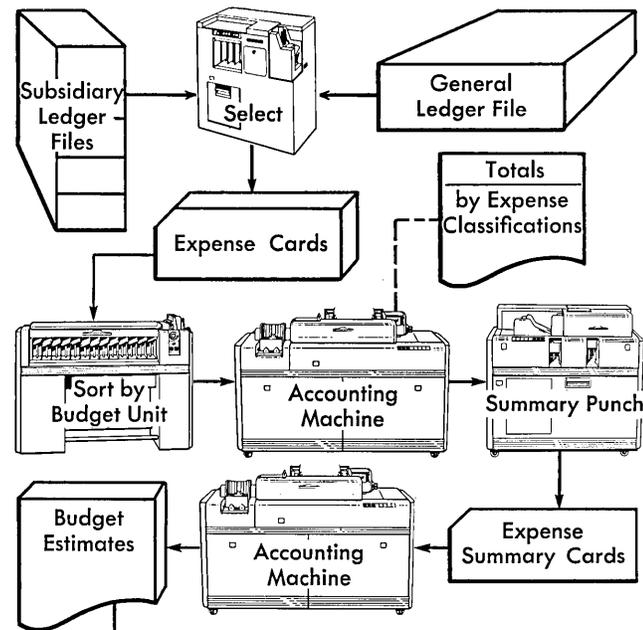
Figure 24. Keeping expenses within the budget.

EXPENSE BUDGET STATEMENT											
DEPT. NAME			DEPT. MANAGER	D GARRISON		PROJECT MANAGER	D GARRISON		PROJECT NO.	DEPT. NO.	MONTH ENDING
			CURRENT MONTH			YEAR TO DATE					
ACCOUNT NAME	ACCT. NO.	DEPT. NO.	WORKING DAYS	DIRECT HOURS	OVER (+) OR UNDER (-) BUDGET	WORKING DAYS TO DATE	WORKING DAYS REMAINING	DIRECT HOURS	PERCENT		
			20			35	210				
			BUDGET AMOUNT	ACTUAL EXPENSE		ORIGINAL BUDGET AMOUNT	(+ OR -) AUTHORIZED CHANGES	ACTUAL EXPENSE	OVER (+) OR UNDER (-) BUDGET		
SETUP MAN	227		136	77	59	161	77	119	119	50.0	
CLERK	233		1002	516	486	1911	360-	1195	356	23.0	
ASSEMBLY INSPECTOR	244		1276	853	423	1715	518	1357	876	39.2	
MACHINE & EQUIP MAINT	252		1632	1772	140-	2856		3020	164-	5.7-	
TOOL MAINTENANCE	258		348	318	30	609		600	9	1.5	
GENERAL LABORER	262		2540	2157	383	4445		3971	474	10.7	
STOCK ROOM & RECEIVING	268			312	312-			332	332-	0-	
REWORK LABOR PRODUCT	280		388	514	126-	679		827	148-	21.8-	
OTHER INDIRECT LABOR	281		576	88	488	1008		207	801	79.5	
DISPATCHER	296		2700	2919	219-	4725		4992	267-	5.7-	
OVERTIME PREMIUM	302			4	4-			13	13-	0-	
RETROACTIVE RATE ADJ	303			2	2-			2	2-	0-	
SHIFT PREMIUM	304		384	392	8-	672		690	18-	2.7-	
JOB TRAINING	342			84	84-			107	107-	0-	
WAITING TIME	371							46	46-	0-	
ACIDS & CHEMICALS	401		2284	1986	298	3997		3500	497	12.4	
LUBRICANTS & COOLANTS	403		68	42	26	119		82	37	31.1	
ABRASIVES	404		152	138	14	266		319	53-	19.9-	
SHIPPING CONTAINERS	405							5	5-	0-	
CLEANING SUPPLIES	406		80	113	33-	140		121	19	13.6	
WEARING APPAREL	408		84	55	29	147		93	54	36.7	
OTHER SUPPLIES	409		968	1623	655-	1694		2362	668-	39.4-	
MACH & EQUIP MAINT	455		684	1018	334-	1197		1278	81-	6.8-	
SMALL TOOLS & GAGES	456		400	474	74-	700		1013	313-	44.7-	
SMALL TOOLS MACHINE	457		144	170	26-	252		207	45	17.9	
BLDG & OTHER MAINT	459			26	26-			26	26-	0-	
STATIONERY SUPPLIES	468		156	253	97-	273		293	20-	7.3-	
PARTS SCRAPPED	472		252	58	194	441		248	193	43.8	
PARTS USED	473		16		16	28		36	8-	28.6-	
RAW MATERIALS	477		236	211	25	413		226	187	45.3	
MACHINE & EQUIP MAINT	513		536	177	359	938		177	761	81.1	
TOOL MAINTENANCE	514		48	6	42	84		6	78	92.9	
MANUFACTURING	516		44	58	14-	77		58	19	24.7	
EQUIPMENT RENTALS	572		4		4	7		7	7	100.0	
TRAVELING & SUBSIST	588		52	41	11	91		50	41	45.1	
ACCTG MACHINE SERVICE	671		40	35	5	70		35	35	50.0	
SERVICE OVERHEAD REDIS	895		264	175	89	462		362	100	21.6	
TOTAL			17494	16667	827	30177	235	27975	2437		

Figure 25. Bringing immediate attention to the unusual.

EXPENSE BUDGET STATEMENT											
DEPT. NAME	RECAP BY ACCOUNT	DEPT. MANAGER	PROJECT MANAGER	PROJECT NO.	DEPT. NO.	MONTH ENDING	FEB 19				
ACCOUNT NAME	ACCT. NO.	DEPT. NO.	CURRENT MONTH			YEAR TO DATE			PERCENT		
			WORKING DAYS	DIRECT HOURS	(-)+	WORKING DAYS	DIRECT HOURS	(-)+			
			20		35	210					
			BUDGET AMOUNT	ACTUAL EXPENSE	OVER (+) OR UNDER (-) BUDGET	ORIGINAL BUDGET AMOUNT	(+ OR -) AUTHORIZED CHANGES	ACTUAL EXPENSE	OVER (+) OR UNDER (-) BUDGET		
DIRECT LABOR	100		1316703	1208312	8991	2304230		2116780	187450	8.1	
TOTAL			1316703	1208312	8991	2304230		2116780	187450		
GENERAL DEPARTMENT MANAGER	201		69000	63450	5550	138000		125920	12080	8.8	
ADMIN. & TECHNICAL ASST	203		156000	149482	6518	312000		299579	12421	4.0	
DES. DRAFTSMAN & TRACER	204		42104	42503	399-	78092	80	76544	1628	2.1	
ESTIMATOR	213		8252	10986	2734-	14441		18815	4374-	30.3-	
LABORATORY ANALYST	214		15380	15435	55-	26915		26450	465	1.7	
ROUTING ANALYST	215		428	428		749		24	725	96.8	
TECHNICIAN	216		21584	19418	2166	37772		33327	4445	11.8	
TOOLING ANALYST	217		50124	46128	3996	88717	480-	82256	5981	6.8	
ARCHITECT & PLANT DES.	218		20280	26093	5813-	36190	700-	42972	7482-	21.1-	
BUYER & INTERVIEWER	221		11136	10961	175	19488		19357	131	.7	
INDUSTRIAL DESIGNER	222		28917	28084	833	56091		54669	1422	2.5	
	223		120	368	248-	210		417	207-	98.6-	

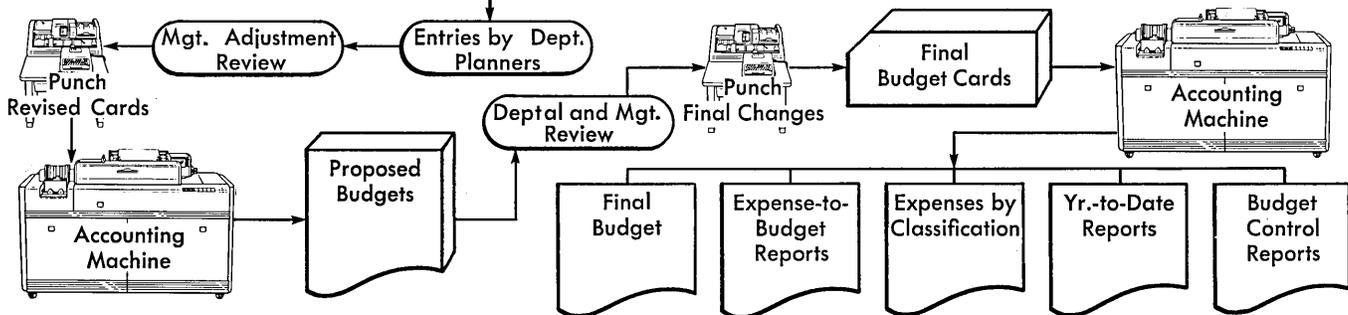
Figure 26. Items that need attention.



As an example, for central budget control the tabulating department could rearrange the sequence of the cards by account number and print the above listing on the accounting machine (Figure 26). This permits immediate awareness of any account showing significant variance. Then the supplementary listing of budget and expense for each department within account number provides the means for isolating the cause of the variance and justifying or correcting the situation.

These departmental and project listings provide immediate data and comparisons for any desired breakdown of the final budget. And the cards that go into preparation, reporting and control of the budget are valuable aids on which to base budget decisions for the following year.

Figure 27.



KRAUSZ MANUFACTURING CO.									
DAILY STOCK TRANSFER SHEET									
PAGE 3 OF 3		DATE APR 4 196-							
NAME AND ADDRESS	STOCK	CERTIFICATE		SHARES		CLOSE ACCOUNT	NEW ACCOUNT	ACCOUNT	
		PREFIX	NUMBER	SURRENDERED	ISSUED			NUMBER	SUB.
ESTATE OF THADDEUS V. STEWARD DECD. LOUISE C. STEWARD EXECUTRIX 74-36 CAROUSEL DRIVE ASTERVILLE, LOUISIANA	9	MC	138-625	100		*		314-501	0
HAROLD N. BORGSTROM C/O SEAMEN'S BANK AND TRUST CO. 14 CANAL STREET GALVESTON, TEXAS	9	MC	235-342		50	*		494-622	0
BLUEFIELD, CONNECTICUT									
GENESEE MUTUAL INVESTMENT CORP. 30-40 EAST SALINA STREET SYRACUSE, NEW YORK	9	MC	235-347		842			173-148	0
ACCOUNTS									
	CLOSED	NEW	OTHER SURRENDERS	OTHER ISSUES					
	4	12							
SHARES	620	5,855	13,255	8,020	13,875	13,875			

Figure 29. Every stock transaction is recorded.

Each day as you receive the record of sale of stock, the original certificate card is removed from the file. A new certificate card is prepared for a new stockholder, together with a name and address card for this new investor. The old and the new certificate cards can now be processed in an accounting machine to produce a transfer sheet (Figure 29). Then the cards can be filed.

Note that in this record of daily stock trading, the number of surrendered or sold shares always equals the number of shares issued or purchased. Another detail is an account number for each stockholder, in addition to the certificate number. This makes it possible to maintain stockholder cards in alphabetic order. Besides, a single stockholder often owns several certificates, or a series.

When the transfer sheet for the day has been completed, the new certificate record cards—together with the name and address cards—can be placed in the open-accounts file. The old cards representing surrendered or sold certificates are filed in a history file. Actually, the open-accounts file is a ledger of all outstanding stock certificates.

STATISTICAL ANALYSES

This three-way method of maintaining stockholders' records takes advantage of the complete flexibility of the IBM method for processing data. Now statistical and analytical reports of any kind can be produced.

At any given moment, a complete and up-to-date list of the current stockholders of record can be supplied your company officers simply by processing the alphabetic file (Figure 30).

Your officers may be interested in the number of different stockholders. A fast operation in the accounting machine will count each separate account number. Or perhaps your need will be for a listing of the stockholders arranged in the order of the size of their holdings—or by state—or by class. Whatever the type of information required, it is available. All you need to do is sort the certificate record cards and the name and address cards into the desired sequence and process the cards in the accounting machine.

DIVIDEND PAYMENTS

Whether your company declares a cash or a stock dividend, or both, the dividend is based on individual shares. The stockholders of record on a given date are the investors to whom the dividend must be distributed.

The speed and efficiency of the IBM method is well illustrated in this function of capital stock accounting. Let us recall that certificates of record were updated daily. When the stock transfer record of the deadline date has been completed, the open-accounts file will contain certificate records and name and address cards for all stockholders entitled to dividend payments.

The entire open-accounts file is processed in a calculating punch, and the dividend is computed and punched in the certificate record cards. Then you can prepare a complete and accurate dividend statement by processing the file, with proper extensions of dividends, in the accounting machine.

While the accounting machine prepares the dividend

statement, the summary punch prepares dividend cards. And all the while, control totals are established to insure complete accuracy.

Furthermore, a consecutive check number can be punched in the dividend card during the same operation. Now the dividend cards can be merged with name and address cards, and a dividend check register prepared in the next accounting machine step. The register shows the name and address of the stockholder of record, the account number, amount of dividend, check number, and number of shares held. The dividend total is accumulated and balanced to a predetermined control for the total dividend declared.

Now the checks can be written and prepared for mailing. Paper or card checks can be used. These would be written by the accounting machine in a procedural step similar to the preparation of the check register. Card checks have become popular because of the ease of reconciling.

KRAUSZ MANUFACTURING CO.							
STOCKHOLDERS OF RECORD							
○ TYPE OF STOCK COMMON							○ PAGE <u>16</u> OF <u>44</u>
○ RECORD DATE FEBRUARY 17, 196-							
NAME AND ADDRESS	NUMBER OF SHARES	PROXY NUMBER	TOTAL CERT.	PROXY CHECK	ACCOUNT		
					NUMBER	SUB.	
MRS. MARIETTA H. FOLSOME 3392 FIFTEENTH AVE. CLEVELAND, OHIO	150	453	3	*	174-990	0	
RENE FONTAINBLANC 165 O'BRIEN PLACE SOLVAY, NEW YORK	1,644	454	1	*	216-321	0	
MORRIS JOSEPH FOOTMAN STAR ROUTE NO.4 FOREST STATION, VIRGINIA	73	455	5		426-811	0	
ESTATE OF DR. JOSEPH W. FOWLER THOMAS FOWLER, EXECUTOR 1146 HENDERSON PARKWAY ROCHESTER, NEW YORK	200	456	1	*	101-187	0	
FOXMAN FOUNDATION INC. 666 GRAMERCY PARK NEW YORK CITY	2,000	457	2		99-325	0	
PATRICK THOMAS FOY AND EILEEN MARY FOY IN EQUAL SHARES OR ALL TO SURVIVOR	15	458	1		456-072	0	

Figure 30. Stockholder lists can be prepared quickly and easily.

**KRAUSZ MANUFACTURING CO.
COMMON STOCK DIVIDEND NO. 120**

PAYABLE TO STOCKHOLDERS OF RECORDS AS OF MAY 15, 196-

PAGE **1** OF **44**

NAME AND ADDRESS	AMOUNT OF DIVIDEND	CHECK NUMBER	NUMBER OF SHARES	ACCOUNT	
				NUMBER	SUB.
HENRY W. AARONSON C/O CHAMBER OF COMMERCE TALL FALLS, KENTUCKY	\$ 12.50	1001	50	440-625	0
THOMAS J. ABARNATHY IN TRUST FOR WILLIAM T. ABARNATHY FORT ST. JOHN. MINNESOTA	\$ 86.50	1002	346	112-732	0
SERENA ABATONDO 116 ONONDAGA TURNPIKE SYRACUSE, NEW YORK	\$ 2.50	1003	10	246-010	0
VITTORIO ABATONDO 118 ONONDAGA TURNPIKE SYRACUSE, NEW YORK	\$ 2.50	1004	10	246-011	0
ESTATE OF THEODORE J. ABBAT COMMERCIAL TRUST CO. EXEC. 62 MEMORIAL SQUARE PATERSON, NEW JERSEY	\$ 200.00	1005	800	147-775	0
WILLIAM WAYNE ABBOT 340 LONGFELLOW CRESCENT HOLYOKE, MASSACHUSETTS	\$ 550.00	1006	2200	126-129	0
WESLEY ARNOLD ABBURTON 75 FIFTH AVE. GREENBRIAR, RHODE ISLAND	\$ 158.75	1007	635	423-518	0

DIVIDEND NO 120	KRAUSZ MANUFACTURING COMPANY	12-123 1234
	SYRACUSE, NEW YORK	
	JUNE 12, 196-	
CHECK NUMBER 1002	ACCOUNT NUMBER 112-732	Pay \$ *****86*50
TO THE ORDER OF		DOLLARS CENTS
THOMAS J. ABARNATHY IN TRUST FOR WILLIAM T. ABARNATHY FORT ST. JOHN, MINNESOTA		<i>This check is in payment of dividend of \$.25 per share, payable this day upon the capital stock of Representative Corporation registered in your name at the close of busi- ness May 15, 196-</i>
GENESSEE COMMERCIAL TRUST COMPANY SYRACUSE, NEW YORK		<i>Herman J. Krausz</i> TREASURER

Figure 31. Fast machine processing of calculations, lists and checks.

These card checks are prepared by reproducing the check number, dividend number, and dividend amount from the dividend cards into the check forms. Then the dividend cards, certificate record cards, and name and address cards are arranged in check-number sequence. The check forms pass through the bill feed, the other group of cards through the feed of the accounting machine, and the checks are printed—check number, dividend number, dividend amount, and name and address of the payee (Figure 31). Continuous-form card checks can be prepared in a similar manner.

PROXIES

Each stockholder is a part owner of the business and has a voice in the management of the business. So, periodically, the stockholders meet to vote decisions on various subjects.

It is usually impossible for some stockholders to attend

these meetings. But absentee stockholders can still participate in making decisions by means of proxy votes.

Therefore, proxy cards are distributed to all stockholders well in advance of the stockholders' meetings. The proxy cards solicit the stockholders' votes on the issues to be presented.

Let us consider the preparation and distribution of proxies. The open-accounts file for the given date is processed in the accounting machine to prepare a list of all stockholders entitled to vote. At the same time, a summary punch prepares a summary card for each stockholder, giving the stockholder's number and the total number of shares he has.

All the summary cards are reproduced, and the reproduced cards are the actual proxy authorizations. When they have been properly signed and returned by the stockholder, they constitute legal authority to vote on behalf of that particular stockholder (Figure 32).

IBM	PROXY
	<p>The undersigned hereby appoints John A. Doe, William H. Doe, James Smith, D. M. Smith, George K. Smith and Dean D. Jones, or any of them who shall act, proxies for and with all the powers of the undersigned, each with power of substitution, to vote all shares of stock of KRAUSZ MANUFACTURING CO. registered in the name of the undersigned at the annual meeting of the stockholders of said corporation to be held on April 29, 196-, and at all adjournments thereof:</p> <p>(a) FOR THE ELECTION OF DIRECTORS; (b) FOR THE ELECTION OF INSPECTORS OF ELECTION; AND (c) FOR THE TRANSACTION OF SUCH OTHER BUSINESS AS MAY PROPERLY COME BEFORE THE MEETING.</p> <p>Dated <u>April 3</u>, 196-. <u>James Morris</u> (L. S.) Signature of Stockholder</p>

Figure 32. Maximum efficiency in handling proxies.

The reverse side of the proxy is printed with the stockholder's name and address in another bill-feed operation, and the card is ready for mailing in a window envelope.

The returned proxy cards are arranged in account-number sequence and matched against the original summary cards. The unmatched cards, set aside by the collator, represent proxies that have not been returned. It may be that your board of directors will request a follow-up for these unreturned proxies.

The voting power represented by each proxy is coded and punched in the order of business specified. On the date of the meeting, you can prepare a listing of the proxies and the shares represented. The speed and flexibility of the operation permit you to include every proxy received right up to the last moment (Figure 33).

TAX REPORTS

One of the reports that your organization must prepare is a listing of all stockholders who have received dividends in excess of \$100 during the calendar year. The data needed for preparation of this report is in the history files and in the open-accounts file.

All the dividend summary cards can be removed from the files in a high speed machine operation. Then a printed report can be prepared in the accounting machine.

Using the same general procedure, you can also provide a periodical summary of dividend payments. This could show stockholders, dividends paid, breakdowns of totals by types of stock, geographical studies by state or by residence, number of shares held, or any other significant factor involved (Figure 34).

KRAUSZ MANUFACTURING CO.								
LIST OF PROXIES SIGNED AND RETURNED								
STOCKHOLDER ACCOUNT NO.	TOTAL NO. OF		AUTHORIZED VOTE FOR					
			A		B		C	
			NUMBER OF		NUMBER OF		NUMBER OF	
PROXIES	SHARES	PROXIES	SHARES	PROXIES	SHARES	PROXIES	SHARES	
174-887	1	450	1	450	1	450	1	450
174-901	1	50	1	50			1	50
174-902	1	50	1	50			1	50
174-906	1	1,725			1	1,725	1	1,725
174-910	1	360	1	360	1	360	1	360
175-143	1	100			1	100		
175-144	1	400	1	400	1	400	1	400
175-149	1	2,508	1	2,508	1	2,508		
GROUP TOTALS FORWARD	* 264	* 9,562	* 205	* 5,158	* 231	* 7,875	* 227	* 7,650

Figure 33. Accurate and up-to-date proxy authorization.

NATIONAL PRODUCTS INC.
SUMMARY OF DIVIDEND PAYMENTS FOR 196-

PAGE 3 OF 138

NAME AND ADDRESS	ACCOUNT NUMBER	TOTAL DIVIDENDS PAID	DIVIDENDS PAID ON		
			FIRST PREFERRED	SECOND PREFERRED	COMMON STOCK
CHARLES M. ASTRANDIAN 855 HUDSON STREET HOBOKEN, NEW JERSEY	113-825	\$ 362.50			\$ 362.50
TRUST ACCOUNT OF LUCY C. ASUNCION SALMON BANK AND TRUST CO. 27 OLYMPIC AVENUE OLYMPIA, WASHINGTON	416-140	\$ 93.70			\$ 93.70
HAROLD F. ASUSA AND CO. 116 STRAIT STREET SAN FRANCISCO, CALIFORNIA	127-389	\$ 5,616.30	\$ 1,000.00	\$ 1,800.00	\$ 2,816.30
THOMAS JOHN ATEs AND EMMA LEIGH ATEs IN EQUAL SHARES OR ALL TO SURVIVOR CRESTWOOD CROSS, CONNECTICUT	294-111	\$ 450.00	\$ 450.00		
ATGOOD, ATGOOD, AND BRINE 21 PINE STREET NEW YORK CITY, NEW YORK	455-261	\$ 18,975.50	\$ 2,200.00		\$ 16,975.50
AMELIA LOUISE ATHERTON % SEACLIFF TRUST CO. SEACLIFF, FLORIDA	117-863	\$ 1,250.00		\$ 1,250.00	
BRENDA MAE ATHERTON % SEACLIFF TRUST CO. SEACLIFF, FLORIDA	117-864	\$ 1,250.00		\$ 1,250.00	
CYRIL GEORGE ATKINS 2 EAST 56TH STREET NEW YORK CITY, NEW YORK	326-419	\$ 185.00			\$ 185.00
ESTATE OF ROLAND TRAVIS ATKINSON GENESEE COMMERCIAL BANK, EXECUTORS P. O. BOX 1699 SYRACUSE, NEW YORK	110-909	\$ 4,460.00			\$ 4,460.00
GUGLIELMO AND SERAFINA ATTILIO UNDER LAST WILL AND TESTAMENT OF AGOSTINO ATTILIO DECD. 38-32 CONEY ISLAND CONCOURSE BROOKLYN, NEW YORK	212-663	\$ 85.00			\$ 85.00

Figure 34. Reports based on any classification of available data.

Data Processing Systems

Management control over the operations of modern business results from examining, tabulating and comparing great masses of information—data about every business transaction.

The general ledger, and financial control concepts for management are the result of summarized details of every operation of every division and every department of a business organization. These foundations for management decisions represent a tremendous expenditure of man-hours and money.

Let us examine the concept of automation in record keeping as it has been implemented by automatic data processing systems. IBM data processing systems are groups of machine units, capable of accumulating, computing, storing, comparing, recording and transcribing information.

Furthermore, these component groups of machines can take a series of circumstances within the data and compare it with a predetermined pattern. Whenever a deviation from the predetermined norm is encountered, the machines will follow a course of action chosen by management to fit such variations from standard.

All these functions are performed at speeds never before attained in business machines or computers. Many of the operations take place simultaneously, and information can be fed into the system from various sources at the same time. The net result is that procedures not

previously attempted because of the prohibitive cost in time and money have become fast routine operations.

The speed and adaptability of data processing systems combine to produce diversified results:

All subsidiary ledgers are maintained, and automatic postings to general ledgers achieved.

The chart of accounts is complete and simple, providing many subdivisions of accounts, with ample room for expansion. Source records of all kinds are readily adapted to the simple source requirements of data processing systems.

Trial balances are produced quickly; increased accuracy reduces the need for corrections, and adjustments are part of routine programming.

Financial reports, income statements, balance sheets, and analytical reports require no special handling. They are provided for in planned programming.

Operating and administrative reports are also a part of the procedure. Management receives reports as soon as the need for them is evident; this evidence of need is a planned period, or any deviation from pre-established standards.

All the requirements of capital stock accounting can be provided for in designing the program.

This is automation in record keeping for modern business. The concept has already been applied in many large organizations. The use of this efficient tool for management is increasing steadily.

ABCs of IBM Data Processing

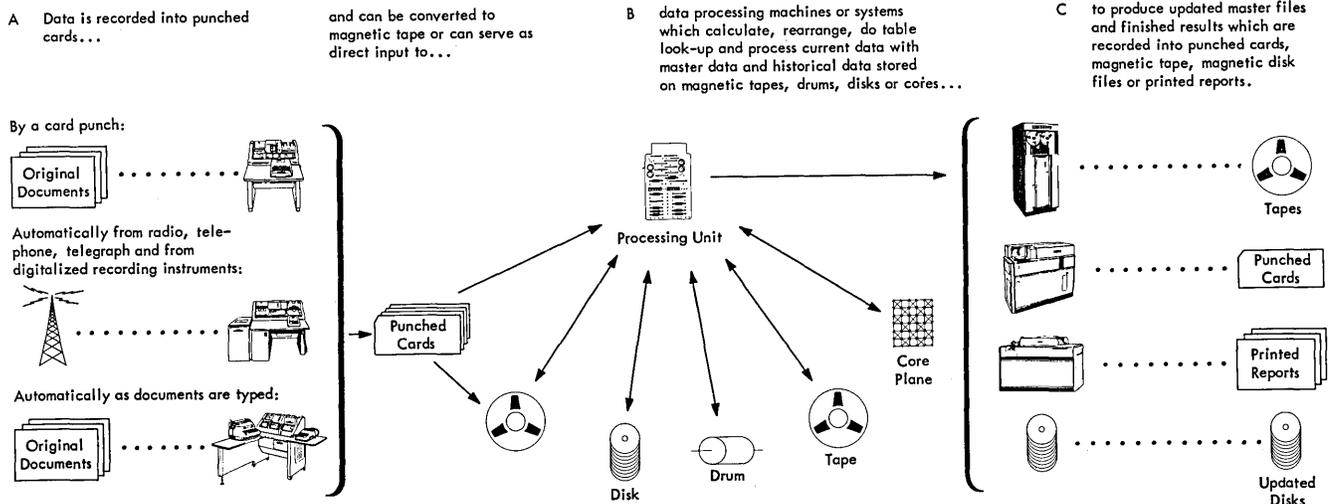
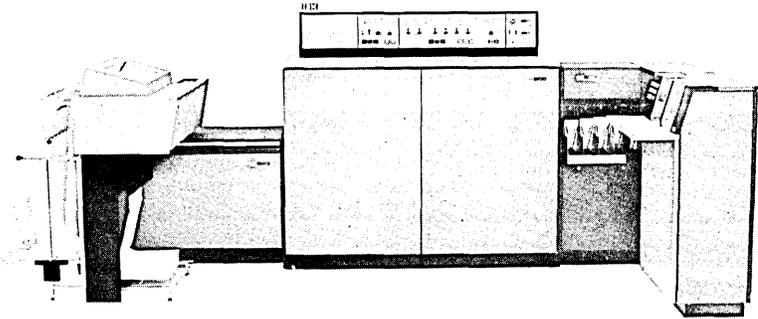
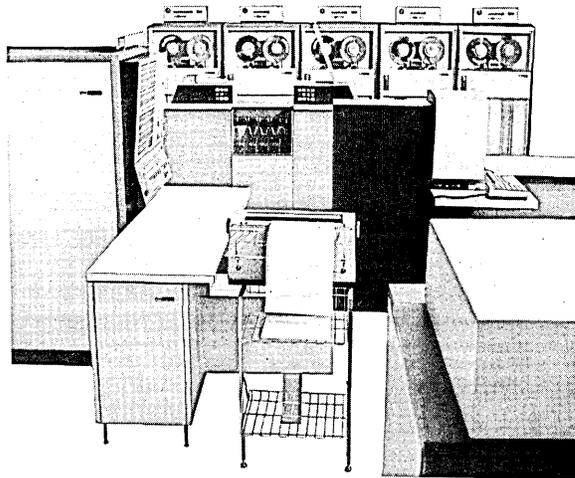


Figure 35.

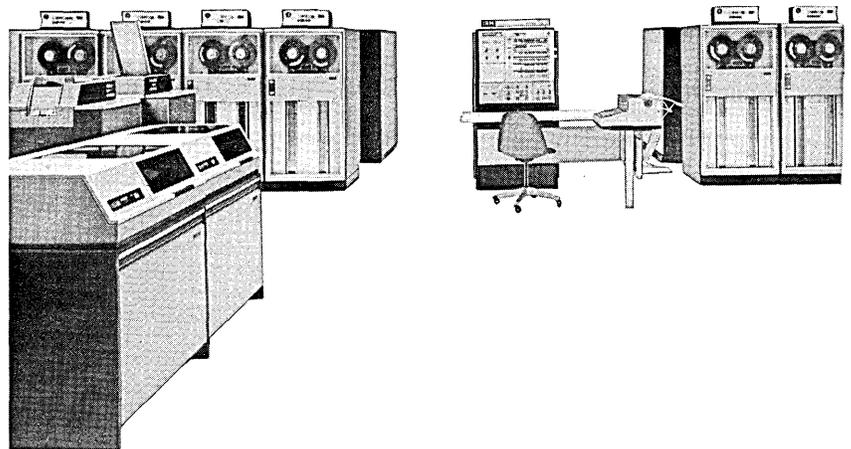
IBM System/360 Model 20



IBM System/360 Model 30



IBM System/360 Model 40



Advantages: Profit to Your Company

Intimate knowledge of every detail of a business is essential if management is to make the most efficient decisions concerning the welfare of that business. But there is not enough management time to permit intimate knowledge of every detail. Actually, management must have knowledge of significant details—cumulative effects of transactions, abnormal variation from standards, and net results of operations.

So it is on these significant facts that management bases decisions—significant facts that become available at the peak of the accounting pyramid: the general ledger and the financial reports it provides. That is where you will find the summary of your company's activities.

Because management bases decisions on these facts—because the facts themselves are derived from summaries of great masses of detail—your accounting methods have a direct effect on the efficiency and operation of your business.

The IBM method of processing data can provide the facts you need—provide significant facts from accurate and fast processing of all the details that make up your company's operations. Facts, analyses and detail are made available, according to your requirements, with speed and economy, with accuracy and flexibility.

Let us sum up briefly the clear-cut, measurable advantages your company will derive from the IBM method of processing data:

CLEAR DEFINITION of subsidiary ledgers is a direct result of a diversified chart of accounts. Regardless of expansion or multiple subdivision in subsidiary accounts, entries, calculations, postings, and summaries are all performed mechanically.

EFFICIENCY in handling the records of your company results in accurate and complete reports of all kinds. More important, these reports are timely—available when they are needed.

FLEXIBILITY of the method for handling data makes it possible to accommodate rapid expansion, corporate changes, revised tax structures, with a minimum of deviation from established routines, and without interruptions to normal flow of business.

TAX REPORTING to fulfill all the requirements of tax collection agencies is routine operation, rather than a year-end burden on your staff.

CONTROL over every phase of the business is a prime objective of management everywhere. The data and analytical material available in the IBM method makes close control a more easily attainable objective.

MORE INFORMATION becomes available than ever before. Mechanization of data processing makes possible routines that could not be attempted under slower and more cumbersome methods.

AUDITING is facilitated by the clear-cut audit trails left in documenting all details, all transactions. All final reports make complete reference to source documents.

BUDGETING is reduced to a smooth-working routine, and more accurate, workable budgets are the result.

ECONOMY OF TIME AND MONEY is one of the greatest benefits derived from the speed, accuracy, flexibility, and efficiency of the IBM method for general ledger accounting and financial control.

IBM[®]

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