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BUSINESS BUILDER 4

HOW TO PREPARE A CASH FLOW STATEMENT

how to prepare a cash flow statement

A cash flow statement is important to your business because it can be used to assess the timing, amount and predictability of future cash flows and it can be the basis for budgeting. A cash flow statement can answer the questions, "Where did the money come from?" and "Where did it go?"

what to expect

This Business Builder will introduce you to the cash flow statement and its importance for financial management. Through the use of a worksheet, the Business Builder will guide you through the construction of a cash flow statement for your business. The cash flow statement is a complex financial statement and by necessity, this Business Builder contains information on sophisticated accounting topics.

what you should know before getting started

What is a Cash Flow Statement?

For your business, the cash flow statement may be the most important financial statement you prepare. It traces the flow of funds (or working capital) into and out of your business during an accounting period. For a small business, a cash flow statement should probably be prepared as frequently as possible. This means either monthly or quarterly. An annual statement is a must for any business.

The cash flow statement's primary purpose is to provide information regarding a company's cash receipts and cash payments. The statement complements the income statement and balance sheet. It is important to note — cash flow is not the same as net income. Cash flow is the movement of money into and out of your company, and it can be affected by several noncash transactions.

The cash flow statement became a requirement for publicly traded companies in 1987. There are various rules governing how information is reported on cash flow statements, as determined by generally accepted accounting principles (GAAP). While your business may not be a public company, a cash flow statement is still important to measure and track the flow of cash into and out of your business.

This Business Builder is designed to show you how to create and understand your cash flow statement. Cash flow, simply, is the movement of money in and out of your business, or the inflows and outflows.

This Business Builder assumes that a reliable accounting system is in place in your business and information typically recorded by small businesses is accessible to you. Therefore, you will need a balance sheet and profit and loss statement (or income statement) for your business for the same time period as the cash flow statement you will be preparing. The three statements work together to give you and others a clear picture of your business. You will learn what data is necessary to create a statement of cash flows for your business.

> *The cash flow statement may be the most important financial statement you prepare.*

The cash flow statement reports the cash provided and used by the operating, investing, and financing activities of a company during an accounting period. In 1987, the Financial Accounting Standards Board issued Statement No. 95, which requires that a statement of cash flows accompany the income statement, balance sheet and statement of retained earnings.

An Overview

The cash flow statement explains the change during the period in cash and cash equivalents. Cash includes currency on hand and demand deposits. Cash equivalents are short-term, highly liquid investments that are readily convertible to cash.

Statement No. 95 requires that cash receipts and payments be classified as operating, investing and financing activities.

The cash flow statement will summarize the cash flows so that net cash provided or used by each of the three types of activities is reported. Beginning and ending cash must be reconciled based on the net effect of these activities. Here is an example of what a cash flow statement might look like.

ABC Wholesale Company Cash Flow Statement

For the Year Ended 200X (In Thousands)

Cash Flow From Operations	
Net Income*	**$200**
Additions (Sources of cash)	
Depreciation	100
Increase in Accounts Payable	30
Increases in Accrued Income Taxes	10
Subtractions (Uses of cash)	
Increase in Accounts Receivable	(150)
Increase in Inventory	(25)
Net Cash Flow From Operations	**165**
Cash Flows From Investing Activities	
Equipment	(400)
Cash Flows Associated with Financing	
Activities Notes Payable	30
Net Change in Cash	**(205)**

*Net income is taken from the income statement.

The cash flow statement for the ABC Company shows there was a $205 cash shortfall in 200X. As can be seen from the cash flow statement, the cash drain is primarily from the investment of $400 in equipment. The statement also shows the cash flow from operations activity was a positive $165.

components of a cash flow statement

Operating Activities

The statement provides information about the cash generated from a company's daily operating activities. Operating activities are those which produce either revenue or are the direct cost of producing a product or service.

Operating activities which generate cash inflows include customer collections from sales of their primary products or services, receipts of interest and dividends, and other operating cash receipts. Operating activities which create cash outflows include payments to suppliers, payments to employees, interest payments, payment of income taxes and other operating cash payments.

Investing Activities

Investing activities include buying and selling noncurrent assets which will be used to generate revenues over a long period of time; or buying and selling securities not classified as cash equivalents.

Cash inflows generated by investing activities include sales of noncurrent assets such as property, plant, and equipment. Investing activities can also include the purchase or sale of stock and securities. Lending money and receiving loan payments would also be considered investing activities.

Financing Activities

Financing activities include borrowing and repaying money, issuing stock (equity) and paying dividends.

For example, if you borrow funds to purchase equipment or pay off a loan, the cash flow statement will enable you to determine how much cash was either generated or used as a result of those transactions.

Income Flows and Cash Flows

The income statement and balance sheet are based on accrual accounting which was developed based on the principle of matching. The matching principle states that revenues generated and the expenses incurred to generate those revenues should be reported in the same income statement. This emphasizes the cause-and-effect association between revenue and expense.

Many revenues and expenses result from accruals and allocations that do not affect cash. A company can operate at a profit and continually be short of cash. It can also generate huge inflows of cash from operations and still report a loss. The statement of cash flows can explain how these situations might occur. Answers to these questions cannot be found in the other financial statements.

There are two types of items that cause differences between income flows and outflows: noncash income or expense and nonoperating income or expense.

An example of a noncash item on the income statement would be depreciation or amortization. An example of a nonoperating item on the income statement would be a gain on the sale of an asset. These transactions must be reported on a cash flow statement in order to properly determine the true effect of conducting business on cash.

how to prepare a cash flow statement

Information used to prepare a cash flow statement is taken from the income statement for the current year and balance sheets for the past two years. Net income is adjusted for deferrals and accruals. The purpose of these adjustments is to convert the accrual basis income statement to a cash flow statement.

The cash flow statement follows an activity format and is divided into three sections: operating, investing and financing activities.

The cash flow statement follows an activity format and is divided into three sections: operating, investing and financing activities. Generally, the operating activities are reported first, followed by the investing and finally, the financing activities.

Additionally, there are two methods of calculating and reporting the net cash flow from operating activities. Both methods result in identical figures for net cash flow from operating activities because the underlying accounting concepts are the same.

- The direct method reports gross cash inflows and gross outflows from operating activities.
- The indirect method reconciles net income with net cash flow from operating activities by adjusting net income for deferrals, accruals, and items that effect investing and financing cash flows.

The first step in preparing the cash flow statement is to determine the net increase in cash and cash equivalents for the period. This amount will be a control figure and the cash flow statement will reconcile the inflows and outflows (sources and uses) to this figure.

The fictional company From the Roots Up will be used as the example throughout this booklet. The current year income statement data is shown on Exhibit 1 and the balance sheets from the prior two years have been combined on the cash flow worksheet as Exhibit 2. This is also referred to as the sources and uses statement.

Begin with the balance sheet data by taking the cash balance of $223,000 from the most recent balance sheet and subtracting the cash balance of $169,000 from the prior year, which results in an increase in cash of $54,000. The cash flow statement must balance to this control number.

Next, determine the change in each balance sheet account. This is reflected in the Balance Change column (Exhibit 2) of the worksheet. It is calculated by subtracting the prior year account balance from the current year balance. For example, accounts receivable in 200Y was $884,000 compared to $705,000 in 200X, which resulted in a $179,000 increase in accounts receivable. This process is continued for each of the balance sheet accounts.

After calculating the account balance change, it is necessary to determine if the balance change is an inflow or an outflow of cash or a source or use of cash. To make this task simple use Table I as a guide to determine the effect of each balance change. The table shows a decrease in an asset balance and an increase in a liability or equity account are cash inflows. The opposite holds true for increases in an asset balance or a decrease in a liability or equity account, which results in a cash outflow.

To complete the cash flow worksheet (Exhibit 2), determine if each account balance change is an operating, investing or financing activity. Using Table II as your guide, beginning with the asset section of the cash flow worksheet, review each account. Remember, the change in cash and cash equivalents is the control number to which you reconcile your cash flow statement.

Accounts receivable would be categorized as an operating activity, because it is related to collections from customers. The change in inventory is classified as an operating activity, because it is a component of core operating activities. Plant and equipment transactions would be classified as investing, because the sale or purchase of productive assets which are expected to generate revenues in the future are defined as Investing Activities in Table II.

Exhibit 1

From the Roots Up Income Statement

For the Year Ended December 31, 200Y (In Thousands)

Sales	**$8,158**
Cost of Goods Sold	(4,895)
Gross Profit	**3,263**
General & Admin Expense	(367)
Depreciation and Amortization	(188)
Operating Expense	(1,468)
Personnel Expense	(816)
Bad Debt Expense	(33)
Operating Profit	**391**
Other Income (Expense)	0
Interest Expense	(122)
Net Income	**$269**

Exhibit 2

From the Roots Up

Cash Flow Worksheet (In Thousands)

Comparative Balance Sheet	Prior Year 200X	Current Year 200Y	Balance Change	Cash Source/ (Cash Use)	Activity Type
Assets					
Cash	$169	$233	$54	Control	Cash
Net Accounts Receivable	705	884	(179)	Use	Operating
Bad Debt Reserve	(14)	(18)	(4)	Use	Operating
Inventories	983	1,160	(177)	Use	Operating
Other Notes Receivable	130	214	(84)	Use	Investing
Plant and Equipment	512	552	(40)	Use	Investing
Accumulated Depreciation	(102)	(110)	8	Source	Operating
Noncurrent Assets	72	68	4	Source	Investing
Total Assets	**$2,455**	**$2,973**			
Liabilities and Equity					
Accounts Payable	$353	$442	$89	Source	Operating
Salaries Payable	40	50	10	Source	Operating
Short-Term Loans Payable	28	50	22	Source	Operating
Other Current Liabilities	200	231	31	Source	Financing
Long-Term Debt - Bank	490	400	(90)	Use	Financing
Due to Shareholders	324	450	126	Source	Financing
Paid in Capital	500	698	198	Source	Financing
Retained Earnings	520	652	132	Source	Operating
Totals Liabilities and Equity	**$2,455**	**$2,973**			

Table I

Cash Effects of Balance Sheet Account Changes

Cash Inflow	Cash Outflow
A Decrease in an Asset Account	An Increase in an Asset Account
An Increase in a Liability Account	A Decrease in a Liability Account
An Increase in an Equity Account	A Decrease in an Equity Account

Table II

Cash Flows by Activities

The operating activities section of a cash flow statement reports the information listed below.

Inflows of Cash

Operating Activities	Investing Activities	Financing Activities
Collections from Customers	Collection on Loans	Issuance of Long-Term Debt
Interest Income	Sale of Debt Instruments	Issuance of Equity Securities
Dividends Receipts	Sale of Equity Instruments	
Other Operating Cash Receipts	Sale of Productive Assets	

Outflows of Cash

Operating Activities	Investing Activities	Financing Activities
Payments to Suppliers	Purchase of Productive Assets	Payment of Dividends
Payments to Employees	Purchase of Debt Instruments	Acquisition of an Entity's Own Equity Securities
Interest Payments	Purchase of Equity Instruments	Repayment of Amounts Borrowed
Payment of Income Taxes	Making Loans	
Other Operating Cash Payments		

constructing the statement

Operating Activities

The Direct Method

The first method performed will be the direct method of calculating cash flow. This method combines information from both the Income Statement and the Cash Flow worksheet we created using the Balance Sheet.

The result is an accurate indication of exactly what funds were collected in the form of cash, paid in the form of cash, and if the company actually generated cash. You can use Table III as a guide for calculating the cash flow on a direct basis.

Table III

Cash Flows from Operating Activities Using the Direct Method

Cash Collections from Sales	Sales — increase (+ decrease) in Accounts Receivable — Bad Debt Expense
Cash Payments to Suppliers	Cost of Goods Sold + increase (- decrease) in Inventory —increase (+ decrease) in Accounts Payable
Cash Payments for Operating Expenses	Total Operating Expense (excluding Bad Debt Exp) — other noncash expenses (depreciation/amortization) + increase (-decrease) in Other Accrued Liabilities
Other Income/Expense	+/- Other Income/Expense
Cash Paid for Interest	Interest Expense
Dividends/Withdrawals	Dividends/Withdrawals Paid + increase (-decrease) in Dividends Payable
Cash Paid for Taxes	Tax Expense — increase (+ decrease) in Accrued Taxes Payable — decrease (+ increase) in Prepaid Tax

Exibit 3

From the Roots Up Statement of Cash Flows - Direct Method

For the Year Ended December 31, 200Y (In thousands)

Net Sales	**$8,158**		Income Statement
Change in Account Rec. Net	(175)		Balance Sheet
Less Bad Debt Expense	(33)		Income Statement
Cash Collected From Sales		7,950	
Cost of Goods Sold		(4,895)	Income Statement
Change in Inventories	(177)		Balance Sheet
Change in Accounts Payable	89		Balance Sheet
Cash Paid to Suppliers		(4,983)	
Cash from Trading Activities		2,967	
General and Administrative Expenses (less noncash expenses)	(2,839)		Income Statement
Change in Accruals	10		Balance Sheet
Cash from Operating Activities		138	
Change in Other Assets/Liabilities	4		Balance Sheet
Net Cash From Operations		**$142**	

The Indirect Method

The second method used to calculate the Cash Flows from Operating Activities is referred to as the Indirect Method. Using the Indirect Method, cash flows from Operating Activities are reported by adjusting net income for revenues, expenses, gains, and losses that appear on the income statement but do not have an effect on cash.

Using Table IV as a guide, and Table I and Table V to determine if the change is an inflow or outflow, extract data from the Income Statement (Exhibit 1) and Cash Flow Worksheet (Exhibit 2) to prepare the Cash Flows from Operating Activities using the Indirect Method. (Exhibit 4).

Table IV

Cash Flows from Operating Activities using the Indirect Method

Adjustments to reconcile net income to net cash provided by operating activities.

(+) Depreciation
(-) Amortization of Bond Premium
(+) Amortization of Bond Discount
(-) Gain on Sale of Equipment
(+) Loss on Sale of Equipment
(+) Decrease in Accounts Receivable
(-) Increase in Accounts Receivable
(+) Decrease in Inventory
(-) Increase in Inventory
(-) Decrease in Accounts Payable
(+) Increase in Accounts Payable
(-) Decrease in Accrued Expenses
(+) Increase in Accrued Expenses
(+) Decrease in Prepaid Expenses
(-) Increase in Prepaid Expenses
(-) Decrease in Taxes Payable
(+) Increase in Taxes Payable

Table V

Cash Effects of Income Statement Account Changes

Cash Inflow	**Cash Outflow**
Revenue Accounts are Sources of Cash	Expense Accounts are Uses of Cash

Based on the formula provided in Table IV, reconcile From the Roots Up net income with net cash provided by its Operating Activities (Exhibit 4).

Exhibit 4

From the Roots Up Statement of Cash Flows - Indirect Method

For the Year Ended December 31, 200Y (In thousands)

Net Profit	**$269**
Non-Cash Changes	
Depreciation, Amortization	188
Change in Allowance for Bad Debt	4
Net Income Adjusted for Non-Cash Changes	**461**
Change in Accounts Receivable	(179)
Change in Notes Receivable	(84)
Change in Inventory	(177)
Change in Accounts Payable	89
Change in Salaries	10
Change in Other Short-Term Notes Payable	22
Net Cash Provided by Operations	**$142**

A comparison of the Direct Method with the Indirect Method indicates that either method will generate the same results. The Operating Activities of From the Roots Up generated $142,000 in net cash during 200Y.

Investing Activities

Cash flow from investing activities is the second part of both types of cash flow statements. Investing activities are the changes to the cash position created by the buying or selling of non-current assets. This includes selling and replacing equipment that wears out or acquiring a new building or land to facilitate growth in a company.

Investing activities can also include the purchase or sale of stocks, bonds and securities. Lending money and receiving loan payments are also considered investing activities. For a small business, the investing activities section of a cash flow statement usually reports the following information:

Cash Flows From Investing Activities

+ Proceeds From Sale of Assets

- Purchases of Property and Equipment

= Total Net Cash Provided (Used) by Investing Activities

For a given period, there may not be much in the way of investing activities. But over time, it is an important consideration for assessing how to choose to use the cash generated by your business.

Financing Activities

Financing activities on a cash flow statement reflect borrowing money and repaying money, issuing stock, and paying dividends. The financing activities section of the cash flow statement can be reduced to the following formula:

Cash Flows From Financing Activities

+ Net Borrowing Under Line of Credit Agreement

+ Proceeds From New Borrowings

- Repayment of Loans

- Principal Payments Under Capital Lease Obligations

- Dividends/Distributions/Withdrawals Paid

+ Proceeds From Issuance of Stock

+ Partner/Owner Capital Contributions

=Total Net Cash Provided (Used) by Financing Activities

As you can see, this section of the cash flow statement is registering inflows of cash from loans received and loans repaid, and other cash inflows from outsiders and owners. If you have paid dividends or taken money from the business, it should be reported here.

Our actual Cash Flow Statement can now be created by summarizing the results as follows:

Cash Flow Statement

Description	12 Month Period
Net Sales	**$8,158**
Change in Account / Notes Rec-Trade (Net)	(208)
Cash Collected From Sales	7,950
Cost of Sales / Revenues	(4,895)
Change in Inventories	(177)
Change in Accounts Payable-Trade	89
Cash Paid to Suppliers	(4,983)
CASH FROM TRADING ACTIVITIES	2,967
General and Administrative Expenses (Less Non-Cash Expenses)	(2,839)
Change in Accruals and Other Pay	10
Cash Paid for Operating Costs	(2,829)
CASH AFTER OPERATIONS	138
Change in Other Assets / Liabilities	4
Other Income (Expense) and Taxes Paid	4
Net Cash After Operations	**142**
Interest Expense	(122)
Dividends - Paid in Cash	(137)
Cash Paid for Dividends and Interest	(259)
NET CASH INCOME	(117)
Current Portion Long-Term Debt	
CASH AFTER DEBT AMORTIZATION	(117)
Change in Net Fixed Assets	(32)
Change in Investments	(84)
Cash Paid for Plant and Investments	(116)
FINANCING SURPLUS (REQUIREMENTS)	(233)
Change in Short-Term Loans / Other Payables	53
Change in Long-Term and Sub Debt	(90)
Change in Other Non-Current Liabilities	126
Change in Capital	198
Total External Financing	287
CASH AFTER FINANCING*	54
Add: Beginning Cash & Equivalents	169
Ending Cash Equivalents	**$223****

*Cash After Financing matches control # from Exhibit 2.

**Ending Cash Equivalents should match cash on the balance sheet.

how to analyze a cash flow statement

Once you have constructed a cash flow statement, you will be much closer to understanding the financial position of your company. While a balance sheet and income statement are tools for management, without a cash flow statement they are limited barometers and may even be misleading.

Operating Activities

The cash flow statement will tell you where money came from and how it was used. When analyzing cash flow, the first place to look is the cash flow from operating activities. It tells you whether the firm generated cash or whether it needs a cash infusion.

A few periods of negative cash from operating activities is not by itself a reason for alarm if it is based on plans for company growth or due to a planned increase in receivables or inventories. However, if a negative cash flow from operating activities is a surprise to managers and owners, it may be undesirable. Over time, if uncorrected, it can foretell business failure. Managers and owners should pay particular attention to increases in accounts receivable. The cash flow statement gives the true picture of the account. A large increase in accounts receivables may warrant new billing or collection procedures.

Investing Activities

The cash flow statement puts investing activities into perspective. At one glance, you can see whether or not a surplus in operations is being used to grow the company.

A lack of investing activities, which is few purchases of new equipment or other assets, may indicate stagnant growth or a diversion of funds away from the company.

Financing Activities

The financing activities section of the cash flow statement will show repayments of debt, borrowing of funds, as well as injections of capital and the payment of dividends. As a company expands, this area of the cash flow statement will become increasingly important. It will tell outsiders how the company has grown and the financial strategies of management.

Together, the three sections of the cash flow statement show the net change in cash during the period being examined. A comparison between past periods will give owners and managers a good idea of the trend of their business. Positive trends in cash flow may encourage owners to consider long-term financing as an aid to growth and increase their comfort level concerning the company's ability to generate cash for repayment. Strong cash flow will also make it easier to acquire financing and to negotiate with lenders from a position of strength. Preparation of a cash flow statement is the first step toward financial management for long-term success.

Cash Flow Statement Worksheet

Description	12 Month Period
Net Sales	
Change in Account / Notes Rec-Trade (Net)	
Cash Collected From Sales	
Cost of Sales / Revenues	
Change in Inventories	
Change in Accounts Payable-Trade	
Cash Paid to Suppliers	
CASH FROM TRADING ACTIVITIES	
General and Administrative Expenses (Less Non-Cash Expenses)	
Change in Accruals and Other Pay	
Cash Paid for Operating Costs	
CASH AFTER OPERATIONS	
Change in Other Assets / Liabilities	
Other Income (Expense) and Taxes Paid	
Net Cash After Operations	
Interest Expense	
Dividends - Paid in Cash	
Cash Paid for Dividends and Interest	
NET CASH INCOME	
Current Portion Long-Term Debt	
CASH AFTER DEBT AMORTIZATION	
Change in Net Fixed Assets	
Change in Investments	
Cash Paid for Plant and Investments	
FINANCING SURPLUS (REQUIREMENTS)	
Change in Short-Term Loans / Other Payables	
Change in Long-Term and Sub Debt	
Change in Other Non-Current Liabilities	
Change in Capital	
Total External Financing	
CASH AFTER FINANCING*	
Add: Beginning Cash & Equivalents	
Ending Cash Equivalents	

checklist

Operating Activities

___ When you prepared the operating activities portion of the cash flow statement by the direct method, did you also prepare it by the indirect method to reconcile net income to cash flow from operating activities?

___ Has net income been adjusted for changes in accounts receivable, inventory, accounts payable, wages payable, and income taxes?

Investing Activities

___ Is every cash transaction to purchase equipment or other assets represented?

___ If any loans were made by the company, are they reflected?

Financing Activities

___ Are all loan payments reported?

___ Have all cash dividends been reported?

___ Are there any unreported cash inflows from owners or investors?

Cash Flow Analysis

___ What is the trend in cash flow from operating activities for your company?

___ Is there a reason for any large increase in accounts receivable?

___ How do you expect the financing activities of your company to change in the next year and the next two years?

resources

Books

Cash Flow Analysis, Financial Proformas, Inc., Fifth Edition, September 1995

Healthy Business Guide, Zions First National Bank

Websites

The Trade Creditor's Guide to the Statement of Cash Flows,
www.crfonline.org/orc/cro/cro-10.html

notes

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